BARNSLEY METROPOLITAN BOROUGH COUNCIL

REPORT OF: **Executive Director – Growth & Sustainability**

TITLE: **Vehicle Replacements 2023/24**

REPORT TO:	**Cabinet**
Date of Meeting	**5 April 2023**
Cabinet Member Portfolio	**Environment and Highways**
Key Decision	**Yes**
Public or Private	**Public**

Purpose of report

To request approval for the 2023/24 Fleet Vehicle Replacement programme which proposes the procurement of 102 vehicles, plant items and equipment in line with the Vehicle Replacement Strategy 2019 to 2025, previously approved by Cabinet (Cab.20.2.2019/10 refers).

Council Plan priority

- Sustainable Barnsley
- Healthy Barnsley
- Enabling Barnsley

Recommendations

That Cabinet:-

1. **Authorise the procurement of 102 vehicles, including up to 29 ULEVs, in the 2023/24 financial year, to be used by council departments and partner organisations, with a total value of up to £5.45M, by way of purchase followed by a sale and lease back arrangement or whichever method of funding is deemed appropriate following full financial appraisal.**

1. INTRODUCTION

1.1 This report sets out options for the annual replacement of vehicles that have reached the end of their lease period or have exceeded the optimum point at which to be replaced.

1.2 This recommended, strategic optimum, option will further transform the fleet in line with the Council's 2030 sustainable and enabling Barnsley objectives. The Council Fleet of over 420 vehicles, plant and equipment has a capital value of over £15m and is essential to deliver statutory services to Barnsley residents, it is therefore imperative that its impact on the environment is reduced as much as possible to help create a healthier and more sustainable Barnsley.

1.3 Already contributing towards the 2030 Sustainable Barnsley objective, the Council operates 34 zero tailpipe emission electric vehicles. For our new vehicles, Electric is our preference, however those that cannot be electric will always meet the latest emissions standards. It is estimated that the vehicles procured since 2019 produce around 75% less CO2 per km travelled than the older vehicles they have replaced.

1.4 Where electric vehicles are not available on the market, other types of low emission vehicles are researched and considered. Currently the council's ambition is ahead of the market availability meaning the percentage of Electric Vehicles and number of Ultra Low Emission Vehicles (ULEVs) in the fleet is not advancing as quickly as desired due to:

- The specialist nature of vehicles operated by the council.
- Development of ULEVs in the commercial vehicle market being slower than the passenger car market.
- Manufacturers of commercial vehicles are focusing research and development on Electric Vehicles – therefore, the steppingstone created by hybrids has not been available for a large portion of our fleet.
- Covid 19 has also had an impact on the industry, meaning that product development has stagnated, and releases of new products has been delayed.

The Council continues to monitor the market, as products are developed and released opportunities will be sought to trial innovative technology so that when it is readily available and financially viable the council is able to adopt it.

1.5 This report seeks approval to implement a replacement programme for 2023/24 which will allow the department to continue to contribute to the 2030 Sustainable Barnsley objective. It plans to procure a total of 102 vehicles, 29 of which have been identified as candidates for EVs. 86 of these vehicles are replacing existing vehicles, with 33 of these for use by Berneslai Homes. The remaining 16 vehicles are not replacements and are additional to the existing fleet, one of these additional vehicles is for use by Berneslai Homes. These additional vehicles are to accommodate the growth of the services and in the case of Travel Assistance to support the business case of bringing routes

(where it is economical to do so) in house to reduce cost and relieve pressures on service delivery caused by market pressure.

1.6 The market has recently taken steps forward that would, following trials, allow to council to procure up to ten fully electric light tipper vehicles for use in the Neighbourhoods Service as well as a further 19 electric cars and vans across other services.

1.7 There are a total of 64 vehicles on order awaiting delivery from the 2022/23 Vehicle replacement programme. These have a value of £2.711M. The council has experienced delays in delivery of new vehicles, suppliers are informing us this is due to shortages in parts, labour, materials, and energy issues resulting from the geopolitical incident in Ukraine with legacy impact from Covid 19 and Brexit. This is adding a financial pressure to the fleet budget because of additional maintenance on older vehicles, lease extension costs for existing vehicles, and a reduction in availability of vehicles which requires additional short term hire vehicles to meet service delivery requirements.

