

Report to: Cabinet

Date: 1 June 2022

Title: Waste and recycling services - fleet

Report of: Tim Whelan, Director of Service Delivery

Cabinet member: Councillor Colin Swansborough, Cabinet Member for Climate Change, Place Services and Special Projects

Ward(s): All

Purpose of report: The purpose of this report is to introduce and seek approval for the replacement strategy for the waste and recycling fleet to circa 2035. This is against a backdrop of new and emerging technologies; alternative fuels and energy vectors; ageing vehicles and Eastbourne Carbon Neutral 2030.

Decision type: Key

Officer recommendation(s): That Cabinet approves the plans presented:

- (1) To upgrade the refuse and recycling collection vehicle (RCV) fleet from April 2023 with re-purposed vehicles, subject to approval by Full Council.**
- (2) To use renewable diesel as an alternative to regular diesel from April 2023, subject to due diligence.**
- (3) To procure an electric vehicle fleet for food waste collections from 2025 and subject to government New Burdens Funding support and depot upgrade, subject to a further report to Cabinet and Full Council supported by a business case.**
- (4) To install charging infrastructure at Courtlands Road depot to support the EV fleet (as part of an associated work stream subject to separate approvals).**
- (5) To secure ultra-low emission vehicles for the RCV fleet and street cleansing by 2030, to align with the council's carbon neutral target, subject to a further report to Cabinet and Full Council supported by a business case.**

Reasons for recommendations: **Recommendations to Cabinet for waste recycling and street cleansing vehicle procurement required from 2023, with associated adaptations at the depot to support ambitions to decarbonise the fleet by 2030.**

Contact Officer(s): **Name: Seán Towey**
Post title: Head of Environment First
E-mail: sean.towey@lewes-eastbourne.gov.uk
Telephone number: M: 07506 026412

Name: Jane Goodall
Post title: Environment Lead
E-mail: jane.goodall@lewes-eastbourne.gov.uk
Telephone number: 07788515359

1 Introduction

- 1.1 The waste service fleet provides vehicles for functions such as refuse and recycling, garden waste, trade and clinical waste collections, street cleansing and bulky item collections. This report considers the replacement strategy for the diesel-fuelled collections and street cleansing fleet.
- 1.2 The collections and street cleansing fleet accounts for approximately 30% of the council's carbon emissions profile.
- 1.3 The purpose of this report is to outline the replacement pathway for the waste and recycling fleet to circa 2035. The detail is presented in the report at Appendix 1 'Vehicle Replacement Strategy, May 2022' and the tables at Appendix 2 affording more intel in respect of predicted capital costs and fuel/carbon savings. This is against a backdrop of new and emerging technologies; fuels and energy vectors; ageing vehicles; and the council's carbon neutral 2030 ambition for the town.
- 1.4 The immediate priority is to upgrade the current fleet at Courtlands Road depot from where the Eastbourne waste service operates. Industry standard replacement schedules for these collection vehicles are a 7–10-year cycle and most of our vehicles are at the end of economic life. It is business critical to secure a fit for purpose fleet to be in-situ for SEESL operations from April 2023 that will see us through for the next 5 or 6 years, ahead of the council's carbon neutral 2030 milestone.

2 Proposal

- 2.1 The proposal is a hybrid of conventional diesel/renewable diesel for the RCV fleet in 2023/24 and electric vehicles (EVs) for food waste collections (2025) (see Appendix 1, section 'Bridging the Gap').

- 2.2 As new technologies and alternative fuel options become economically viable, alongside the provision of a depot infrastructure that can support them, the service will switch to ultra-low emission vehicles for the RCV fleet and street cleansing before 2030, to align with the council's carbon neutral target.
- 2.3 There will be associated work at the depot to provide appropriate infrastructure and facilities, although this is a separate project managed by the Commercial Business and Development team.

