Cabinet

Item 8(iii)

14 October 2020

Report of	**Assistant Director of Environment**	**Author**	**Robert Doran ☎ 282612**
Title	**Request for delegated authority for the Procurement of Fleet: Caged Tipping Vehicles**		
Wards affected	All Wards		

1. Executive Summary

1.1 This report is to agree the options for the purchase or contract hiring of twenty-one 3.5 tonne caged tipping vehicles for the reasons set out in this report and to delegate authority to purchase/contract hire the vehicles depending on the outcome of the procurement process and provided that costs are met within existing budgets.

2. Recommended Decision

2.1 To give authority to the Chief Operating Officer, in consultation with the Portfolio Holder for Waste, Environment and Transportation to purchase or contract hire twenty-one caged tipping vehicles for the reasons set out in this report and providing the costs can be met from within existing budgets.

3. Reason for Recommended Decision

3.1 The current fleet of caged tipping vehicles are coming to the end of their contract hire over the next ten months: thirteen in September 2020, one in October 2020, four in April 2021 and three remain on spot hire (these can be replaced at any time), so for operational reasons the Council will need to purchase/contract hire replacement vehicles.

3.2 Due to the types of vehicles and stages within the timescale for procurement in 2020 it is recommended to delegate authority to the Chief Operating Officer in consultation with the Portfolio Holder for Waste, Environment and Transport, to purchase/contract hire the caged tipping vehicles, to ensure that there is no risk to the delivery of core Council services.

3.3 The Council will carry out a procurement exercise through a specialised framework to determine whether the option to purchase or contract hire is the most cost-effective option.

4. Alternative Options

4.1 The Council could try to extend the lease hire for the existing vehicles, but due to the age and wear and tear on these vehicles, the current contractor will put clauses into the extended hire agreement stating the Council will be liable for any damage/failure of any major components, including engines and gear boxes. This would significantly increase hire charges, future maintenance costs and risk operational service delivery.

4.2 Low emission /electric caged tipping vehicles have been considered with the expert opinion of the Energy Saving Trust who are supporting local authorities like Colchester to transition to a more sustainable fleet. At this time the market for these vehicles in an electric format is restricted, making it operationally unviable and cost prohibitive compared to the Euro VI diesel engine equivalent. At this time, the Council is better served by investing in other measures to mitigate environmental impact across its operations. The Energy Savings Trust recommend the Council undertake one more procurement of Euro VI engines for this section of fleet (it is proposed to introduce other EV light fleet in 2021) and at the end of that period, electric vehicle technology, cost and viability will have improved. This timeframe aligns to the Council's developing Carbon Management Action Plan to be net zero by 2030. See Appendix A for an extract from the Energy Saving Trust report regarding the 3.5 tonne caged vehicles.

5. Background Information

5.1 The Council operates caged tipping vehicles, a critical element of its fleet operations is to empty litter bins, collect 'missed bins', undertake exemption collections, remove fly tipping, general street cleansing and maintenance, all of which relate to fulfilment of statutory duties. They are also provided for the Highway Ranger service delivered by the Council on behalf of Essex County Council.

5.2 The Council has a responsibility to ensure that all fleet complies with national standards, is adequate in terms of capacity, reliable and is fit for purpose to deliver against the agreed outcomes for the service.

5.3 Without a regime of vehicle replacement, the Council will not be able to deliver a satisfactory service to residents' visitors and businesses. The investment will promote financial, social and environmental benefits and support the Council's strategic aims.

5.4 The current caged vehicle fleet is coming to the end of the contract hire agreement over the next ten months; thirteen in September 2020, one in October 2020, four in April 2021 and three remain on spot hire (these can be replaced at any time).As such the Council will need to purchase/contract hire replacement vehicles.

5.5 Although the Council has a repair and maintenance contract with an existing provider, the level of wear and tear on these vehicles means that they are unavailable, due to repairs, for increasing periods of time. This means there are times when the Council does not have a full complement of vehicles available which in turn impacts negatively on services for residents and businesses.

5.6 Lead time for the delivery of new vehicles is uncertain considering the Covid-19 pandemic. With this in mind, and in order to allow time for vehicles to be delivered, a full procurement process and subsequent order needs to be progressed as soon as possible. The Council has agreed a short extension period for the existing cage tipping vehicles with our current provider to ensure services are unaffected throughout this transitional period.

5.7 The Council is working with the Carbon Trust to develop a detailed Carbon Management Plan to 2030. This includes a strategy to transition to a fully Electric Vehicle (EV) Fleet and the Council is working with experts at the Energy Savings Trust to develop this programme. In line with this strategic approach, the procurement of low emission /electric caged tipping vehicles has been considered but ruled out at this stage in consultation with the Energy Saving Trust. At this time the market for these types of vehicles in an electric format is restricted. This will impact negatively on operational

viability, and the costs associated with these vehicles are 200% higher compared to a Euro VI diesel engine equivalent resulting in a £95,000 annual budget pressure.

