

4.3 Waste

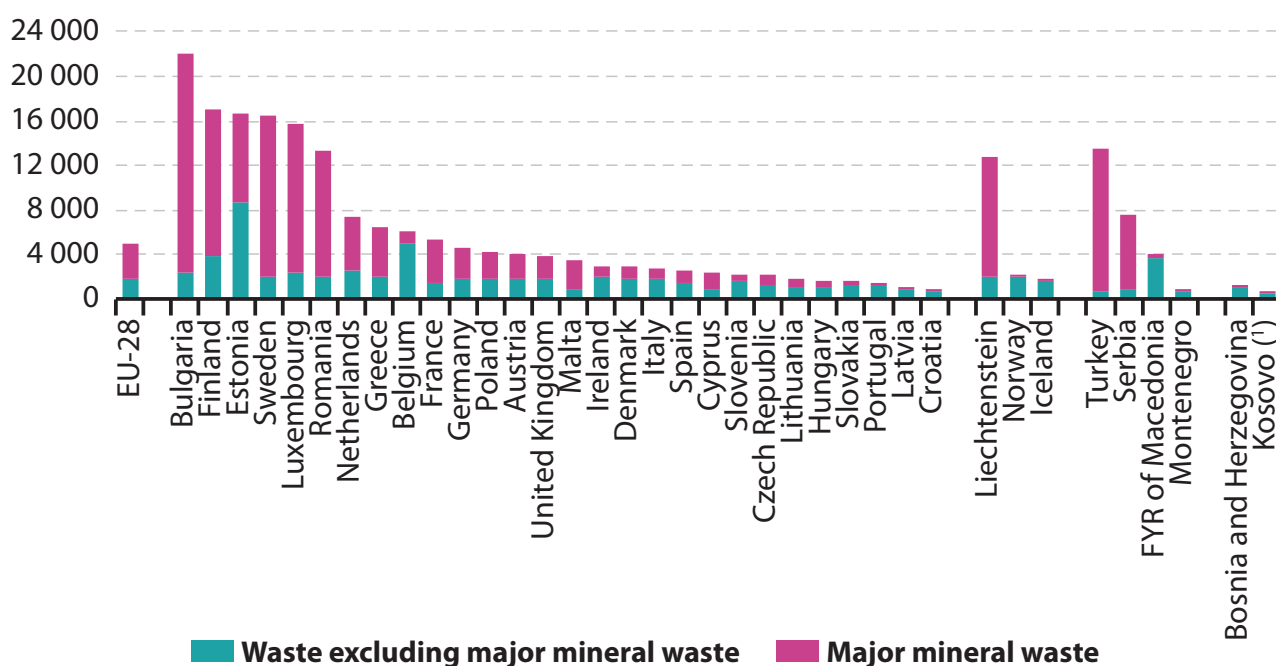
Table 4.3.1: Hazardous waste generation, 2010 and 2012

	Total waste generation		Hazardous waste		Hazardous waste share of total waste generation
	(1 000 tonnes)				(%)
	2010	2012	2010	2012	2012
EU-28	2 460 330	2 514 220	97 490	99 850	4.0
Belgium	62 537	67 630	4 479	4 258	6.3
Bulgaria	167 396	161 252	13 553	13 407	8.3
Czech Republic	23 758	23 171	1 363	1 481	6.4
Denmark	16 218	16 332	1 225	1 193	7.3
Germany	363 545	368 022	19 931	21 984	6.0
Estonia	19 000	21 992	8 962	9 159	41.6
Ireland	19 808	13 421	1 972	1 385	10.3
Greece	70 433	72 328	292	297	0.4
Spain	137 519	118 562	2 991	3 114	2.6
France	355 081	344 732	11 538	11 303	3.3
Croatia	3 158	3 379	73	123	3.6
Italy	158 628	162 765	8 543	9 474	5.8
Cyprus	2 373	2 086	37	31	1.5
Latvia	1 498	2 310	68	95	4.1
Lithuania	5 578	5 679	105	137	2.4
Luxembourg	10 441	8 397	380	315	3.8
Hungary	16 735	16 310	541	700	4.3
Malta	1 353	1 452	25	29	2.0
Netherlands	120 384	123 613	4 485	4 860	3.9
Austria	34 883	34 047	1 473	1 066	3.1
Poland	159 458	163 378	1 492	1 737	1.1
Portugal	17 313	14 184	667	545	3.8
Romania	219 310	266 976	666	671	0.3
Slovenia	5 986	4 547	117	133	2.9
Slovakia	9 384	8 425	415	370	4.4
Finland	104 337	91 824	2 559	1 654	1.8
Sweden	117 645	156 307	2 528	2 697	1.7
United Kingdom	236 568	241 101	7 004	7 631	3.2
Iceland	511	529	8	16	3.1
Liechtenstein	312	467	8	4	0.8
Norway	9 433	10 721	1 763	1 357	12.7
Montenegro	:	386	:	3	0.7
FYR of Macedonia	2 328	8 472	150	679	8.0
Serbia	33 616	55 003	11 161	14 457	26.3
Turkey	783 423	1 013 226	3 226	3 988	0.4
Bosnia and Herzegovina	:	4 457	:	946	21.2

Source: Eurostat (online data code: [env_wasgen](#))

**Figure 4.3.1: Waste generation, 2012**

(kg per capita)

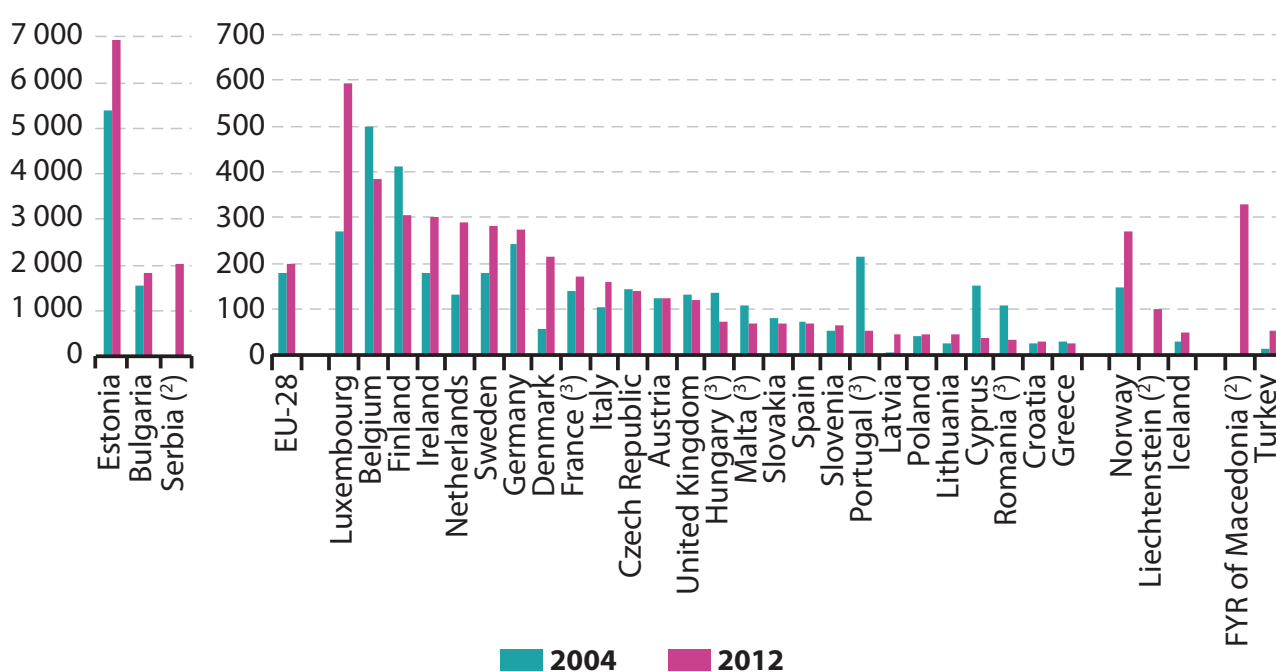


(¹) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/99 and the ICJ Opinion on the Kosovo declaration of independence.

Source: Eurostat (online data code: [env_wasgen](#))

Figure 4.3.2: Hazardous waste generation, 2004 and 2012 (¹)

(kg per capita)



(¹) Note that the two parts of the figure have different scales for the y-axis.

(²) 2004: not available.

(³) 2004: estimate.

Source: Eurostat (online data code: [env_wasgen](#))

In 2012, the total **waste** generated in the EU-28 by all economic activities and households amounted to 2 514 million tonnes; this was slightly higher than in 2010 and 2008 (2 460 million tonnes and 2 427 million tonnes) but lower than in 2004 (2 565 million tonnes). The relatively low figures for 2008 and 2010 may, at least in part, reflect the downturn in economic activity as a result of the global financial and economic crisis. There were considerable variations across EU-28 Member States in 2012, both in the amount of waste generated and in the activities that mostly contributed to waste generation.

The total waste generated by economic activities and households in 2012 may also be expressed in relation to population size. The average amount of waste generated across the EU-28 in 2012 was equivalent to almost five tonnes (4 982 kg) per capita. However, big differences between EU Member States can be observed which are mainly due to differences in the generation of mineral waste.

A majority (63 %) of the total waste generated in the EU-28 was mineral waste. The relative share of mineral waste in the total waste generated varied considerably between EU Member States, which may reflect, at least to some degree, different economic structures. In general, those Member States that had higher shares of mineral waste were those that were characterised as having sizeable mining and quarrying activities (such as Bulgaria, Finland, Sweden and Romania) and / or construction and demolition activities (such as Luxembourg). These two activities accounted for 3.0 tonnes out of a total of 3.2 tonnes per capita of mineral waste, equivalent to 93.5 % of the total mineral waste generated across the EU-28 in 2012.

