Y PWYLLGOR CRAFFU
DIOGELU'R CYHOEDD A'R AMGYLCHEDD

22 EBRILL 2024

STRATEGAETH TRAWSNEWID CERBYDAU ALLYRIADAU ISEL IAWN (ULEV)
Y Pwrpas: Darparu Diweddariad i Aelodau am ein Strategaeth Trawsnewid Cerbydau Allyriadau Isel iawn (ULEV)
GOFYNNIR I'R PWYLLGOR CRAFFU:- Darparu sylwadau ar ddatblygiad y Strategaeth Trawsnewid Cerbydau Allyriadau Isel iawn (ULEV)
Y Rheswm/Y Rhesymau Ffurfio barn y Pwyllgor Craffu cyn gwneud gwaith datblygu manwl yn y maes hwn.

YR AELOD CABINET SY'N GYFRIFOL AM Y PORTFFOLIO: - Cyng. Aled Vaughan Owen – Newid Hinsawdd, Datgarbonieddio a Chynaliadwyedd

Y Gyfarwyddiaeth: Enw Pennaeth y Gwasanaeth: Daniel John Awdur yr Adroddiad: Daniel John	Swyddi: Pennaeth Seilwaith Amgylcheddol Pennaeth Seilwaith Amgylcheddol	Cyfeiriadau e-bost: dwjohn@sirgar.gov.uk dwjohn@sirgar.gov.uk

Cyngor Sir Gâr
Carmarthenshire
County Council

EXECUTIVE SUMMARY

PLACE, SUSTAINABILITY AND CLIMATE CHANGE SCRUTINY COMMITTEE

22ND APRIL 2024

FLEET ULTRA LOW EMISSION VEHICLE (ULEV) STRATEGY

1. Introduction

1.1 The Council declared a Climate Change Emergency in February 2019 and a subsequent target of becoming a Net Zero organisation by 2030, committing to actively reduce the impact of its activities on the environment in line with its sustainable delivery and wellbeing objectives.

1.2 The Welsh Government set out its expectations with regards to public sector fleets in its 2019 strategy 'Prosperity for All: A Low Carbon Wales', outlining its ambitions for all new cars and light goods vehicles to be ultra-low emission by 2025 and all heavy goods vehicles by 2030.

1.3 The Council Fleet mileage makes up 19% of our carbon footprint which is a significant proportion of the overall carbon impact. The need to develop robust planning of the decarbonisation of the fleet will have a major impact on our strategic objective.

2. Vision

2.1 The Council's principal aim is to reduce the environmental impact of the Council's fleet operations and to strive towards achieving the Council's vision of an optimised, sustainable decarbonised vehicle fleet by 2030.

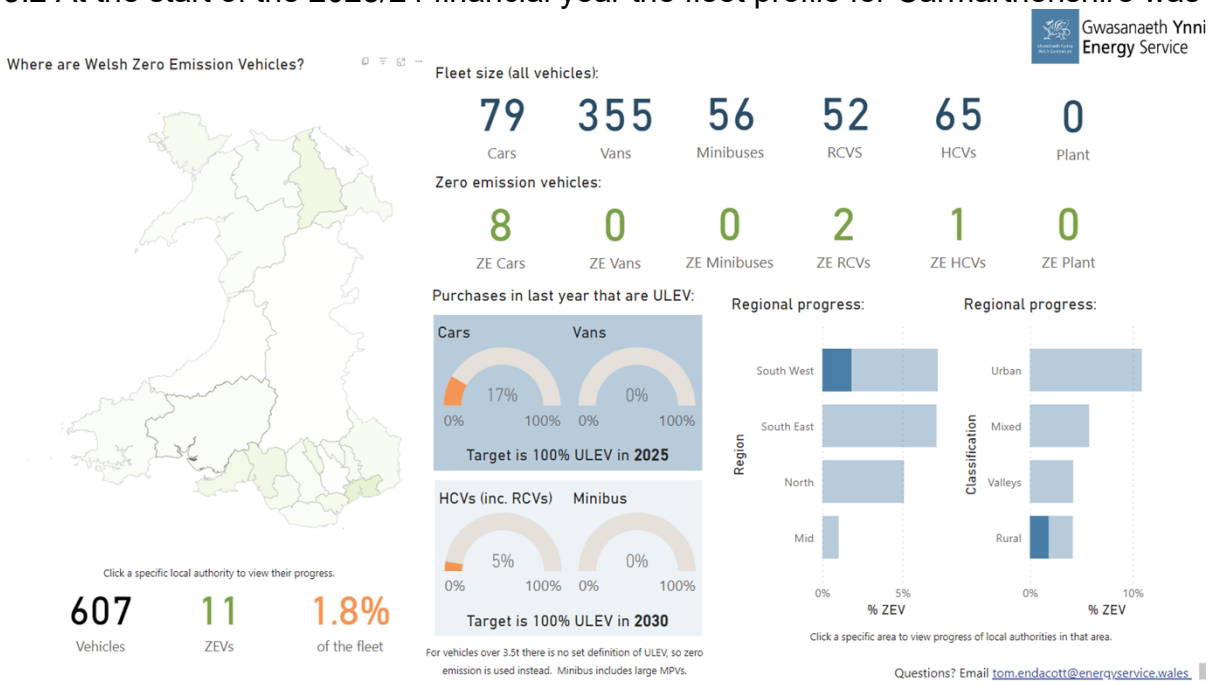
2.2 To develop an efficient, low carbon service that puts the needs of Carmarthenshire residents at the centre of everything we do.