5.8 The Council is investing capital funding into a project to make improvements to the Shrub End Depot. It is proposed that this will include future proofing the site for electric fleet, including heavy goods vehicles. However, to develop the site to support a fully electric fleet requires a power supply with enough capacity to charge the entire fleet. The current power supply at Shrub End would not facilitate this and so it is advised that a substation may need to be built and installed at Shrub End or nearby. The cost and time frame for this is currently being explored.

5.9 In pursuit of the best practicable environmental option with the caged vehicles, any replacements at the current time will have the latest Euro VI engines. This will ensure cleaner fuel technology and will reduce CO^2 emissions, which falls under the Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles.

6. Procurement

6.1 The Procurement Partnership Limited (TPPL) Framework will be used for the caged tipping vehicles, due to the expertise and knowledge provided by the team and this will also ensure compliance with the Public Contracts Regulations 2015 and the Council's Contract Procedure Rules.

7. Equality, Diversity and Human Rights Implications

7.1 The relevant Equality Impact Assessment for the Council's Procurement Strategy can be found HERE

7.2 Through the Council's procurement strategy, staff will ensure that all procurement and purchasing documentation recognises, understands, and supports the Council's policies with regards to equal opportunities, diversity and human rights.

9. Strategic Plan References

9.1 Fleet operations are key element of the way the Council delivers its services to residents and businesses and therefore underpins much of the activity that will deliver against the strategic priorities. Fleet operations within the context of climate challenge and sustainability are considered within section 16 of this report.

10. Consultation

10.1 The Council have been in consultation with the Energy Savings Trust regarding the implementation of electric vehicles and the infrastructure required to charge these vehicles.

10.2 Frontline staff and service managers involved in the operational management of core services that require these fleet vehicles will be involved at all stages of the procurement and selection process to ensure that the vehicles are fit for purpose and appropriate.

10.3 There are no further direct consultation requirements over and above the process of publishing procurement awards.

11. Publicity Considerations

11.1 The vehicle fleet underpins many of the Council's core frontline services and this will have a potential impact on the perception of the Council if conducted well and there continues to be a good provision of services.

12. Financial implications

12.1 As part of the waste review, the Council agreed in 2018 to investigate the options of purchasing the waste fleet once the current leasing arrangements expired. It is proposed that the purchase of these vehicles is funded via prudential borrowing financed over a period of 7 years. The Council has already purchased the large fleet vehicles generating a saving of approximately £150,000 in 2019/20 with the additional £100,000 coming from the existing fleet vehicles in 2020/21.

12.2 Currently the Council leases 18 vehicles on a 7-year contract and 3 on spot hire at a cost of £151,500 a year. Soft market testing has taken place and the proposed option of purchasing these vehicles would require £520,000 of capital budget financed by borrowing.

12.3 Based on the cost of borrowing and maintenance, the total revenue implications of purchasing these vehicles amounts to £144,455 a year resulting in a saving of £7,045 a year towards the £100,000 target. The table below provides a breakdown of costs:

	Amount per year
Capital Financing Costs	87,465
Revenue Costs inc Maintenance	56,990
Total Cost	**144,455**

13. Health, Wellbeing and Community Safety Implications

13.1 These new vehicles should contribute to crew wellbeing as the vehicles will be more reliable meaning less downtime in fulfilling daily duties.

13.2 The new caged tipping vehicles will come with a Euro VI diesel engine meaning a reduction in CO^2 emissions from the old Euro V engines. This will improve air quality which in turn is a positive move for the wellbeing of our staff and communities.

14. Health and Safety Implications

14.1 The Council has a corporate responsibility to ensure that all fleet and transport operations comply with national standards. These new vehicles will come with safety beacons and rear door chevrons to meet legal requirements while working on Highways.

15. Risk Management Implications

15.1 By not undertaking a procurement process, we would be contravening the contract procedure rules of the Council, therefore making any award decision challengeable by other potential suppliers.

15.2 This procurement exercise has been undertaken to ensure the Council can demonstrate that a robust process has been followed and is contracting with a supplier to provide best value and to ensure continuity of service.

15.3 The Council will seek to mitigate against any potential risks by following the compliant procurement process and ensure contingency plans are in place for any failure of vehicles that may impact on core services.

15.4 Without these vehicles it would make it difficult for the Council to undertake it duties under the Environmental Protection Act 1990 and the Clean Neighbourhoods and Environment Act 2005.

16. Environmental and Sustainability Implications

16.1 As set out in this report, the electric caged tipping vehicles have limited scope and range which would affect service delivery. The additional costs associated with procuring EV's/hybrids are shown within the Energy Savings Trust report in Appendix A. In addition, the time factor required to build the infrastructure at Shrub End would need to be considered along with the additional cost implications.

