

Transport Scotland Carbon Management Tools

Developed in response to TS Carbon Management Plan. Third version of this plan (2015-2020) set the corporate emission baseline and targets until 2019/20 (we're waiting on the next version being published). Scope includes emissions from:

- Buildings
- Travel
- Operations, including Trunk Road lighting
- Maintenance
- Works
- Waste

Targets are to reduce operational emissions by 2019/20 by 20% compared to 2015/16.

The Operating Company contracts require monitoring and steps to compare and reduce carbon emissions in their operations and schemes. There are requirements to report quarterly and annually- with the annual report comparing emissions with the first annual period benchmark (2020 for South Units, 2015 for North Units).

The Carbon Management Tool assists the estimation of the whole life carbon footprint from the design stage based on a project's material consumption, waste generation, material and waste transport, maintenance (replacement of materials) and plant fuel/electricity consumption. It allows the comparison of up to three designs, with associated construction, to report and compare the carbon emissions "as built". The whole life carbon is calculated via a Project Tool which looks at the carbon cost of construction and ongoing maintenance of new assets. The Carbon Management Tool must be used for maintenance schemes and general maintenance operations but it doesn't (yet) calculate ongoing maintenance carbon estimates like the Project Tool for new build.

Material emission factors are from the Inventory of Carbon and Energy (ICE) v3, energy, waste and transport emission factors from UK Govt emission conversion factors for greenhouse gas reporting (2020). The ICE v3 factors account for the embodied carbon within the raw material but not the manufacturing or processing of the raw materials into a product.

We don't yet have carbon estimates for our existing assets but it's something they're going to be looking at.

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