3 Outcome expected and performance management

- 3.1 The adoption of this vehicle replacement strategy will support EBC's carbon neutral 2030 ambition, using renewable diesel (subject to due diligence) to reduce carbon emissions in the interim before moving to a fully ultra-low emission fleet. There will be expected carbon savings of up to 90% on conventional diesel tailpipe emissions and this will be monitored on a delivery by delivery basis as the exact factor may vary with each consignment.
- 3.2 Proposals for a food waste collection fleet are aligned with indications within the Environment Act 2021 that weekly food waste collections will become mandatory from 2025. Secondary legislation detailing implementation dates and requirements alongside provision of New Burdens Funding is awaited.
- 3.3 A new fleet, alongside an improved depot, will positively impact on staff morale at Courtlands Road.

4 Consultation

- 4.1 Key staff are engaged with the vehicle replacement strategy.
- 4.2 These plans have been shared with the SEESL Board of Directors and the views and suggestions from those discussions are reflected in this report and the documents appended. A letter from the Chair of SEESL to Cabinet is included at Appendix 3.
- 4.3 There have also been extensive consultations with suppliers and discussions with other local authorities for best outcomes on fleet and fuel.

5 Corporate plan and council policies

- 5.1 The vision for the entire fleet is set out in 'Eastbourne Carbon Neutral 2030 - A plan for action' where we state we will decarbonise the fleet to save approximately 800 tonnes of CO₂e per year.
This informs the vehicle replacement pathway proposed in this report.
- 5.2 The aim of the vehicle replacement strategy is to achieve an ultra-low emission fleet by 2030.
- 5.3 The intention is to use renewable diesel in the interim period. Manufactured from 100% renewable and sustainable waste products renewable diesel is a paraffinic

drop-in fuel that can be used as a replacement for diesel, meeting EN15940 (British specification) standards. It is made using waste fats and oils (typically these are used vegetable-based cooking oils but it may also contain animal processing waste products). Unlike conventional biodiesel, hydrogen (rather than methanol) is used as a catalyst, which makes renewable diesel cleaner burning and ensures a long shelf life

6 Business case and alternative option(s) considered

- 6.1 While ultra-low emission solutions are developing at a rapid pace, there are significant advantages in delaying decisions on new vehicle types (i.e. EV or hydrogen fuel cell) until the market stabilises. EBC/SEESL can position itself to procure the best fit vehicles from 2024/25 - 2028/29 as the market matures, prices normalise, and the most appropriate fuel or energy sources are in place locally.
- 6.2 Given current uncertainty re: 'consistent collections' (Environment Act 2021) with secondary legislation yet to be issued, there is further good reason to delay making decisions on the choice of RCV.
- 6.3 In the interim period, 2023/24 – 2029/30, SEESL will rely on renewable diesel for the diesel fleet so long as that is deemed securely available, financially viable and environmentally sustainable, in order to reduce emissions.
- 6.4 This report seeks to ensure adequate financial provision is made in capital allocations for waste service vehicles for the period 2023 to 2030 against a range of complex and inter-connecting circumstances.
- 6.5 At Appendix 1 options are presented with associated costs for the immediate term: to upgrade, purchase or lease vehicles. The recommendation is to re-use and upgrade the current SEESL fleet from April 2023.
- 6.6 There will be revenue implications for a) switching from conventional to renewable diesel and b) installing chargers at Courtlands Road. To support the food EV fleet from 2025, UKPN have informed us that there is low voltage cable within the curtilage of the depot and that connection of 10no. 7kW chargers would be up to £10k.
- 6.7 A decision on the new RCV and street cleansing fleet for 2028/29, type to be determined, will be based on the market position and local infrastructure at the time. Rapid charging for electric RCV's is being investigated but will incur much higher connection costs that are yet to be confirmed.

7 Financial appraisal

- 7.1 The current Capital Investment Programme for the Council does not include a provision to upgrade the refuse/recycling collection vehicle (RCV) fleet from April 2023 with re-purposed vehicles, to procure an electric vehicle fleet for food waste collections from 2025, and street cleansing from 2028/29, which will be subject to government New Burdens Funding support and depot upgrade.

An option appraisal has been undertaken for all of the proposed vehicle acquisitions comparing two acquisitions options. The capital outlay might need to be funded either through the realignment of existing capital programme resources, exploring potential Government subsidies, and/or borrowing from the PWLB, which is the cheapest option for all of the proposed vehicle acquisitions. The Council will be able to borrow at a lower interest rate than what might be offered by the leasing companies. The wider financial implications will need to be incorporated into the overall Council's revenue budget and capital programme to ensure that the long-term financial implications are monitored accordingly.

