



## **RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL**

### **CABINET**

**6<sup>th</sup> SEPTEMBER 2022**

### **ULTRA LOW EMISSIONS VEHICLES (ULEV) TRANSITION PLAN**

#### **REPORT OF THE DIRECTOR – FRONTLINE SERVICES, IN DISCUSSIONS WITH THE RELEVANT PORTFOLIO HOLDER, LEADER OF THE COUNCIL, CLLR A MORGAN**

**Author:** Roger Waters, Director – Frontline Services

#### **1. PURPOSE OF THE REPORT**

- 1.1 The purpose of the report is to outline the Council's plan to transition from an Internal Combustion Engine, (ICE), fleet to an Ultra-low Emissions Vehicles, (ULEV), fleet over the next 6 years.
- 1.2 The scope, and primary focus of this report, relates to the Council's Light Goods Vehicle, (LGV), Fleet.

#### **2. RECOMMENDATIONS**

- 2.1 To note the content of the report and duly to resolve to support:
  1. The procurement, either via lease-hire or outright purchase, of electric LGVs to replace existing ICE vehicles in accordance with the indicative timeline below in a phased approach.
  2. The development and installation of associated Electric Vehicle Charging Infrastructure, (EVCI), to enable the successful delivery and implementation of the ULEV transition plan.
  3. Trials of alternatively-fuelled vehicles, such as Hydrogen and Hydrotreated Vegetable Oil, (HVO), when and where available. (One such HVO trial is presently underway with respect to a selection of vehicles from the Council's Heavy Goods Vehicle, (HGV), fleet, with developments being closely monitored for signs of reductions in carbon emissions, which could potentially be used to inform future green fleet initiatives).

- 2.2 It is further recommended that Officers continue to pursue any and all opportunities to secure grants to assist with funding, either in part or in full, of any aspect of ULEV procurement or EVCI development.

### **3. REASONS FOR RECOMMENDATIONS**

- 3.1 The Council's Climate Change Strategy, ***Tackling Climate Change in Rhondda Cynon Taf (2021- 2025)*** sets out the Council's commitments to reduce carbon within the Council, including: *procuring a vehicle fleet that is fit for purpose, yet has a limited impact on the environment and replacing all our new cars and light goods vehicles with ultra-low emission vehicles by 2025*. The ever-improving capabilities of ULEVs means that these vehicles will only become more attractive operationally, and financially, and will reduce the level of carbon created by the Council as time progresses.
- 3.2 Additionally, the Council's ***Electric Vehicle Charging Strategy 2021-2030***, has stated ambitions of: *identifying suitable locations for 'Workplace Charging' across all RCT sites and work with other sectors, where applicable, to increase workplace charging, to meet demand as appropriate and transforming our fleet towards more sustainable methods of transportation, in a planned and practical way*. A key enabler for the transition to ULEVs is the provision of suitable charging infrastructure, primarily based at depot locations.
- 3.3 Further, the UK Government has stipulated that there will be a ban on the sale of all new diesel and petrol-fuelled LGVs from 2030. Hybrid vehicles will continue to be able to be sold until 2035, but from that date, the sale of such vehicles will also end with all new LGVs sold in the UK from 2035 being zero emissions vehicles.
- 3.4 At the current time, Hydrogen is viewed by the industry as a more realistic option for future HGV transition to ULEVs, but the Council are presently undertaking a trial using HVO as a replacement for diesel across a range of fleet vehicles, with results of the trial study expected back at the end of the summer.
- 3.5 There are a variety of grants and grant funding schemes available from the Welsh Government, (WG), and Office of Zero Emissions Vehicles, (OZEV), which the Council is actively looking to utilise to bid for monies to put towards the cost of replacement ULEVs and EVCI. *\*NB. It should be noted that such grants come with constraints such as only being for the cost difference between the new purchase price of a conventionally-fuelled vehicle and that of its ultra-low emissions equivalent, as well as not being applicable for the purchase of hybrid vehicles either.*
- 3.6 Moreover, via the Cardiff Capital Region, (CCR) partnership, there are over 70 publicly available Electric Vehicle Charging Points, (EVCPs), being installed across the County Borough at the present time, with OZEV funding for additional EVCPs at further sites on the cusp of being awarded.

#### **4. BACKGROUND AND THE PROCESS OF VEHICLE REPLACEMENT**

- 4.1 The range of Council services delivered is diverse in nature and complexity: from maintaining the public realm and green spaces, collecting recycling and refuse, delivering meals on wheels, educating our young people and caring for those that require support to remain independent. The terrain of the county borough is equally diverse.
- 4.2 Services are delivered within the community and from a significant number of locations, ranging from offices, depots and frontline buildings. Many of the services that are delivered use a Council vehicle.
- 4.3 The Council's fleet consists of 481 vehicles, with a well-established fleet replacement plan in place. Depending on the nature of the vehicle(s), replacements will either be in the form of new acquisitions following tender processes, (HGVs), or where relevant spot hires can be used in order to ensure the Council is well placed to take advantage of an electric fleet when appropriate, (LGVs), (i.e. vehicles can be off-hired and replaced with electric alternatives).

