

## HAMPSHIRE COUNTY COUNCIL

### Decision Report

<b>Decision Maker:</b>	Executive Member for Commercial Strategy, Human Resources and Performance
<b>Date:</b>	17 March 2021
<b>Title:</b>	Electric Vehicle Purchasing Strategy
<b>Report From:</b>	Director of Culture, Communities and Business Services

**Contact name:** Andrew Ellis

**Tel:** 03707 791447

**Email:** Andrew.ellis@hants.gov.uk

#### Purpose of this Report

1. The purpose of this report is to seek Executive Member approval for the County Council to adopt a new policy position regarding its purchase of Electric Vehicles (EVs).
2. This policy change aligns with the County Council's declaration of a Climate Emergency, its net zero emissions target and its commitment to review all existing County Council policies to ensure they are consistent with the County Council's position on tackling the Climate Emergency.

#### Recommendations

That the Executive Member for Commercial Strategy, Human Resources and Performance:

3. Approves the policy for Electric Vehicles (EVs) to be the default purchase choice across the County Council for all eligible vehicles (i.e. vehicles for which there is a viable EV option available from the market).
4. Approves the policy that a business case setting out the business requirements, with Departmental Management Team approval, would be required for the purchase of a fossil fuelled vehicle, where an EV option is available.

## **Executive Summary**

5. The County Council's declaration of a Climate Emergency on 7 June 2019 reinforced its commitment to tackling climate change through reducing carbon emissions and reflects the work previously undertaken through the Hampshire 2050 Commission.
6. The County Council reports on Greenhouse Gas (GHG) emissions from its fleet vehicles and other business travel (grey fleet mileage). Therefore, it is necessary to address these emissions to meet its stated target of net zero emissions by 2050.
7. With nearly 8% of all UK vehicle sales now being pure EVs, it is appropriate that the County Council addresses its own fleet, to be consistent with its stated climate change targets.
8. The transition to EVs would be phased over a period of 7 years to 2028, with diesel vehicles only being replaced at the end of their lifecycle, thus ensuring the County Council avoids any unnecessary expenditure. Ongoing vehicle requirements continue to be kept under review.
9. The benefits of EVs are principally in their significantly reduced tailpipe emissions, compared with fossil fuelled vehicles, thus reducing the County Council's GHG emissions and contributing to better air quality (see Appendix 1). Additionally, since the County Council transitioned to renewable energy for its electricity, all EVs charged at County Council charge points, will also be reducing indirect GHG emissions, through their use of renewable energy.

## **Contextual information**

10. Hampshire Transport Management (HTM) manages a fleet of 745 vehicles. Of these, 190, or 25% have viable EV options. Within this proportion of the fleet, 41 EVs have already been successfully introduced, representing 5% of the Council's total fleet.
11. The Alpha City diesel pool cars, which reach the end of their contract at the end of February this year, are being replaced with a smaller number of EVs. The pool fleet will reduce from 23 diesel vehicles to 6 EVs. This number will be kept under review and, based on demand, can be increased in future if required. This will provide staff with an environmentally friendly self-service pool car system for essential business travel, as well as a seamless transition to EVs.
12. This report relates to the remaining eligible fleet vehicles (cars and small vans) for which an EV option is available. The EV replacement strategy is

based upon the rolling expiry of fleet vehicle contracts to avoid early contract exit penalties. It is not proposed that vehicles are replaced earlier than their contractual end date because it is neither cost effective nor environmentally beneficial to do so.

13. Both the EV market, and the necessary charge point infrastructure, are growing strongly. Initial user concerns about vehicle range and access to charge points has been addressed. Most EVs now have a range greater than 145 miles, whilst an average pool car journey is 65 miles, therefore most operational business journey requirements can be easily met by EVs.
14. Successful pilots have been undertaken with several County Council services that involve regular business travel including CCBS' catering service (HC3S), Hampshire Highways and the Asbestos Management service.
15. All departments have fleet vehicles that are eligible for replacement with an EV. The table in Appendix 2 sets out a breakdown of vehicles by department, along with current levels of EV uptake.
16. It should be noted that at present there are no cost-effective electric minibuses or large commercial vehicles in the marketplace, so these are considered out of scope. However, HTM maintains active contacts with the market, and will continue to monitor this position for financially viable opportunities for larger fleet vehicles to transition to EVs or other low emissions options.
17. A pilot of Hydrotreated Vegetable Oil (HVO) fuel is currently underway to determine whether this can provide a viable solution to reducing emissions for the fleet that is not in scope for EVs and the outcome of this pilot will be evaluated and reported on later this year.