Among the waste generated in the EU-28 in 2012, some 99.9 million tonnes (4.0 % of the total) were classified as hazardous waste. This was equivalent to an average of 198 kg of hazardous waste per capita in the EU-28.

Compared with 2010, 2.0 % more non-hazardous waste was generated in 2012 in the EU-28 and 2.6 % more hazardous waste, the latter increasing in quantity terms from 97.5 to 99.9 million tonnes. In 2012, the share of hazardous waste in total waste generation was below 10.0 % in all of the EU Member States except for Estonia, where it made up a 41.6 % share of the total, and for Ireland where its share was 10.3 %. The very high share for Estonia was principally due to energy production from oil shale. Among the non-member countries, Serbia recorded the highest share of hazardous waste in total waste generation (26.3 %) due to intensive activity in mining and quarrying, and was followed by Bosnia and Herzegovina (21.2 %) and Norway (12.7 %).

The generation of hazardous waste (harmful for health or the environment) in 2012 across EU Member States ranged from a low of 27 kg per capita in Greece to a high of 593 kg per capita in Luxembourg. For Luxembourg the amount is mainly due to construction activities.

Between 2004 and 2012, the EU-28 experienced a 10 % increase in hazardous waste generation per capita. The large increases in some EU Member States (for example, Latvia and Denmark) were offset, to some extent, by reductions in 11 other EU Member States (for example, Cyprus, Portugal and Romania).

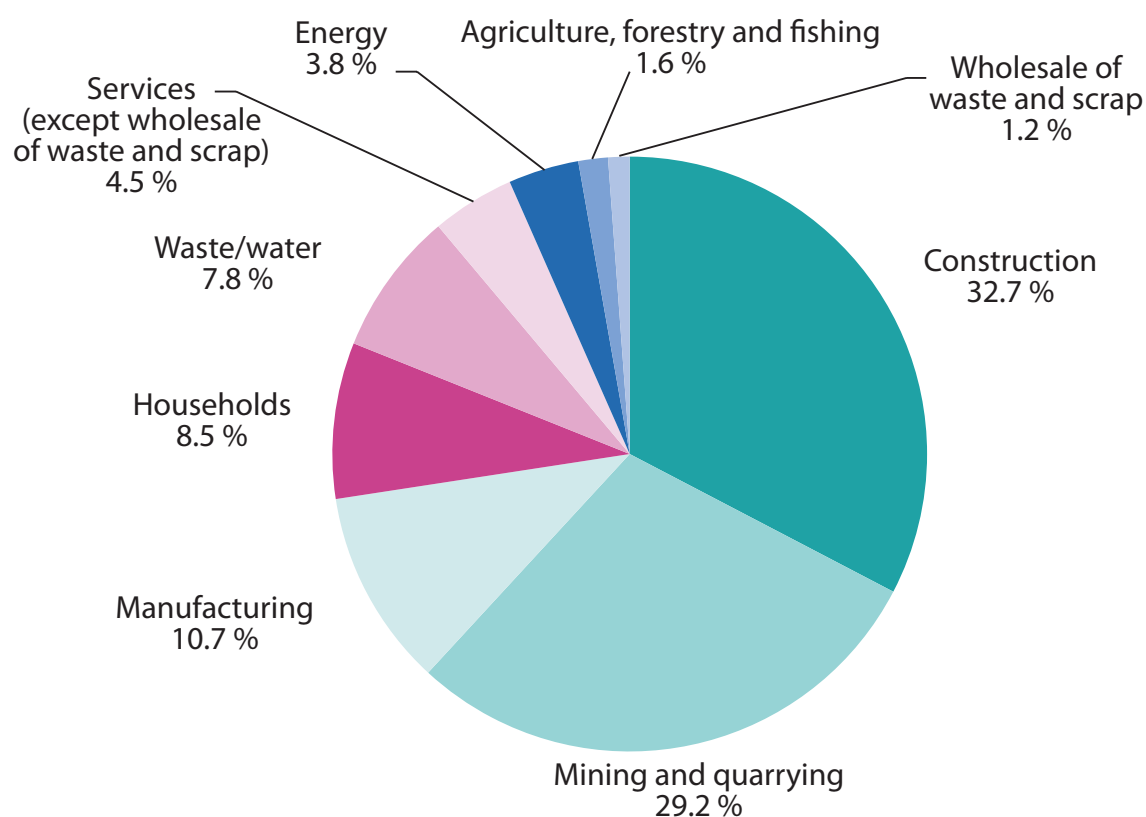


Table 4.3.2: Waste generation by economic activity and households, 2012
(1 000 tonnes)

	Total	Mining and quarrying	Manufacturing	Energy	Construction	Other economic activities	Households
EU-28	2 514 220	733 980	269 630	96 480	821 160	379 560	213 410
Belgium	67 630	115	17 736	1 314	24 570	18 891	5 004
Bulgaria	161 252	141 083	3 009	9 533	1 033	3 841	2 755
Czech Republic	23 171	167	4 376	1 063	8 593	5 739	3 233
Denmark	16 332	18	1 610	893	3 867	6 216	3 727
Germany	368 022	8 625	56 596	8 050	197 528	60 752	36 472
Estonia	21 992	9 355	4 121	6 258	657	1 165	436
Ireland	13 421	2 025	4 599	396	366	4 379	1 657
Greece	72 328	47 832	4 183	12 259	813	2 383	4 859
Spain	118 562	22 509	14 594	5 772	26 129	28 333	21 224
France	344 732	2 477	21 431	2 100	246 702	42 024	29 996
Croatia	3 379	5	425	108	682	968	1 191
Italy	162 765	720	34 142	3 616	52 966	41 708	29 613
Cyprus	2 086	218	98	2	965	353	451
Latvia	2 310	2	396	133	8	558	1 213
Lithuania	5 679	26	2 551	29	419	1 477	1 177
Luxembourg	8 397	131	509	2	7 079	426	249
Hungary	16 310	91	2 991	2 872	4 038	3 638	2 681
Malta	1 452	45	9	2	1 041	201	155
Netherlands	123 613	179	14 115	1 342	81 354	17 758	8 864
Austria	34 047	51	3 636	622	19 471	6 247	4 020
Poland	163 378	68 035	31 135	20 706	15 368	18 809	9 324
Portugal	14 184	243	3 188	422	928	4 672	4 731
Romania	266 976	223 293	6 029	9 043	1 325	22 638	4 647
Slovenia	4 547	14	1 345	1 069	535	941	641
Slovakia	8 425	311	2 516	1 046	806	2 090	1 657
Finland	91 824	52 880	14 531	1 011	16 034	5 635	1 734
Sweden	156 307	129 481	6 158	1 852	7 656	6 967	4 193
United Kingdom	241 101	24 044	13 596	4 965	100 230	70 759	27 506
Iceland	529	0	93	2	11	191	233
Liechtenstein	467	29	12	0	107	2	316
Norway	10 721	470	2 639	89	1 881	3 205	2 438
Montenegro	386	1	33	351	0	0	0
FYR of Macedonia	8 472	802	1 304	6	0	6 360	0
Serbia	55 003	47 896	760	5 744	364	238	0
Turkey	1 013 226	950 587	13 141	18 424	0	289	30 785
Bosnia and Herzegovina	4 457	72	1 213	3 171	0	0	0

Source: Eurostat (online data code: [env_wasgen](#))

Figure 4.3.3: Waste generation by economic activity and households, EU-28, 2012
(%)



Source: Eurostat (online data code: [env_wasgen](#))

When looking at the share of each economic activity and of households in total waste generation in the EU-28 for 2012 we observe that construction contributed 33 % of the total (with 821 million tonnes) and was followed by mining and quarrying (29 % or 734 million tonnes),

manufacturing (11 % or 270 million tonnes), households (8 % or 213 million tonnes) and energy (4 % or 96 million tonnes); the remaining 15 % was waste generated from other economic activities.

