

Joint Scrutiny Report



Listening Learning Leading



Report of Head of Housing and Environment

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Wards affected: All

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To: Joint Scrutiny Committee

Date: 25 March 2024

Waste and Street Cleansing Vehicle Procurement Strategy

It is recommended that Joint Scrutiny Committee:

- a) Note the contents of the report on why the council needs to be procuring new waste vehicles, and the factors which influence the future carbon footprint of the fleet and the process that officers will use for the future procurement of waste and street cleansing vehicles, and ask any questions pertaining to the report.

Implications (further detail within the report)	Financial	Legal	Climate and Ecological	Equality and diversity
	Yes	No	Yes	No
Signing off officer	Emma Creed	Pat Connell	Heather Saunders	Abigail Witting

Purpose of Report

1. To inform joint scrutiny members of the current issues facing the councils in modernising and sustaining the waste and street cleansing operational fleet, and to outline the process that officers will use for the future procurement of new vehicles.
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Corporate Objectives

2. The councils have a role in the efficient and effective provision of waste collection and street cleansing services as they are waste collection and litter authorities which places a statutory requirement on second tier local authorities, and fits with the following corporate objectives:
 - South Oxfordshire. 5. Homes and Infrastructure that meets local need & 3. Action on Climate emergency
 - Vale of White Horse. 5. Working in Partnership, 4 Building Stable Finances 2. Tackling the Climate Emergency

Background

3. South Oxfordshire District Council and Vale of White Horse District Council, as second tier local authorities, have responsibilities under the [Environmental Protection Act 1990](#) (EPA) for the collection of household waste. They also have responsibility to maintain the clean nature of their streets as litter authorities. These are amongst the highest profile services the councils provide, as they affect all households and have a significant impact upon the climate change outcomes of the districts.
 4. The councils currently contract out the EPA responsibilities to Biffa, which in turn operates approximately 100 road registered vehicles and a range of plant and equipment to deliver the front-line services – refuse, recycling, food waste, garden waste, bulky waste collections, street cleansing and container deliveries from the Culham depot. The current contract with Biffa is due to expire in June 2026, as is occupation of the current depot, and so beyond that date the contract and depot are subject of different pieces of work and will be presented in forthcoming individual reports.
 5. When operational, most of these vehicles burn diesel in internal combustion engines (ICE).
 6. As set out in the latest annual greenhouse gas reports, waste collection is the biggest contributor to South and Vale carbon emissions - [South](#) 57.5% and [Vale](#) 49.8%. Biffa used approximately 900,000 litres of diesel whilst operating the vehicles, in 2022/23. The burning of this fuel releases harmful emissions, including carbon dioxide into the atmosphere, which contributes towards climate change.
 7. The UK Government introduced 'The Climate Change Act 2008' which committed the UK to an 80% reduction in carbon emissions relative to 1990 levels by 2050. In June 2019, further legislation was passed which extended that target to 'at least 100%'.
 8. The Government had brought in a ban on the sale of conventional petrol- and diesel-powered cars, and small vans by 2030 (this has recently been delayed until 2035) and a ban on the sale of petrol and diesel powered heavy goods vehicles (HGVs) weighing up to 26 tonnes currently set for 2035. However, it is expected that such vehicles will continue to be operated, and have fuel available, for several years beyond this date.
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- 9 The councils have declared a climate emergency and have currently made a commitment to be carbon neutral in their own operations by 2025 in South Oxfordshire and 2030 in Vale of White Horse. This will have an impact on waste and street cleansing service vehicles purchased over the next few years as, under current life expectations, vehicles purchased from now are expected to still be operational beyond these dates.
- 10 Under the existing contract, Biffa are responsible for purchase, maintenance, and ownership of all of vehicles required to provide the services. However, from June 2024 Biffa will no longer purchase, or permanently replace, any vehicles were they to become non-viable to operate. Instead, the councils will become responsible for procurement and ownership of the fleet of vehicles and lease them to Biffa for use on the frontline services. As a result, the councils have taken the decision to purchase new vehicles directly, so to have more control over the acquisitions and ensure that the assets can easily transfer to the new provider from 2026 (should that not be Biffa).
- 11 In order to understand the condition of the current vehicle fleet, in spring 2023 the councils commissioned an independent survey from a specialist company called Refuse Vehicle Solutions (RVS), which identified that nine vehicles needed replacement as a matter of urgency, with the remaining 87 vehicles needing replacement over a rolling programme of up to five years.
- 12 Following a formal procurement process, an order was placed in October 2023 to replace the nine identified vehicles, eight of which are being replaced with internal combustion engine (ICE) diesel powered vehicles and one is being replaced with an all-electric fuelled vehicle. The vehicles ordered have circa 6-8 month build lead times and so are expected to arrive around June 2024.
- 13 The decision to replace the vehicles was taken after officers completed a thorough assessment using the following criteria:
 - Ability to replace the identified trucks immediately upon delivery
 - Vehicle specifications
 - Timescale for delivery
 - Ability to store vehicles and fuel at the depot
 - Type of fuel required to operate the vehicles
 - Fuelling infrastructure at the current depot
 - Ability to meet the operational need
 - Financial and procurement method to obtain vehicles

