



Cyngor Castell-nedd Port Talbot  
Neath Port Talbot Council

## **NEATH PORT TALBOT COUNTY BOROUGH COUNCIL**

**Environment, Regeneration and Streetscene Services Cabinet Board**

14<sup>th</sup> November 2023

**Report of the Head of Engineering & Transport**

D. W. Griffiths

**Matter for Information**

**Ward Affected: All**

**Electrical Vehicle and Charging Infrastructure Transition to Ultra Low Emissions update.**

**Purpose of Report**

1. To inform members of the current position for vehicle transition to zero emission as well as charging infrastructure to support the transition for the fleet.
2. Update Members on the position of transition in line with the established transition plan.

**Executive Summary**

3. A report has been prepared which identifies vehicles which are either already purchased, on order or have been identified for this year's replacements to help the fleet transition to net zero.
4. This report also lists the current charge points and locations which support the EV fleet and informs members of the services required to transition a large fleet of vehicles.

## **Background**

### **Vehicles**

5. Fleet services have provided a list of vehicles already transitioned too full electric which total 34 with a further 43 due by 2024, see Appendix A. The vehicles range from large goods vehicles to light vans and are assessed based on suitability, mileage, market research/trials and availability before procuring.
6. The targets set by WG and in line with our transition plan are tight, 2025 for car and light van and all other vehicles by 2030. We have made very good progress in transitioning suitable vehicles so far and continue to explore all options and trials when vehicles are due for replacement.
7. Our experiences so far have been one of learning. At all stages we engage with sections and involve them in the decision-making process as well as exploring suitable vehicle types when considering range and charging etc. We also aim to educate the drivers and managers that the way we use electric vehicles is different to diesel and petrol engine vehicles as there is more planning around routes, range and charging. Feedback from drivers who have trialled the vehicles so far has been very positive.
8. We have conducted level 3 training on 94% of workshop technicians for electric and hybrid vehicles. This enables us to carry out service and inspections to the required standards on all vehicle types, we are also exploring level 4 qualifications to enable us to deliver more in-depth repairs in line with manufactures guidelines to potentially offer more services externally to generate income and contribute to the council overheads within the service area.

### **Charging Infrastructure**

9. Fleet services have provided a list of current charging infrastructure and locations which will be used for fleet vehicles (Appendix B). The total amount of charge points currently in operation are 62 across depots and civic buildings. The fleet have a range of different chargers available with various power outputs which charge vehicles at different rates Alternating Current AC and Direct Current DC power supplies. The most popular we have are AC charge points which are generally used overnight in contrast to the DC

charger which is a rapid charger to put charge and range into the vehicle battery systems quickly in the event of any service response requirements when vehicle battery status is low.

10. Fleet services have recently changed the back-office management of the charge points from the various charge point providers to Clenergy EV who are based at Pencoed in Bridgend. This makes the management of the charging infrastructure more efficient and will allow the fleet office to better facilitate charger breakdowns, simplifies recovering costs per vehicle for electricity, producing reports and data sets which are easier to access. The fleet office can view the charge points state of charge and if vehicles are currently on charge, if the batteries are fully charged or if there is a charger fault then infrastructure can be remotely accessed, and the charger unit reset.
11. Additional chargers will be needed for future requirements such as the recycling transfer depot, provision has been put in place for the requirements of all vehicles with the potential to be transitioned to EV at the site.
12. A focus group chaired by Facilities management has also identified the need for additional charge points located at key depots and other council buildings which could be used to fast charge or top up as and when required.
13. Fleet Services have also converted their current breakdown vehicle and fitted a unique charge unit to deal with vehicles which may run out of charge. This unit is the same as the RAC and AA vehicles carry and will help with driver's range anxiety in that they will know that help is on hand in the event of running on low battery charge.
14. Members will recall the Zero Emission Fleet Transition report which was presented on the 24<sup>th</sup> September 2021. At that meeting Members approved the Zero Emissions Fleet Transition Plan and the subsequent submission of the plan to the Welsh Government Energy Service on 22<sup>nd</sup> October 2021, in line with the requirements set out in Welsh Governments Prosperity for All Document 2019, a Low Carbon Wales. The Fleet Transition Plan provides a definitive timeline of when vehicles are to be renewed and what they are to be replaced with. The Transition Plan is a management tool which will help the Council budget for the increased costs that will be incurred with E. V's.

## **Financial Impact**

15. Currently there has been no significant financial impacts to fleet reserves mostly due to grant funding for the majority of vehicles procured which offsets the transition from diesel to electric however future vehicle replacements will result in increased costs and potential budget pressures. Due to recent market influences outside of the control of the council it is important to highlight for members that price increases/costings have only been established for the next 2 years. This could be further impacted if WG grant funding does not become available to support the WG ULEV transition targets then the council would need to fund the cost difference to transition. At present the WG have provided assurances that the Waste vehicles scheduled for renewal have been built into their grant programme when the vehicles are replaced. It is important to note the grant funds the difference in cost between a Diesel and new ULEV vehicle.
16. Moving forward any extra costs not funded by grant will be reviewed for affordability prior to purchase this will be monitored closely through the renewals/prudential borrowing arrangements to establish cost impacts on a year-by-year basis.
17. In partnership with accountable managers fleet services will scrutinise all transport related costs with a view to maximising vehicle efficiencies. It will be essential that managers are able to demonstrate that vehicle requirements before a decision is made to renew or replace. This is critical to ensure that the fleet is right sized for the services being delivered and to limit both capital and revenue budget pressures in the future.
18. A list of successful grants claimed for vehicles and chargers by the fleet section are set out in Appendix C. These grants have enabled services to make good progress in transitioning vehicles and developing the infrastructure required. Total Grant claimed for vehicles via WG £460,400.00. Total Grant claimed for charging infrastructure £360,916.00.

