

Committee: **Council**

Date of Meeting: **18th July, 2024**

Report Subject: **Waste & Recycling Fleet Renewal**

Portfolio Holder: **Councillor H. Cunningham - Deputy Leader / Cabinet Member for Place and Environment**

Report Submitted by: **Matthew Stent - Service Manager, Neighbourhood Services**

Reporting Pathway								
Directorate Management Team	Corporate Leadership Team	Portfolio Holder / Chair	Governance Audit Committee	Democratic Services Committee	Scrutiny Committee	Cabinet	Council	Other (please state)
18.06.24	20.06.24				09.07.24		18.07.24	

1. Purpose of the Report

- 1.1 The purpose of the report is to give a brief overview of the current Waste & Recycling fleet, possible options on its renewal in the short and medium term, and the funding options identified to enable its renewal.

2. Scope and Background

- 2.1 The Councils Waste & Recycling fleet is made up of Rigid Trucks, being a combination of Refuse Collection Vehicles [RCV's] and Kerbside Resource Recovery Vehicles [RRV's] or Recycling vehicles. These vehicles have been specified to different carrying capacities and sizes [see table below].

Qty	Type	Use
3	18t Dennis RCV	Refuse collection in easy to access areas
2	12t DAF RCV	Refuse collection in difficult to access areas
11	12t DAF / Romaquip RRV	Recycling collection across the Borough
2	Isuzu 6.5t Narrow Access Vehicle	Recycling Collection in narrow access areas
3	5.5t Rear Loading RRV	Recycling collection in rear lanes

- 2.2 The majority of the Waste & Recycling vehicles were procured in 2015 using Welsh Government [WG] Grant funding. This was part of the WG Collaborative Change Programme, which saw the Councils Waste collections change from fortnightly refuse / co-mingled recycling collections to 3 weekly refuse / weekly kerbside sort collections.
- 2.3 Due to the uncertainties of austerity at the time, no funding was identified / earmarked for future fleet replacement associated with the future provision of the new service.
- 2.4 The current vehicles are now over 8 years old and require more and more maintenance, increasing running costs, resulting in sustained vehicle downtime. Consideration must now be given to renewal, as further pro-longed vehicle downtime will likely mean wide scale disruption to waste collections for residents.

- 2.5 Since 2015, the landscape has changed significantly when it comes to how these vehicles are powered. In September 2020, the Council declared a climate emergency and published their Decarbonisation Plan to 2030. This plan supports the WG ambition for the Welsh Public Sector to be climate neutral by 2030 and for all new public sector vehicles to be an Ultra Low Emission Vehicles [ULEV's] by 2025 or 2030 for heavy goods vehicles.
- 2.6 ULEV's have become more readily available in the market, although, not for all vehicle types that BG use to provide our waste and recycling services. Consideration needs to be given whether current vehicles are replaced with new diesel vehicles i.e. more efficient Euro 6 compliant diesel powered [a new diesel engine in 2024 is much cleaner than one from 2016, thanks to advancements in technology and strict adherence to updated Euro emissions standards, or alternative fuel options are a possibility, such as Battery Electric Vehicles [BEV's] in the short / medium term or, in the longer term, Hydrogen, when the infrastructure will likely be advanced enough alongside vehicle market availability.
- 2.7 Working with Cenex [an independent, not-for-profit research technology organisation that specialises in low emission transport and associated energy infrastructure], a Fleet Review has been undertaken. This review provided a detailed assessment of the real-world operating range, total cost of ownership, emissions and infrastructure requirements of currently available low emission vehicle technologies (with a focus on ultra-low emission vehicles). All operational road vehicles owned or leased by Blaenau Gwent CBC were assessed.
- 2.8 One of the Review recommendations was to “**Prepare for the potential introduction of ULEV HGVs from 2025 onwards**”. To do this, specific trials have been undertaken over the last 6 months of electric vehicles equivalent to those we currently utilise, with varying degrees of success.
- 2.9 The Review found that BEVs are currently the only zero emission vehicle technology that could be deployed at a large scale within the next 3-5 years and this technology provides the lowest running costs of all ULEVs studied within the rigid truck vehicle segment. The main challenges associated with these vehicles are the limited examples of RRVs / RCVs at 12-18t GVW for kerbside collection, and the increased purchase costs. **The critical challenge being; the existing Depot does not have the physical space to accommodate the quantity of dedicated charging bays needed** with other potential sites have their own limitations.
- 2.10 Other short-term measures have also been considered; specifically, Biodiesel and Hydrotreated Vegetable Oil [HVO]:
- Biodiesel - The Council fleet already operates with a blend of biodiesel, which although doesn't offer any financial benefits, does contribute to carbon reduction and the obvious benefits of that.
 - HVO – There are many claims that with HVO “greenhouse gas emissions could be reduced by up to 90%”. However, we would have to calculate the carbon impact on the basis of the average carbon intensity of HVO fuel in the UK as calculated by UK government. Doing so would represent a reduction of 13% in our fleets carbon footprint if we switched the entire fleet from diesel to HVO. There is however a significant cost implication, recent discussions with