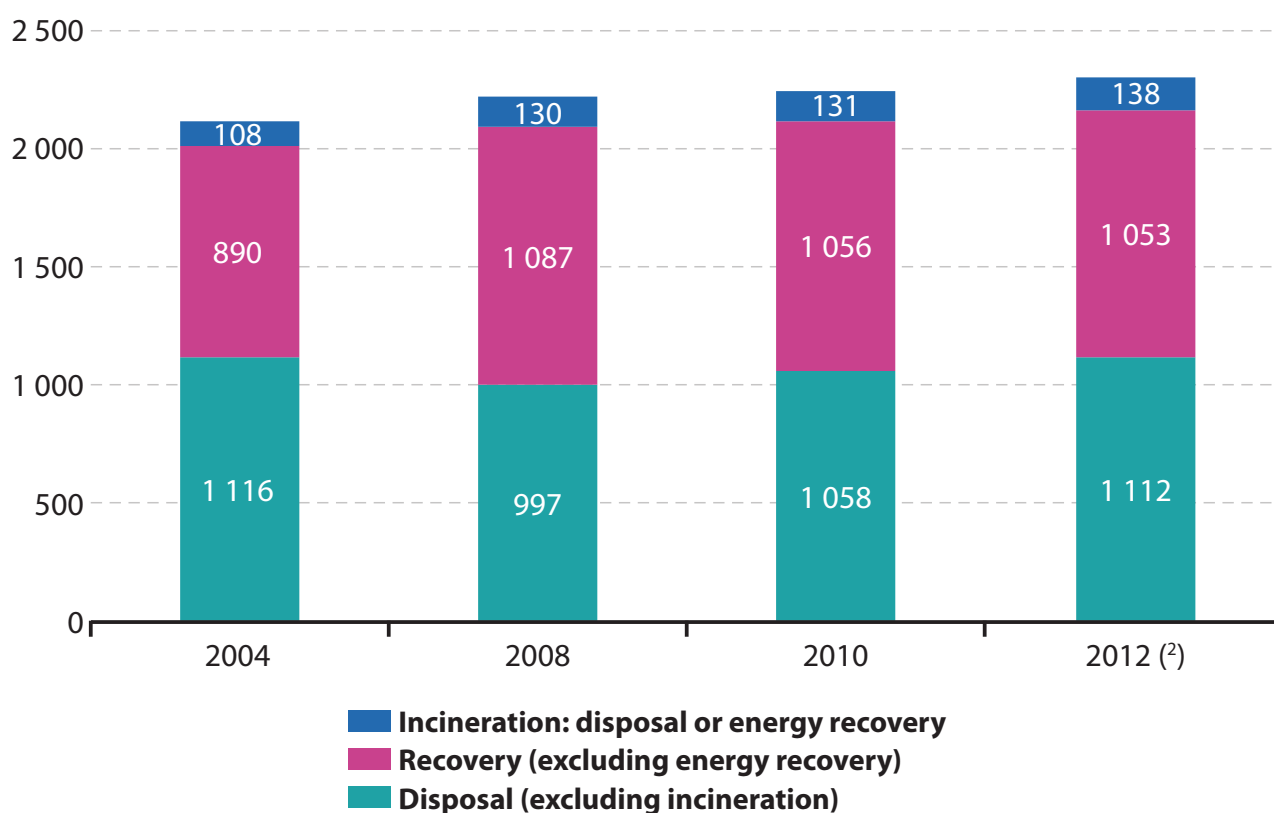


Table 4.3.3: Waste treatment, 2012
(1 000 tonnes)

	Total	Recycling	Energy recovery	Backfilling	Incineration	Landfill
EU-28	2 302 490	838 960	101 200	213 850	36 460	1 112 020
Belgium	41 328	30 237	4 612	0	3 331	3 148
Bulgaria	158 752	1 789	172	0	14	156 777
Czech Republic	18 263	8 420	959	5 137	76	3 670
Denmark	14 070	8 147	3 255	0	0	2 668
Germany	352 996	152 807	33 953	91 469	11 017	63 750
Estonia	20 610	7 903	349	4 196	0	8 162
Ireland	8 033	827	403	1 985	13	4 805
Greece	71 334	2 928	118	5 440	21	62 827
Spain	108 475	48 745	3 269	8 194	7	48 259
France	315 147	151 724	11 637	39 591	7 153	105 042
Croatia	2 999	994	39	42	0	1 923
Italy	130 460	98 809	2 593	160	5 814	23 084
Cyprus	2 077	409	2	232	7	1 429
Latvia	1 573	808	153	0	1	612
Lithuania	4 287	999	106	66	1	3 115
Luxembourg	10 302	4 691	36	1 934	134	3 507
Hungary	12 964	4 637	960	436	90	6 842
Malta	1 351	116	0	46	6	1 183
Netherlands	119 835	61 796	9 057	0	1 425	47 556
Austria	32 122	14 272	3 305	2 795	75	11 675
Poland	160 697	80 941	3 567	35 103	328	40 757
Portugal	10 188	4 598	1 735	0	70	3 785
Romania	264 647	18 849	1 708	1 037	182	242 871
Slovenia	5 068	2 965	326	1 102	36	639
Slovakia	7 052	2 651	270	0	71	4 059
Finland	90 478	31 700	10 317	0	445	48 015
Sweden	151 225	18 732	6 712	774	43	124 964
United Kingdom	186 163	77 467	1 585	14 114	6 102	86 895
Iceland	521	344	14	3	0	160
Norway	10 103	4 303	4 271	143	86	1 300
FYR of Macedonia	9 023	68	19	0	41	8 896
Serbia	55 023	793	49	0	0	54 180
Turkey	983 046	307 467	440	:	44	675 095

Source: Eurostat (online data code: [env_wastrt](#))

Figure 4.3.4: Development of waste treatment, EU-28, 2004–12 ⁽¹⁾
(million tonnes)



⁽¹⁾ 2006: data not available.

⁽²⁾ Estimates.

Source: Eurostat (online data code: [env_wastrt](#))

In 2012, some 2 302 million tonnes of waste were treated in the EU-28; this includes the treatment of waste imported into the EU. Looking at the types of waste treatment operation employed, almost half (48.3 %) of the waste treated in the EU-28 in 2012 was subject to disposal operations other than waste incineration. This was predominantly deposits onto or into land (for example, landfills) but also included land treatment and waste discharges into water bodies. A further 45.7 % of the waste treated in the EU-28 in 2012 was sent to [recovery](#) operations (other than energy recovery), which comprises [recycling](#) (36.4 %) and backfilling (9.3 %) operations. Backfilling is the use of waste in excavated areas for the purpose of

slope reclamation or safety or for engineering purposes in landscaping. The remaining 6.0 % of the waste treated in the EU-28 was sent for incineration: 4.4 % with energy recovery and 1.6 % without. Significant differences could be observed among the EU Member States concerning the use they made of the various treatment methods. For instance, some EU Member States had very high recovery (other than energy recovery) rates (for example, Slovenia, Italy, Belgium, Poland and Germany), while others favoured waste disposal (for example, Bulgaria, Romania, Greece and Malta).

Waste disposal accounted for almost half (47.8 %) of the hazardous waste that was treated in the

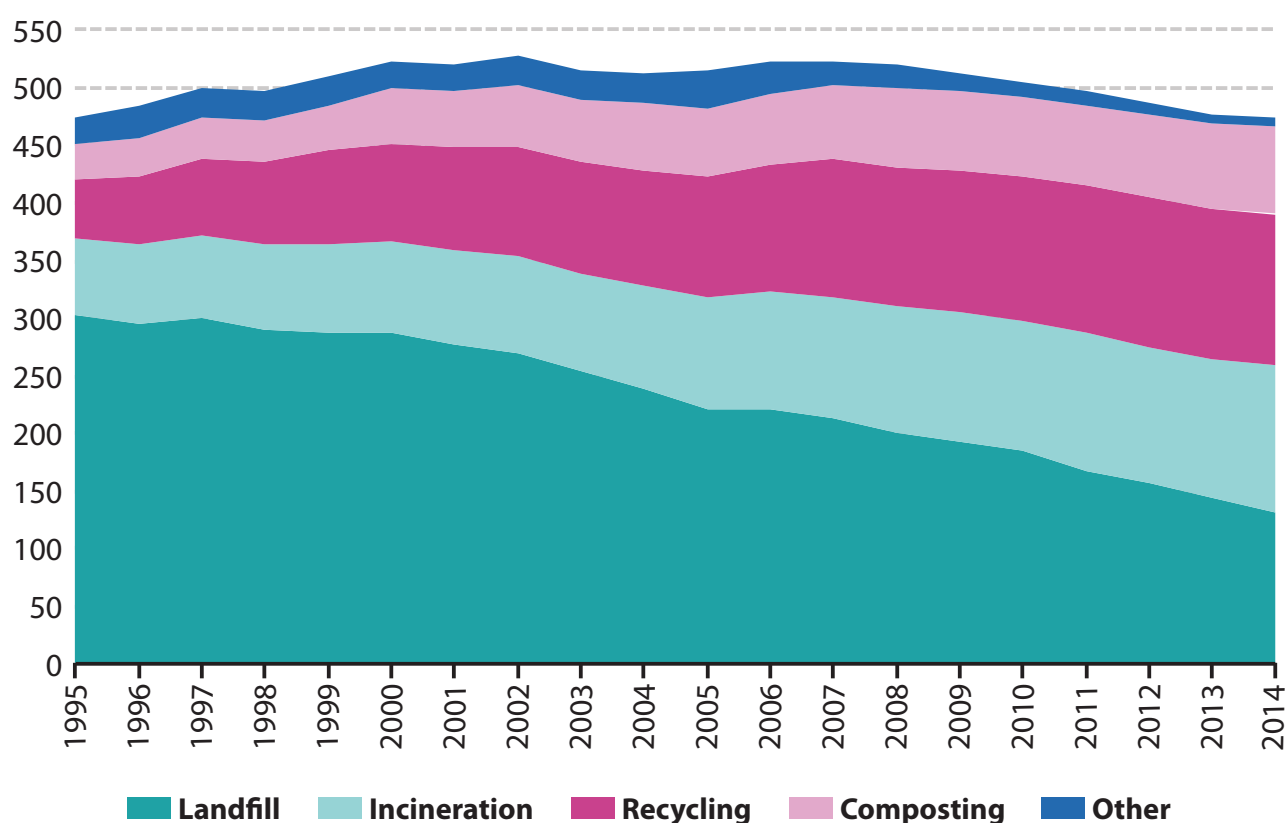


EU-28 in 2012. Some 10.5 million tonnes (or 13.9%) of all hazardous waste was **incinerated** or used for energy recovery, and 28.8 million tonnes (or 38.3%) was recovered.

The quantity of waste treated by disposal in 2012 was slightly (0.4%) lower than it had been in 2004. The quantity of waste recovered (excluding energy recovery) grew from 890 million

tonnes in 2004 to 1 053 million tonnes in 2012, an increase of 18.3%. As a result, the share of recovery in total waste treatment rose from 42.1% in 2004 to 45.7% by 2012. Waste incineration (including energy recovery) saw an overall increase between 2004 and 2012 of 27.4%.

