
Report to: Transport Committee

Date: 15 January 2021

Subject: **Carbon Impact Assessment**

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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 This paper provides an update on the work commissioned by the Combined Authority to develop a carbon impact assessment tool and incorporate this into the Assurance Framework. This work will ensure that the impact of proposals on the Climate Emergency are more explicitly taken into account in decision making.

2. Information

Background

- 2.1 Given the scientific consensus that human influence is overwhelmingly responsible for changes in the global climate, addressing the climate emergency is a key priority for the Combined Authority and the West Yorkshire councils.
- 2.2 The Combined Authority declared a climate emergency and strengthened the City Region's carbon emission reduction target in July 2019. The strengthened target commits the region to achieve net-zero carbon by 2038, with significant

progress by 2030. The task is challenging and will require significant and swift action to decarbonise all sectors.

- 2.3 A paper to the West Yorkshire and York Investment Committee on 1 September 2020 outlined several initiatives that are being undertaken to reduce carbon emissions to tackle the Climate Emergency. This includes strengthening how clean growth and climate change impacts are considered for all schemes coming through the Assurance Framework.

The carbon impact assessment project

- 2.4 A methodology and supporting toolkit for assessing carbon emissions and clean growth impacts of new schemes is being developed, and the Combined Authority has appointed Mott Macdonald to carry out this work. A technical steering group, including officers from all West Yorkshire councils and York, has been established to develop the work and oversee the commission.

- 2.5 The work underway has five phases:

- Phase 1 Review of national and local examples of best practice in carbon assessment (September and October 2020)
- Phase 2 Development of the carbon impact assessment toolkit (October 2020 to March 2021 with initial proposals available in December 2020)
- Phase 3 Applying the toolkit to existing capital schemes currently going through the Assurance Framework (February and March 2021)
- Phase 4 Carry out an in-depth assessment and recommend carbon mitigation measures for a shortlist of schemes in development (March and April 2021)
- Phase 5 Carry out carbon literacy training to embed the toolkit in the Assurance Framework (February to August 2021)

- 2.6 This paper outlines the results from Phase 1 of the work. This involved:

- An external review of best practice in calculating carbon emissions and some wider environmental impacts
- A Review of how internal decision-making practices in the Combined Authority take carbon impacts into account
- Recommendations for what should be included in a new carbon impact assessment toolkit for the Combined Authority

- 2.7 The emerging findings of the Phase 1 report received from the contractors cover both general findings and recommendations that are relevant to particular elements of the Assurance Framework process.

- 2.8 General Findings:

- The proportionality principle should be followed when assessing the carbon impact of schemes, meaning that effort should be focused on schemes or parts of schemes likely to have the greatest impact on greenhouse gas emissions
- A consistent set of assumptions and rules should be adopted (but see below for a comment on background assumptions)

- A requirement to assess carbon impact should apply to all project types

2.9 Specific findings in the context of the Assurance Framework:

- At Strategic Assessment (Activity 1), there should be a check on the alignment of the proposal with Carbon Emission Reduction Pathways
- At Strategic Outline Business Case (Activity 2), proposals should be subject to a qualitative screening process which assesses the wider sustainability/environmental impacts.
- At Outline Business Case (Activity 3) and Full Business Case (Activity 4), there should be a quantitative assessment of the carbon impact of proposals, this will need to consider:
 - The carbon included in the construction of any infrastructure (embodied carbon)
 - The best way to express the carbon impact of the proposal so that it is meaningful for decision makers
 - How the carbon impact of the proposal should be presented within the documentation, perhaps as a '6th Case' in the business case
 - What background assumptions should be used in the assessment of carbon impact such as fleet composition and traffic growth
 - How to take account of the impact of the proposal itself on behaviour and related effects such as the impact of the proposal on new development

Next Steps

- 2.10 Work on Phase 2 of the project has already begun. Initial findings from Phase 2 will be developed to produce firmer proposals in early 2021. These will be reported to the Combined Authority meeting in March.
- 2.11 It is likely that several issues that will need to be considered when applying the tool (Phase 3). For non-transport schemes new techniques will need to be developed to assess carbon impact. For transport schemes, more detailed consideration will need to be given to the last two bullet points above and the assumptions made for the purposes of carbon assessment may have to be different from those used in the economic assessment. These assumptions include:
- Fleet composition and background traffic forecasts – these are highly uncertain over the appraisal period (typically 60 years), especially given COVID-19, but the assumptions used can make a significant difference to the carbon impact of a scheme, as well as to the economic appraisal.
 - The impact of the scheme on traffic levels and trip making – It is often difficult to assess the specific impact of the scheme, but for the purposes of carbon assessment, this is likely to be important.
 - Traffic associated with new developments and whether this should be included in the assessment of transport schemes which affect the viability or success of such developments.
- 2.12 Partner councils are already represented on the Steering Group for the Carbon Impact Assessment project. Further data about schemes progressing through the Assurance Framework may be required as part of Phase 3

(applying the toolkit to existing schemes) and this may involve requests to scheme promoters. Phase 4 (in depth assessment and recommendation of carbon mitigation measures) represents a significant opportunity for promoters to improve the carbon impact of their schemes.

3. Clean Growth Implications

- 3.1 The proposed carbon impact assessment tool should assist decision makers in taking the carbon impact of proposals into account and therefore help to facilitate clean growth.

4. Financial Implications

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

5. Legal Implications

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

6. Staffing Implications

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

7. External Consultees

- 7.1 A steering group, including officers from all West Yorkshire councils and York has been established to develop this work and oversee the commission. A representative from the LEP's Green Economy Panel also sits on the steering group, acting as a "critical friend".

8. Recommendations

- 8.1 That the Transport Committee notes the contents of this report.

9. Background Documents

- 9.1 None

10. Appendices

- 10.1 None