

Report to: Climate, Energy and Environment Committee

Date: 10 January 2023

Subject: **Zero Emission Transport**

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Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

1. Purpose of this Report

- 1.1 To provide the Committee with an overview of the zero-emission transport activity and work programme being undertaken by the Combined Authority.

2. Information

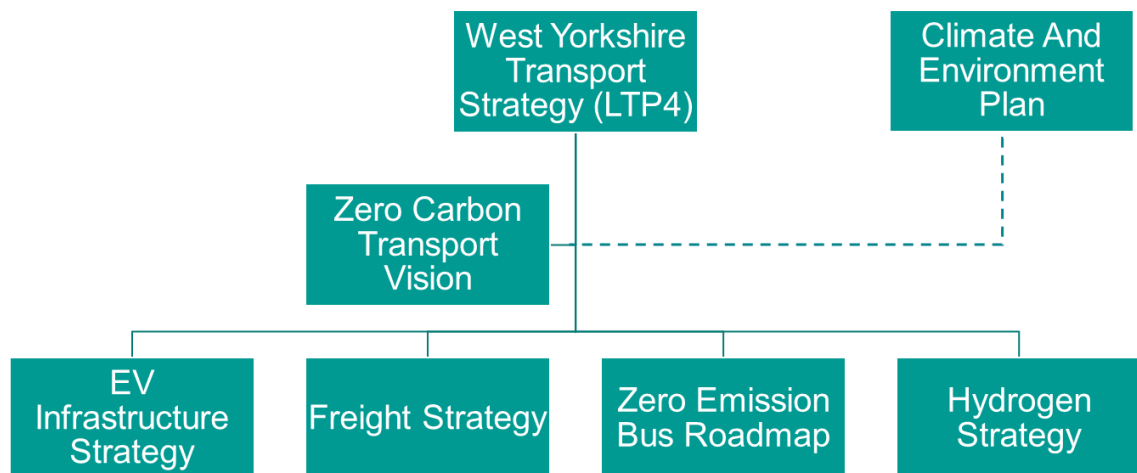
- 2.1 Transport is the highest emitting sector in the region, accounting for 44% of all CO2 emitted. These emissions are dominated by road transport which accounts for 89% of transport related emissions in West Yorkshire.
- 2.2 Work has commenced on the Mayor's West Yorkshire Local Transport Plan, anticipated for adoption in 2024. The new Local Transport Plan will deliver on the Mayor's ambition for transport across West Yorkshire, as well as help deliver on the Mayoral pledge to tackle the climate emergency and protect the environment. The new plan will facilitate the scale of change needed to decarbonise the transport sector and deliver the ambitions contained within the West Yorkshire Climate and Environment Plan, the Bus Service Improvement Plan (BSIP), and our Mass Transit Vision.
- 2.3 The new Local Transport Plans are expected to become the focus of engagement between central and local government about future funding decisions. Updating our LTP will set out the scale of change and investment needed to decarbonise transport across the West Yorkshire in a way which is fair and inclusive, supporting West Yorkshire's consistent call on government

to address the historical underinvestment in transport across the North, and level up the United Kingdom.

- 2.4 A range of zero emission transport work is underway to support the development of the new Local Transport Plan as well as enable the delivery of the [West Yorkshire Climate and Environment Plan 2021-2024](#) (CEP).

Zero Carbon Transport Vision

- 2.5 A zero-emission transport vision is in development setting out the actions we will need to take to decarbonise road transport in West Yorkshire. This document considers the need to decarbonise all vehicles on our roads, include private and shared cars, taxis, public transport and freight, and considers the best technology options available to do so (e.g. electrification, hydrogen).
- 2.6 The ambition of the zero-emission transport vision will be to enable and accelerate decarbonisation of road transport whilst support the modal shift away from private car use needed if we are to realise our commitment to achieving net-zero carbon by 2038.
- 2.7 Building a comprehensive, accessible and inclusive alternative fuel network ahead of predicted zero emission vehicle uptake is vital to accelerate facilitate transition to decarbonisation if we are to meet our climate change and zero carbon goals. A set of policy documents and action plans will sit beneath the zero-emission transport vision to help realise our ambitions, as outlined by the indicative diagram below:



Hydrogen Strategy

- 2.8 The UK released its hydrogen strategy in 2021 setting out the approach and roadmap to scale up hydrogen production and develop a thriving low carbon hydrogen sector. Alongside industry, local and regional governments have a crucial role in ensuring the uptake and development of hydrogen technologies with the view of achieving regional net zero targets.

- 2.9 Exploring all alternative fuel options as part of our decarbonisation strategy is vital to ensure we can meet our climate ambitions effectively and as efficiently as possible. The carbon emission reduction pathway study for West Yorkshire set out a role for hydrogen in all major pathways to achieve net zero emission in West Yorkshire by 2038, including for transport. Developing a hydrogen strategy will allow us to identify key opportunities, maximise potential utilisation and deployment as part of the energy mix in west Yorkshire for transport and beyond.
- 2.10 The strategy will set out a coherent, formally established policy on hydrogen in West Yorkshire, looking at all sectors, with the view of understanding its use case and timeline for deployment. The strategy will also detail an action plan for hydrogen deployment in West Yorkshire, taking into consideration stakeholder engagement, requirements for inter-regional collaboration as well as driving investments and infrastructural development in West Yorkshire. Of key importance for transport is the crucial role hydrogen could play to accelerate decarbonisation of heavy vehicles, such as buses and heavy goods vehicles (HGVs).
- 2.11 There are a range of hydrogen aspirations in the region looking at opportunities for buses and HGVs alongside possible industrial uses which the strategy will look to build on and support. This includes the work Bradford Council are doing with Northern Gas Network and the Bamford Group to develop a scalable hydrogen production facility at the old Gas Works on Bowling Back Lane in Bradford. The facility would look to include a hydrogen refuelling station supported by solar photovoltaics which could be used to fuel a range of vehicles including buses serving more challenging locations with hilly terrain that are less suitable for electric buses.

Electric Vehicle Strategy

- 2.12 The UK Electric Vehicle Infrastructure Strategy, published in March 2022, sets out a requirement for combined authorities to develop local charge point strategies, setting out policies to remove charging infrastructure barriers and accelerate the pace of adoption.
- 2.13 West Yorkshire has made great progress in recent years to increase the number of publicly accessible chargepoints and has more rapid chargers than of any city region outside of London. There are currently 792 publicly accessible chargepoints in West Yorkshire, with 268 of these rapid chargers. However, a government figures predicting over 10,000 may be needed by 2030 to meet demand.
- 2.14 The emerging West Yorkshire strategy has been developed in collaboration with District Partners and will establish the objectives for public electric vehicle infrastructure roll out as well as principles for investment and action plan for accelerating deployment. The purpose of the document is to guide investment decisions for future funding opportunities as well as provide design guidance for chargepoints to ensure provision meets the needs of those who live and work in West Yorkshire and ensure equity of access across region.

2.15 Draft strategic principles have been developed to guide the future expansion of publicly accessible electric vehicle chargepoints in West Yorkshire. These are designed to support investment decision making on the development of a public funded network, as well as set out our requirements for private investment into the network:

- **Enable & accelerate EV charging network:** Build charging network ahead of predicted EV uptake to facilitate transition, support climate agenda and improve air quality, with an emphasis on strategic priorities and 'close to home' charging.
- **Reduce inequalities and ensure good coverage of the West Yorkshire network:** Strive for equality of access in EV charging, levelling up coverage across West Yorkshire, reducing inequalities and transport related social exclusion (TRSE), ensuring no areas are left behind.
- **Ensure right chargers in the right places:** Ensure EV charging infrastructure meets the needs of local communities that continues to contribute positively to our local areas and streets.
- **Ensure easy to use, fair and accessible to all:** Promoting competition and proper regulation to ensure a healthy market with fair prices, good levels of service and supporting a good customer experience for all.
- **Ensure the West Yorkshire network is resilient, reliable, safe and well maintained:** Work to ensure chargepoints are well maintained, reliable, safe and secure to maximise the use of the network and increase user confidence in electric vehicle charging.
- **Support wider transport decarbonisation goals:** Help to reduce the environmental impact of travel & transport but encouraging modal shift & enable alternatives to private car use, supporting electrification of buses and shared transport, and ensuring the use of renewable energy is prioritised to supply chargepoints.

2.16 A number of workstreams support the work of a West Yorkshire strategy:

- A **technical study** on the potential for EV charging infrastructure was commissioned by the West Yorkshire Low Emission Strategy Delivery Group. This study focused on demand forecasting, strategic investment priorities and early infrastructure deliverables.
- Transport for the North have developed an **Electric Vehicle Charging Infrastructure Framework** which includes an evidence base and visualisation tool for use by TfN and partners to assess electric vehicle charging infrastructure requirements.

- **City Region Sustainable Transport Settlement (CRSTS)** contains funding for a number of EV infrastructure schemes, including charging points in residential areas, charging at mobility hubs, and electrification of the West Yorkshire car clubs.
- 2.17 This work compliments other workstreams by the Combined Authority and district partners to advance sustainable vehicle uptake. A range of public EV charging infrastructure schemes have already been delivered, including the ULEV taxi scheme, delivering over 100 charging points for taxis and public use, alongside additional schemes to deliver public charging at sites across the region such as council owned car parks.
- 2.18 In June 2022, a West Yorkshire bid was submitted to the Local Electric Vehicle Infrastructure (LEVI) Pilot fund to accelerate the rollout of electric vehicle charging for residents without access to off-street parking. Unfortunately, the West Yorkshire bid was not successful, however positive feedback was received from funders and further rounds of funding are expected in 2023. We are also exploring opportunities for private investment chargepoints in West Yorkshire.

Zero Emission Bus Programme

- 2.19 The Combined Authority submitted its Bus Service Improvement Plan to the Department for Transport (DfT) in October 2021. The development of the Bus Service Improvement Plan, which sets out our ambitious vision and plan for improving local bus services, was a requirement of the 'Bus Back Better: The National Bus Strategy for England' (2021).
- 2.20 Along with modal shift to public transport, a green, zero-emission bus system is a core element of the Combined Authority's long-term vision for buses - the Bus Services Improvement Plan sets out our ambition to have a fully zero emission fleet by 2036. The scale of this ambition is significant, with only around 2% of the current West Yorkshire bus fleet zero emission. A number of electric buses projects have already been delivered, including the all-electric Stourton Park and Ride scheme.
- 2.21 The Zero Emission Bus Programme currently in delivery will help to increase this to closer to between 14% and 19%. This programme includes:
- Phase 1: £56.2million project to introduce 111 zero emission buses and charging on routes in Bradford, Leeds, and Wakefield districts funded through Department for Transport's Zero Emission Bus Regional Area funding.
 - Phase 2: £4 million project to introduce 8 zero emission buses and charging to routes in Calderdale and Kirklees funded through Gain Share, with a focus on exploring the impact of hilly landscape on the running of electric buses, and how the Combined Authority can work with smaller operators running tendered services to encourage a switch to zero emission buses.

- Phase 3: £21million project to introduce between 60 and 126 zero emission buses and charging (number of vehicles subject to delivery model). This will be funded through City Region Sustainable Transport Settlement (CRSTS).

Work is underway to plan for transition the remaining fleet to zero emission vehicles, looking at delivery models and funding approaches alongside our franchising work.