Figure 4.3.5: Municipal waste treatment, EU-27, 1995–2014
(kg per capita)



Source: Eurostat (online data code: [env_wasmun](#))

Table 4.3.4: Municipal waste generated, 1995–2014
(kg per capita)

	1995	2000	2004	2008	2011	2014	Change 1995–2014 (%)
EU–28	:	521	511	520	496	475	:
EU–27	473	523	513	521	497	475	0
Belgium	455	471	485	479	456	435	–4
Bulgaria	694	612	599	599	508	442	–36
Czech Republic	302	335	279	306	320	310	3
Denmark	521	610	620	741	781	759	46
Germany	623	642	587	589	614	618	–1
Estonia	371	453	445	392	301	357	–4
Ireland	512	599	737	718	617	586	14
Greece	:	412	436	458	503	510	:
Spain	510	658	600	551	485	435	–15
France	475	514	519	541	538	511	8
Croatia	:	262	304	415	384	387	:
Italy	454	509	540	552	529	488	7
Cyprus	595	628	684	728	683	626	5
Latvia	264	271	318	345	350	281	6
Lithuania	426	365	373	428	442	433	2
Luxembourg	587	654	679	697	666	616	5
Hungary	460	446	454	454	382	385	–16
Malta	395	546	623	674	589	600	52
Netherlands	539	598	599	600	568	527	–2
Austria	437	580	574	600	573	565	29
Poland	285	320	256	320	319	272	–5
Portugal	352	457	445	518	490	453	29
Romania	342	355	349	411	259	272	–20
Slovenia	596	513	485	542	415	432	–28
Slovakia	295	254	261	313	311	321	9
Finland	413	502	469	521	505	482	17
Sweden	386	428	460	483	449	438	13
United Kingdom	498	577	602	541	491	482	–3
Iceland	426	462	503	495	320	345	–19
Norway	624	613	414	487	485	423	–32
Switzerland	600	656	660	736	689	730	22
Montenegro	:	:	:	:	:	508	:
FYR of Macedonia	:	:	:	:	357	370	:
Serbia	:	:	:	347	375	302	:
Turkey	441	465	440	400	416	405	–8
Bosnia and Herzegovina	:	:	:	:	340	349	:

Source: Eurostat (online data code: [env_wasmun](#))



For 2014, **municipal waste** generation totals vary considerably, ranging from 759 kg per capita in Denmark to 272 kg per capita in Poland and Romania. The variations reflect differences in consumption patterns and economic wealth, but also depend on how municipal waste is collected and managed. There are differences between countries regarding the degree to which waste from commerce, trade and administration is collected and managed together with waste from households.

Even though more waste is being generated in the EU-27, the total amount of municipal waste **landfilled** has diminished. In the reference period, the total municipal waste landfilled in the EU-27 fell by 78 million tonnes, or 54 %, from 144 million tonnes (302 kg per capita) in 1995 to 66 million tonnes (131 kg per capita) in 2014. This corresponds to an average annual decline of 4.0 %. Since 2004, landfilling has fallen by as much as 5.6 % per year on average.

As a result, the landfilling rate compared with municipal waste generation, dropped from 63.8 % in 1995 to 27.5 % in 2014 in the EU-27.

The amount of waste **recycled** rose from 25.0 million tonnes (52 kg per capita) in 1995 to 66 million tonnes (132 kg per capita) in 2014 at an average annual rate of 5.2 %. The share of municipal waste recycled overall rose from 11 % to 28 %.

The recovery of organic material by composting has grown with an average annual rate of 5.3 % from 1995 to 2014. Recycling and composting together accounted for 44 % in 2014, relative to waste generation.

Waste incineration has also grown steadily in the reference period, though not as much as recycling and composting. Since 1995, the amount of municipal waste incinerated in the EU-27 has risen by 32 million tonnes or 100 % and accounted for 64 million tonnes in 2014. Municipal waste incinerated has thus risen from 67 kg per capita to 128 kg per capita.

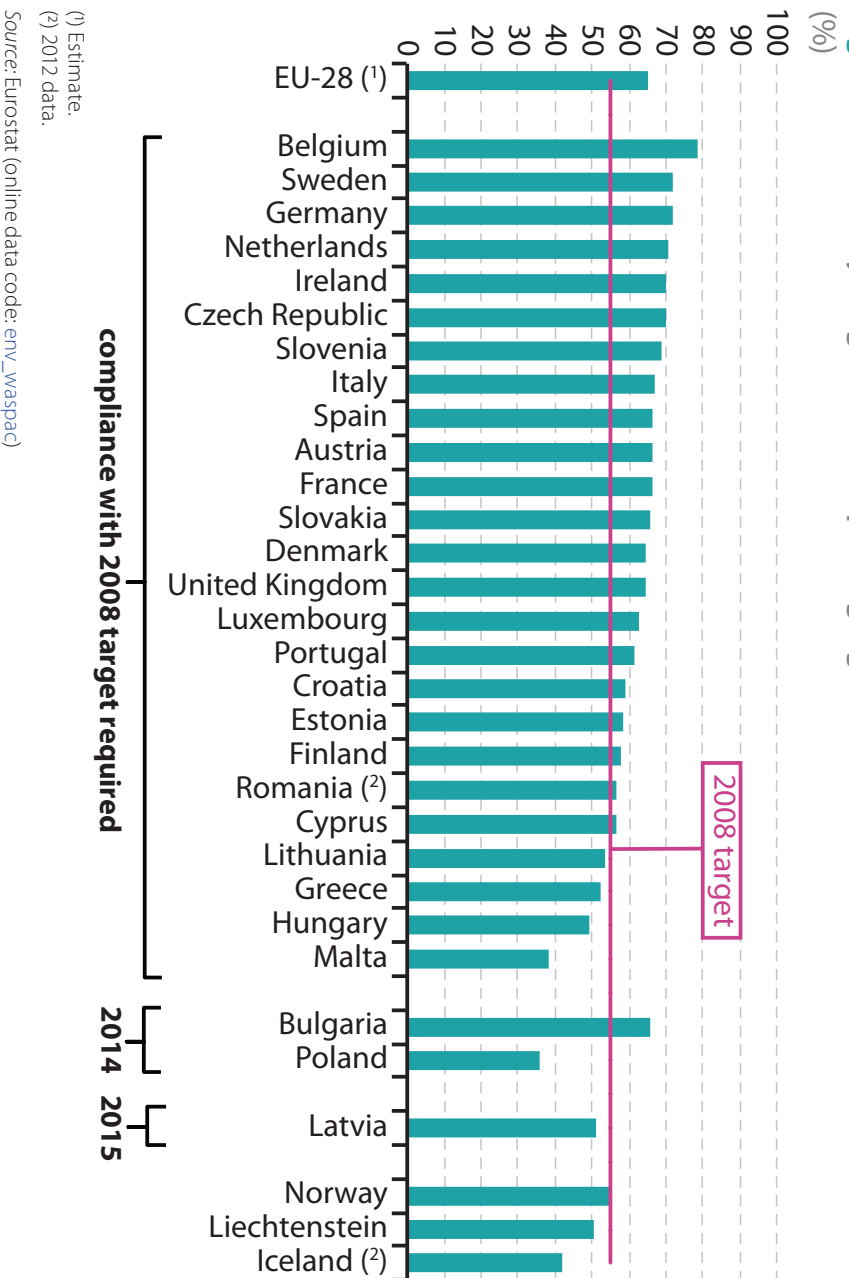
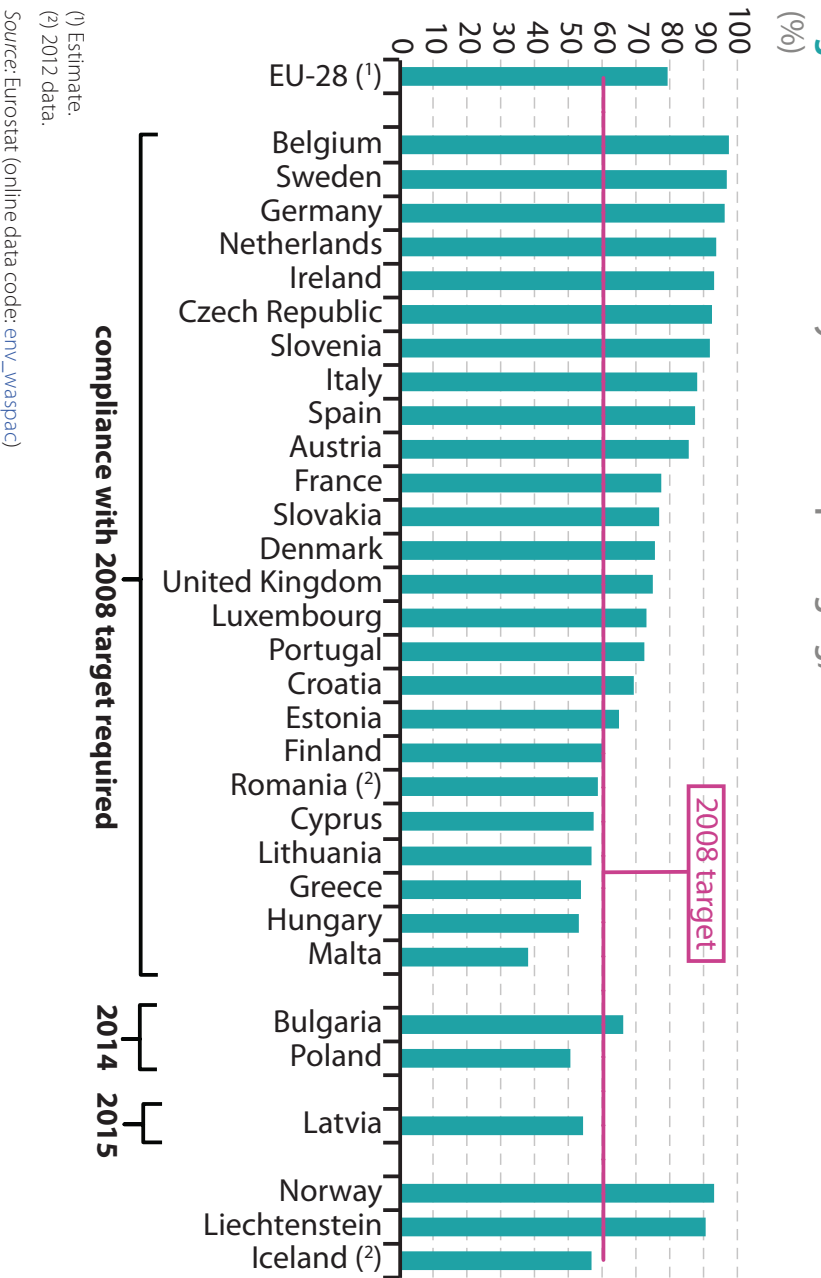
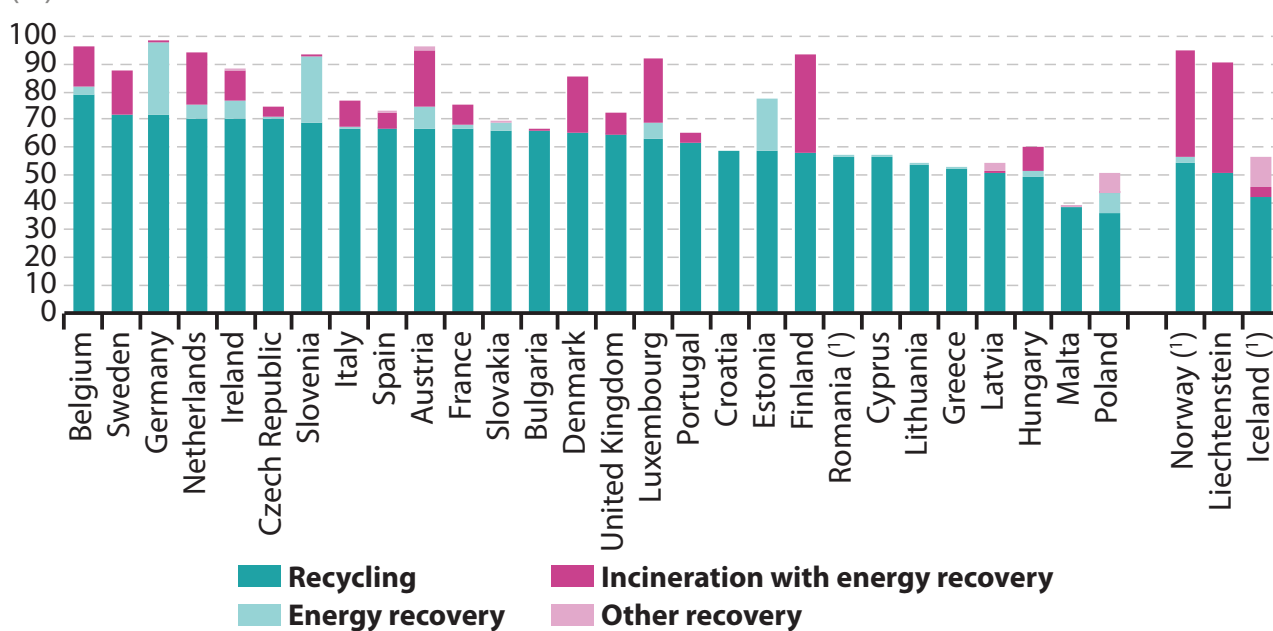
Figure 4.3.6: Recycling rate for all packaging, 2013**Figure 4.3.7: Recovery rate for all packaging, 2013**