This assessment was provided in appendices which accompanied the 'Delegated Authority' (DA) decision papers. This route was approved by Cabinet in decisions made in March 2023 (Vale 09 March, South 10 March)

- 14 In order to take advantage of bulk buying discounts with fuel providers and to secure significantly cheaper prices than those seen at domestic fuel providers, the new depot (once determined) will need to be able to store and provide whatever fuel or fuels are chosen to effectively operate the vehicles during the medium to long term. This could be a liquid store of diesel, liquid hydrogen, hydrotreated vegetable oil (HVO), electrical connection to provide effective charging provision on site or a
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combination of those fuels. For diesel, hydrogen and HVO, this would be a bundled fuel tank(s) but for electric, a survey of the proposed new depot site and subsequent grid applications will identify the current and potential electrical supply capacity, and this will be built into the build specification.

Vehicle Specification, Selection and Procurement Process

15 The following strategic steps will be used by officers to guide the procurement of new waste and street cleansing vehicles. They are placed in the decision order by which officers would normally take account:

- a) Enable the councils to continue to meet the statutory obligations placed on them to undertake household waste collection and perform street cleansing services.

The councils have a statutory obligation to ensure that waste and recycling collection, and street cleansing services are provided to every household, and they would fail in this duty, and in their duties to all residents, if they were unable to undertake the hundreds of thousands of doorstep collections provided on a weekly basis, along with keeping the streets clean. The councils therefore must undertake all endeavours to ensure that collections continue to take place and the high performing services are maintained. A failure to operate well-functioning collection and street cleansing services would not only put the council at risk of legal challenge and reputational damage, but also potentially result in some valuable resources not being recycled, but instead ending up being incinerated.

Therefore, having the correct vehicle specification to provide the correct vehicles to complete the service, is the most critical element of vehicle procurement. This will include only buying vehicles where suitable fuelling options are in place from the start of operation.

- b) Purchase within the capital and revenue budgets agreed by Full Council.

The council can only purchase vehicles which it can afford to do so under its capital and revenue budget programme as set by Full Council.

- c) Operational efficiency to minimise the number of vehicles required.

The council will work with the operator of the vehicles to minimise the number of new vehicles required by ensuring that collection rounds are efficient, and that technology is used wherever possible. We will also look to ensure that the vehicles are maintained to ensure they remain clean and efficient for as long as possible and aim to extend the lifespan of the vehicles to minimise their total lifetime carbon footprint.