a potential supplier indicated HVO costs 187ppl [pence per litre], compared to the current price of 113ppl for diesel. Switching the fleet to HVO would see an increase of approximately £43,000 per year compared to diesel, a cost increase in the region of 58%. There have also been concerns around the sustainability of HVO, leading to large companies issuing a self-imposed ban on its use. Subsequently, excluding this as an option.

2.11 Vehicle replacement fuel options:

Fuel Options	Market Availability	Infrastructure
Diesel	No restraints with market availability, latest vehicles are more fuel efficient	Fuel infrastructure already in place with existing contingencies
Electric	There is market availability for RRV's that would meet our requirements. Trials of RCV's have proved more advances in battery technology is required.	Significant restrictions at current Depot site, no space to accommodate dedicated charging bays
Hydrogen	Very limited market availability, no RRV's available, only 35t RCV available which is too big and doesn't meet our required specification	Hydrogen is only now taking it's first steps to becoming commercially available as a road transport fuel in the UK.
Natural Gas	Very limited availability in the market for Rigid Trucks	There are currently no major natural gas refuelling stations in South East Wales

2.12 Fleet replacement schedule and estimated Capital expenditure required, comparing diesel with electric equivalents on an annual basis, until 2030, is indicated in **Appendix 1**.

2.13 Welsh Government [WG] have indicated they will fund 80-90% of the difference between the ICE [Internal Combustion Engine] diesel and its electric equivalent. This is subject to successful grant applications whereby the Council will need to demonstrate the financial risk is managed effectively. They will not provide grant funding for replacement diesel vehicles.

2.14 An indicative financial appraisal has been carried out by Resources colleagues to aid consideration as to how the Council can fund the necessary Capital outlay [**see 5.1 Impact on budget**]. Options for consideration are:

- Submit bids to Capital Programme from 2024/25 onwards.
- Public Works Loans Board
- Leasing
- WG Grant funding [applicable to electric vehicles only].

3. Options for Recommendation

- 3.1 Place Scrutiny Committee considered the options at their meeting on 9th July 2024 and recommended Option 1 with an additional comment for consideration, for Council to provide the most cost effective appropriate funding for the like for like replacement of its Waste & Recycling Fleet (Option 1).

Option 1 [preferred option] – Council supports the replacement of Waste & Recycling fleet with the more efficient, cleaner diesel-powered vehicles until such time the appropriate vehicles and infrastructure is in place to transition to ULEV's.

And

Council provides the appropriate funding for the like for like replacement of its Waste & Recycling fleet.

Option 2 – Do nothing

4. Evidence of how this topic supports the achievement of the Corporate Plan / Statutory Responsibilities / Blaenau Gwent Well-being Plan

- 4.1 This topic supports the Corporate Plan in responding “to the nature and climate crisis” and allows the Council to reduce its carbon emissions as it looks “to provide high quality services to meet local need” at “the right time and in the right place”.

It also follows the Gwent Well-being Plan “to create a Gwent where the natural environment is protected and enhanced”.

This report also ensures we continue to meet our Statutory obligations under the Councils Operators Licence that all vehicles “are kept in a fit and serviceable condition”, something that becomes more and more challenging the older vehicles become.

5. Implications Against Each Option

Option 1

Provides a clear pathway for fleet renewal on a like for like basis of the Councils Waste and Recycling vehicles, being more efficient diesel vehicles in the short term. Reducing vehicle downtime and ever-increasing maintenance costs which will no doubt get worse with an ageing vehicle profile. Reduces carbon footprint gradually in line with the Councils Decarbonisation Plan.

Option 2

Pro-longed vehicle downtime, increase in maintenance costs and disruption to waste collections for residents. The bigger picture being failure to meet Statutory Recycling targets and subsequent fines from Welsh Government. No reduction in carbon footprint.