1.8 As a result of the rise in inflation rates, the council has also experienced large price increases both for new vehicles and parts/materials required to service and maintain its existing fleet.

1.9 Every vehicle has a lifespan based on its type, the role it carries out and its usage profile. Once a vehicle reaches the end of this lifespan there is an increase in maintenance cost and vehicle downtime. Therefore, it is imperative that vehicles are replaced once they reach this point to ensure that excess downtime doesn't adversely affect the department's ability to deliver their services and the council does not incur additional costs associated with maintenance. A decision on whether the vehicles will be replaced at the end of their scheduled life will be made towards the end of the initial lease period. Appendix B shows vehicles that are considerably over their initial lease period. With such a diverse fleet with varied uses we cannot determine the exact life of a vehicle; it is dealt with on a case-by-case basis after the initial review period.

1.10 Tables 1a and 1b below shows a breakdown of the capital request by department.

Table 1a – Replacement Vehicles

User/ Department/ Customer	Number of vehicles (ULEV)	Average age (years)	Capital cost	Extra cost for ULEV	Total capital cost
Bereavement Services	1(0)	6.2	£120,000	£0	£120,000
Berneslai Homes	32(0)	5.1	£1,055,000	£0	£1,055,000
Facilities Management	16(16)	4.4	£430,000	£210,000	£640,000
Highways	5(0)	9.7	£515,000	£0	£515,000
Mayoral Support	1(1)	9.4	£40,000	£40,000	£80,000
Neighbourhoods	26(10)	7.7	£1,375,000	£300,000	£1,675,000
Public Rights of Way	2(0)	4.5	£70,000	£0	£70,000
Safer Neighbourhoods	1(0)	9.5	£55,000	£0	£55,000
Travel Assistance	2(2)	3.3	£50,000	£30,000	£80,000
Sub-Total	**86(29)**	**6.6**	**£3,710,000**	**£580,000**	**£4,290,000**

Table 1b – Additional Vehicles

User/ Department/ Customer	Number of vehicles (ULEV)	Average age (years)	Capital cost	Extra cost for ULEV	Total capital cost
Berneslai Homes	1(0)	N/A	£35,000	£0	£35,000
Travel Assistance	15(0)	N/A	£1,125,000	£0	£1,125,000
Sub-Total	**16**	**N/A**	**£1,160,000**	**£0**	**£1,160,000**
Total	**102(29)**	**6.6**	**£4,870,000**	**£580,000**	**£5,450,000**

2. PROPOSAL

2.1 A total of 86 vehicles will be procured to replace existing vehicles and an additional 16 procured to meet operational needs as detailed in Appendix B and Tables 1a and 1b. Funding for the additional vehicles will be moved to the fleet budget from existing budgets currently held by the departments that have requested the vehicles.

2.2 The council vehicles that are planned for replacement in this batch have been in service for on average 6.6 years and are on average 0.9 years over their initial predicted lifespan. Considering longer than usual lead times for vehicle delivery, any vehicles detailed in appendix B that have not yet reached their initial predicted lifespan will have done upon delivery of the replacement vehicle.

2.3 Up to 29 of the procured vehicles will be EVs; the certainty on the number of ULEVs is restricted by the current market, vehicle charging infrastructure and future vehicle usage however prior to any procurement these restrictions will all be assessed and ULEVs will always be preferred to Diesel or Petrol vehicles. Where possible, procurement may be delayed allowing the market to catch up with our ambition.

2.4 Replacing vehicles at the end of their life is beneficial to the council for the following reasons:

- **Reduction in carbon emissions** – replacing vehicles enables us to move onto innovative technology such as ULEVs, however even if a diesel or petrol vehicle is replaced with another, new engines are much cleaner, and it will still result in a reduction in emissions. Studies show that the emissions of an electric vehicle are up to 2 tonnes less than a Diesel when travelling 10,000 miles in a year. New emissions standards have dramatically decreased the emissions of vehicles, for example, a medium sized panel van in 2014 emitted 0.359 grams of CO2 per km a new one would emit 0.192g/km, a reduction of almost 50%.
- **New safety technology** – new vehicles have features to make them safer to the occupants and public, reducing the risk of accidents. Some examples are detailed at 19.2.
- **Reduction in maintenance** - as vehicles age their maintenance requirements increase, meaning that they spend more time off the road and potentially incur extra costs.
- **Reduction in running costs** – new vehicles are much more efficient, meaning that fuel and other associated running costs would be lower.