Figure 4.3.8: Share of treatment for overall packaging waste, 2013

(%)



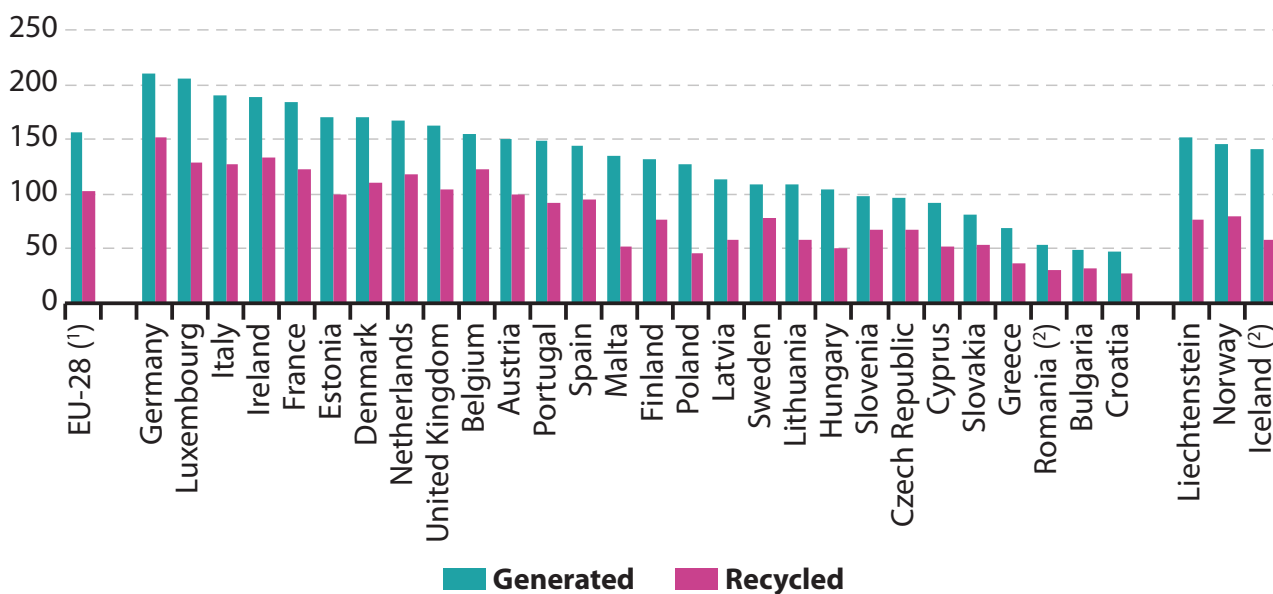
Note: ranked on 'Recycling'.

(¹) Romania and Iceland: 2012 data; Norway: 2012 data for 'Incineration'.

 Source: Eurostat (online data code: [env_waspac](#))

Figure 4.3.9: Volume of overall packaging waste generated and recycled per capita, 2013

(kg per capita)



Note: ranked on 'Waste generated'.

(¹) Estimate.

(²) 2012 data.

 Source: Eurostat (online data code: [env_waspac](#))

In 2013, Germany held the EU-28's highest recovery rate (97.7 %) and Belgium the highest recycling rate (78.7 %).

The [Packaging Waste Directive \(94/62/EC\)](#) sets out the targets of a minimum of 60 % for a recovery rate (including waste incineration) and 55 % for a recycling rate. These are also referred to as 2008 targets, however, not all EU Member States received the same deadline to attain them.

Looking at the recycling rates of packaging waste in 2013, as well as the targets each group of EU Member States were to meet in 2013, we can observe that Lithuania, Greece, Hungary and Malta did not reach the 55.0 % target, while Bulgaria already had recycling rates above the 2008 target.

Similarly, comparing the recovery rates of packaging waste in 2013 for each EU Member State with the target which needs to be met, we find out that the recovery rates in Croatia, Romania, Cyprus, Lithuania, Greece and Malta were below the 2008 target of 60.0 % which should have been reached. Bulgaria, whose targets were set in the future, already had met the 2008 target and showed rates above 60 %.

Recycling was the major form of recovery in all EU Member States, while other forms of

recovery had a minor share in total treatment for overall packaging waste. In some EU Member States 'Energy recovery' and 'Incineration with energy recovery' contributed significantly to the overall recovery rate. Especially EU Member States which utilise 'Incineration with energy recovery' as a standard method of waste disposal achieved a significantly higher recovery rate. This was typically the case of Nordic countries but also Belgium, the Netherlands, Ireland, Austria and Luxembourg. These EU Member States all presented incineration values with energy recovery rates at over 10 %.

In 2013, the Member States that joined the EU before 2004 generally showed the highest amount of packaging waste generated except Greece. Of these EU Member States, Austria, Portugal, Spain, Finland and Sweden showed a significantly lower amount of packaging waste generated (all under 150 kg/capita). Romania, Bulgaria and Croatia (53 kg, 48 kg and 47 kg/capita, respectively) exhibited the lowest amount of all EU Member States. Estonia had the highest figure (170 kg/capita) for packaging waste generation among the Member States that joined the EU after 2004.