- d) Once the preceding steps have been taken, and where vehicles need to be purchased, we will look to purchase vehicles which run on fuel with the lowest carbon footprint, recognising that certain fuels will have higher upfront capital costs, but in turn may have lower ongoing revenue costs. Where vehicles purchased are ICE, the procurement process will look to ensure that they are as clean and fuel efficient as reasonably possible.
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16. Details on the different fuel types available for waste collection and street cleansing vehicles and operational options to reduce carbon emissions, are provided in Appendix 1 and are summarised below:
 - a. There are four main types of fuel available for use in large commercial vehicles – internal combustion engine (ICE) diesel and petrol powered, hydrogen fuel cell electric vehicles (FCEV) battery electric vehicles (BEV) and Hydrotreated Vegetable Oil powered (HVO).
 - b. The type of fuel used makes up a large proportion of the carbon generated, but there are also other factors to consider including the route and service the vehicle is going to be used on, how efficiently it is being used and the ancillaries which are fitted to it such as the types of tyre and bin lifts.
 - c. To optimise the efficiency of the waste collection and street cleansing vehicle fleet, it will be important to not only select the correct fuel type, but also take advantage of the other measures available which will help reduce carbon emissions.

Process for Vehicle Replacements

17. Despite any further drive towards zero waste, it is anticipated that household waste collections and street cleansing services will continue to be required in the medium to long term, and therefore further vehicle purchases will also be required to facilitate this. To effectively manage the procurement of replacement front line waste and recycling collection, and street cleansing vehicles, the following procurement process is proposed:
 18. At the outset, an annual assessment of the current fleet would be completed prior to budget setting, as part of a specific fleet replacement programme, to understand the number and type of vehicles that will require replacement in the following financial year.
 19. This information would then be used by officers from the waste, climate, and procurement teams to conduct a high-level assessment of the vehicle market, to understand the technological advancements and therefore the types of vehicles that are available, together with the best form of ownership (buy new, buy used or lease) and any restrictions in place at the time of placing orders, such as depot, and infrastructure. Assuming that vehicles are purchased, this will result in a high-level capital bid which will outline the range of options available, along with any subsequent revenue impacts that would result, for example by moving to a more or less costly fuel option.
 20. The information would then be presented as part of the capital budget setting process and Full Council would be asked to agree the capital allocation, for the forthcoming financial year, to replace the identified vehicles and any new infrastructure requirements.
 21. Within these approved financial parameters, officers would then define the vehicle specification for each vehicle needing replacement prior to conducting a robust formal procurement, which would then be presented as a business case for review.
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22. Once a procurement has been undertaken, officers would produce an Individual Cabinet Member Decision (ICMD), for approval by the relevant Cabinet Members, which would:
- Outline the procurement undertaken, and why it is in line with this strategy,
 - Confirm the number and type of vehicles required and any infrastructure changes,
 - (South only Request the move of provisional capital budgets to approve and) authorise officers to complete the purchase.
23. Where there are no opportunities to move away from fossil fuelled ICE vehicles within the operational effectiveness of providing the statutory service, restrictions in infrastructure or the financial scope, focus would be given to ensure the most efficient and lowest polluting vehicle fuels available are specified for the acquisition.
24. In line with the overarching councils' procurement strategy, as part of reviewing the options available for a particular type of vehicle, consideration would also be given to the environmental credentials of the vehicle manufacturers and suppliers of vehicles, to understand their commitment to reducing carbon, both in manufacturing and ongoing supply arrangements.
25. The new process would follow the following indicative timeline for each of the four annual vehicle procurements cycles – 2025/26 through to 2028/29:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Fleet appraisal procurement																								
Fleet appraisal																								
High level assessment of vehicle market																								
Budget setting process																								
Finalise vehicle specifications																								
Approval of business case and authorisation to procure																								
Procurement exercise																								
Individual Cabinet Member Decisions (ICMD)																								
Orders placed																								
Vehicles arrive (pending manufacturer timescales)																								

Financial Implications

Capital Budget Provision

26. The current capital budget provision proposed over the next 5 years which will need agreement by both councils for vehicle replacements is set out below. However, the numbers, and profiling of this budget is only indicative at this stage, and an annual review of vehicle requirements will be undertaken prior to the annual budget setting cycle and as part of the adoption of this strategy.

