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Biodegradable municipal waste to landfill methodology

UK estimates for biodegradable municipal waste to landfill have been calculated using a UK wide approach in accordance with relevant legislation. Biodegradable municipal waste is the fraction of municipal waste that will degrade within a landfill site. Amongst other materials it will include food waste, green waste, cardboard and paper.

Tonnage data is collated from mandatory returns made for landfills to the Environment Agencies of each of the four UK countries. Tonnages are split by [European Waste Catalogue](#) (EWC) categorisation codes, as determined by landfill operators.

For this reporting obligation, the UK countries have agreed a set of EWC codes to represent 'municipal waste'. Scotland applies a factor to EWC code 19 12 12 on the basis that only a proportion is 'municipal', however other countries do not do this. Scotland includes some additional EWC codes.

Factors on the proportion of waste that is biodegradable are applied to each code. Countries use broadly similar, but non-identical sets of factors.

The factors are multiplied by the tonnages and then summed to give final country level estimates for BMW to landfill. New factors were adopted by England in 2014 for the two EWC codes that dominate Municipal Waste, based upon a [commissioned study of landfill waste composition](#). All England figures published here have been produced using these new factors. Wales adopted these new factors from 2013 and backdated their estimates for 2010-2012.

Tables 1 and 2 provide details of the waste codes considered to be 'municipal waste' for this purpose and the associated biodegradable factors.

Table 1: Waste codes considered to be municipal waste and the associated biodegradability factors for England, Northern Ireland, Scotland and Wales

Waste Code	England Biodegradable Factors	Northern Ireland Biodegradable Factors	Scotland Biodegradable Factors	Wales Biodegradable Factors
15 01 01	1	1	1	1
15 01 02	0	0	0	0
15 01 05	0.74	0.74	0.74	0.74
15 01 06	0.68	0.64	0.63	0.61
15 01 07	0	0	0	0
15 01 09	0.5	0.5	0.5	0.5
19 05 01	0.68	0.64	0.63	0.61
19 05 02	0.68	0.64	0.63	0.6
19 05 03	0.68	0.64	0.63	0.61
19 05 99	0.68	0.64	0.63	0.61
19 06 03	0	0	0	0
19 06 04	0.2	0.2	0.2	0.2
19 06 05	1	1	1	1
19 06 06	1	1	0.2	1
19 06 99	0.68	0.64	0.63	0.61
19 12 01	1	1	1	1
19 12 02	0	0	0	0
19 12 03	0	0	0	0
19 12 04	0	0	0	0
19 12 05	0	0	0	0
19 12 06*	1	1	1	1
19 12 07	1	1	1	1
19 12 08	0.5	0.5	0.5	0.5
19 12 10	0.5	0.5	0.5	0.5
19 12 11*	0	0	0	0
19 12 12	0.463	0.64	0.63	0.463
20 01 01	1	1	1	1
20 01 02	0	0	0	0
20 01 08	1	1	1	1
20 01 10	0.5	0.5	0.5	0.5
20 01 11	0.5	0.5	0.5	0.5
20 01 13*	0	0	0	0
20 01 14*	0	0	0	0
20 01 15*	0	0	0	0
20 01 17*	0	0	0	0
20 01 19*	0	0	0	0
20 01 21*	0	0	0	0
20 01 23*	0	0	0	0
20 01 25	1	1	1	1
20 01 26*	1	1	1	1
20 01 27*	0	0	0	0

*Donates a hazardous waste code

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Table 1 continued: Waste codes considered to be municipal waste and the associated biodegradability factors for England, Northern Ireland, Scotland and Wales

Waste Code	England biodegradable factors	Northern Ireland biodegradable factors	Scotland biodegradable factors	Wales biodegradable factors
20 01 28	0	0	0	0
20 01 29*	0	0	0	0
20 01 30	0	0	0	0
20 01 31*	0	0	0	0
20 01 32	0	0	0	0
20 01 33*	0	0	0	0
20 01 34	0	0	0	0
20 01 35*	0	0	0	0
20 01 36	0	0	0	0
20 01 37*	1	1	1	1
20 01 38	1	1	1	1
20 01 39	0	0	0	0
20 01 40	0	0	0	0
20 01 41	0	0	0	0
20 01 99	0.68	0.64	0.63	0.61
20 02 01	1	1	1	1
20 02 02	0	0	0	0
20 02 03	0	0	0	0
20 03 01	0.561	0.64	0.63	0.561
20 03 02	0.68	0.64	0.63	0.61
20 03 03	0.51	0.51	0.51	0.51
20 03 04	0.2	0.2	0.2	0.2
20 03 06	0.1	0.1	0.1	0.1
20 03 07	0.5	0.5	0.5	0.5
20 03 99	0.68	0.64	0.63	0.61

*Donates a hazardous waste code

Table 2: Additional waste codes considered to be municipal waste in Scotland and the associated biodegradability factors

Waste Code	Scotland biodegradable factors
19 01 02	0
19 01 14	0
19 01 11*	0
19 01 12	0
19 01 13*	0
19 01 16	0
19 01 18	0
19 01 99	0
19 04 01	0
19 12 09	0

*Donates a hazardous waste code