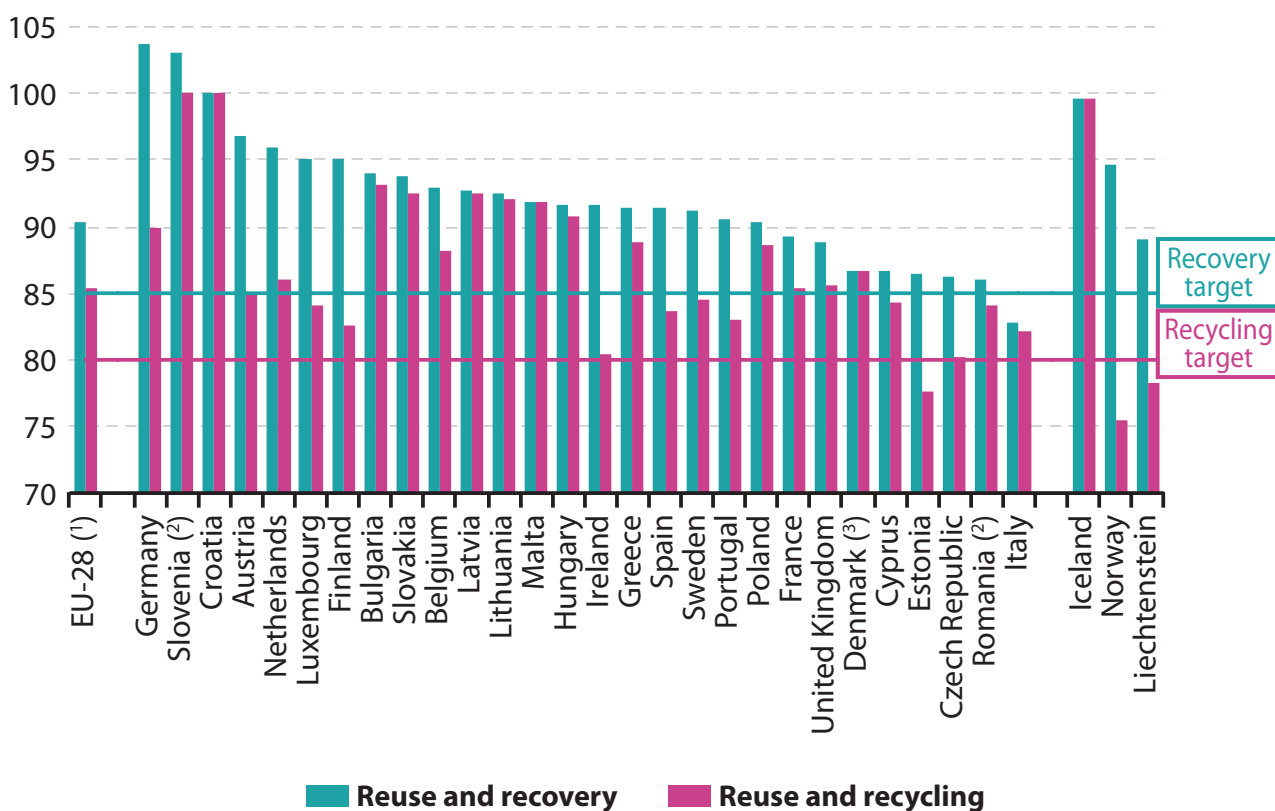
Table 4.3.5: Total number of end-of-life vehicles, 2007–13
(number of cars)

	2007	2008	2009	2010	2011	2012	2013
EU-28	:	:	:	:	:	6 290 000	6 250 000
EU-27	6 500 000	6 270 000	9 000 000	7 350 000	6 750 000	6 250 000	6 220 000
Belgium	127 949	141 521	140 993	170 562	165 016	160 615	134 506
Bulgaria	23 433	38 600	55 330	69 287	62 937	57 532	61 673
Czech Republic	72 941	147 259	155 425	145 447	132 452	125 587	121 838
Denmark	99 391	101 042	96 830	100 480	93 487	106 504	125 650
Germany	456 436	417 534	1 778 593	500 193	466 160	476 601	500 322
Estonia	12 664	13 843	7 528	7 268	11 413	12 835	14 712
Ireland	112 243	127 612	152 455	158 237	134 960	102 073	92 467
Greece	47 414	55 201	115 670	95 162	112 454	84 456	86 205
Spain	881 164	748 071	952 367	839 637	671 927	687 824	734 776
France	946 497	1 109 876	1 570 593	1 583 283	1 515 432	1 209 477	1 115 280
Croatia	:	:	:	:	:	35 213	32 135
Italy	1 692 136	1 203 184	1 610 137	1 246 546	952 461	902 611	876 052
Cyprus	2 136	14 273	17 303	13 219	17 145	17 547	13 212
Latvia	11 882	10 968	10 590	10 640	9 387	10 228	9 003
Lithuania	15 906	19 534	19 656	23 351	26 619	22 885	26 482
Luxembourg	3 536	2 865	6 908	6 303	2 341	2 834	2 290
Hungary	43 433	37 196	26 020	15 907	13 043	15 357	14 897
Malta	:	:	:	330	2 526	2 530	1 198
Netherlands	166 004	152 175	191 980	232 448	195 052	187 143	183 451
Austria	62 042	63 975	87 364	82 144	80 004	64 809	73 993
Poland	171 258	189 871	210 218	259 576	295 152	344 809	402 416
Portugal	90 509	107 746	107 946	107 419	77 929	92 008	92 112
Romania	36 363	51 577	55 875	190 790	128 839	57 950	:
Slovenia	8 409	6 780	7 043	6 807	6 598	5 447	:
Slovakia	28 487	39 769	67 795	35 174	39 717	33 469	36 858
Finland	15 792	103 000	96 270	119 000	136 000	119 000	99 300
Sweden	228 646	150 197	133 589	170 658	184 105	185 616	189 748
United Kingdom	1 138 496	1 210 294	1 327 517	1 157 438	1 220 873	1 163 123	1 149 459
Iceland	:	9 386	5 109	4 195	4 075	5 824	4 463
Liechtenstein	82	91	72	107	94	114	326
Norway	95 128	130 018	95 000	112 537	124 563	119 905	141 452

Source: Eurostat (online data code: [env_waselvt](#))

Figure 4.3.10: Recovery and recycling rate for end-of-life vehicles, 2013

(%)



Note: ranked on 'Reuse and recovery'.

(1) Eurostat estimates.

(2) 2012 data.

(3) Estimates.

Source: Eurostat (online data code: [env_waselvt](#))

The total number of end-of-life vehicles reported in the EU-27 rose sharply, from 6.3 million in 2008 to 9.0 million in 2009. Germany was the primary contributor to this rise with an increase of 1.4 million vehicles, while other major contributors included France with 0.46 million more vehicles, Italy with 0.41 million more and Spain with 0.20 million more. From 2009 to 2013 the number of reported end-of-life vehicles fell by 31 %, to 6.2 million vehicles. This reduction was mostly due to the decrease in the number of vehicles in Germany (1.3 million), Italy (0.7 million), France (0.5 million), Spain and

the United Kingdom (both 0.2 million). In 2013, the end-of-life vehicles in these five EU Member States made up 70 % of the EU-28 total.

No later than 2006, EU Member States were required to meet rates for reuse and recycling of $\geq 80\%$ and for reuse and recovery of $\geq 85\%$. All reporting EU Member States, except Estonia, were in compliance with the recycling targets. Italy was the only EU Member State that did not comply with the recovery and reuse target in 2013 having achieved a share of 82.2 %. In 2009 several temporary national scrapping schemes



were established causing visible effects on the reported data. For instance in Germany, the new scheme had a knock-on effect on stock numbers. The total amount of end-of-life vehicles is correctly reported to have been very high in 2009. Due to capacity limitations not all vehicles were treated in the same year, resulting in a decline in the recycling / recovery rate during 2009. From 2010 to 2013 most of the remaining stocks from the previous years were treated resulting in high calculated recycling / recovery rates (over 100 %). However, this was reportedly only due to these stock effects.

Waste electrical and electronic equipment (WEEE) is one of the fastest growing waste streams in the EU. WEEE contains substances that pose environmental and health risks if treated inadequately, while their recycling offers opportunities of making secondary raw materials available on the market. EU legislation promoting

the collection and recycling of such equipment had been in force since February 2003 and provides for the return of used waste equipment free of charge by consumers. WEEE data are grouped in 10 product categories.

In 2013, the tonnes of WEEE collected by EU Member States ranged between 1 704 in Malta and 727 998 in Germany. Large household appliances accounted for 1.6 million tonnes or 46.0 % of the total WEEE collected in the EU-28. IT and telecommunications equipment came second and consumer equipment was the third most important category in terms of quantity, with 575 000 tonnes and 553 000 tonnes respectively. Small household appliances contributed 254 000 tonnes to WEEE collection. The remaining seven categories together totalled 201 000 tonnes or 5.7 % of the collected WEEE.