## **Integrated Impact Assessment**

19. There is no requirements to undertaken an Integrated Impact Assessment as this report is for information purposes.

## **Valley Communities Impacts**

20. No implications

### **Workforce Impacts**

21. Training on new vehicle technologies and systems to aid transition to a zero emission vehicles.

### **Legal Impacts**

22. There is no legal risk to the Authority although it is noted that the council are required to meet the Welsh Governments net zero targets.

### **Risk Management**

23. Service delivery in the event of power failures and charge point communication failures.

### **Consultation**

24. There is no requirement for external consultation on this item.

### **Recommendations**

25. No recommendations.

### **Reason for Proposed Decision**

26. No decision required.

### **Implementation of Decision**

27. No decision required.

### **Appendices**

28. Appendix A – Electric Fleet Vehicles

29. Appendix B – Charging Infrastructure and Locations

30. Appendix C – Schedule of grant funding received

31. Appendix D - Vehicle Transition Plan

## List of Background Papers

32. None

## Officer Contact

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## **Appendix A**

### **Electric Vehicle List Already on Fleet**

- 6 Full Electric cars, General Office pool and Access Management
- 6 Full Electric cars, Domiciliary Care
- 16 Full Electric Light Vans across sections
- 1 Full Electric 16t Road Sweeper
- 1 Full Electric Recycling Vehicle
- 2 Full Electric Community Service Transport Minibuses
- 1 Full Electric Town Centre Sweeper
- 1 Full Electric All-Terrain Vehicle Gnoll Park

### **Vehicles Currently on Order**

- 1 Full Electric Light Van Parking Services

### **Vehicles on this year's renewals**

- 21 Recycling Vehicles Full Electric
- 13 Full Electric Light Vans various sections
- 3 Full Electric Cars pool
- 4 Medium Possibly Full Electric panel Vans
- 1 16t Full Electric Road Sweeper

## **Appendix B**

### **Charging Infrastructure and Locations**

#### **New Fleet Charging Facility at the Quays SRC.**

The new Fleet charging facility at the Quays-SRC will have 16 twin socket 22kWh chargers providing the capability of charging 32 vehicles at any one time. All chargers are load balanced to ensure the power available is not exceeded.

The charging facility is an extension to the current SRC yard, entrance to this facility will be via the SRC yard. However, there are two extra emergency access points should the need arise.

The Fleet site also has a canopy with PV Solar panels fitted, this will be capable of providing a maximum of 80kWp, although it is anticipated that 68kWp is more realistic. The power generated by the PV panels will go to offset the electricity consumption of the Quays.

Alongside the Fleet facility there is also an area for staff charging in the Quays main car park. This provides six twin socket 22kWh chargers which will allow a maximum of 12 cars to be charged simultaneously. These are again load balanced to ensure power available is not exceeded.

The SRC yard also has some original charge points which have been installed for some time which serviced the early electric vehicle however have been updated a few years ago. There are 2 twin 7.5kw so 4 points which are generally used for pool vehicles. Recently fleet have also installed a rapid charger 50kWh on one side and a 22kWh on the other which is generally used for the current heavy goods sweeper and recycler.

#### **Tregelles Court**

Currently at the fleet depot located at Tregelles Court there are 8 single wall external mounted 7.5kwh trickle charge units. We have procured 2 more which were originally for the 2 CST electric minibuses however there is a decision pending on where these wall mounted chargers can be located.

#### **Tawe Terrace**

There is 1 standalone post mounted single 7.5kwh charger located at Tawe Terrace however there is limited capacity for more unless the electricity is upgraded for future requirements.

#### **Port Talbot Civic**

There are 2 single wall mount 7.5kwh charge points located at the civic centre these were installed on the wall outside the ramp entrance for cleaner's vehicles.



## Library HQ Britton Ferry

There is 1 single wall mounted 7.5kwh charge point which is utilised for the current libraries light van.

## Future requirements

There is also provision for Solar PV fitted to the waste transfer station roof and suitable 9x dual 22kw and 4x 150kw fast chargers for the Waste Recycling Centre at Crumlin Burrows (MREC), This will service the Refuse Recycling Fleet when moved.

## **Appendix C**

### WG Grants Received to Date for Fleet Vehicles

£6,000.00	ATV Gnoll Park
£25,000.00	Precinct Town Centre Sweeper
£185,000.00	16t V65e Electric Dual Sweeper
£12,000.00	Light Vans
£170,000.00	Terberg Matec Kerbloader Urban EV recycling truck
£62,400.00	Light Vans

Social Service also received a grant for full purchase costs of 6 Vauxhall Corsa cars for Domiciliary care.

### WG Grants Received to Date for Fleet vehicle charging infrastructure.

£300,000.00	SRC Charge Park Project
£31,858.00	SRC Fast Charger
£5,000.00	Wall Mounted Chargers Tregelles Court
£24,058.00	Wall Mounted various locations.

Further Grants have been secured for the purchase of recycling vehicle fleet this year with WG however due to delivery times and chassis availability these are predicted to slip into next year.

Work is on going to identify further grant support from WG to aid transition of all vehicle types.