



North Devon Council

Report Date: Monday, 13 May 2024

Topic: A proposal to reduce the Council's carbon emissions by replacing selected vehicles with Electric

Report by: Donna Sibley, Sustainability and Climate Officer

1. INTRODUCTION

- 1.1. 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 2022/2023, reported to this Committee on 8th January 2024, shows that our fleet contributes about a third of our total CO₂ emissions.
- 1.2. The majority of emissions from the Council's fleet comes from our larger Waste & Recycling vehicles. There is currently no suitable, practical replacement for these vehicles.
- 1.3. The Council does operate a number of cars and vans which are likely to be suitable for electric vehicle (EV) replacement. A small officer working group set up to consider fleet decarbonisation has identified leased vehicles in the Parks team that could be replaced by EVs. There are cost implications to be considered for EV replacement.
- 1.4. The replacement of vehicles in other council teams is under active consideration.

2. RECOMMENDATIONS

- 2.1. That Strategy and Resources Committee agree to replace one Ford Transit 3.5t Tipper and one Mercedes Transit 3.5t Panel Van with Electric Vehicle alternatives.
- 2.2. That further work is undertaken to establish costs for the installation of more EV charge points at Brynsworthy Environment Centre (BEC) and other North Devon Council owned facilities, with a view to switching more of the council's small fleet vehicles from diesel to electric.
- 2.3. That a further report is brought back to Strategy and Resources Committee when the work outlined at point 2.2 above is complete.

3. REASONS FOR RECOMMENDATIONS

- 3.1. To comply with the Council's Carbon, Environment & Biodiversity Plan and to help us meet our net zero by 2030 commitment.

4. REPORT

Fleet carbon emissions

- 4.1. North Devon Council declared a climate emergency in 2019, and made a commitment to be net zero carbon as an organisation by 2030. This means that any carbon emissions after this date will need to be offset, with a corresponding cost to the Council.
- 4.2. Our carbon footprint for the Council for 2022/2023, reported to this Committee on 8th January 2024, shows that our owned transport contributes about a third of our total CO₂ emissions.

No. Category	2018/2019	2022/23
SCOPE 1: Direct GHG emissions and removals	1393	1217
1. Stationary combustion	191	192
2. Owned transport	1202	1025
3. Process emissions	N/A	N/A
4. Fugitive emissions	0	0
SCOPE 2: Energy GHG indirect emissions	351	145
5. Electricity	351	145
SCOPE 3: Other indirect GHG emissions	2208	1941
6. Purchased material and fuel	748	641
7. Transport related activities	426	23
8. Waste disposal	0	0
9. Leased assets and franchising, outsourcing	0	0
10. Sold Goods and Services	1034	1277
TOTAL GROSS FOOTPRINT (SCOPES 1, 2 and 3)	3952	3303
11. Offset Emissions	0	0
TOTAL NET FOOTPRINT (SCOPES 1, 2 and 3 and Offsets)	3952	3303

4.3. The majority of emissions from the Council's owned transport comes from our larger Waste & Recycling vehicles. There is no suitable replacement for most of these vehicles at present. Electric heavy goods vehicles are unable to cope with the geography of North Devon and with our lengthy collection rounds. Hydrogen technology for HGVs is still being developed and we do not have access to a source of green hydrogen locally.

4.4. The Council does operate a number of cars and vans which are likely to be suitable for electric vehicle (EV) replacement. In 2023 the Heads of Environmental Enhancement and Programme Management & Performance set up a small officer working group to look at these vehicles in detail and propose alternatives.

Current leasing arrangements

- 4.5. Since 2022 North Devon Council has had a vehicle leasing arrangement with SFS, who both supply and maintain the majority of our fleet. The vehicles provided are leased for 10 years and use diesel. The length of the lease takes us beyond 2030, the date North Devon Council has set to be net zero carbon.
- 4.6. SFS are able to swap out diesel vans/cars for EVs, but there are cost implications for the Council. We require manufacturers to have Modern Slavery statements.
- 4.7. SFS have provided a number of EVs for the Council to trial, including a Ford E transit in July 2023 and a Maxus e-deliver 3 tipper. These trials have been successful. Those using the vehicles found them easy to drive and charge, charging the vehicles overnight at BEC. The nature of Parks work means the Parks Team could charge vehicles using EV chargers in our public car parks while they work and have charge cards that enable them to do so. This is a logistically practical charging solution, but is comparatively costly (see table at point 5.1 of this report).
- 4.8. Given these successful trials, the Parks team have identified two vehicles which could be replaced by EVs:

Vehicle Type	Lease terms	Annual mileage
Ford Transit 3.5t Tipper	10 years, Jan 2023	10883
Mercedes Transit 3.5t Panel Van	10 years, Jul 2022	Estimated 15000

Carbon savings from switch to EVs

- 4.9. Based on current mileage figures, there will be a total carbon saving of 10.56 tCO₂e per year by switching these two vehicles to EVs. This equals 1% of the current carbon emissions from our fleet transport.

Vehicle	Carbon saving (tCO ₂ e) per year
Ford Transit 3.5 Tipper	4.44
Mercedes Transit 3.5t Panel Van	6.12

- 4.10. In order to replace the current vehicles with EVs, North Devon Council would have to terminate the lease of the current vans. We would pay a settlement figure, the vehicle is then sold and we would receive a rebate of the sales proceeds. SFS have provided us with indicative settlement figures of between £10,025 and £10,525 for the panel van and £28,834 for the tipper. These figures will be offset in the main by resale of the vehicles. Taking these and other factors into account the additional costs of leasing an

EV will be £2-3k per year for the panel van and £4-5k per year for the tipper, vehicles would be leased for 10 years.

- 4.11. North Devon Council currently has one EV charge point at BEC. The Parks team have payment cards allowing them to use public EV chargers such as the Osprey rapid charges we've installed in a number of our car parks. The costs per mile of running a diesel Ford Transit van versus a Ford E-transit with a number of charging options has been calculated using zapmap's journey cost calculator.

Charging option	Estimated cost	
	Per mile	Annual
Diesel	21.4p	£3210
Rapid charger in a public car park at 79p kW/h	34.3p	£5145
Public charger at another location at 48p kW/h	20.9p	£3135
Overnight Charger at Brynsworthy 15p kW/h	6.5p	£975

Note: A cost comparison for the Maxus E-Deliver is not available on the zapmap calculator, it's a more specialist vehicle and less widely used.

5. RESOURCE IMPLICATIONS

- 5.1. The table at point 4.11 above shows an annual £2,235 saving on running costs if the Ford Transit Tipper is replaced with an alternative, electric vehicle and charged overnight at BEC using the existing charge point. This should offset the additional, increased hire costs noted at point 4.10 above.
- 5.2. It has not been possible to provide a similar estimate for the Mercedes Diesel cost savings versus the charge costs for the Maxus E-Deliver vehicle, but any saving will be used to offset in part the additional lease costs outlined at point 4.10 above.
- 5.3. Whilst both EVs could be charged overnight at BEC, it may be more efficient to install an EV charger at Ilfracombe Cemetery. Estimated cost for this is £1200-1500, but this could be funded through the Workplace Charging Scheme. If the Council were to add more EVs to their fleet in the future, we would need to install more chargers and there are likely to be grid constraints at BEC we would need to address (see Recommendation 2.2).
- 5.4. It should be noted that lease hire price increases are a result of industry wide cost increases on all vehicles rather than a result of switching to electric.



Taking out new lease hire agreements for the same diesel or petrol vehicles at this moment in time would incur the same increases as those referenced at point 4.10 of the report.

5.5. There are no additional maintenance costs through leasing EVs.

6. EQUALITIES ASSESSMENT

6.1. This is a 'like for like' swap of vehicles, and there is no anticipated impact on any of the protected characteristics.

7. ENVIRONMENTAL ASSESSMENT

7.1. Replacing diesel vans with electric vehicles will reduce our carbon footprint.

8. CORPORATE PRIORITIES

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

8.1.1. The commercialisation agenda: none

8.1.2. Improving customer focus: none, and/or

8.1.3. Regeneration or economic development: none.

9. CONSTITUTIONAL CONTEXT

9.1. 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

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 Greenhouse Gas Emissions report 2022 2023
(The background papers are available for inspection and kept by the author of the report).

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