Table 4.3.6: Waste electrical and electronic equipment (WEEE) collected, by EEE category, 2013
(tonnes)

	Total waste	Large household appliances	Small household appliances ⁽¹⁾	IT and telecommunications equipment ⁽¹⁾	Consumer equipment ⁽¹⁾	Other ⁽¹⁾
EU-28	3 513 906	1 616 200	254 406	575 260	553 421	200 603
Belgium	120 365	52 112	15 576	18 482	24 961	9 234
Bulgaria	35 162	26 341	1 677	2 851	2 224	2 069
Czech Republic	54 215	25 925	4 112	8 753	12 308	3 116
Denmark	72 080	32 342	5 053	12 797	19 250	2 638
Germany	727 998	274 093	91 677	157 357	147 818	57 053
Estonia	4 658	1 584	321	1 138	1 397	218
Ireland	42 629	19 463	1 883	7 197	8 954	5 132
Greece	38 268	21 722	2 961	4 641	7 305	1 639
Spain	209 505	127 972	9 636	23 510	37 486	10 901
France	479 694	264 468	29 682	64 151	98 673	22 720
Croatia	15 025	6 228	267	2 650	5 187	693
Italy ⁽²⁾	437 090	123 070	:	:	:	:
Cyprus	2 283	1 124	279	477	326	77
Latvia	4 827	2 364	448	466	504	1 046
Lithuania	16 154	8 119	1 318	3 317	1 461	1 939
Luxembourg	5 176	2 364	466	754	1 239	354
Hungary	49 778	26 004	5 691	9 606	6 635	1 843
Malta	1 704	1 005	27	419	230	23
Netherlands	117 499	58 517	7 362	14 437	27 547	9 636
Austria	76 835	31 400	7 679	17 503	15 223	5 031
Poland	171 728	76 518	16 614	30 781	27 736	20 080
Portugal	50 051	30 851	5 938	7 151	4 868	1 242
Romania ⁽³⁾	23 083	11 399	864	4 976	3 514	2 331
Slovenia	8 539	4 124	515	1 497	1 775	628
Slovakia	22 584	11 299	2 000	3 629	2 665	2 990
Finland	57 919	28 862	3 453	8 230	14 329	3 046
Sweden	176 567	84 744	5 484	30 895	46 371	9 073
United Kingdom	492 490	262 186	33 423	137 595	33 435	25 851
Iceland	2 469	1 321	186	616	254	92
Liechtenstein	290	71	76	78	64	1
Norway	104 927	45 400	5 435	14 153	16 453	23 486

⁽¹⁾ EU-28 estimate excluding Italy.

⁽²⁾ Total waste: definition differs, see metadata.

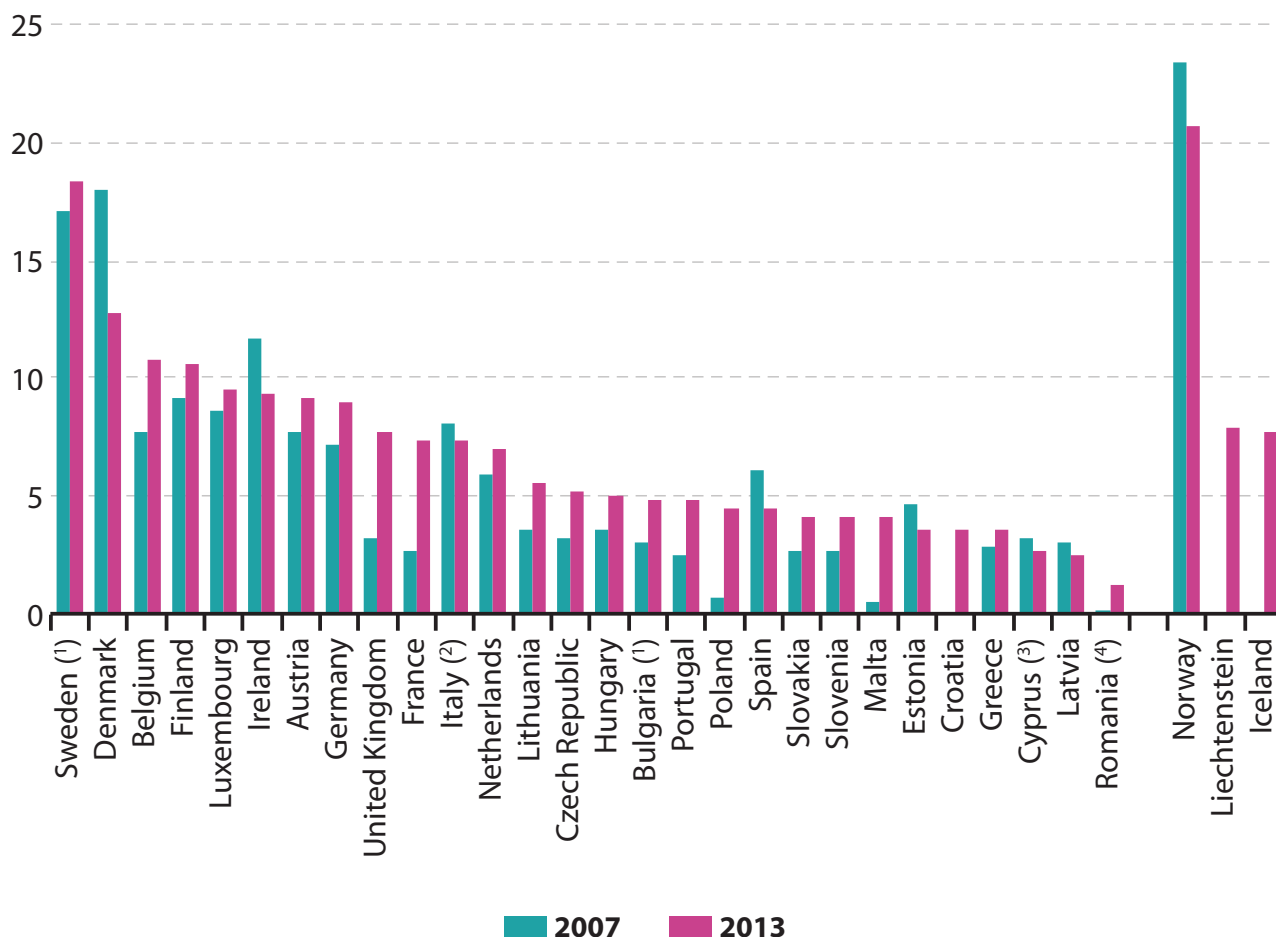
⁽³⁾ 2012 data.

Source: Eurostat (online data code: [env_waselee](#))



Figure 4.3.11: Waste electrical and electronic equipment (WEEE) collected, 2007 and 2013

(kg per capita)



⁽¹⁾ 2007: Eurostat estimate.

⁽²⁾ 2013: definition differs, see metadata.

⁽³⁾ 2013: estimate.

⁽⁴⁾ 2013: 2012 data instead.

Source: Eurostat (online data code: [env_waselee](#))

In 2013, the amount of WEEE collected varied considerably across EU Member States, from 1.2 kg/capita in Romania to 18.4 kg/capita in Sweden. Norway presented 20.7 kg/capita. The considerable variation in the amounts collected reflects differences in EEE consumption levels as well as the different performance levels of the waste collection schemes in place. A comparison

of WEEE collection in 2007 and 2013 shows that separate collection has improved significantly in most EU Member States. Decreasing amounts for WEEE collection were reported by only seven EU Member States including Denmark and Ireland where the level of separate collection was already high in 2007.

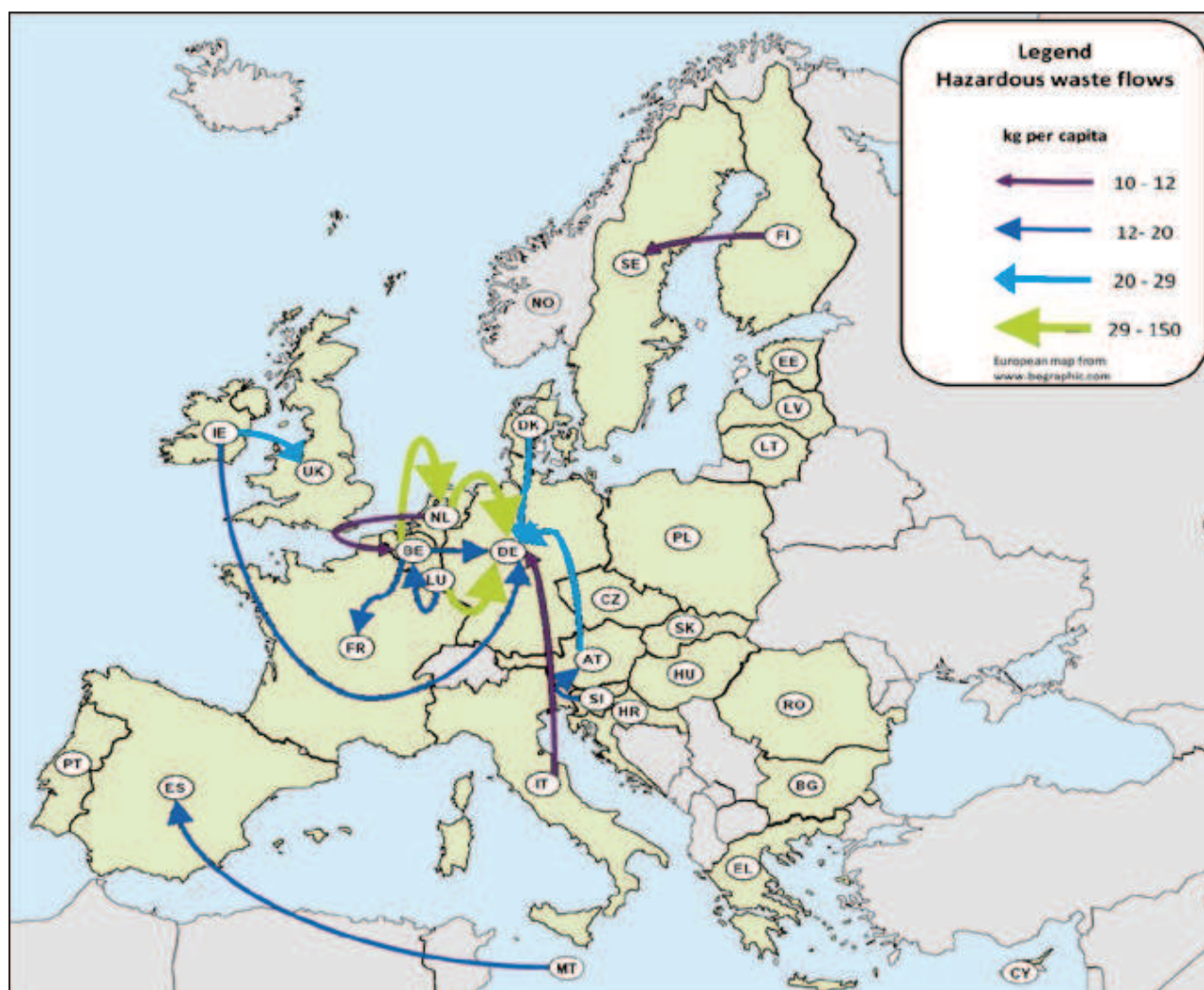
Table 4.3.7: Shipment of hazardous waste, 2001–13
(1 000 tonnes)