#### **5. CURRENT FLEET PROFILE**

- 5.1 The Council's fleet currently comprises of:
- 148 HGVs, (including large sweepers, refuse collection vehicles, Highway's lorries, gully vehicles and tractors).
  - 333 LGVs, (including cars, small / medium vans, small / medium tippers and 4x4s); these will be the focus of this report.
- 5.2 The Council's fleet is a mix of owned vehicles and leased vehicles, with all the HGVs being owned and the vast majority of LGVs being leased. The majority of the fleet are either petrol or diesel-fuelled and we currently have 10 Electric Vehicles, (EVs).

#### **6. THE MOVE TOWARD ULTRA LOW EMISSIONS VEHICLES**

- 6.1 A recent report from the Carbon Trust identified the Council's fleet as contributing 7% of the Council's baseline carbon footprint.
- 6.2 The speed of change was also identified as important in a recent report from the Welsh Government Energy Service, (WGES). Taking no action would result in 67,200 tonnes of Greenhouse Gases, (GHG), being emitted per year versus a period of steady change producing around half of this figure at 33,615 tonnes GHG by 2030.

- 6.3 It is also worth noting that a balance has to be struck between the pace of change and the requirement to maintain high operational standards, (e.g., if change is brought in at too fast a pace, it would likely lead to operational problems, so the transition toward a ULEV fleet needs to be phased, (whilst nonetheless retaining an ambitious target).
- 6.4 With regards to the Council's LGV fleet of 333 vehicles in total, these are broken down as follows:

<b>Figure 1</b>	
<b>Vehicle Type</b>	<b>Total</b>
4x4s	30
Cars	29
Light Vans	153
Medium Vans	50
Tippers	71
<b>Grand Total</b>	<b>333</b>

- 6.5 However, at this stage, 4x4s are considered to not be in scope for this transition plan to the lack of suitable ULEV equivalent vehicles.
- 6.6 In addition, 10 of the current LGV fleet are Electric and so these will also not form part of the transition plan. Therefore, in light of these caveats, this transition plan sets out a phased transition from a total of 293 ICE vehicles to ULEVs:

<b>Figure 2</b>	
<b>Vehicle Type</b>	<b>Total</b>
Cars	25
Light Vans	147
Medium Vans	50
Tippers	71
<b>Grand Total</b>	<b>293</b>

- 6.7 The proposed ULEV transition timeline is outlined below in Figure 3:

<b>Figure 3</b>	
<b>Timeline</b>	<b>No. of Vehicles</b>
<b>YEAR 1 (2022/23)</b>	<b>121</b>
Cars	14
Light Vans	78
Medium Vans	29
<b>YEAR 2 (23/24)</b>	<b>60</b>
Cars	4
Light Vans	45
Medium Vans	11
<b>YEAR 3 (24/25)</b>	<b>35</b>
Cars	7
Light Vans	22

Medium Vans	6
<b>YEAR 4 (25/26)</b>	<b>73</b>
Light Vans	2
Tipplers	71
<b>YEAR 5 (26/27)</b>	<b>3</b>
Medium Vans	3
<b>YEAR 6 (27/28)</b>	<b>1</b>
Medium Vans	1
<b>Grand Total</b>	<b>293</b>

## **7. STRATEGY AND APPROACH**

- 7.1 The transition plan is initially based upon a lease model. This is because the Council is keen to learn from the experience of operating an electric fleet in what is still a fledgling market for ULEV technology.
- 7.2 Notwithstanding any of the above, this approach will be subject to ongoing review, so should not be regarded as inflexible. Indeed, should factors such as further technological innovations, feedback from other Local Authorities, an increase in proliferation of EVCI, changes to grant conditions present themselves and so forth, then the Council will adapt its strategy accordingly.
- 7.3 Nevertheless, whilst ULEV technology continues to evolve at a fast pace, there are still significant concerns around battery longevity in particular. The Council's current fleet is on a renewal cycle of 5 years, yet the estimated "payback" for ULEV equivalents is estimated to be nearer 9 years, (albeit this figure may be offset with grant support).
- 7.4 Consequently, to help de-risk the transition and mitigate the chance of battery failure outside of warranty, whilst at the same time allowing the opportunity to gather more operational information and reliability data as technology improves, it is proposed to predominately lease new ULEVs for a period of 3 years, rather than purchase them outright.
- 7.5 Furthermore, and with respect to grant support although the WG do offer some support to fund the purchase of new ULEVs, funding is usually only for the cost difference between conventionally-fuelled models and their ultra-low emission equivalents, which are currently around 50%-60% more expensive to purchase).
- 7.6 However, whilst such funding offers will continue to be considered accordingly, the Council proposes writing to the WG requesting consideration to amend their grant funding strategy, making it more flexible and attractive for Local Authorities by making grant monies available for a lease model too, (noting that it currently costs, on average, around 40% more to lease an EV compared to a diesel vehicle).