Freight Strategy

- 2.22 A West Yorkshire Freight Strategy is planned as part of our zero-emission transport programme to support the development of our new Local Transport Plan and the delivery of the West Yorkshire Climate and Environment Plan 2021-2024.
- 2.23 Initial work has started on the strategy which will be designed to support accelerated decarbonisation of freight and logistics within West Yorkshire while enabling inclusive economic growth. This strategy will be developed in tandem with the work to develop the West Yorkshire hydrogen strategy to help ensure we support the best alternative fuel mix for the region and identify opportunities for collaboration to accelerate decarbonisation of heavy vehicles with cross sector hydrogen aspirations of the Combined Authority and our partners.
- 2.24 The strategy will be developed with partners to help identify opportunities for the CA and partners to be part of potential trials, pilots and schemes for sustainable freight and logistics in West Yorkshire and will set out a framework for how we will work with industry partners to ensure that freight is part our wider decarbonisation and economic ambitions.

Air Quality Strategy

- 2.25 The West Yorkshire Low Emission Strategy (WYLES) was developed through a collaboration between the West Yorkshire District Partners, West Yorkshire Combined Authority and Public Health England. The strategy was adopted in 2016 by all District Partners and by the Combined Authority in 2017. The purpose of the strategy was to provide a regional framework to support policy and action for air quality improvements, improve cross-boundary cooperation at a local level, and enable the compliance of air quality legal targets at the shortest time possible.
- 2.26 WYLES focused specifically on emissions from transport as a primary source of poor air quality in the region. There are currently 36 Air Quality Management Areas in West Yorkshire and a Clean Air Zone in Bradford, all of these are areas in which nitrogen dioxide emissions exceed the annual/hourly statutory limits as direct result of road traffic pollution.
- 2.27 The Environment Act 2021 provides the Government with powers to set new binding targets, including for air quality, water, biodiversity, and waste

reduction. This includes new targets for more stringent air quality targets on fine particulate matter (PM2.5).

- 2.28 Work is now underway through the WYLES Delivery Group on a new air quality strategy for the region. The new strategy will look to build on the foundations of the WYLES, updating the strategy to reflect the introduction of the Clean Air Zone in Bradford and the increased emphasis on particulate matter alongside nitrogen dioxide as a result of the Environment Act 2021. This work is being led by West Yorkshire Combined Authority in collaboration with air quality officers from all five partner councils, and representatives from public health. A new strategy is anticipated Spring/Summer 2023.

3. Tackling the Climate Emergency Implications

- 3.1 The zero-emission transport vision, strategies and work programme all aim to significantly contribute to tackling the climate emergency and meeting the net-zero carbon by 2038 target. All policy documents highlighted by this report are being designed to reduce transport related carbon emissions as well as improve emissions and air quality more widely.

4. Inclusive Growth Implications

- 4.1 In the transition to a net zero carbon economy there are important considerations to be made to ensure that decarbonisation does not reinforce existing social inequalities but rather enhances social equity for the residents of our region. All policy documents look to foster inclusive growth addressing the interconnected nature of decarbonisation and deprivation to ensure that the actions and solutions outlined in this report leave no one behind.

5. Equality and Diversity Implications

- 5.1. Meeting net-zero carbon and transitioning to a net-zero carbon economy should be equitable and not be at the expense of any groups or communities. For example, the EV strategy is being designed to ensure that all charging infrastructure is easy to use, fair and accessible to all, with equality of access in EV charging, levelling up coverage across West Yorkshire, reducing inequalities and transport related social exclusion, ensuring no areas are left behind.

6. Financial Implications

- 6.1. There are no financial implications directly arising from this report.

7. Legal Implications

- 7.1. There are no legal implications directly arising from this report.

8. Staffing Implications

- 8.1. There are no staffing implications directly arising from this report.

9. External Consultees

9.1. No external consultations have been undertaken.

10. Recommendations

10.1. That Climate, Energy and Environment Committee note the update on the zero-emission transport activity and work programme being undertaken by the Combined Authority.

11. Background Documents

There are no background documents referenced in this report.

12. Appendices

None.