



9 SEPTEMBER 2021

ULTRA LOW EMISSION VEHICLES (ULEV) STRATEGY & DELIVERY UPDATE

REPORT OF CARDIFF CAPITAL REGION DIRECTOR

AGENDA ITEM 5

Reason for Report

1. To provide Members with a draft Cardiff Capital Region (CCR) ULEV Strategy for consideration.
2. To request that Members endorse the proposed CCR ULEV Strategy and forward to Regional Cabinet to request adoption of the Strategy.
3. To update Members on the progress made to date on delivering the 2021/22 ULEV programme, funded by Welsh Government's (WG's) ULEV Transformation Fund 2021/22 to help deliver ULEV infrastructure and provide incentives for early take up of ULEVs.
4. To ask Members to note the progress made.
5. To reiterate the importance of a regional approach to delivering ULEV initiatives, to ensure a regional solution for managing charging infrastructure and delivering incentives to encourage transition to zero emission vehicles in line with their target dates.

Background

6. In 2019, Cenex was commissioned to prepare a draft ULEV Strategy for the CCR. Further commissions included a Metro Plus ULEV Strategy and a ULEV Taxi Strategy, both of which were endorsed by the RTA in 2019. However, the draft CCR ULEV Strategy (for all modes of transport) has not yet been considered by the Regional Transport Authority (RTA) Board. Therefore, Cenex has recently completed an update of the original draft to take into account progress made since the draft was originally produced. The updated draft Strategy can be found at appendix 1.
7. WG has awarded Merthyr Tydfil County Borough Council up to £4,814,095 in response to a regional bid submitted to deliver schemes within the ULEV

Transformation proposal identified through the RTA. This is a one-year investment fund and all works need to be completed by 31st March 2022.

8. The funding being made available is to assist the Welsh Government transform the network to ULEV and help them reach their targets of zero emissions from buses and taxis by 2028. The Grant award specifically states that the purpose of the funding is for the following:-

Taxi ULEV Infrastructure	Rapid chargers for taxis to include grid reinforcement costs, project management, research, strategy and planning of the installation, health and safety and auditing Zero emission taxi pilot scheme – operational costs	£1,250,000 £573,594 (2021/22 costs)
Public Use ULEV Infrastructure	ULEV Infrastructure for on-street / car parks / transport hubs (minimum 159 sites)	£2,870,501
ULEV Delivery Partner	To assist with the delivery of the Programme	£50,000
Electric Vehicle (EV) Roadshow with Drive and Ride Opportunities	Trade engagement event including ride and drives and newsletters	£70,000

9. Merthyr Tydfil County Borough Council is the lead authority and is managing the ULEV Transformation Fund element with the RTA providing leadership and overall management of the project.
10. Merthyr Tydfil County Borough Council is responsible for reporting quarterly to WG on the LTF spend.

Progress to Date

ULEV Strategy

11. The updates to the original draft strategy include:-
- Summary of progress made by City Deal Office since the draft strategy was first prepared, highlighting funding secured for the CCR.
 - Updated definitions of ULEVs.
 - New targets for ending the sale of new petrol and diesel cars and vans by 2030 explained.
 - Full update of policy and strategy context, including European legislation updated with reference to Brexit. Updated summary policy roadmap.
 - Technology Overviews including the removal of references to (bio-)LPG as this is unlikely to play a role in decarbonising road transport. (This has been removed throughout the report).
 - Minor updates to technology readiness levels and vehicle availability.
 - Methodology - Fully revised to reflect the new scenarios that were developed for this update.