16.2 The decommissioning of the existing caged tipping vehicles, which contain Euro V engines and replacing with new vehicles and Euro VI engines, will produce less hydrocarbons plus nitrogen oxides, bringing benefits to public health and the environment. This will ensure cleaner fuel technology and will reduce CO^2 emissions, which falls under the Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles. The Council should also see an improved fuel efficiency gain.

16.3 Replacing the small and medium vans (up to two tonnes) with an electric/hybrid version is a more viable option and a proposal for a 'phase 2' light fleet procurement exercise will be taken to Cabinet before the end of the year.

16.4 The fleet contract will include obligations on the contractor to ensure that the Council is kept informed about the latest environmental technology innovations.

16.5 The Council will constantly investigate and identify alternative options to improve the environmental impacts of the Council's fleet and will seek opportunities to trial new technology in line with the net-zero Carbon target.

16.6 A report about the conversion of the Council's fleet to electric, and the development of a transition strategy based on a review commissioned by the Energy Savings Trust is due to be presented to the Council's Environment and Sustainability Panel in December.

Appendix A Extract from Energy Savings Trust Report June 2020

Vehicle Type	Vehicle Count	Electric Alternative	Annual Cost / Saving if all vehicles electrified	Estimated annual CO_2e reduction if all vehicles electrified
Supermini	18	Peugeot e-208	£166	25.4
Lower medium hatch	7	Hyundai Ioniq	-£3,394	7.2
Small SUV	1	MG ZS	-£426	0.8
Small panel van	10	Renault Kangoo	£1,434	9.4
Medium panel van	8	Nissan e-NV200	-£1,944	6
Large panel van	4	Mercedes Benz e-Vito	-£2,490	4.5
Tipper	20	LDV EV80	-£94,717	41.8

In the van sector the small and medium Battery Electric Vehicle (BEV) vans (up to two tonnes) already offer a lifetime cost-saving alternative to Internal Combustion Engines (ICE) equivalents but the larger 3.5 tonne electric vans are currently expensive, have a limited range and a limited carrying capacity. This will change and between 2022 and 2025 we expect that 3.5 tonne vans (4.25 tonnes with a weight derogation) will become available with a single-charge range of at least 150 miles under full load and with a good towing capacity. They will have a whole life costs (WLC) comparable to or better than ICE models.

The CBC fleet except has an average age of 5.7 years whilst the oldest vehicle is 13.1 years old. It is important to maintain a rolling fleet renewal programme especially when a fleet is almost 100% diesel powered as is the case at CBC, (see section 5-3). Pre-Euro 6 diesel engines are significantly more polluting in terms of their air quality emissions of NO_X and PM and continuous improvements in emission technology and emission standards means that even Euro 6 vehicles will be superseded by cleaner models. We would recommend the maximum age of a diesel vehicle should be about seven to eight years as this will usually encompass at least three different Euro emission standards.

The bulk of the CBC Light commercial vehicles (LCV) fleet appear to be flatbeds with cages fitted, or tippers with cages, some additionally fitted with tail lifts. (A column tail lift capable of raising 500kg typically reduces the available payload by about 125 to 140 kgs.) Electric LCVs, especially with GVWs of 3,500 kgs, have compromised payloads (in comparison to their diesel equivalents), because of the weight of the batteries. We would caution CBC that they should consider this in any procurement decision. We have modelled a diesel Ford Transit tipper and the LDV EV80 has been modelled as a possible EV choice.

By 2025 there is likely to be much greater uptake of electric vehicles and year-on-year reductions in battery prices will result in new EVs costing less to buy than petrol or diesel alternatives and significantly less to run.

The table assumes installation of 7kW charge points throughout. This does not consider any existing infrastructure at the sites.

AC chargers capable of delivering 7.4 kW at 32 Amps are a low-cost solution with hardware costs starting at £355 per outlet and rising to over £900 per outlet if full remote management, telemetry, 3G communication and RFID card reader are required. Installation, remote management hardware, billing system, preventative maintenance and management software

can add more than £1,000 per port (based on a 10-port system). All these costs will depend on site access, the scale of groundworks and the distance to the power source. Consideration should be given to the location of parking bays and cabling costs should be minimised by using bays close to the main switch which is usually located in the principal building on the site.

Table 10-3- Typical EV consumption and battery sizes and range - Vans

Group	Energy Consumption (Miles/kWh)	Battery size kWh	Typical Range (miles)	Payload Kgs
Small and Medium Vans up to 2601kgs	2.16	40	112	605
Large Vans below 3,500 kilos	1.75	41	80	1,073
Large Vans 3500 kilos	1.4	56	85	983