2.3 The Ultra Low Emission Vehicle (ULEV) Transition Strategy will seek to set out the strategic delivery programme to achieve these aims.

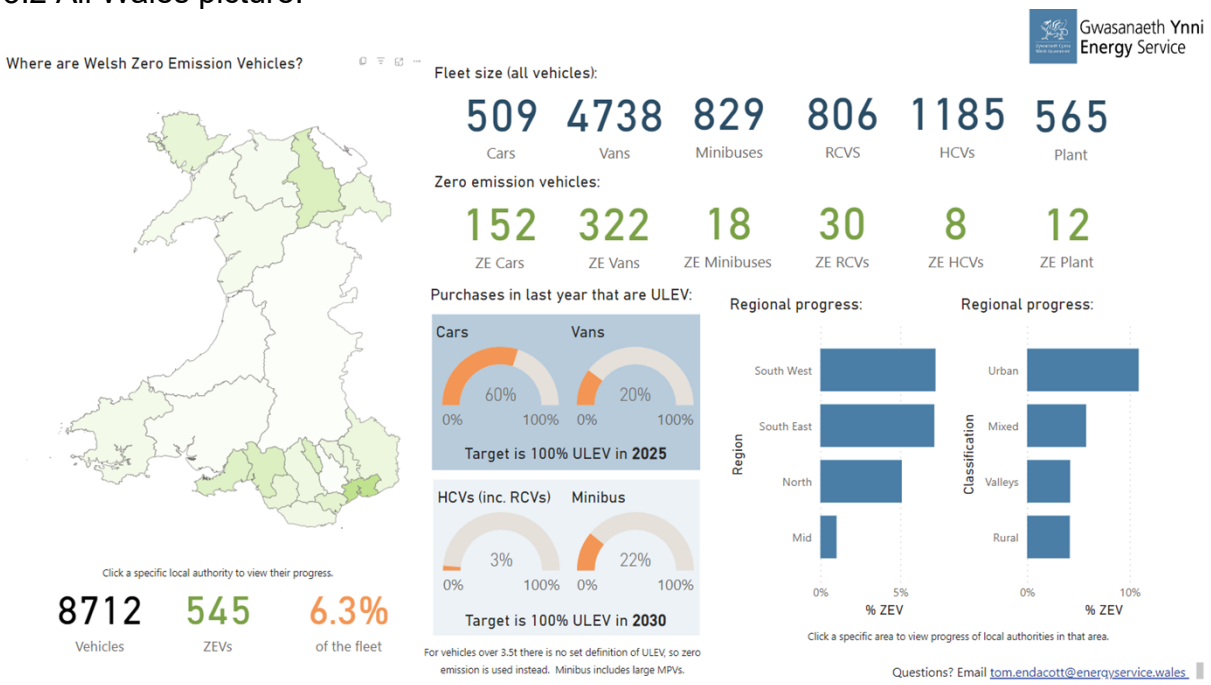
3. Current Situation

3.1 The Welsh Government Energy Service (WGES) is funded by the Welsh Government with the aim of developing energy efficiency and renewable energy projects that contribute to public sector decarbonisation and national energy Targets. The WGES has been supporting Carmarthenshire in benchmarking current performance and supporting with advice on how to develop a deliverable transition strategy to deliver our vision, aspirations, and legislative need.