- **Increase in vehicle availability** – due to the additional maintenance requirements of older vehicles, they inevitably spend more time off road, which potentially increases the requirement on hire vehicles to maintain service delivery.
- **More efficient working** – new vehicles can be tailored to suit operational requirements, meaning that operatives can use them in a more efficient manner than the ones they are replacing.

2.6 When replacing a vehicle with an alternative fuelled vehicle, electric is the council's current preference. This is for the following reasons:

- Market research undertaken by council officers has shown that the availability of electric vehicles is greater than other alternative fuels. It has also shown there is a greater diversity of vehicle types available as electric compared to other alternative fuelled vehicles.
- The council already has a small electric vehicle charging infrastructure that can be utilised for additional electric vehicles.
- They give a 100% reduction in tailpipe carbon and particulate emissions, resulting in a benefit to the air quality within Barnsley.
- There is no infrastructure for alternative fuelled vehicles such as Hydrogen in Barnsley.

2.7 Vehicle replacements will be scrutinised and robust challenges made before any procurement takes place. This is to ensure that the fleet is utilised as much as possible and unnecessary or underused vehicles are not replaced. Where there are possible alternatives to replacing a vehicle, a decision will be made by fleet services as to the action taken. Alternatives to replacement could include:

- Services sharing vehicles where they are used at different times, tools such as vehicle telematics will allow detailed utilisation reports to be viewed. If a vehicle can be shared between departments or utilisation does not warrant a dedicated vehicle, procurement of a replacement will not take place.
- Use of short term hire vehicles or pool vehicles if use is sporadic and the cost of a dedicated vehicle is greater than that of a short term hire vehicle.
- Utilisation of grey fleet – again if the cost of a dedicated fleet vehicle outweighs that of mileage claims.

2.8 Procurement of replacement vehicles will consider the predicted whole life cost of vehicles – purchases will not be made based solely on the initial price. As well as our own calculations we will utilise external research that is freely available to us as an aid.

2.9 A final decision will be made on whether to replace the vehicles we have identified with EVs or ULEVs during the procurement process. The usage profile will be scrutinised, and estimated fuel and maintenance cost reduction will be evaluated against the additional purchase price and leasing cost. The infrastructure available to charge the vehicles will also be a determining factor. E.g., Fitting additional EV Charging points.

2.10 Based on industry data, a benefit of EVs, as well as zero tailpipe emissions, is that the day to day running costs are typically much lower than their diesel- or petrol-powered counterparts so it is likely that the whole life costs of them will be lower. The council is compiling data from its own fleet to determine the optimum usage profile for EVs in Barnsley.

2.11 Research suggests that the fuel cost of using Full Electric Vehicles is around 50% of the price of Diesel equivalent vehicles. The maintenance requirements of electric vehicles are also less than diesel vehicles meaning that servicing and maintenance costs are lower over the lifetime of the vehicle. This is variable and will change as the price of fuel and electricity fluctuates.

Future Funding Requirements

2.12 The Vehicle Replacement Strategy 2019 - 2025 stated that the capital expenditure forecast and the revenue impact of this for the following five years would be presented as part of the annual capital requirement report to provide a longer-term view of the capital funding requirement. These projections are generated from a spreadsheet model designed for this purpose. The requirements for years 2023/24 to 2027/28 are set out in Table 2. Unless there is a change in financing policy, resulting from changes in accounting standards (see section 7) or otherwise, future purchases will also be followed by sale and leaseback arrangements following the initial purchase.

