

Carbon Accounting and Benefits Methodology

How we calculate carbon emissions and benefits

Scope 3 Reportable Carbon Emissions

Carbon emissions from waste management are calculated using Department for Energy Security and Net Zero (DESNZ) 2025 conversion factors, following the Greenhouse Gas Protocol methodology. These figures represent your reportable Scope 3 Category 5 emissions (Waste Generated in Operations) for carbon footprint reporting.

Carbon Benefits of Recycling

Our carbon benefit calculations use two metrics based on WRAP (Waste & Resources Action Programme) data:

Carbon Saved by Diversion: Emissions avoided by diverting materials from landfill to recycling, or from landfill to energy recovery for non-recyclable materials.

Carbon Avoided by Recycling: Emissions displaced across the supply chain by using recycled materials instead of virgin materials, based on WRAP's Net Avoided Emissions lifecycle data.

Important Notes

1st Waste Management and Auditel, a leading carbon management firm, have worked together to develop a methodology for 1st Waste Management's carbon reporting.

The calculations are based on DESNZ 2025 GHG reporting factors and WRAP published data. Neither of these external organisations endorses specific applications of their data.

Scope 3 emissions and carbon benefits metrics serve different purposes and follow different standards. Scope 3 figures are for carbon footprint reporting under the GHG Protocol; carbon benefits demonstrate positive whole-life impacts not typically included in carbon footprint reports and should not be directly offset against reported emissions.

All figures are estimates based on industry-standard data and represent modelled scenarios rather than direct measurements. Actual emissions vary based on specific materials, facilities, and operational factors. Carbon impact is one metric within broader environmental considerations. Carbon benefits are for informational purposes and do not constitute verified carbon credits or offsets.

1st Waste Management & Auditel make no guarantees regarding specific carbon outcomes, future regulatory acceptance of these methodologies, or the accuracy of projections based on these figures for any particular purpose.

Data reflects current DESNZ and WRAP conversion factors which are subject to periodic updates.

For a detailed methodology and caveats, please contact us.