Emissions Factors

Table A below show the emission factors for a variety of fuel sources and are derived from the Defra guidance (BNXS01).

Table A: Emission factors for stationary source energy consumption

Energy type	Factor (kg CO ₂ /kWh gross)
Electricity (grid)	0.537
Natural gas	0.185
Burning and heating oil	0.268
LPG and propane	0.214

Similar emissions factors exist for transport and are again derived from Defra guidance. Table B highlights the average emission factors by fuel and transport type. Actual emissions will be dependent on the efficiency of the specific vehicle and driving style.

Table B: Emission Factors for transport fuels

Fuel or vehicle type		CO ₂ factor (kg/unit specified)
Average petrol car	(kms)	0.209
Average diesel car	(kms)	0.198
Rail - national rail	(passenger kms)	0.060
Air – domestic	(passenger kms)	0.172
HGV All rigid UK average	(hrs)	0.895

The carbon factors are established by Defra and are updated annually.