3.2 At the start of the 2023/24 financial year the fleet profile for Carmarthenshire was :



3.2 All Wales picture:



3.3 Through this initial benchmarking exercise with WGES in September 2023 it evidenced need to develop a robust transition plan to ensure delivery of our aspirations and undertake a suite of actions to ensure pressing progress.

3.4 To progress the decarbonisation of the Council Fleet a new operational fleet policy of ULEV by default was implemented in October 2023. This policy acknowledges that different service departments have unique operational needs whilst still prioritising the need to decarbonise.

3.5 There is a need to adopt ULEV Vehicles that align with the specific requirements of each department, encompassing various vehicle types, payload capacity, and daily driving distances.

3.6 The ULEV by default approach with a structured analysis to allow procuring mangers make an informed decision if this is not practical. This fleet policy will implement a requirement of adopting ULEV as the default choice for fleet renewals with commissioning services undertaking a TEEP analysis taking into account the specific context and needs of the service from a Technical, Economic, Environmental, Practical standpoint to provide a robust rationale if it is not possible to adopt.

3.7The TEEP Analysis is:

Technical:
Vehicle Technology: Research whether there is and select a range of Electric Vehicle (EV) models that meet the operational needs of the service and function of the vehicle. (E.g. EV passenger cars, EV vans, and specialised vehicles EV RCVs/Busses)
Charging Infrastructure: Evaluate the current availability of charging infrastructure within the county and where the vehicle is based and assess whether it can support the planned EV purchase. Then identify areas where additional charging stations may be required to be included within economic analysis.
Range and Performance: Ensure that the EV vehicle can meet the specific operational requirements of the service and achieve daily driving ranges for specified purpose.

Economic:
Whole Life Costing(WLC): Compare the WLC of EVs with traditional internal combustion engine (ICE) vehicles, taking into account purchase prices, operating costs, and potential savings in fuel and maintenance. Include the analysis of the potential resale value of EVs vs ICE to understand the long-term financial implications.
Incentives and Grants: Explore available government incentives, grants, and funding opportunities for EV procurement in Wales to reduce upfront costs and support the transition.

Environmental:
Emissions Reduction: Calculate the reduction in greenhouse gas emissions by transitioning to EVs and their contribution to the council's sustainability, climate targets and Net Zero aspirations.
Charging Infrastructure Sustainability: Consider the source of electricity for charging, with an emphasis on using renewable energy sources to minimize environmental impact.
Life Cycle Analysis: Assess the environmental impact of manufacturing, operating, and disposing of EVs compared to ICE vehicles.

Practical:
Fleet Needs Assessment: Analyse the specific requirements of the service vehicle fleet, taking into account vehicle types, daily routes, and expected charging needs. Also, an assessment if a vehicle is required, could sharing a vehicle with another service/department be facilitated.
Training and Support: Identify the training requirements for council employees to operate and maintain EVs and ensure the availability of technical support for the EV fleet.
Charging Infrastructure: Evaluate the availability and adequacy of charging infrastructure. Ensure that charging stations are conveniently located at Council facilities and along common service routes. Plan for the installation of additional charging stations if necessary.

Charging Scheduling: Develop a plan for efficient vehicle charging schedules to minimize downtime and optimize the use of charging infrastructure.
Maintenance: Understand the maintenance requirements of EVs, which are generally lower than those of internal combustion engine (ICE) vehicles. Plan for regular maintenance, such as tire rotations, brake inspections, and battery health checks.

