

2012 Carbon Calculations

Waste Analysis

Total waste produced:

Staff FTE*	Landfill Waste Total (kg)	Landfill per FTE (kg/FTE)	Recycling Waste Total (kg)	Recycling per FTE (kg/FTE)	Landfill Waste %	Recycling Waste %
7.55	101.00	13.38	130.00	17.22	56.28%	43.72%

* Cheltenham office only as no figures available for Scotland Office

Total carbon emissions from waste disposal:

Staff (FTE)	Waste Total (kg)**	Waste Emissions (kg/CO ₂)	Emissions per FTE (kgCO ₂ /FTE)
9.81	300.15	46.85	4.78

Notes:

- Extrapolated from 1 week audit figures multiplied by 50 (to allow for bank holidays etc.)
- Calculated using Defra's conversion factors 2012 - 290kgCO₂/1000kg waste for landfill (municipal waste, average) & 21kgCO₂/1000kg waste for recycling
- Waste figures are for Cheltenham office only so total for carbon calculation has used waste per FTE average to extrapolate total waste usage across both offices.

Water Analysis

Staff (FTE)	Waster Usage (l)	Water per FTE (l/FTE)	Water Emissions (kg/CO ₂)	Emissions per FTE (kgCO ₂ /FTE)
9.81	35786.88	3648	24.62	2.51

Notes:

- As water is from a shared building, the above uses WRAP's office average figure of 16 litres per person per day
- Total hours calculated as 5 days x 46.5 weeks (allowing for annual leave)
- Calculated using Defra's conversion factors 2012 of 344kg/CO₂/million litres for direct and indirect emissions

Lighting & Heating Analysis

Staff (FTE)	Lighting & Heating Usage Total (kWh)	Lighting & Heating Emissions (kgCO ₂)	Emissions per FTE (kgCO ₂ /FTE)
9.81	8809.35	5195.93	529.66

Notes:

- Assumption that lighting is on 8 hours x 5 days x 32 weeks per annum
- Calculated using Defra's conversion factors 2012 (0.58982kg/CO₂/kWh – direct & indirect)
- Using Carbon Trust average office heating figure per m² per annum

