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REGIONAL TRAINING ON THE PRODUCTION AND USE OF WASTE AND CIRCULAR ECONOMY STATISTICS AND INDICATORS

SESSION 4: STATISTICS AND INDICATORS ON WASTE GENERATION AND WASTE COMPOSITION

20-21 June 2024, Vienna International Centre (VIC), Vienna

STATISTICS AND INDICATORS ON WASTE GENERATION AND WASTE COMPOSITION

In this presentation:

- Municipal waste generation
- Municipal waste generated per capita
- Municipal waste composition
- Total waste generation / Total waste generation per capita
- Waste generation intensity per unit of GDP

STATISTICS AND INDICATORS: TOTAL WASTE GENERATION

= 2 153 950 000 t in 2020

Waste (env_was)

Waste generat

Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (online data code: env_wasgen) Source of data: Eurostat

Table Line Bar Map

	TIME	2010	2012	2014	2016	2018	2020
GEO							
European Union - 27 countries (from 2020)	800	2 212 900 000	2 242 540 000	2 243 790 000	2 258 910 000	2 338 230 000	2 153 950 000
European Union - 28 countries (2019-2020)	900	2 454 710 000	2 483 800 000	2 506 780 000	2 530 980 000	2 620 400 000	:
Belgium	916	61 345 803	53 839 470	57 965 392	63 152 384	68 187 479	68 061 590
Bulgaria	316	167 396 268	161 252 166	179 677 011	120 508 475	129 751 823	116 387 358
Czechia	595	23 757 566	23 171 358	23 394 956	25 381 426	37 847 614 (a)	38 486 186
Denmark	208	16 217 736	16 713 822	20 008 043	20 981 931	21 445 206	20 135 564
Germany	355	363 544 995	368 022 172	387 584 241	400 071 672	405 523 624	401 156 266
Estonia	855	19 000 195	21 992 343	21 004 040	24 277 879	23 185 581	16 170 358
Ireland	816	19 007 586	12 713 821	15 166 830	15 251 689	13 986 757	16 192 033
Greece	903	70 432 705	72 328 280	69 758 868	72 332 353	45 240 333	28 358 897 (a)
Spain	157	137 518 902	118 561 669	110 518 494	128 958 523	137 822 935	105 624 359
France	210	355 081 245	344 440 922	324 402 969	322 685 297	343 307 326	310 373 987
Croatia	152	3 157 672	3 611 678	3 724 563	5 366 953	5 543 310	6 003 700
Italy	461	158 627 618	154 427 046	157 070 348	163 827 830	172 502 773	174 887 620
Cyprus	781	2 372 750	1 875 308	1 978 699	2 467 042	2 302 144	2 221 809
Latvia	884	1 498 200	2 309 581	2 621 495	1 909 631	1 773 726	2 852 792
Lithuania	352	5 578 134	5 678 751	6 200 450	6 674 238	7 080 538	6 695 731
Luxembourg	144	10 441 469	8 397 228	7 072 758	10 020 519	9 814 307	9 215 222
Hungary	197 (a)	16 735 423	16 310 151	16 650 639	15 930 877	18 369 585	17 150 400
Malta	391 (a)	1 352 994	1 456 213	1 672 810	1 951 928	2 507 870	3 528 463
Netherlands	805	121 145 468	121 194 466	132 362 297	141 024 620	145 245 469	125 138 771
Austria	766	46 799 579	48 045 089	55 868 298	61 225 037	65 666 128	68 906 034
Poland	538	158 661 957	162 382 959	179 179 899	182 005 677	175 473 691	170 233 670
Portugal	923	13 640 079	13 359 517	14 368 003	14 739 135	15 894 873 (a)	16 601 514
Romania	507	201 432 951	249 354 926	176 607 415	177 562 905	203 817 193	141 364 457
Slovenia	401	5 086 106	4 546 506	4 686 417	5 494 362	8 220 679	7 518 375
Slovakia	908	9 384 112	8 425 384	8 862 778	10 686 966	12 401 870	12 775 926
Finland	854	104 336 944	91 824 193	95 969 888	122 869 183	128 251 735	116 082 531
Sweden	590	117 645 185	156 306 504	167 026 806	141 625 718	138 667 585	151 823 910
Iceland	584	510 941	529 351	815 148	1 067 319	1 293 511	1 060 903
Liechtenstein	337	312 180	466 547	509 067	502 581	437 823	542 691
Norway	543	9 432 997	10 721 599	10 614 914	11 131 594	14 137 718	14 040 663
United Kingdom	127	241 888 706	241 506 743	262 992 726	272 064 636	282 393 639	:
Bosnia and Herzegovina	:	:	4 456 556	5 540 772	6 127 022	6 747 605	6 753 458
Montenegro	:	:	1 014 139	1 092 741	1 132 587	1 222 758	1 246 933
North Macedonia	806	2 327 590	8 472 343	2 186 612	1 424 859	1 140 253	1 484 596
Albania	:	:	:	:	:	:	:
Serbia	:	33 615 918	55 002 570	49 128 311 (a)	48 965 314	51 102 914	50 637 622
Türkiye	502	63 540 624	67 383 777	73 075 119	75 534 641	97 294 071	107 008 312
Kosovo*	:	:	1 166 619	1 039 803	2 855 990	2 961 225	2 592 828

Waste streams

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Sales an

Recyclin

End-of-lif

End-of-lif

Transboundary shipments of notified waste by partner, hazardousness and waste management operations (env_wasship)