#	2024/25	2025/26	2026/27	2027/28
South Oxfordshire	£950,000	£1,750,000	£1,500,000	£1,500,000
Vale of White Horse	£950,000	£1,750,000	£1,500,000	£1,500,000

approved as part of budget setting in 2024.

Legal Implications

27. There are no legal implications related to this report, proposed process or supporting appendix, the provision of waste collection and street cleansing services are a statutory function of 2nd tier local authorities and having the necessary vehicles in place to deliver the service, is therefore paramount.

Climate and Ecological Emergency Implications

28. Waste collection is the biggest contributor to South and Vale carbon emissions as set out above. Route management and other efficiency actions are ongoing and will continue to reduce emissions in the future.
29. Research and trials to identify how low carbon vehicles can fit the districts' geography are a high priority moving forward. Financing vehicles with a high upfront capital cost but attractive whole life costs, needs further investigation to inform future acquisition decisions.
30. All vehicles have their own climate impacts however, battery electric vehicles are likely to be the best low carbon option in future, subject to acceptable solutions being found to range, fuelling infrastructure and cost.

Equality implications

31. There are no equality implications related to this report or supporting appendix.

Risks

32. With a largely ageing waste collection and street cleansing vehicle fleet, it is necessary to replace vehicles as they become unviable to maintain/repair, in order to protect the statutory service provision. By not supporting the recommendation to introduce a new strategic approach for reviewing technological advancement within the waste fleet industry and ordering the correct vehicle, able to perform the intended
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function, for a price which is affordable and which positively contribute towards the councils climate aspirations, there is a risk that the wrong vehicles may be purchased which would have a negative impact on the service, budget and/or carbon reduction aspirations of the councils.

Alternative Options

33. With high maintenance costs of keeping the current fleet in service falling on the councils under the new open book budget arrangement from June 2024 (where the councils are directly responsible for the costs of the services, plus management overhead and operating profit), the option to do nothing is not affordable and considering the detrimental effects on the front-line statutory services, not reputationally palatable.
34. The councils could choose to substitute vehicles needing replacement with leased equivalents and let technological advancements improve in the sector, which would hopefully reduce the high value initial outlay required to purchase FCEV or BEV vehicles compared with ICE equivalents. However, this option would bring with it significantly higher associated revenue costs, potentially increased carbon because hire companies traditionally use older fleet and no clarity on when a viable solution would be available.

Conclusion

35. Although the end of diesel-powered heavy goods vehicles will happen, the replacement timetable has not yet been fully defined and the geographies of the councils won't change. If the councils want to wait for HGV technologies to be established and affordable, before deciding on which alternative fuel to choose, they should not feel uncomfortable about a movement to full HGV Euro 6 ICE for the larger fleet and incorporating other measures as shown at Appendix 1 of this report together with effective carbon offsetting for their journey towards net zero carbon.
 36. There are advantages and disadvantages with all vehicle fuel types, but these need to be balanced with the needs of the frontline services, together with whole life costs and affordability.
 37. It is not considered that the councils (similarly for most mixed fleets in the UK) will have a single fuel type for the entire vehicle fleet in the short to medium term. Instead, it is envisaged a mix of battery electric vehicles (BEV), hydrogen fuel cell electric vehicles (FCEV) and internal combustion engines (ICE) and/or hydrotreated vegetable oil powered (HVO) along with a range of other measures may be the practical solution over the next few years.
 38. The adoption of this vehicle strategy provides a clear process for officers to follow, which will enable them to review the needs of the service, together with the options available within the industry and their respective costs, in order to present to members, so that an informed decision on capital budget allocation can be made each year.
 39. Therefore it is recommended that the proposed new process for vehicle replacements, as set out in this waste and street cleansing vehicle strategy be noted
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by Cabinet members in preparation for the 2024 fleet assessment review and replacement, and as part of the capital budget setting process for 2025/26.

40. Any feedback provided by the Joint Scrutiny Committee, will be referenced at the individual Cabinet meetings, when the report is discussed.