The proposed vehicle replacement financial analysis is attached as Appendix 4 (exempt report) detailing the vehicles identified for replacement and the associated costs. Further updates will be provided to the Cabinet during the formal annual budget setting process and as further costs and savings efficiencies are identified as a result of any future acquisitions.

8 Legal implications

- 8.1 Any procurement undertaken following approval of officer recommendations in this report must comply with the Council's Contract Procedure Rules, including (where applicable) the Public Contract Regulations 2015.

Lawyer input date: 09.05.22 "Legal ref 011062-EBC-OD"

9 Risk management implications

- 9.1 Headline risks include:

- The condition of the current fleet is declining due to age
- Delays in the decision-making process
 - delays in the above impacting on speed of executing tender process
 - delays in the above impacting on placing our orders
- Missing "slots" on the successful supplier(s) fleet production line
- Supply of alternative fuels (renewable diesel) against the ongoing conflict in Ukraine
- Cost of alternative fuel (renewable diesel)
- Potential cost of ULE RCV fleet
- Viability of EV Infrastructure at Courtlands Depot
- Viability of Hydrogen supply via Newhaven Hub or skid at Courtlands Depot

- 9.2 The vehicle replacement strategy is designed to mitigate these risks. Officers are engaging with industry and researching options to secure the best fit for EBC now and in the future.

- 9.3 New vehicle technologies are rapidly developing, primarily in the form of electric powered vehicles. Hydrogen vehicles, i.e. fuel cell electric vehicles (FCEVs) powered by hydrogen, are now available (2 are operational in this country, see Appendix 1) but limited at present by hydrogen production and the infrastructure that is required to supply and deliver it. Making timely decisions to meet the

immediate requirements of the service while predicting future needs and available options is a speculative exercise.

- 9.4 We have engaged current and potential suppliers for the earliest opportunity to trial new fleet specifications (electric vehicles, hydrogen vehicles and renewable diesel), for all our service areas (refuse, recycling and food waste collections, street cleansing fleet including mechanical sweepers). This will be on an on-going basis as technology develops, thereby affording us peace of mind that our business decision in respect of associated procurement is sound, informed and timely. Through this active approach, we anticipate encouraging these same suppliers to maintain pace on the evolution of the optimum solution.
- 9.5 In the context of limited resources and emerging technologies which may be effective but often initially expensive, the route to decarbonisation of the waste fleet is a significant challenge.

10 Equality analysis

- 10.1 Air quality in Eastbourne: a co-benefit of this plan will be a reduction in emissions in the town, which will improve air quality and contribute to better health outcomes for the local community.
- 10.2 Staff will be given appropriate training on utilising new equipment.

11 Environmental sustainability implications

- 11.1 There is a carbon benefit to re-using and upgrading the current SEESL fleet to extend its life until the point where purchasing new ultra-low emission RCVs is more feasible – noting that, based on the current data available, approximately 5-8% of an HGV's whole life carbon emissions can be attributed to production.
- 11.2 Plans to purchase EVs for food waste and street sweepers align with the aim to reduce carbon emissions. As the council procures 100% renewable energy the tailpipe emissions for these vehicles will fall to zero immediately.
- 11.3 Renewable diesel will be used as an alternative to conventional diesel over the next circa five years if readily available, financially viable and sustainably sourced, in order to reduce emissions and the impact of waste collections on air quality. This will see tailpipe carbon emissions reduced by up to 90% and indirect emissions from production should be reduced by a similar value.
- 11.4 The ultimate goal of running ultra-low emission RCVs by 2029/30 will meet the council's carbon neutral 2030 target. The carbon trajectory of SEESL operations is set out at Appendices 1 and 2.

12 Appendices

- Appendix 1 – vehicle replacement strategy
- Appendix 2 – supporting tables on fleet, fuel and carbon cost
- Appendix 3 – letter from Chair of SEESL Board to Cabinet
- Appendix 4 – Financial review (**EXEMPT**)

13 Background papers

The background papers used in compiling this report were as follows:

- None