

DECARBONISING CAMBRIDGE CITY COUNCIL VEHICLE FLEET



To:

Councillor Rosy Moore, Executive Councillor for Climate Change,
Environment and City Centre
Environment & Community Scrutiny Committee

Report by:

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Wards affected:

All

Key Decision

1. Executive Summary

- 1.1. Cambridge City Council declared a climate emergency in February 2019. The Council is keen to reduce its own emissions to as close to zero as possible, as soon as is feasible within the resourcing, technological and service obligation constraints it works within. The Council's vehicle fleet of 113 vehicles currently accounts for 24% of all the council's emissions. We have been incrementally moving our fleet from internal combustion engine vehicles (ICE) to ultra-low emission vehicles (ULEV) over recent years and currently there are 10 electric vans. Of the remainder 41 of the diesel/petrol fleet are ULEZ (Ultra Low Emission Zone) compliant and 10 have stop/start technology. The climate emergency creates an imperative to accelerate that transition, and this paper sets out a road map to achieve that.
- 1.2. The compact, urban environment of Cambridge and the comparatively low daily mileage required to deliver city-based operations make ULEVs ideally suited to the Council's need. The latest generation of ULEVs can operate at normal speeds with comparable payloads and ranges between recharges that you would

expect from an ICE vehicle. The ever-improving capabilities of ULEVs means that these vehicles will only become more attractive operationally and financially and will reduce the level of carbon created by the Council as time progresses.

- 1.3. The appended Decarbonising Cambridge City Council Vehicle Fleet paper sets out the approach to decarbonising Cambridge City Council's vehicle fleet, identifying areas of change, some immediate and others more incremental, requiring a longer-term view. It presents changes both to working practices and to the type of vehicles the Council purchases, seeking to commit to replace old vehicles with ULEVs whenever possible.
- 1.4. The paper provides evidence of how the Council can substantially reduce the carbon emissions its vehicle fleet creates. The paper additionally forecasts the CAPEX cost of converting to ULEVs and OPEX savings this could generate.
- 1.5. The paper used data captured via a variety of methods primarily, the use of vehicle telematics (historical tracking of the asset) – to measure vehicle usage, driving styles, routes, peak time usage and fuel invoicing – to identify fuel costs and measure CO2 output from vehicle usage.
- 1.6. A key enabler for the transition to ULEVs is the provision of suitable solution infrastructure primarily based at the depot location. Some of this additional cost i.e. the sub-surface hardware maybe a sunk cost when the depot relocates, much of the above surface hardware can be relocated although there will be a cost incurred when that happens.

2. Recommendations

The Executive Councillor is recommended to:

- 2.1. Acknowledge the opportunities and detriments when converting to ULEVs as set out in the appended Decarbonising Cambridge City Council Vehicle Fleet paper.
- 2.2. To endorse the recommended approach notably:

- 2.2.1. The key area for action is a formal commitment to always, where there is a suitable ULEV alternative and the infrastructure allows, to procure ULEVs when replacing Council vehicles.
- 2.2.2. Where there is no ULEV alternative possible then this is only to be procured after a detailed business case has been written.
- 2.2.3. That services will actively monitor the usage of their vehicle assets and, through service reviews, seek to streamline the way work is carried out, with the twin aims of cutting carbon emissions and increasing service efficiency via a decrease in the miles driven, and over time, a decrease in the total number of vehicles required.

3. Background

- 3.1. The ULEV environment is constantly changing, whether it is vehicle technology, the capability of charging infrastructure or grid capacity, there is never going to be a perfect moment to decarbonise the fleet.
- 3.2. Central Government have set the direction for the electrification of motor transport by banning sales of internal combustion engine cars by 2040, or potentially sooner, to deliver cleaner air and reduce carbon emissions.
- 3.3. The move to ULEVs is necessary to meet our own climate change aspirations to be net zero carbon by 2050 or sooner if possible and to meet air quality objectives set out in the Cambridge Air Quality Action Plan (2018-2022). As noted in the report, our fleet (including our share of the waste fleet) made up 24% of all City Council emissions in 2018/19. Reducing those emissions to as close to net zero as possible will therefore be a key part of our climate change strategy and carbon management plan going forward.
- 3.4. The Decarbonising Cambridge City Council Vehicle Fleet paper provides a roadmap to delivering the committed reduction in emissions generated by the council's vehicle fleet by changing how services use vehicles, converting to ULEVs (as the current, established technology) and substantially reducing the number of miles driven by the Council's

vehicles.