## **Finance**

18. Overall, the financial position for an EV replacement strategy is cost neutral after five years, when comparing monthly costs of mid-sized diesel and electric vehicles. For County Council services requiring shorter contracts, vehicles can be re-allocated to other users within the overall contractual timeframe, providing flexibility for departments whilst maximising the use of the vehicle. A full cost comparison is set out in Appendix 3.
19. The higher capital purchase cost of an EV is offset by its higher residual value and lower maintenance and road fund licence costs. The life expectancy of the EVs is expected to be a minimum of five years and similar to the current diesel vehicles. The difference in capital costs (c.£6,000) between purchasing a diesel Ford Focus and a Nissan Leaf EV includes a £3,500 government

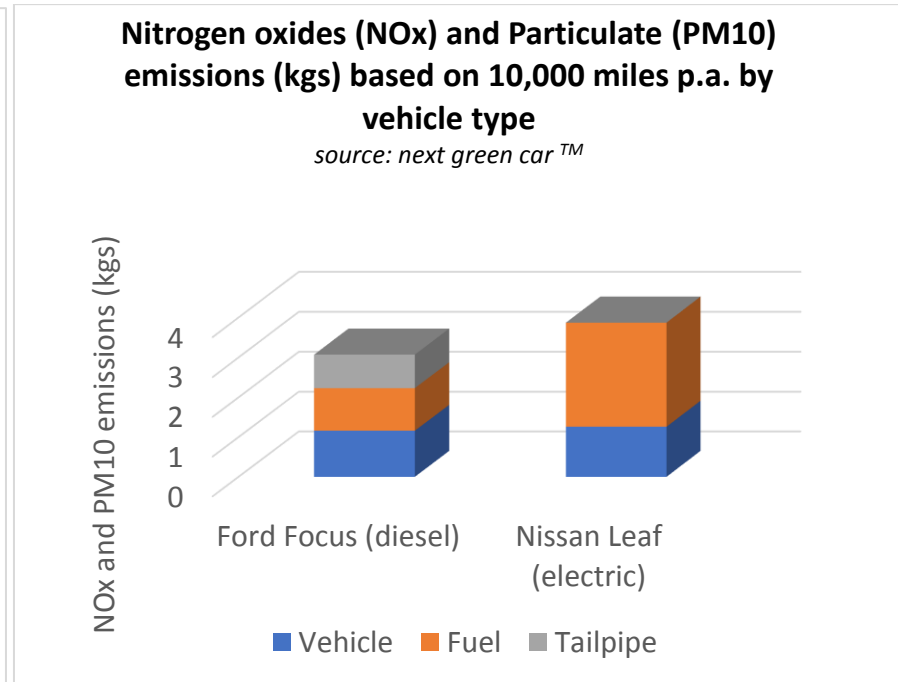
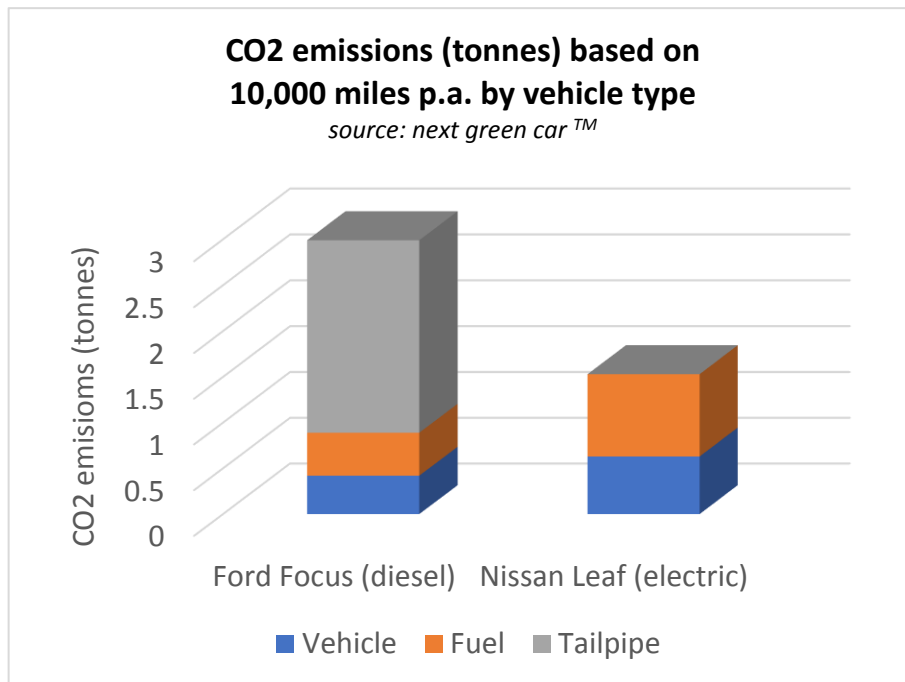
grant. In future, this grant is likely to be reduced and there may also be increases in EV Road Fund Licence costs (currently zero) and increases in other costs such as taxation on EV charging costs (e.g. on the electricity used). However, any reduction in grant and increase in running costs is likely to be offset by the increased market supply driving down purchase costs in the next few years, following the Government's announcement that sales of new petrol and diesel cars will cease in 2030 (five years earlier than the previous target). Considering this is an evolving picture, the financial impact will be monitored and assessed with any changes in running costs and reductions in the government grant.

