

Report to: Transport Committee

Date: 8 November 2019

Subject: Zero Carbon and Air Quality update

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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:	

1. Purpose of this report

- 1.1. To provide an update on carbon reduction and air quality improvement activities being progressed by the West Yorkshire Combined Authority and partner councils.

2. Information

Background

- 2.1 The West Yorkshire Transport Strategy 2040, developed by Transport Committee and adopted by the Combined Authority in August 2017 includes a policy commitment to:
- (Policy 7) Work with partners to deliver the West Yorkshire Low Emission Strategy to reduce as far as possible to zero, emissions of CO₂, NO₂, particulates and noise from transport.
- 2.2 The policy recognises the slower rate of carbon reduction in the transport sector relative to other sectors and the far-reaching, damaging impacts on the environment and people's lives. The policy also recognises the damaging

impacts of air pollution, especially nitrogen dioxide and particulate matter, on people's health. West Yorkshire has some of the worst incidences of poor air quality in the UK.

- 2.3 A West Yorkshire Low Emission Strategy (WYLES) was adopted in 2016 by all of the West Yorkshire partner councils and by the Combined Authority in 2017. Managing air quality falls within the remit of local authorities. The WYLES covers all road traffic emissions but has a particular focus on air quality and commits all of the West Yorkshire partner councils to reducing local transport emissions, especially nitrogen dioxide and particulate matter. The Combined Authority is committed through the Transport Strategy 2040 to supporting the partner councils in their efforts to improve air quality.
- 2.4 In December 2018 the Leeds City Region Energy Strategy and Delivery Plan (ESDP) was adopted by the Combined Authority. The ESDP sets out how the ambition of the Strategic Economic Plan (SEP) for the City Region to become a resilient, zero carbon energy economy underpinned by high-quality green and blue infrastructure could be achieved. As part of the ESDP, forecasts of future carbon dioxide emissions were calculated for the industrial and commercial, domestic and transport sectors. While industrial and commercial, and domestic sector carbon dioxide emissions are forecast to reduce over the next 20 years transport, carbon dioxide emissions are forecast to increase by 28 percent.
- 2.5 In June 2019 the Combined Authority, in line with all the West Yorkshire partner councils and most Leeds City Region local authorities, formally declared a Climate Emergency. This declaration signals the Combined Authority and partner councils' ambition for the region to become net zero-carbon by 2038, with significant progress being made by 2030. The scale of this target is challenging and significant, with the Tyndall Centre for Climate Change estimating that a 14.5% reduction in emissions will be required year on year in order to meet this target.
- 2.6 This report provides an update on progress across a number of initiatives in respect of emissions from transport since the adoption of the above strategies and the Declaration of Climate Emergency. A full progress report on tackling the Climate Emergency within the Leeds City Region was presented to the Combined Authority on 10 October.

Zero Emissions Transport Working Group

- 2.7 The Transport Committee meeting of 15th March 2019 agreed that a joint working group with the Green Economy Panel be established to consider transport's contribution to achieving the regional carbon dioxide emission reduction ambitions. While the forecasted rise in transport sector carbon dioxide emissions forms the primary motivation for establishing this group, it was agreed that the group would also consider air quality issues due to the intrinsic link between the two.

2.8 Terms of Reference for the working group were agreed by the Transport Committee meeting of 10 May 2019, identifying the purpose of the group as:

- To support the delivery of the ESDP and its carbon dioxide emission reduction ambitions;
- To recommend the actions that will decarbonise the transport sector and improve air quality within the City Region;
- To work with / influence partners, including regional organisations and government to deliver actions that decarbonise the transport sector;
- To provide oversight of the delivery of outputs and outcomes of low-carbon / low emission transport related projects being developed by the Combined Authority;
- To align activity on decarbonising the transport sector with activity to improve air quality in the City Region.

2.9 The working group will meet on a minimum quarterly basis, but more regularly as necessary to progress key pieces of their work programme. The first meeting of the Working Group was held on 30 September 2019. The working Group reviewed the outputs of the Transport Low-Carbon Workshops held in July 2019 and agreed the brief and programme for taking forward actions, with a priority identified as commissioning specialist technical support to understand the pathway of transport interventions and the scale and timing of their delivery to deliver the zero carbon target by 2038. The group will have oversight of this work as it progresses. More details of the commission are provided in paragraph 2.15. A detailed update from the Working Group on its work will be provided to the Transport Committee meeting of 10 January 2020.

West Yorkshire Zero Emission Bus Roadmap

2.10 The West Yorkshire Bus Strategy supports the SEP priority of delivering infrastructure for growth by creating ‘a modern, integrated and innovative bus system’ and includes policy commitments to encourage new vehicle technologies which move towards near to zero vehicle emissions. As part of the work to achieve these goals, a West Yorkshire Zero Emission Bus Roadmap has been commissioned to develop a strategy for transitioning to a zero-emission bus fleet in West Yorkshire.

2.11 The Zero Emission Bus Roadmap assesses existing fleet composition, reviews technological solutions, quantifies the emissions impact of uptake scenarios, and sets out recommendations to support the transition of the bus fleet. A series of zero emission technology uptake scenarios were generated with the emissions saving potential of each scenario modelled. This was supplemented by information gathered through interview with bus operators to identify opportunities and barriers for adoption, together with an assessment of bus depots alongside local electricity grid analysis to ascertain existing network capacity.

2.12 The review of different technologies found that efficient diesel, retrofitted diesel and diesel hybrid buses were preferable as short term technology options to help meeting air quality goals. However, the report highlighted that battery

electric and hydrogen buses are the key technologies capable of achieving the long-term policy aim of zero carbon emissions.