3.8 The aim, and principle, of TEEP, is to improve the take up of electric vehicles within the Authority, but also to provide a robust and defendable position as to when this is not either technically, economically, environmentally or practically possible.

3.9 Following this policy introduction the Council were successful in obtaining Welsh Government funding through WGES to deliver new EV charging infrastructure at Council/Depot sites as set out below:

EVCI Site Details
1 x 50kW Rapid Chargers & 2 Fast 22kW @ Unit 10, Trostre Industrial Estate SA14 9UU
2 x Fast 22kW @ Dafen Stores SA14 8QN
2 x 50kW Rapid Chargers & 3 Fast 22kW @ Llandovery Depot SA20 0AZ
1 x 50kW Rapid Chargers & 3 Fast 22kW @ Mynydd Mawr Woodland Park SA14 6HU
2 x Fast 22kW @ Trostre Depot SA14 9RA
2 x rapid charge Units at Heol Stanllyd, Cross Hands

3.10 As well as the above we included a funding request to support the introduction of 10 new Electric vans and 10 Electric cars; with the grant bridging the cost differential between traditional internal combustion and their electric equivalent.

3.11 In addition to the Grant funded vehicles we also purchased a further 20 vans through an all-Wales collaborative procurement process.

3.12 With this funding support of £461k from WG combined with the additional collaborative purchase 20 vans, it has expedited our fleet transition ambitions, which will see an increase in the proportion of EV fleet from 1.8% to 8% by 31st March 2024.

4. Transition Strategy

4.1 Following the WGES benchmarking exercise and supported funding with the rapid expansion of our ULEV fleet during 2023/24 the need to develop a robust transition plan to ensure delivery of our aspiration is essential.

4.2 To support this development the Councils Climate Change and Nature Emergency Cross Party Advisory Panel CCNEAP is supporting with the initial development of the Strategy.

4.3 The aim of the CCNEAP is to provide advice to the Council's Cabinet on the development and implementation of policies and programmes to tackle Climate change, deliver the transition to net zero by 2030 and address the nature emergency.

4.4 It is proposed to use a transformation approach to the development of the Transition Strategy to track and manage delivery of clear and measurable key outcomes. The Strategy and action plan will be monitored and reviewed annually; it will need to focus on the following 10 principle areas:

- Fleet Renewals programme planning
- Fleet Utilisation
- Fleet Data and Performance
- Vehicle Charging and Other Infrastructure
- Funding
- Procurement
- Stakeholder Engagement and training
- Vehicle Maintenance
- Grey fleet
- Risk and Dependencies

5. Challenges

5.1 Transitioning to an Ultra Low Emission Vehicle (ULEV) fleet presents several challenges for a council. Here are some key ones:

5.2 Infrastructure Development - Installing sufficient charging infrastructure to support ULEV fleets can be expensive and logistically challenging. It requires identifying suitable locations, obtaining permissions, and ensuring compatibility and capacity with existing electrical infrastructure.

5.3 Cost Considerations- ULEVs generally have higher upfront costs compared to traditional vehicles, although the total cost of ownership may be lower over the vehicle's lifetime due to reduced fuel and maintenance expenses. However, budget constraints can hinder the initial investment in ULEV procurement and infrastructure development. We will need to develop an approach which allows for gradual expansion within our budgetary position.

5.4 Service Change Management - Concerns about range limitations and charging availability may deter services from adopting ULEVs, particularly for services that require extensive travel or operate in remote areas. Overcoming this through infrastructure expansion, training, development of charging procedures and correct vehicle selection is crucial.

5.5 Vehicle Options and availability - Limited availability of ULEV models that meet the specific operational requirements of councils, such as payload capacity, vehicle size, and specialised equipment compatibility, can constrain fleet transition efforts.

5.6 Operational Adaptation - Transitioning to ULEVs may require changes to operational practices, such as adjusting maintenance procedures, driver training, and route planning to accommodate the unique characteristics of services when using electric vehicles.

5.7 Staff Training and Support- Providing adequate training and support for council employees involved in ULEV fleet management, operation, and maintenance is essential but will require additional resources and time.

5.8 Data Management and Integration - Integrating ULEV fleet data with existing management systems and processes can be complex, new software solutions to effectively monitor vehicle performance, charging activities, and compliance with transport regulatory requirements.