	2001	2003	2005	2007	2008	2009	2010	2011	2012	2013
EU-28	3 164.3	4 444.5	6 488.8	8 046.9	7 966.8	7 427.9	6 255.6	6 125.1	5 231.6	5 874.6
Belgium	721.2	792.5	829.0	1 026.2	861.2	672.6	688.8	836.2	631.1	679.8
Bulgaria	:	:	:	0.3	0.9	0.4	9.4	5.0	6.0	3.0
Czech Republic	1.9	1.1	1.5	3.5	5.9	7.3	15.2	11.4	18.1	31.2
Denmark	177.2	136.1	85.6	117.0	166.5	176.1	102.0	64.3	154.8	193.9
Germany	270.0	186.3	229.5	249.3	248.7	163.7	308.9	317.0	334.3	495.6
Estonia	3.2	1.3	0.3	2.7	0.7	4.7	0.9	1.6	3.4	9.5
Ireland	282.0	388.6	257.2	322.5	575.6	190.9	199.5	211.1	193.4	245.9
Greece	0.8	3.2	3.2	8.5	25.5	23.1	39.0	44.1	21.9	22.2
Spain	61.2	48.9	44.1	60.2	52.1	53.9	51.7	104.4	59.0	74.2
France	149.2	709.6	400.4	863.4	759.9	971.7	1 400.4	1 223.3	985.3	851.8
Croatia	:	:	:	:	:	:	:	:	21.0	19.3
Italy	182.6	243.5	671.9	1 243.4	1 237.4	1 404.9	1 458.7	1 353.8	976.8	851.7
Cyprus	2.5	2.4	2.8	4.1	2.1	2.3	4.7	7.9	5.4	3.8
Latvia	16.6	16.2	0.8	7.2	2.3	10.9	17.4	14.4	11.9	13.9
Lithuania	:	84.4	2.3	4.1	6.5	17.3	17.8	23.9	21.4	23.5
Luxembourg	89.1	85.8	45.8	72.7	44.3	114.1	88.7	80.7	88.7	92.4
Hungary	18.3	31.5	76.0	72.2	76.6	69.3	48.9	29.4	19.1	25.7
Malta	4.5	:	1.3	1.8	2.0	1.9	17.8	16.7	14.3	10.2
Netherlands	808.1	1 177.3	3 221.1	3 120.6	3 030.9	2 743.4	738.1	813.0	788.5	777.4
Austria	106.2	150.3	191.1	284.9	199.2	172.9	278.7	284.7	270.0	319.6
Poland	17.9	37.0	10.0	66.4	13.0	25.6	20.3	13.7	13.7	13.5
Portugal	63.3	92.3	107.7	7.5	6.4	61.4	54.3	62.5	17.4	69.9
Romania	:	:	:	37.2	2.4	23.4	3.9	2.1	7.0	14.4
Slovenia	7.9	14.7	22.0	69.7	102.6	57.6	35.1	45.4	46.6	46.6
Slovakia	0.3	2.2	2.6	2.2	3.4	3.0	4.3	4.4	5.0	7.1
Finland	39.0	59.9	68.5	74.2	113.5	107.0	119.6	92.1	94.8	106.5
Sweden	105.3	119.2	94.8	176.0	255.6	184.3	310.0	269.9	249.0	164.3
United Kingdom	35.9	60.3	119.5	149.3	171.6	164.4	221.7	192.1	173.9	707.6

Source: Eurostat, [Environmental Data Centre on Waste](#)



Map 4.3.1: Hazardous waste shipments between EU Member States (larger flows), 2013

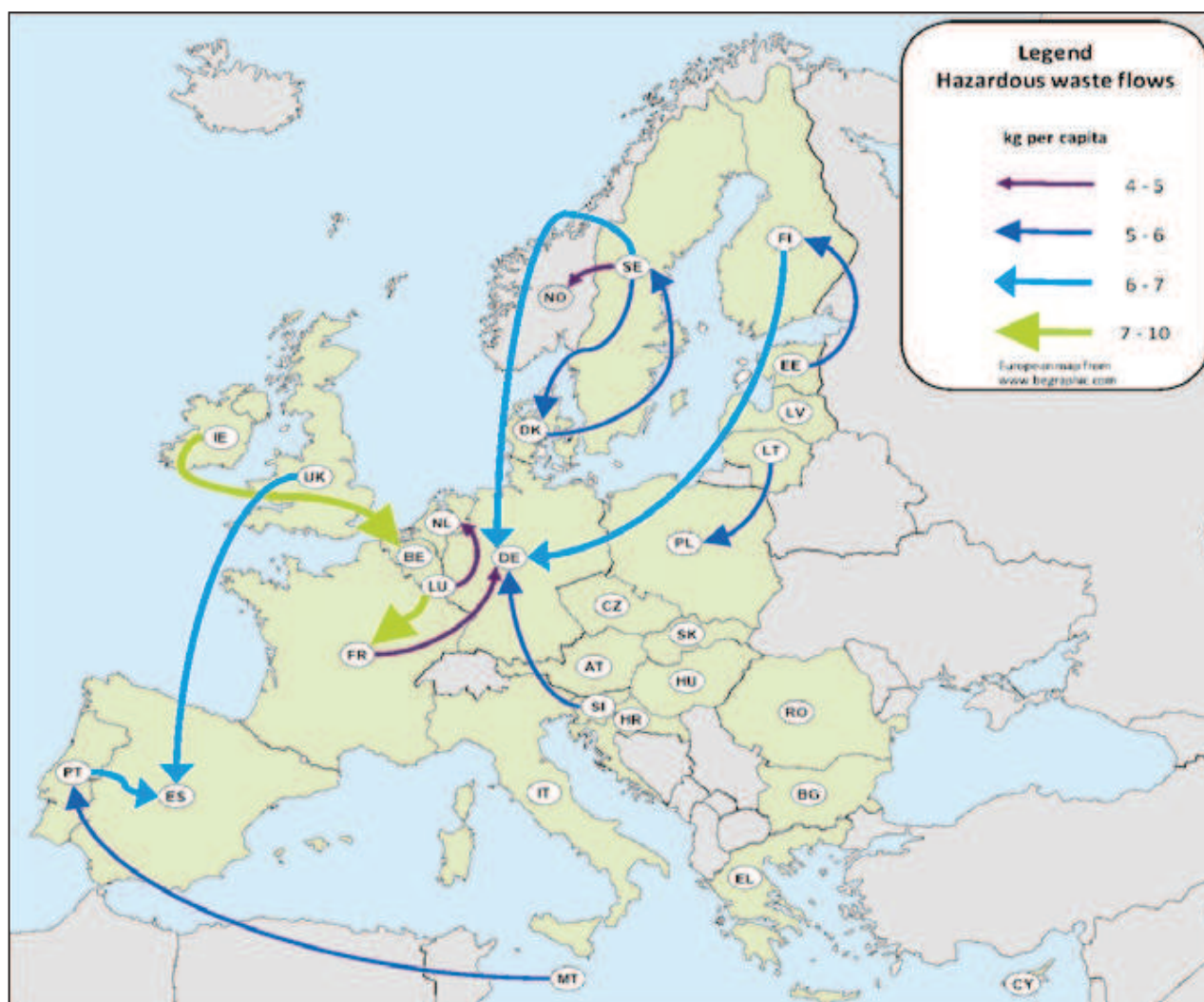


Source: Eurostat, Environmental Data Centre on Waste

Between 2001 and 2013, the amount of hazardous waste shipments from EU Member States to other EU Member States or out of the EU has increased by 86 %, from 3 164 000 tonnes in 2001 to 5 875 000 tonnes in 2013, although shipments peaked in 2007 at 8 047 000 tonnes.

There has been an increase of 10 % from 2012 to 2013, largely due to increased export from Germany and the United Kingdom. France and Italy showed the largest decrease of hazardous waste shipments.

Map 4.3.2: Hazardous waste shipments between EU Member States (smaller flows), 2013



Source: Eurostat, Environmental Data Centre on Waste

Two thirds of the countries have increased their shipments from 2001 to 2013. France, Germany, Italy, and the United Kingdom especially, have seen a large increase in waste exports: Germany and the United Kingdom mainly due to the increase from 2012 to 2013. The Netherlands had a large fall in exported hazardous waste from 2009 to 2013. This decrease can be partly explained by changes in the classification of the

reported waste: some waste reported earlier as hazardous were in fact non-hazardous.

Almost all Member States ship hazardous waste to Germany and this is reflected by the large number of arrows into Germany on the maps. Belgium and France also receive waste from a number of countries.