- 2.13 To facilitate the required fleet transition to zero emission vehicles, the report sets out a series of recommendations focused on addressing cost and deployment barriers and accelerating knowledge, awareness and collaboration. Work is now progressing in collaboration with the West Yorkshire Bus Alliance to develop and deliver an action plan based on the report's recommendations, with Carbon and Air Quality a prioritised workstream, which include action to reduce on-route emissions, working with operators to shape their fleet replacement, refurbishment and deployment programmes, and developing a communications plan for air quality issues in West Yorkshire.
- 2.14 A number of schemes are already underway to improve the emissions of the bus fleet operating in West Yorkshire, which include:
- **Clean Bus Technology Fund scheme** – This scheme provides capital funding to support the retrofit of 466 older, more polluting vehicles. This will improve vehicle tailpipe emissions up to the latest Euro 6 emissions standards or better. The project seeks to reduce the amount of Nitrogen Oxides (NOx) and Carbon Dioxide produced by West Yorkshire's bus fleet, which could deliver health and environmental benefits, estimated at £70.7m over a 5 year period as a result of removing 560 tonnes of NOx per annum. To date, technology has been retrofitted to 202 buses which are in operation in West Yorkshire.
 - **Stourton 'low-energy' park and ride** - As part of the Connecting Leeds programme Bus Delivery Package, plans for a new 'low-energy' park and ride for West Yorkshire in Stourton are progressing. The service will use 100% electric double deck buses, supported by the Combined Authority and Government Ultra Low Emission Bus funding, and include solar powered infrastructure for on-site vehicle recharging.
 - **Leeds Bus Station improvement plan** – the Connecting Leeds improvement plan for Leeds Bus Station includes proposals to develop the station into a low carbon and sustainable site through installation of a solar panel system, generating electricity with the aim to make the bus station self-sufficient. Similar schemes to other bus stations will be developed.

West Yorkshire Transport Emission Reduction Pathways

- 2.15 A series of low-carbon workshops were held in July 2019, run by the Combined Authority with key stakeholders contributing from the four sectors of building, industry, power and transport to help identify and scope actions.
- 2.16 Ideas generated by the workshops form an important first step in getting traction with the interventions needed to achieve the zero-carbon ambition, but it is recognised that there is also a need to fully understand the scale and pace at which interventions should be deployed and their appropriateness to the region given its unique assets and geography.

- 2.17 The Combined Authority will need to understand how all of the sectors can work together to decarbonise as well as building a detailed picture of the contribution that each individual sector can make. To this end an Emission Reduction Pathways project has been commissioned to develop emission reduction pathways for all sectors: buildings, industry, power, transport and land-use. The outcome of this project will be a clear understanding of the interventions and emission contributions each sector can deliver and the role of the Combined Authority and stakeholders in their delivery.
- 2.18 Part of the commission will be a detailed exploration of the transport sector's role in decarbonisation, to build on the West Yorkshire Zero Emission Bus Roadmap work described in para 2.10. The commission will review the appropriateness of existing transport and emission focused strategies and investment programmes (including those identified in paragraphs 2.1 to 2.5 above) and produce a set of alternative emission reduction pathways for the transport sectors to achieve the 2038 targets. The commission will produce a set of recommendations which identifies actions, partners and funding mechanisms required for delivery, including any barriers to implementation. The Zero Emissions Transport Working Group will have oversight of this commission going forward, and the information will be presented for consideration by the Transport Committee.
- 2.19 This work is expected to interact with, and inform, the Leeds City Region Connectivity Strategy work (currently being undertaken by the Combined Authority and partner councils and previously reported to Transport Committee) to identify a future pipeline of transport interventions.

West Yorkshire Low Emission Strategy Review and Action Plan

- 2.20 The West Yorkshire Low Emission Strategy (WYLES) adopted by the partner councils and Combined Authority in 2016/17, set out a series of actions to address air quality challenges caused by transport emissions.
- 2.21 The Transport Committee meeting of 9 November 2018 was informed that the West Yorkshire partner councils had been awarded £106,000 through the DEFRA annual Air Quality Grant scheme for resourcing to deliver the recommendations of the WYLES. A WYLES Co-ordination Officer has since been appointed (in June 2019, employed through Kirklees Council to work on behalf of all of the West Yorkshire partners), tasked with undertaking a review of the WYLES, including benchmarking progress against the strategy's objectives and developing a WYLES delivery plan for future years based on the findings of the benchmarking review work.
- 2.22 The WYLES review is involving representatives from all the West Yorkshire partner councils and the Combined Authority. The review considers outputs, governance, funding streams and the physical scope of the projects, mapping the findings against Air Quality Management Areas to assess delivery performance. The delivery plan will seek to enhance and accelerate

the implementation of the WYLES identifying interventions and required resources.

- 2.23 The West Yorkshire Integrated Transport Block (ITB) programme for 2019-2022 endorsed by Transport Committee in March 2019 and agreed by the Combined Authority in April 2019 included a minimum allocation of £240,000 to supplement partner council funding in the delivery of WYLES actions.
- 2.24 A detailed report on the WYLES review and delivery plan will be made to the 10 January meeting of Transport Committee.

3. Financial Implications

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

4. Legal Implications

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

5. Staffing Implications

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

6. External Consultees

- 6.1 No external consultations have been undertaken.

7. Recommendations

- 7.1 That the Committee notes the updates on current carbon reduction and air quality improvement activities across the region.
- 7.2 That further detailed reports on the West Yorkshire Zero Emission Bus Roadmap, West Yorkshire Transport Emission Reduction Pathways commission and West Yorkshire Low Emission Strategy Review and Delivery Plan are presented to a future meeting of the Transport Committee.

8. Background Documents

None.

9. Appendices

None.