- 7.7 In phasing the transition from ICE vehicles to ULEVs, the Council will be able to maximise the potential of the existing fleet, whilst allowing for the planning, development and installation of EVCI, which will be crucial to the success of the transition.
- 7.8 Carbon reduction subgroups are liaising with external consultants to look at our power usage and what, in terms of Kilowatt Hours, (Kwh), the Council would need to generate at depots to fulfil our fleet transition needs, (with one such consultant currently developing a Ty Glantaf specific infrastructure model).
- 7.9 To complement the transition plan, the Council will continue to trial alternative fuels, such as HVO, as well as exploring technological innovations that improve vehicle engine efficiency, burn cleaner fuel and thus reduce harmful tailpipe emissions.
- 7.10 As a future commitment, and as part of an holistic approach to transitioning the Council's fleet, the Council will also investigate ways of reducing the carbon footprint of the so-called "grey fleet", (i.e. those vehicles owned and driven by staff for business purposes). Consideration will also be given to reducing the carbon footprint for staff journeys to and from the workplace.
- 7.11 The Council will continue to review the make-up of the Fleet as a whole, with a view to reducing its size when practicable to do so. In addition, as each vehicle comes up for renewal, the need for that vehicle will be vigorously challenged with the service area involved.

## **8. EQUALITY & DIVERSITY IMPLICATIONS / SOCIO-ECONOMIC DUTY**

- 8.1 An Equality and Socio-Economic Impact Assessment has been completed for the Council's aforementioned Climate Change Strategy. That Assessment directly relates to this report and reflects the wide range of subjects contained within the Strategy, as it is described as a "framework" for the more detailed work that will be developed in lower level plans, such as this ULEV Transition Plan, which will contribute to the delivery of the Council's Carbon reduction ambitions.
- 8.2 Under the Public Sector Equality Duty as set out in the Equality Act 2010, Local Authorities are required to have due regard to the need to:
1. Eliminate unlawful discrimination.
  2. Advance equality of opportunity.
  3. Foster good relations between people who share a protected characteristic and those who do not.
- 8.3 The Council is committed to meeting the requirements of the Equality Act and in doing so contributing to the national Well-being goal of a

more equal Wales, required by the Well-Being of Future Generations (Wales) Act 2015.

## **9. WELSH LANGUAGE IMPLICATIONS**

- 9.1 There are no Welsh language implications as a result of the recommendations in this report.

## **10. CONSULTATION / INVOLVEMENT**

- 10.1 The Fleet Services section will continue to liaise with all departments regarding the replacement / transition of assigned fleet vehicles.

## **11. FINANCIAL IMPLICATION(S)**

- 11.1 Moving forward, the agreed programme of work to transition the Council's LGV Fleet from an ICE fleet to a ULEV one, will be incorporated into Medium Term Financial Planning arrangements to ensure resource requirements are reviewed, challenged and planned for.

## **12. LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED**

- 12.1 There are no legal implications aligned to this report.

## **13. LINKS TO CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT**

- 13.1 The Council has committed to becoming a Carbon Neutral organisation by 2030 and to work with residents and businesses to ensure the whole County Borough is Carbon Neutral as close as possible to the 2030 target. This supports the priorities of the Council's Corporate Plan 'Making a Difference' – 2020-24.
- 13.2 This report reflects the Sustainable Development principles of the Well-being of Future Generations Act, and its work contributes to all seven national goals.

## **14. CONCLUSION**

- 14.1 Procuring new or replacement LGV fleet vehicles should be undertaken in line with this ULEV Transition Plan together with the embedded fleet replacement programme. This is vital if the Council are to meet its stated carbon reduction targets.

- 14.2 It is anticipated that the timelines mentioned in this report, which represent a phased approach to the fleet transition, whilst challenging, can be achieved as long as technology and infrastructure allows. Fleet Services will continually liaise with all sections and departments to trial new technologies and infrastructure to ensure that they are operationally fit for purpose.
- 14.3 It is clear that a lack of EVCI is one of the main obstacles to progressing the ULEV fleet as a whole and so it is key that solutions to this problem are found quickly. To help achieve this, cross-cutting work between the Council's Carbon Reduction & Energy team and Fleet Services, in consultation with all departments that utilise the Council's LGV fleet, is ongoing to agree the preferred locations for the installation of such essential infrastructure.
- 14.4 A phased approach will give the Council options and flexibility going forward to help ensure its Carbon Footprint is lowered and zero emissions targets are met in with wider strategies and local plans.





**Other Information:-**

***Relevant Scrutiny Committee***  
**Climate Change, Frontline Services & Prosperity**

***Contact Officer***