

Transport for London

Safety and Sustainability Panel

Subject: Carbon Foot Printing in TfL

Date: 4 December 2013

1 Purpose

- 1.1 The former Safety, Health and Environment Assurance Committee considered a paper on carbon foot printing in December 2010 and an update in March 2012. The original paper established the TfL approach whereby carbon foot print analysis would at this stage only be carried out for TfL projects that are likely to make a material difference to TfL's two million tonnes per year of CO₂ emissions. This paper updates on further progress.
- 1.2 The Panel is asked to note the paper.

2 Background

- 2.1 The Mayor has set a 60 per cent CO₂ reduction target for London in his Climate Change Mitigation and Energy Strategy (CCMES). This Strategy aims to set an example to the rest of the public sector on reducing CO₂ emissions. Accordingly, the Mayor continues to work with the GLA to improve how carbon is taken into account in internal decision-making. This includes how CO₂ and wider environmental impacts are assessed as part of investment decisions on major capital projects. (CCMES Action 13.4 refers).
- 2.2 The CCMES also states that the GLA and its functional bodies will continue to lead the way in public sector reporting of CO₂ emissions and setting targets to reduce them. (CCMES Actions 13.1 and 2 refer).

3 Progress on Carbon Accounting in TfL Projects

Review of Carbon Accounting in TfL

- 3.1 There was a review in 2011, where TfL HSE, along with the sustainability experts Forum for the Future reviewed carbon accounting in TfL decision making, such as the business case mechanism, procurement and gateway financial approvals, to understand how the management of CO₂ emissions is weighted and handled in projects and programmes.
- 3.2 The review showed that whilst the social cost of carbon is accounted for as part of TfL's business case methodology, as the appraisal is structured around transport benefits, there is a risk that the importance of carbon reduction gets overshadowed by benefits such as journey time improvement.
- 3.3 The review identified the need to assess baseline and planned energy use and carbon emissions at an early stage after projects had their business cases

approved, to ensure that design could be influenced to reduce the carbon footprint.

Project and Programme Carbon and Energy Efficiency Plan

- 3.4 TfL introduced a Carbon Energy Efficiency Plan requirement into the new 'Pathway' project management process in April 2013.
- 3.5 The Carbon and Energy Efficiency Plan must now be done by all projects and programmes valued at more than £1m where the work would result in a change in energy consumption (for example it would not be done for an earthworks project). It is targeted at renewal schemes and enables Project managers to understand the energy consumption baseline of the proposed work and the opportunities for reduction in energy demand.
- 3.6 Project Managers work with engineers and other colleagues to identify opportunities based on the London Plan energy hierarchy - reducing the need for energy, using less energy and changing the source of energy supply (e.g. renewable energy).
- 3.7 The Plan has helped to identify CO₂ emissions reductions and energy cost savings, for example at Harrow on the Hill station, 75 per cent non traded carbon cost savings were identified from heating and cooling solutions.
- 3.8 The Plan also has the benefit of being in line with and supporting local authority requirements for development control energy statements.

Further Work

- 3.9 TfL has measured and reported publicly on CO₂ emissions classified as scope 1 (direct from our sites or vehicles) and scope 2 (from energy generation) for many years. Analysis of scope 3 emissions, those associated with carbon embodied in materials, will be the next stage of development. We will focus on projects where such analysis can inform choices of materials to reduce the carbon footprint.

4 Conclusions

- 4.1 Good progress has been made in requiring energy use and carbon emissions analysis to be measured and improved in TfL's projects and programmes.
- 4.2 Further work will be done to identify the benefits of identifying and addressing embodied carbon in materials.

5 Recommendation

- 5.1 The Committee is asked to note the good progress being made and the further work planned.

6 Contact

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