Table 2

Financial Year	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Number of vehicle to procure						
BMBC services	69	21	25	65	20	200
Partners	33	1	55	2	9	100
Total number	**102**	**22**	**80**	**67**	**29**	**300**
Projected Capital Expenditure						
BMBC services	£ 4,360,000	£ 658,965	£ 3,951,516	£ 4,923,770	£ 1,864,556	£ 15,758,807
Partners	£ 1,090,000	£ 33,806	£ 1,820,630	£ 65,520	£ 162,337	£ 3,172,293
Total spend	**£ 5,450,000**	**£ 692,771**	**£ 5,772,145**	**£ 4,989,290**	**£ 2,026,893**	**£ 18,931,099**
Impact on revenue (leasing cost budget)						
Opening leasing cost	£ 1,690,470	£ 2,503,160	£ 2,532,696	£ 2,960,911	£ 3,334,407	
Increase due to new vehicles	£ 1,090,846	£ 114,307	£ 952,404	£ 823,233	£ 334,437	
Increase due to additional vehicles	£ 191,400	£ -	£ -	£ -	£ -	
Decrease from vehicles returned	-£ 469,556	-£ 84,771	-£ 524,189	-£ 449,737	-£ 155,212	
Closing leasing cost	**£ 2,503,160**	**£ 2,532,696**	**£ 2,960,911**	**£ 3,334,407**	**£ 3,513,632**	
Existing Leasing Budget	£ 1,994,917	£ 2,463,624	£ 2,465,874	£ 2,571,533	£ 2,576,520	
Increase in partner fees	£ 283,082	£ 2,250	£ 105,659	£ 4,987	-£ 12,010	
Budget Transfer Required from User Depts	£ 185,625	£ -	£ -	£ -	£ -	
Revised Leasing Budget	**£2,463,624**	**£2,465,874**	**£2,571,533**	**£2,576,520**	**£2,564,511**	
Under/-Overspend before one off savings	**-£39,536**	**-£66,822**	**-£389,378**	**-£757,886**	**-£949,121**	
Reduction in maintenance costs	£ 73,470	£ 10,392	£ 86,582	£ 74,839	£ 30,403	
Savings from ULEVs	£ -	£ -	£ -	£ -	£ -	
Under/-Overspend	**£33,934**	**-£56,431**	**-£302,796**	**-£683,047**	**-£918,718**	

2.13 The figures in Table 2 include a replacement cost for the purchase of replacement vehicles procured within the time shown that also reach the end of their life within the period shown. For instance, if the life of the vehicle is 5 years, it will be included in 2023/24 and in 2027/28.

2.14 The figures also assume that vehicles will be replaced when they come to the end of their existing initial lease period/life of the vehicle. However, this may not be the case. The need for the replacement will be evaluated towards the

end of the lease period. If replacement is not deemed necessary at that point, then the lease will be extended, and this profile amended.

2.15 Table 2 shows that if the expected reduction in maintenance costs from having newer vehicles is included in the calculations there is sufficient headroom in the Fleet revenue budget for the 2023/24 replacement programme. From 2024/25 onwards, the increases in leasing costs resulting from increases in the capital cost of BMBC replacement vehicles (for Berneslai Homes, the increased costs are passed through via increased charges) can not be totally absorbed within the existing budget resulting in increasing overspends year on year. As noted in paragraph 2.17 below, these overspends will be even higher if the costs of ULEVs do not reduce over time. Savings in other areas will need to be found or alternative financing/procurement options explored to be able to stay within budget. There are several risks, (the actual cost of vehicles, borrowing rates, the effect of residuals on leased vehicles, actual delivery dates) and opportunities (e.g. lower repairs and maintenance costs when running a newer fleet) which will impact on the capital and revenue budgets going forward. Therefore, the programme should be refreshed each year.

2.16 The projections in Table 2 (except those for 2023/24) do not include the additional capital cost that will be required for ULEV upgrades to the fleet for the following reasons:

- Due to the ongoing product development of ULEVs we are unable to predict what suitable vehicles will be available to us in years to come.
- It is predicted that the price gap between ICE vehicles and ULEVs will drop in the coming years – meaning that additional funding may not be required.

2.17 If we continue with the strategy adopted in 2019/20 to buy 25% of replacement vehicles as ULEVs and make the same assumptions about the incremental cost of ULEVs (the price difference is dependent on the type of vehicle, however based on the predicted costs in appendix B, basic electric vans/cars are an average of £13,333 more expensive than the equivalent petrol or diesel versions), then £659,983.50 of additional capital expenditure will be required in the next 5 years as shown in Table 3, not including 2023/24. This will result in an increase in the annual leasing charge of £134,636.63 per year by 2027/28. The table also shows the additional funding requirement should 50% of the replacements be ULEVs. This is assuming that no specialist electric vehicles are procured in this period, which would be considerably more expensive.