- For cars and vans, replacing the three previous scenarios, the new report is based on two potential pathways from the current baseline to reach 100% ULEV sales in 2030. The methodologies for vehicle scenarios, infrastructure scenarios, costs (Capex and Opex), and damage costs mitigated have all been updated.
- For HGVs there are smaller updates to the methodology to reflect new scenarios published by the Committee on Climate Change (CCC).
- Baseline: Vehicles and Infrastructure - Fully revised using 2019 DfT vehicle registration and travel data, and latest data on recharging and refuelling infrastructure availability. Footnote added to explain use of 2019 data.
- New maps created in GIS, replacing the screenshots used in the original report, to give a better representation of regional infrastructure.
- Vehicle Roadmaps - Fully revised with new roadmaps and commentary throughout to reflect improvements in vehicle technology and availability.
- Key changes include more rapid advancements in plug-in vehicle technology, and a reduction in the expected role of gas for buses in the later 2020s.
- Infrastructure Roadmaps - Fully revised with new roadmaps and commentary throughout to reflect improvements in infrastructure technology and availability.
- Key changes include more commentary on residential, rapid and ultra-rapid charging, and updates on new technology like V2G and inductive charging.
- Vehicle and Infrastructure Forecasting - Fully revised to reflect the new car, van and HGV scenarios as described above, with new figures, tables and charts throughout.
- In line with the more challenging target from central government, the numbers of ULEVs on the road is expected to increase. For example, in the new aspirational scenario, 38% of all vehicles on the road would be ULEVs in 2030, compared to 17% in the old exemplar scenario.
- HGVs have changed less, the main updates being slightly accelerated uptake of pure electric vehicles and fuel cell trucks towards 2030.
- Total infrastructure demand has increased to reflect these updates. The model has also been revised to reflect trends in the industry towards rapid charging hubs rather than on-street residential charging: while there is a role for both, more investment has been put into rapid charging hubs. As a result the number of rapid chargepoints in the aspirational scenario is around 1,500 – compared to just over 500 in the previous exemplar scenario.
- For HGVs accelerated deployment of zero emission vehicles mean there may be a need for hydrogen refuelling earlier than thought, perhaps soon after 2025, though there is some uncertainty around this.
- The scenario evaluation shows a substantial increase in damage costs mitigated, due to increases in the per-tonne figures, and an increase in the tonnes mitigated.
- Infrastructure Sites and Costs - Infrastructure site types are unchanged.
- Costs have increased significantly in line with the higher numbers in the scenarios. For example, in the new aspirational scenario, the total cost by 2030 is estimated at just under £60m, £32m in the old exemplar scenario.
- Recommendations have been fully reviewed, in most cases these are still relevant, with only minor changes made.

- The main update is the start of section 9.2 where commentary has been added on the potential division between providing on-street residential charging, or users being reliant on rapid charge hubs.
- Funding and Delivery - Updated to reflect changes to UK government funding and access to European funding.
- Conclusions - Minor updates to reflect the changes described above.

ULEV Delivery

12. WSP Consultancy was contracted to deliver the ULEV project which has been funded by the grant. The work carried out to date includes:-

- **ULEV – Provision of Taxi Infrastructure**
34 chargers at 31 sites were identified by the Local Authorities and form the basis of a tender awarded to SWARCO on 2nd February 2021. The project is due to be completed within the next few weeks. The award of contract also included a Concession agreement with SWARCO to maintain and manage the chargers for 5 years with an additional 1+1+1 option. A return on investment has been agreed under a profit share that increases over the period of the contract.
- **ULEV – Provision of Taxis for ‘Try Before You Buy Scheme’ - 3 Year Pilot Project**
44 wheel chair accessible 100% electric vehicles were purchased in 2020/21 to operate a try before you buy scheme over the next 3 years.
As part of the grant award for 2021/22, it was intended to procure a Management company to manage delivery of the try before you buy scheme. However, only two tender bids were received and neither met the minimum criteria to enable a contract to be awarded. It is now intended to deliver the management of the scheme in-house, and work is currently being undertaken to progress this way forward.
Tenders were also invited to manage a Lease Hire Scheme for Cardiff Council (which could potentially expand to the Region longer term and is funded by WG’s Clean Air Fund), and both of these programmes will closely align and will be managed under the same programme.
- **ULEV – Provision of Public Use Charging Infrastructure**
159 sites have been identified throughout the region, and costed for on street / car parks / transport hubs. Tenders were issued and 7 submissions have been received and evaluated. It is expected that the preferred bidder will be awarded a contract in early September to deliver the infrastructure. The contract will be awarded under a concession arrangement identical to that of the taxi infrastructure, with a share in profit, and an All Wales Framework has been included within the tender to enable other public bodies (other regions within Wales, TfW and WG) to deliver future infrastructure under this framework.
- **ULEV – Provision of Bus Use Charging Infrastructure**
15 sites have been identified throughout the region and costed at transport hubs. The bid submitted to WG was also included for this delivery in 2021/22, but the bid has not been successful yet.

Other works ongoing to enable future Opportunities

9. To enable the CCR to consider what it will take to transition the school transport network, Genex has been commissioned to consider the current school transport fleet within the Region, the age and size of the fleet, the distances travelled on the contracts, and the emissions of the existing fleet. This will enable an assessment to be made of how the school transport fleet is currently adding to emissions of transport and what interventions are required to assist their transition to net zero. The results of the study, along with any recommendations, will be brought to a future RTA meeting early in 2022 for consideration by Members.
10. There are also options to carry out a similar exercise for the public bus network later in the year.
11. A public fleet challenge is also being progressed and will be the subject of a separate report to a future meeting.
12. An update on further progress will be brought to the next meeting of this Board.

Local Member consultation (where appropriate)

13. This report is part of a series of updates on programme activity, whereby regional engagement will take place.

Reason for Recommendations

14. To offer Members a draft ULEV Strategy for consideration and a request for Members to endorse the draft Strategy and forward to Regional Cabinet to request adoption.
15. To offer Members an update on the progress of the delivery of the Programme where WG's ULEV Transformation Fund is being utilised to the sum of £4,814,095 in this financial year.
16. To advise Members on the progress made on the delivery of the 'try before you buy' incentivised scheme.