5.1 Impact on Budget (short and long term impact)

Option 1

Summary	Diesel		Electric	Blaenau Gwent Capital outlay	PWLB			Leasing		
	Annual	Total Outlay (6 years)	Cumulative		Annual	Total Outlay (6 years)	Cumulative			
2024/25	£ 600,000	£ 1,350,000	£ 600,000	£ 600,000	£ 118,286	£ 709,717	£ 118,286	£ 108,234	£ 649,404	£ 108,234
2025/26	£ 600,000	£ 1,350,000	£ 600,000	£ 600,000	£ 118,286	£ 709,717	£ 236,572	£ 108,234	£ 649,404	£ 216,468
2026/27	£ 630,000	£ 1,260,000	£ 630,000	£ 630,000	£ 124,200	£ 745,202	£ 360,773	£ 113,646	£ 681,874	£ 330,114
2027/28	£ 480,000	£ 950,000	£ 480,000	£ 480,000	£ 94,629	£ 567,773	£ 455,401	£ 86,587	£ 519,523	£ 416,701
2028/29	£ 600,000	£ 1,350,000	£ 600,000	£ 600,000	£ 118,286	£ 709,717	£ 573,688	£ 108,234	£ 649,404	£ 524,935
2029/30	£ 450,000	£ 950,000	£ 450,000	£ 450,000	£ 88,715	£ 532,287	£ 662,402	£ 81,176	£ 487,053	£ 606,110
2030/31							£ 544,116			£ 497,876
2031/32							£ 425,830			£ 389,642
2032/33							£ 301,630			£ 275,997
2033/34							£ 207,001			£ 189,410
2034/35							£ 88,715			£ 81,176
Totals	£ 3,360,000	£ 7,210,000	£ 3,360,000	£ 3,360,000	£ 662,402	£ 3,974,413	£ 3,974,413	£ 606,110.40	£ 3,636,662	£ 3,636,662

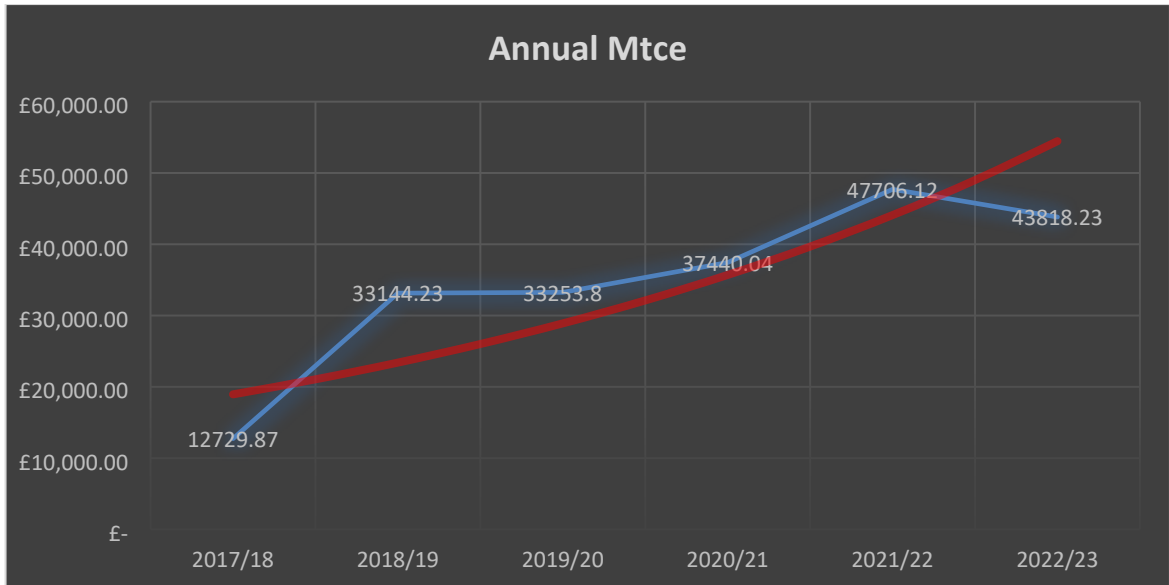
*The above assumes the replacement of current fleet only, does not include costs for ongoing replacement of the replacement vehicles.

The above table highlights that to replace the waste and vehicles over the next 6 - 11 years will require either an investment from the Council's Capital Programme of £3.36m or an increase in the annual revenue budget from 2025/26 of £236,572 rising to £662,402 by 2029/30 to fund the borrowing costs incurred in replacing the vehicles.