5.9 Transition Planning and Coordination - Developing and implementing a comprehensive transition plan that considers all aspects of fleet management, including procurement, infrastructure development, staff training, and performance monitoring, requires effective coordination among multiple stakeholders and departments within the council.

5.10 Addressing these challenges requires careful planning, stakeholder engagement, and a commitment to overcoming barriers to ULEV adoption in order to achieve the environmental, economic, and social benefits associated with a more sustainable fleet.

DETAILED REPORT ATTACHED?	**NO**

IMPLICATIONS

I confirm that other than those implications which have been agreed with the appropriate Directors / Heads of Service and are referred to in detail below, there are no other implications associated with this report:

Signed: D. John **Head of Environmental Infrastructure**

Policy, Crime & Disorder and Equalities	Legal	Finance	ICT	Risk Manage-ment Issues	Staffing Implicatio ns	Physical Assets	Bio-diversity & Climate Change
YES	**NONE**	**NONE**	**NONE**	**YES**	**NONE**	**YES**	**YES**

1. Policy, Crime & Disorder and Equalities

The delivery of the strategy and actions will deliver against our commitment to becoming a net zero carbon local authority by 2030

3. Finance

The extent of the funding gap for both the acquisition of the ultra-low/zero emission vehicles and their supporting infrastructure is relatively unknown at this time.

It is estimated that there will be fuel cost savings accruing from the transition as well as vehicle maintenance cost reductions.

Additional funding streams and grants will be pursued to bridge any affordability gap.

5. Risk Management Issues

A corporate transformational programme of this size will inevitably face risks and dependencies. The programme team will establish a risk register to monitor and mitigate for these.

6. Physical Assets

Transitioning to a Ultra Low Emission Vehicle (ULEV) fleet entails several physical asset implications for a council. Here's a breakdown of these implications:
Transitioning to a Ultra Low Emission Vehicle (ULEV) fleet entails several physical asset implications for a council. Here's a breakdown of these implications:
Vehicle Fleet Procurement - This involves purchasing or leasing ULEVs that meet operational
Decommissioning: Existing vehicles that are replaced by ULEVs may need to be decommissioned or sold, requiring proper disposal or remarketing processes.
Maintenance Facilities: Facilities for vehicle maintenance, repair, and servicing may need to be upgraded or retrofitted to accommodate the unique needs of ULEVs.
Charging Infrastructure: The council will need to install charging infrastructure at various locations, such as depots, offices, and public facilities, to support the charging needs of ULEVs. Ensuring an adequate and reliable power supply to charging stations is essential to prevent disruptions and meet the charging demands of the ULEV fleet. Regular maintenance and servicing of charging infrastructure are necessary to ensure optimal performance and reliability.

7. Staffing Implications

Training programs for staff involved in fleet management, operation, and maintenance are essential to ensure they are equipped with the necessary skills and knowledge to work with ULEVs effectively. In addition to training to support the transition and driving of the vehicles.

8. Biodiversity and Climate Change

The transition strategy for Ultra Low Emission Vehicle (ULEV) fleet can have significant implications for biodiversity and climate change. Here's how:

ULEVs produce fewer emissions of air pollutants such as nitrogen oxides (NOx) and particulate matter (PM), which contribute to poor air quality and harm biodiversity. Transitioning to ULEVs can help mitigate air pollution, benefiting local ecosystems and wildlife.

ULEVs produce fewer greenhouse gas emissions, particularly carbon dioxide (CO2), compared to conventional vehicles. By transitioning to ULEVs, Welsh Local Authorities can help reduce the transportation sector's contribution to climate change and meet national and international emission reduction targets.

ULEVs can help lower the carbon footprint of the council's operations, including fleet management and transportation services. This aligns with Wales' commitment to achieving net-zero emissions by 2050 and transitioning to a low-carbon economy.

CABINET MEMBER PORTFOLIO HOLDER AWARE/CONSULTED	YES

Section 100D Local Government Act, 1972 – Access to Information
List of Background Papers used in the preparation of this report:

THERE ARE NONE