The incineration of 1 Mg of municipal waste in MSW incinerators is associated with the production/release of about 0.7 to 1.2 Mg of carbon dioxide (CO2 output). The proportion of carbon of biogenic origin is usually in the range of 33 to 50 percent. The climate-relevant CO2 emissions from waste incineration are determined by the proportion of waste whose carbon compounds are assumed to be of fossil origin. The allocation to fossil or biogenic carbon has a crucial influence on the calculated amounts of climate-relevant CO2 emissions.

General estimates: https://www.ipcc.ch/publications_and_data/ar4/wg3/en/ch10-ens10-3-4.html

Tables published in Tool for calculating greenhouse gases (GHG) in solid waste management (SWM), Institut für Energie- und Umweltforschung Heidelberg GmbH, July 2009, pg.: 18.

Table 5-3 Carbon content waste fractions - Total and fossil carbon (IPCC 2006)

	C total	C fossil	
Food waste	15.2%	0%	% wet waste
Garden and park waste	19.6%	0%	% wet waste
Paper, cardboard	41.4%	1%	% wet waste
Plastics	75.0%	100%	% wet waste
Glass	0%	0%	% wet waste
Ferrous metals	0%	0%	% wet waste
Aluminium	0%	0%	% wet waste
Textiles	40.0%	20%	% wet waste
Rubber, leather	56.3%	20%	% wet waste
Nappies (diapers)	28.0%	10%	% wet waste
Wood	42.5%	0%	% wet waste
Mineral waste	0.0%	0%	% wet waste
Others	2.7%	100%	% wet waste

Table 5-3 shows the percentages used for total and fossil carbon content of the waste fractions according to (IPCC 2006). Table 5-4 shows the calorific values of the waste fractions used in the calculations. The table also shows the estimated water content of organic waste and non-specified waste ("Others") in case of a low or high water content.

Table 5-4 Calorific value waste fractions (note at east 7 MJ/kg needed for combustion)

Fraction	Calorific value	
Organic waste low water content	4	MJ/kg wet waste
Organic waste high water content	2	MJ/kg wet waste
Paper	11.5	MJ/kg wet waste
Plastics	31.5	MJ/kg wet waste
Glass	0	MJ/kg wet waste
Metals	0	MJ/kg wet waste
Textiles, rubber, leather	14.6	MJ/kg wet waste
Wood	15	MJ/kg wet waste
Mineral waste	0	MJ/kg wet waste
Others low water content	8.4	MJ/kg wet waste
Others high water content	5	MJ/kg wet waste

Source: (AEA 2001); wood IFEU estimate