4. Implications

a) Financial Implications

4.1 There are financial implications if the appended Decarbonising Cambridge City Council Vehicle Fleet paper is accepted.

4.1.1 The paper provides indicative costings against the R&R fund for an incremental ULEV replacement plan, these costings show the impact when taking into consideration the SWS vehicle replacement costs.

4.1.2 The paper does not provide costings for the incremental provision of EV charging infrastructure at the current depot site.

4.1.3 The paper provides indicative potential savings from changing how the Council uses and tracks its vehicle fleet.

4.1.4 The paper provides indicative savings from the reduced cost of maintaining and recharging ULEVs along with the reduced tax burden.

4.1.5 The garage service currently provides all maintenance and servicing requirements to the vehicle fleet; this provides a substantial income to the Council. The conversion to a wholly ULEV will have a negative effect on that revenue stream. Given that the suggested approach is incremental and over a six/seven-year period this change is considered manageable. The service will seek to win new commercial business and changing the offer to complete EV servicing.

4.1.6 All vehicle replacement has been delayed for FY20/21 and FY21/22, less SWS and those vehicles that must, due to condition, be replaced. The expenditure not spent will be held by the R&R fund to subsidise future purchases. Additionally this planned delay will allow for charging infrastructure to be planned in the current and future depot location/s and other council locations.

b) Staffing Implications

4.2 There are considerable staffing implications as a result of the acceptance of the appended Decarbonising Cambridge City Council Vehicle

Fleet Paper. The document identifies key changes to working practices particularly where vehicles are taken home by colleagues and where there is a need to actively track the council vehicle assets 24hrs a day and in live time. These changes form a key part in current service reviews.

c) Equality and Poverty Implications

4.3 EQIAs are to be completed by individual HoS. The move to ULEV has a differing impact on each individual service area, many will experience little or no change and others, E&F in particular, will see a considerable effect on ways of working and this change has influenced the current service review.

d) Environmental Implications

4.4 There are considerable environmental benefits to supporting the transition to ULEVs and decarbonising the Council's vehicle fleet.

4.4.1 Primarily for every electric vehicle which replaces an internal combustion engine in the fleet, there will be immediate benefits to local air quality as electric vehicles create no carbon emissions at the point of use. The paper forecasts somewhere in the region of 30%-50% of the fleet's CO2 emissions (156tonnes -260tonnes of carbon). That is a potential reduction of up to 9.6% of the Council's scope 1 carbon emissions.

4.4.2 Secondly full lifecycle carbon costs of electric vehicles are significantly lower than for internal combustion engine vehicles.

4.4.3 This will also improve as the carbon intensity of the grid diminishes as more renewable electricity generation comes on stream. If we can install solar PV at our depot and/or other relevant locations, we can accelerate the extent to which our fleet is running on completely renewable electricity and reducing our emissions commensurately.

e) Procurement Implications

4.5 The process of procuring ULEVs does not differ with the procurement of ICE vehicles, the requisite procurement procedures will continue to be followed ensuring compliance.

4.5.1 The procurement of infrastructure will be completed in line with current procurement regulations. It is highly likely that the supplier relationship will be an enduring one, a decade or more, to ensure that the incremental nature of the transition, maintenance and future proofing are managed.

f) Community Safety Implications

4.6 Where new infrastructure is deployed this will be subject to established, electrical and road safety regulations and national infrastructure standards for accessibility and data collection.

4.7 Drivers who may not have driven an ULEV will require a short training package, part of this package will ensure there is an awareness of other road users given the near silent nature of ULEVs. The responsibility for this will, in line with other service training needs, remain at service level.

5. Consultation and communication considerations

5.1 Those services directly impacted have contributed to the preparation of this document.

5. Background papers

5.1 Air Quality Action Plan 2018-2023 -

<https://www.cambridge.gov.uk/media/3451/air-quality-action-plan-2018.pdf>

5.2 Road to zero

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739460/road-to-zero.pdf

6. Appendices

6.1 Decarbonising Cambridge City Council Vehicle Fleet – 2020

7. Inspection of papers

To inspect the background papers or if you have a query on the report please contact James Elms Head of Commercial, Tel: 07725 623939 Email: james.elms@cambridge.gov.uk