Table 3

Financial Year	2024/25	2025/26	2026/27	2027/28	**Total**
Total Vehicles to be Replaced	22	80	67	29	**198**
25% ULEVS	6	20	17	7	**50**
Additional Capital Requirement	£73,331.50	£266,660.00	£223,327.75	£96,664.25	**£659,983.50**
Additional Leasing Cost	£14,959.63	£54,398.64	£45,558.86	£19,719.51	**£134,636.63**
50% ULEVS	11	40	34	15	**99**
Additional Capital Requirement	£146,663.00	£533,320.00	£446,655.50	£193,328.50	**£1,319,967.00**
Additional Leasing Cost	£23,466.08	£85,331.20	£71,464.88	£30,932.56	**£211,194.72**

2.18 Additional capital expenditure will also be required for more charging points to support these additional vehicles. A separate piece of work is ongoing looking at the redevelopment of Smithies Lane Depot, where the majority of the Council's vehicles operate from, this will consider the requirement for additional charging points and be presented in a separate report.

2.19 The leasing charge figures in Table 3 assume that we will be able to secure similar lease terms for ULEVs to those for petrol and diesel vehicles. If funders assume that ULEVs to be higher risk (e.g., uncertainty about demand and battery life) then the leasing charge could be higher.

2.20 The introduction of Electric Vehicles to the council's fleet may bring the requirement for investment to be made into the vehicle maintenance workshop and the upskilling of Technicians. The requirement is currently under assessment and any funding requirements identified will be brought forward in a separate report

2.21 To further facilitate the sea change towards Electric Vehicles the charging infrastructure at Smithies Lane Depot will also need to be increased – to allow this to happen a review of the depot is required to ensure that it is future proofed and able to accommodate a modern fleet. The current infrastructure may limit the number of ULEVs that can be procured detailed in this report.

Future Fleet Strategy

2.22 The Government have announced that they will ban sales of new petrol and diesel cars and vans in 2030 and larger vehicles in 2040. The council has also set a target to be carbon neutral by 2040.

2.23 As the fleet accounts for a large portion of the fleets carbon emissions and given the deadlines that are set to be imposed by the Government, adopting and adapting to alternative fuel technology must be a priority for fleet services and the council.

2.24 In order to set out a medium and long term strategy, officers from fleet services have conducted market research, including speaking to manufacturers, suppliers and early adopters of alternative fuelled vehicles. This has shown that given the current pace of product/market development and uncertainty around new technology that it would not be possible to set out a detailed medium term plan.

2.25 Learning from this market research has been beneficial and will help to shape a short and long term strategy. Some key points have been:

- Electric Vehicles are currently the best alternative fuelled vehicle option for most of the council's vehicle types and operations.
- It is vital that infrastructure to charge electric vehicles is in place prior to arrival of new vehicles. Installation of infrastructure can be complex/time consuming and requires an electrical engineering specialist to oversee.
- Operational change may be required to accommodate the vehicles – additional purchase price and differences in the abilities of the vehicles may require them to be used differently.
- There will be a large shift in the way vehicles are maintained – especially electric. Technicians will need to learn new skills and gain additional qualifications.

2.26 The council's current strategy in relation to adoption of the new technology is:

- Electric Vehicles are the current preferred alternatively fuelled vehicle.
- Where possible and financially viable, electric vehicles will be procured to replace existing diesel or petrol vehicles when they reach the end of their lease period.
- Through the existing Carbon Management Groups, lead through the sustainability team within BU6 – develop a strategy for an electric vehicle charging infrastructure that can be utilised by fleet vehicles.
- Fleet Services will continue to monitor the market for changes that could both positively and negatively affect the council's adoption of alternatively fuelled vehicles.
- The annual Vehicle Replacement report will be used to determine how many alternatively fuelled vehicles could be procured; however, this will be dependent on other factors at the point of procurement.