20. Currently, EV fuel costs are considerably lower than diesel fuel. An EV using the County Council's charge points will cost 2 pence per mile, compared to a diesel cost of 12 pence per mile, saving 10 pence per mile on every EV journey. For a vehicle covering 20,000 miles per annum, the annual fuel saving from an EV is approximately £2,000.
21. A further financial benefit is that electric vehicle maintenance is minimal, compared to combustion engine vehicles, saving the County Council £350 per vehicle per annum.
22. Additionally, as EV purchase costs reduce, the charges to departments will be reduced accordingly. It will become increasingly cost effective for departments to promote the use of EV pool cars instead of reimbursing staff for business mileage in their own vehicles, thus also tackling grey fleet emissions and costs.
23. Additional EV charge points will be required as EV use expands. Average charge point costs are £4,000 to £9,000. These are funded separately and not featured in this EV cost model.

## **Conclusions**

24. The proposed policy change will bring fleet vehicle renewal into alignment with the County Council's objectives of tackling the Climate Emergency and reducing carbon emissions. It will also align the County Council's trajectory for its fleet replacement with Government legislation that prohibits the purchase of new combustion engine vehicles by 2030.
25. This policy is cost neutral over the lifecycle of a fleet vehicle, and its implementation avoids any unnecessary expenditure. It also has the potential to offer a lower cost means of business travel than staff travelling in private vehicles, providing a financial incentive for departments to promote the use of pool cars over reimbursing private mileage expenses.

### Carbon Footprint of an Electric Vehicle



CO2 emissions	Ford Focus (diesel)	Nissan Leaf (electric)		NOx and PMs	Ford Focus (diesel)	Nissan Leaf (electric)
Vehicle	0.42	0.63		Vehicle	1.16	1.26
Fuel	0.47	0.9		Fuel	1.07	2.61
Tailpipe	2.1	0		Tailpipe	0.84	0

## Appendix 2

### Eligible County Council fleet vehicles and current EV uptake

<b>Department</b>	<b>Total cars</b>	<b>No. of EVs (%)</b>
Adults Health & Care	13	3 (23%)
CCBS	60	17 (28%)
Corporate Services	6	2 (33%)
Children's Services	22	0 (0%)
ETE	89	19 (21%)

## Appendix 3

### Electric Vehicle vs Diesel Vehicle Whole Life Costs

	<b>Ford Focus diesel car</b>	<b>Nissan Leaf Electric car</b>	<b>Difference Electric v Diesel Net cost / (saving)</b>
Gross purchase price	£16,462	£26,195	£9,733
Government grant	-	(£3,500)	(£3,500)
Net purchase price	£16,462	£22,695	£6,233
Residual value	£4,939	£9,078	(£4,139)
Cost of fuel per mile	£0.12	£0.02	(£0.10)
Maintenance Cost per annum	£700	£350	(£350)
Road Fund Licence per annum	£155	£0	(£155)
Contract hire cost per month	£416	£415	(£1)
Contract hire cost per annum	£4,992	£4,980	(£12)
Total cost based on current prices and 5,000 miles per annum	£5,592	£5,080	(£512)
Total cost based on current prices and 10,000 miles per annum	£6,192	£5,180	(£1,012)
Total Cost based on current prices and 20,000 miles per annum	£7,392	£5,380	(£2,012)
CO2 emissions g/km whilst driving	99 g/km	0 g/km	(99 g/km)

**REQUIRED CORPORATE AND LEGAL INFORMATION:**

**Links to the Strategic Plan**

<b>Hampshire maintains strong and sustainable economic growth and prosperity:</b>	no
<b>People in Hampshire live safe, healthy and independent lives:</b>	yes
<b>People in Hampshire enjoy a rich and diverse environment:</b>	yes
<b>People in Hampshire enjoy being part of strong, inclusive communities:</b>	no

**Section 100 D - Local Government Act 1972 - background documents**

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document

Location

None



## **EQUALITIES IMPACT ASSESSMENT:**

### **1. Equality Duty**

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

### **2. Equalities Impact Assessment:**

An overview Equalities Impact Assessment has been completed. The electric vehicles policy will have a positive impact on all Hampshire residents as electric vehicles will reduce carbon emissions in Hampshire.