

SCI CONSULTANCY: DEVELOPMENT SUSTAINABILITY CARBON FOOT-PRINTING



Client:

BCSA is the national organisation for the steel construction industry: its Member companies undertake the design, fabrication and erection of steelwork for all forms of construction in building and civil engineering

www.steelconstruction.org

Carbon footprint calculation required

SCI developed a methodology, and accompanying spreadsheet tool, to enable BCSA members to easily and consistently calculate their carbon footprint. One of the key objectives of this project was to develop a robust methodology that is tailored to the UK steel construction sector. This will avoid inconsistency and inaccuracy arising from variations in scope and methodology between the different carbon foot-printing schemes currently being marketed to the steel construction sector.

The right tools for the job

The carbon footprint calculation tool quantifies the impact from all aspects of the company's activities including energy use, transport, waste and steelwork erection. In addition, the tool generates a product footprint, i.e. the carbon footprint of 1 tonne of fabricated and erected primary and secondary structural steelwork. The footprint includes the impact of making the steel and all other consumables used in the fabrication process and takes account of the recyclability of steel.

The deliverables of the project included:

- A report setting out the methodology adopted for quantifying the carbon footprint of steelwork contractors.
- A user-friendly, Excel spreadsheet tool to enable BCSA members to easily and consistently calculate their carbon footprint.
- A user manual for the spreadsheet tool.

Information collected from BCSA member companies who use the tool will be used to set steel construction industry Key Performance Indicators against which members can benchmark the performance of their company and set targets for reductions. The tool will be updated as better information becomes available and BCSA members gain experience in using the tool.

Demonstrating sector experience

David Moore, BCSA Director of Engineering, comments: 'We selected SCI for the project as they demonstrated a long track record of life cycle assessment (LCA) work within the sector, both at the product and whole building levels. They have already undertaken several audits of steelwork contractors to determine the carbon footprints of companies and buildings, and we felt confident they would work in partnership with us to achieve our aims.'