3. IMPLICATIONS OF THE DECISION

Financial and potential Risks

3.1.1 Consultations on the financial implications have taken place with representatives of the Service Director – Finance (S151 Officer)

3.1.2 This report outlines the proposal to purchase 102 new vehicles and items of equipment during 2023/24. The total capital cost is estimated to be in the region of £5.450M (Table 1a and 1b).

3.1.3 In previous years, the approach adopted has been to purchase the vehicles and following physical delivery, to finance them over a period of 4 to 8 years reflecting the useful life of the vehicle. The finance or leasing costs are charged to the revenue account. Therefore, in respect of affordability and funding implications, the revenue budget is where the assessment is made.

3.1.4 It is estimated that the annual revenue leasing cost of financing the £5.450M expenditure above will be £1.091M. The leasing costs of the £2.321M vehicles ordered as part of the 2022/23 approved programme and scheduled for delivery in 2023/24 is £0.191M resulting in a total increase of £1.282M. This will be reduced by £0.470M to £0.812M for the annual leasing commitments released when the leases for the replaced vehicles are terminated.

3.1.5 The £0.812M increase will be mitigated by a £0.283M increase in partner fees for more expensive replacement vehicles, a £0.186M permanent budget transfer from user departments for the 30 additional vehicles (HtS Transport for new routes) and a projected £0.073M reduction in maintenance costs for the newer vehicles. The remaining £0.270M will be funded from the existing leasing budget.

3.1.6 Table 2 shows that the 2023/24 replacement programme can be funded from the existing leasing budget leaving a £0.034M underspend. From 2024/25 onwards, the projections show increasing overspends year on year due to the higher capital costs of replacement BMBC vehicles which have to be absorbed by the service. Increases in costs for partners vehicles can be passed on through increases in fees. Savings in other areas will need to be found or alternative financing/procurement options explored to be able to stay within budget. Also, the programme may change between now and that time so we will need to monitor this and either amend the future procurement programme or plan for the additional savings within the service or directorate. The under/overspends will only arise if all vehicles in the programme are received in the year in which they are identified to be purchased. Given the lead times for some of the vehicles slippage is expected to occur leading to a re-phasing of the number of vehicles required in each year. In the unlikely event that they are all received in the relevant financial year then the numbers of vehicles due to be procured in later years will be re-evaluated.

3.1.7 Brexit, Covid 19 and the Ukraine crisis have resulted in considerable upward pressure on prices and interest rates. These may result in the actual leasing charges being higher than estimated in the projections in Table 2. Any amounts that cannot be passed on to user departments and partners will result in additional pressure on the Fleet budget and/or other areas within the service.

3.1.8 Further details are set out in Appendix A.

3.1.9 Table 3 shows the additional capital and revenue cost if 25% of the replacement vehicles in future years are ULEVs. The figures assume that ULEVs will cost, on average, £13,333 more than the equivalent petrol or diesel versions. The projections show that £660k of additional capital and

£135k additional revenue expenditure (to the figures in Table 2) will be required in the next 4 years. This will be offset by savings in operating costs or additional income from partners so there should be no additional pressure on the leasing budget.

3.1.10 Additional capital expenditure may also be required in future years to increase the number of charging points for electric vehicles to support the increasing size of the electric fleet.

3.2 Legal

3.2.1 Operating older vehicles could have an adverse effect on the Council's Operators Risk Compliance Score (OCRS) due to the higher risk of them developing defects on the road and increased maintenance requirements. Barnsley Council could see action against the Operator Licence up to total revocation, meaning that the council would not be able to operate a large quantity of its fleet, impacting on the services that can be delivered.