The above does not include any allowance for expected reduction in annual operating costs. Residual Values for used RRVs are relatively new and are only now starting to appear in the second-hand market. Recent research suggests current residual values for equivalent diesel recycling vehicles [12t DAF / Romaquip RRV's] are circa £27,000, however, age and condition of the vehicle is important. It is worth noting that as the timeline towards the banning of new ICE powered vehicles shortens and the introduction of more and more electric equivalent vehicles enter the market, the residual values for used vehicles will diminish. It also needs to be understood that residual values only apply to vehicles in Council ownership, that is, purchased outright through either a loan or the Councils Capital Programme, vehicles procured via a leasing arrangements would not benefit from this future income.

Option 2

Increase in ongoing maintenance costs and replacement vehicle hire to cover for vehicle downtime which will increase exponentially as the current vehicles continue to get older. The following graph demonstrates the year-on-year increase in maintenance costs of the oldest vehicles procured in 2015:



Appendix 2 provides a breakdown of the associated annual maintenance costs shown in the graph above, again, they relate to the oldest vehicles procured in 2015.

Additional funding considerations:

- Total Cost of Ownership [TCO] – Applicable to electric replacement vehicles only, existing revenue fuel budget would be utilised to offset repayments but wouldn't repay the total cost of capital outlay, only the difference between the ICE and electric. Reduced maintenance costs will also materialise for new diesel vehicles.

5.2 **Risk including Mitigating Actions**

Option 1

Financial Risk – There is no WG grant available for replacing with diesel vehicles. There is also a risk the Council may never be able to transition to Ultra Low Emission Fleet without providing the appropriate infrastructure.

Option 2

Vehicle downtime is a costly and frustrating aspect of fleet management and the combination of ageing vehicles and avoidance of spend on maintenance is creating a perfect storm. To mitigate this, we will continue regular servicing and maintenance to ensure sufficient vehicle health and safety. Older and/or high mileage vehicles may need more frequent safety inspections, increasing costs. Daily checks before a vehicle is taken out on the road can catch a potential issue before it escalates. Possible impact on statutory service delivery

5.3 **Legal**

There are no legal issues associated with this report.

5.4 **Human Resources**

There are no HR implication associated with this report.

5.5 **Health and Safety**

As existing vehicles become older and more unreliable, the risk to staff increases. Newer, more modern vehicles will provide those frontline staff using them with the reassurance and peace of mind they have the right tool[s] to do the difficult job they do. Free from defect and risk of injury.

6. **Supporting Evidence**

6.1 **Performance Information and Data**

6.2 **Expected outcome for the public**

Continued efficient kerbside waste collections, minimising missed collections associated with vehicle breakdowns and downtime

6.3 **Involvement (consultation, engagement, participation)**

Frontline staff and vehicle maintenance colleagues have been involved in recent vehicle trials, ensuring the next generation of vehicles are fit for purpose and designed to be as efficient as they can be.

6.4 **Thinking for the Long term (forward planning)**

The existing Waste & Recycling fleet will become uneconomical to operate in the short / medium term, started replacement now will future proof service delivery for Blaenau Gwent residents

6.5 **Preventative focus**

6.6 **Collaboration / partnership working**

As a Council, and more specifically a Waste Service, we are currently working closely with WRAP and Local Partnerships. This work includes a review of the 2018 – 2025 Waste Strategy, of which, an action is the renewal of the Waste & Recycling Fleet to support the Service in attaining the WG Statutory Recycling target of 70%.

6.7 **Integration (across service areas)**

Waste Services works hand in hand with the Councils Fleet Dept; purchase of replacement vehicles with involve our Procurement, Resources, and Insurance Sections, as well as consultation and input from Frontline Teams who use the vehicles daily.

6.8 **Decarbonisation and Reducing Carbon Emissions**

Replacing the current fleet of Waste & Recycling vehicles will improve the Councils Carbon footprint in line with its Decarbonisation Plan. More modern, cleaner and fuel-efficient diesel vehicles would offer minimal carbon reductions as opposed to the more obvious reductions electric vehicles would offer.

6.9 **Integrated Impact Assessment** *(the screening template should be completed for any decisions to identify if a full integrated impact assessment (IIA) is needed. A full IIA will need to be completed if the decision is part of the socio-economic duty to consider how the decision might help to reduce the inequalities of outcome associated with socio-economic disadvantage).*

7. **Monitoring Arrangements**

7.1 *State how the work will be monitored e.g. through scrutiny or directorate performance management arrangements*

Background Documents /Electronic Links

Appendix 1

Appendix 2