Financial Implications

17. Implementing the ULEV strategy will have financial implications, which will need to be considered as part of future business cases and reports, should City Deal Wider Investment Funding be required to be allocated to support projects. A sum of £3 million has been allocated by CCR as part of the wider investment fund to support the match funding of grant bids e.g. to Welsh Government. Where possible opportunities for other public and private sector investment should be considered in delivering the strategy. The terms and conditions of such support and financial mechanisms will need to be reviewed prior to acceptance including the ensuring the form of contracts in respect to delivering the objectives do not have adverse financial implications such as VAT.

18. The report updates on the Grant award to support ULEV schemes bid for and approved by Welsh Government for 2021/22. It should be noted that the current terms indicate that the grant will need to be claimed by 31 March 2022. Close monitoring should take place as to the likelihood of this, with early discussions with Welsh Government as to mitigations, prior to entering into contracts for delivery.
19. Where further consultancy work is proposed to be undertaken on a regional basis, this should be done so in accordance with procurements processes. The financial and public subsidy implications of such strategies e.g in respect to school transport and public bus network will need to be considered as part of separate reports.

Legal Implications

20. Members are being asked to approve the ULEV Strategy at Appendix 1 of this report. Before deciding whether or not to approve the ULEV Strategy, members must ensure that they have read the Strategy in full, seeking clarification from officers if required.
21. There are no other legal implications for this report.

Well-being of Future Generations (Wales) Act 2015

24. In developing the Plan and in considering its endorsement regard should be had, amongst other matters, to:
1. the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards;
 2. public sector duties under the Equalities Act 2010 (including specific Welsh public sector duties). Pursuant to these legal duties Councils must in making decisions have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. Protected characteristics are: a. age; b. gender reassignment; c. sex; d. race – including ethnic or national origin, colour or nationality; e. disability; f. pregnancy and maternity; g. marriage and civil partnership; h. sexual orientation; i. religion or belief – including lack of belief, and;
 3. the Well-being of Future Generations (Wales) Act 2015. The Well-being of Future Generations (Wales) Act 2015 ('the Act') is about improving the social, economic, environmental and cultural well-being of Wales. The Act places a 'well-being duty' on public bodies aimed at achieving 7 national well-being goals for Wales - a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language and is globally responsible. In discharging their respective duties under the Act, each public body listed in the Act (which includes the Councils comprising the CCRCD) must set and published wellbeing objectives. These objectives will show how each public body will work to achieve the vision for Wales set out in the national wellbeing goals. When exercising its functions, the CCRTA should consider how the proposed decision will contribute towards meeting

the wellbeing objectives set by each Council and in so doing achieve the national wellbeing goals. The wellbeing duty also requires the Councils to act in accordance with a 'sustainable development principle'. This principle requires the Councils to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs.

25. Put simply, this means that CCRTA must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, CCRTA must:
- look to the long term;
 - focus on prevention by understanding the root causes of problems;
 - deliver an integrated approach to achieving the 7 national well-being goals;
 - work in collaboration with others to find shared sustainable solutions;
 - involve people from all sections of the community in the decisions which affect them.
26. CCRTA must be satisfied that the proposed decision accords with the principles above. To assist CCRTA to consider the duties under the Act in respect of the decision sought, an assessment has been undertaken, which is attached at Appendix 1.

Equality Act 2010

27. In considering this matter, regard should be had, amongst other matters, to the Councils' duties under the Equality Act 2010. Pursuant to these legal duties the CCRTA must in making decisions have due regard to the need to (1) eliminate unlawful discrimination (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. Protected characteristics are:
- age;
 - gender reassignment;
 - sex;
 - race – including ethnic or national origin, colour or nationality;
 - disability;
 - pregnancy and maternity;
 - marriage and civil partnership;
 - sexual orientation;
 - religion or belief – including lack of belief.

Recommendations

28. It is recommended that:
- (1) Members approve and endorse the draft ULEV Strategy to enable further progress to be made on delivering the ULEV Programme to assist the transition to net zero, and to agree to forward to Regional Cabinet to request adoption of the Strategy.

- (2) Members note the progress made on this project to deliver ULEV infrastructure to assist with the delivery of the ULEV Transformation as identified within this report;
- (3) Members note and endorse the way forward in respect of the taxi 'try before you buy trial' in managing the programme in-house following the unsuccessful tender returns.

Kellie Beirne
Director, Cardiff Capital Region
9 September 2021

Appendix 1 Draft ULEV Strategy
Appendix 2 Well-being of Future Generations Assessment