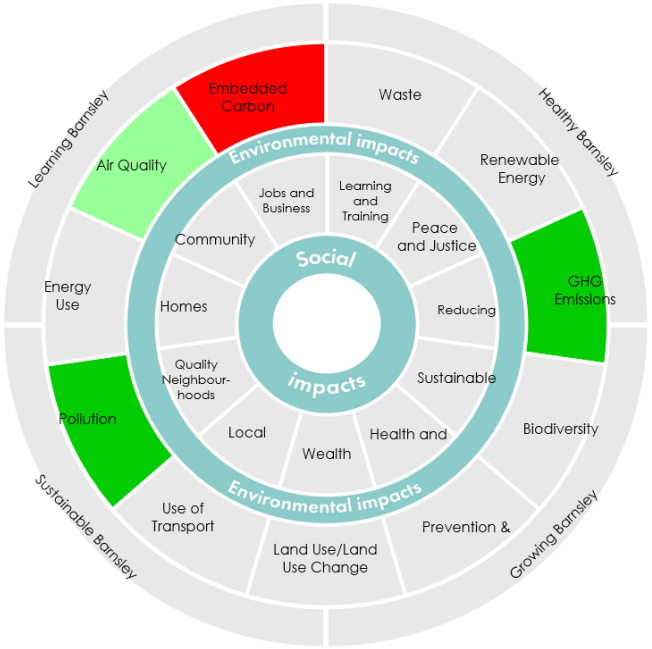
3.2.2 If drivers are found to be using a defective vehicle, they could also face personal liability including fines, penalty points and loss of license.

3.2.3 As a result of increased maintenance requirements with older vehicles, the council could also struggle to meet its statutory duties should vehicles not be replaced, this would put the council at risk of legal action.

3.3 Equality

Not applicable – there will be no changes to the services the council provides because of vehicle procurement or replacement.

3.4 Sustainability



3.4.1 The Carbon wheel shows that replacing existing vehicles will have a high positive impact on GHG emissions and pollution. This is as a direct result of new vehicles meeting a higher emissions standard than the ones they are replacing, or diesel vehicles being replaced with electric. From the experience of vehicles, we have already replaced recently, based on the emissions declared on the vehicles V5C document there has been an overall 75% reduction in CO2 exhaust emissions.

3.4.2 The reduction in GHG emissions and pollution also has a low positive impact on the air quality of Barnsley – this is because of lower or no exhaust emissions from the Council's fleet as it carries out its work across the borough. Transport currently accounts for over 36% of total BMBC core carbon emissions. It is estimated that replacing diesel and petrol vehicles with electric vehicles will reduce emissions from transport by around 65% currently and by 76% by 2030 due to on-going decarbonisation of the UK's electricity supply.

3.4.3 Facilitating the take-up of EVs is an important action within the Council's Air Quality Action Plan (https://www.barnsley.gov.uk/media/5738/barnsley-mbc-air-quality-action-plan-2017.pdf), along with a commitment to improving the Council's fleet. Procurement of EVs will demonstrate commitment to the Air Quality Action Plan and can act as an exemplar to other private and public fleet operators in the Borough of the environmental and operational benefits of such vehicles.

3.4.4 In 2019, the Council declared a Climate Emergency with a commitment for the Council to be zero carbon in its operations by 2040 (Zero40), and for the wider Borough to be zero carbon by 2045 (Zero45). The transformation of the fleet works towards achieving the commitments set out.

3.4.5 There is high negative impact on Embodied Carbon – to gain the benefits detailed above, new vehicles must be procured of which there is an element of embodied carbon.

3.5 Employee

3.5.1 Employees from user departments will be consulted along with management throughout the procurement process to assist in drawing up new vehicle specifications and assessing the suitability of vehicles. Demonstrator vehicles will be sourced to assist them in their decision making where possible.

3.5.2 Training for new vehicles will be requested as part of the procurement process for operators and technicians. The new vehicles will have significantly different technology to those they are replacing and to ensure that employees can use and maintain them safely and efficiently sufficient familiarisation and training will be provided.

3.5.3 Older vehicles increase the pressure on drivers as there have less driver safety aids and they are more difficult to drive; this increases the chance of a collision. Collisions in council vehicles not only have an adverse effect on the driver's mental health as they are potentially subject to investigation and

disciplinary action but also affects their personal vehicle insurance premiums as they must, by law be declared. The risk of injury in collisions also has an impact on the absence rate of our employees, in turn impacting on service delivery.

3.5.4 Newer vehicles and ULEVs produce less carbon and particulate emissions – meaning that there is a reduction in risk to the operative's health through inhalation of exhaust fumes.

3.5.5 Evidence collected from other operators of Electric Vehicles also shows that staff wellbeing and productivity are better as a result of using Electric Vehicles due to a reduction in noise, vibration and contact with fumes/emissions. This has resulted in staff experiencing less headaches and reduction in stress levels.

3.6 Communications

3.6.1 The council's livery is very distinctive in Barnsley and the vehicles are visible all over the borough, some of these vehicles drive down every street in the borough at least once a week. Greater consideration should be afforded to using vehicle sides to market the council's key messages and priorities. It will be recommended that council departments routinely use this opportunity to promote the wider work of the council. The space could also be used to promote the use of electric vehicles.

3.6.2 Communications are aware of the Vehicle Replacement Strategy and this report and will communicate as required. The further increase in ULEVs could be used as a positive marketing message for the council.

3.6.3 Recently, a marketing campaign to name the council's new fleet of new gritter has been highly successful, increasing awareness of the service provided and providing positive engagement with the public. Communications and Marketing will be made aware of all new vehicle deliveries and may consider advertising them on social media or running similar campaigns.

4. CONSULTATION

Name	Position	Section(s) contributed to
Paul Castle	Service Director – Environment and Transport	All
Andrew Simpson	Head of Commercial & Operations Support	All
Marian Kempson	Project Manager	3.4
Jodie Hopper	HR Business Advisor	3.5
Maq Ahmed	Project Accountant	Financial
Sandra Beaumont	Principal Accountant	Financial

5. ALTERNATIVE OPTIONS CONSIDERED

5.1 Alternative Option 1 - Do Nothing, Not Recommended.

Retain the vehicles detailed in Appendix B and extend them beyond their planned lifespan. This option is not recommended as it would lead to increases in maintenance costs, vehicle downtime and supplementary hire vehicles due to more complex repairs becoming necessary and expensive lease extension fees. This would adversely affect user departments' ability to provide front-line services and prevent the council benefiting from newer safety technology, the number of ULEVs in the fleet will not increase and the council will be operating vehicles with older Euro rated engines that do not meet the same emission standards as newer equivalent vehicles. It will also not demonstrate commitments in the Councils 2030 objectives, Air Quality Action Plan, and the Governments 'Road to Zero' strategy.

5.2 Alternative Option 2 – No ULEVs – Not Recommended

Replace the vehicles detailed in Appendix B but not procure ULEVs. This option is not recommended as the borough would not benefit from the increase in air quality that lower/zero emission vehicles bring, the council would also fail to show a good public image in helping to encourage others to take up this technology. It will also not show support to the commitments in the Council's 2030 objectives, Air Quality Action Plan, and the Government's 'Road to Zero' strategy. The benefit to this option would reduce the total capital expenditure to £4.87M.

6. REASONS FOR RECOMMENDATIONS

6.1 Procuring new vehicles will allow the council to continue to deliver essential and statutory services in a safe and efficient way without higher maintenance or hire costs.

6.2 Replacing existing vehicles will allow the council to benefit from either the latest emissions standard vehicles or zero emission electric vehicles. Reducing the carbon emissions of the council's fleet and improving air quality in the borough contributing to the Sustainable Barnsley 2030 objective and the action point within the Council's Air Quality Action Plan.

6.3 New vehicles will also reduce the maintenance cost of the fleet – as vehicles age their maintenance requirement increases. The new vehicles will also come with a warranty, meaning the cost of any breakdowns or unplanned maintenance will not be incurred by the Council.

6.4 Extension of leases or purchasing vehicles out of their lease is not a cost-effective solution given the higher running costs of the vehicle and the additional leasing cost.

7. GLOSSARY

ICE Internal Combustion Engine – Diesel or Petrol vehicles.

ULEV a vehicle that emits less than 75g of Carbon Dioxide (CO2) per kilometer travelled and is capable of at least 10 miles of zero emission driving between recharging. They include:

- Fully Electric Vehicles (EVs) (this is currently the council's preference).
- Plug-in Hybrid Electric Vehicles (PHEVs).
- Extended-Range Electric Vehicles (E-REVs).

8. LIST OF APPENDICES

Appendix A: Financial Implications
Appendix B: List of Vehicle Replacements

9. BACKGROUND PAPERS

None

10. REPORT SIGN OFF

Financial consultation & sign off	Maq Ahmed
Legal consultation & sign off	Martin Wong

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Date: 25/01/2023