Municipal waste by waste management operations (env_wasmun)

STATISTICS AND INDICATORS: TOTAL WASTE



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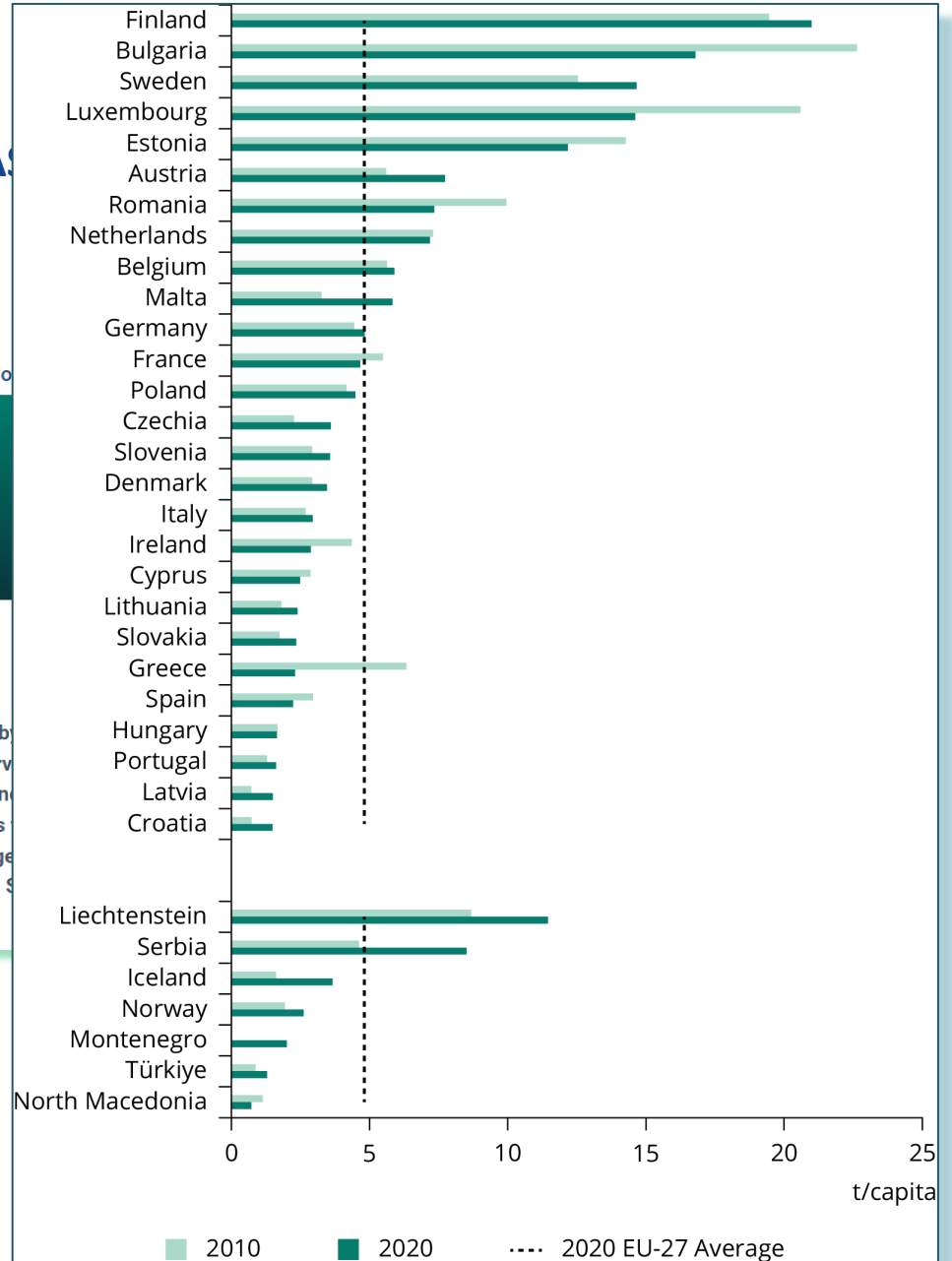
Waste generation in Europe

Published 28 Jun 2023

Home > Analysis and data > Indicators > Waste generation in Europe

Between 2010 and 2020, total per capita waste generation decreased by 1.5 t/capita. However, it is expected to significantly decrease its total waste generation by 2030 and the observed progress towards this. However, the decrease is recent (2018-2020) and the EU economy due to the COVID-19 pandemic. Waste generation has grown relatively closely. It therefore does not seem likely that waste generation will decrease by 2030 in context of the current return to economic growth. Significant measures will be required to sustain the decrease in waste generation.

<https://www.eea.europa.eu/en/analysis/indicators/waste-generation-and-decoupling-in-europe>



STATISTICS AND INDICATORS: WASTE GENERATION INTENSITY / PER UNIT OF GDP

Generation of waste excluding major mineral wastes, per GDP unit

- The indicator is part of the **Circular Economy Monitoring Framework**
- The indicator is defined as all waste generated in a country (in mass unit), *excluding major mineral wastes*, per GDP unit (in Euro, chain linked volumes (2010))

The ratio is expressed in kg per thousand EUR

- For better comparability: Major mineral wastes are excluded because weight of total waste generation is mainly driven by mineral waste from construction / demolition and from mining activities, and the latter widely varies in importance across Member States

See metadata:

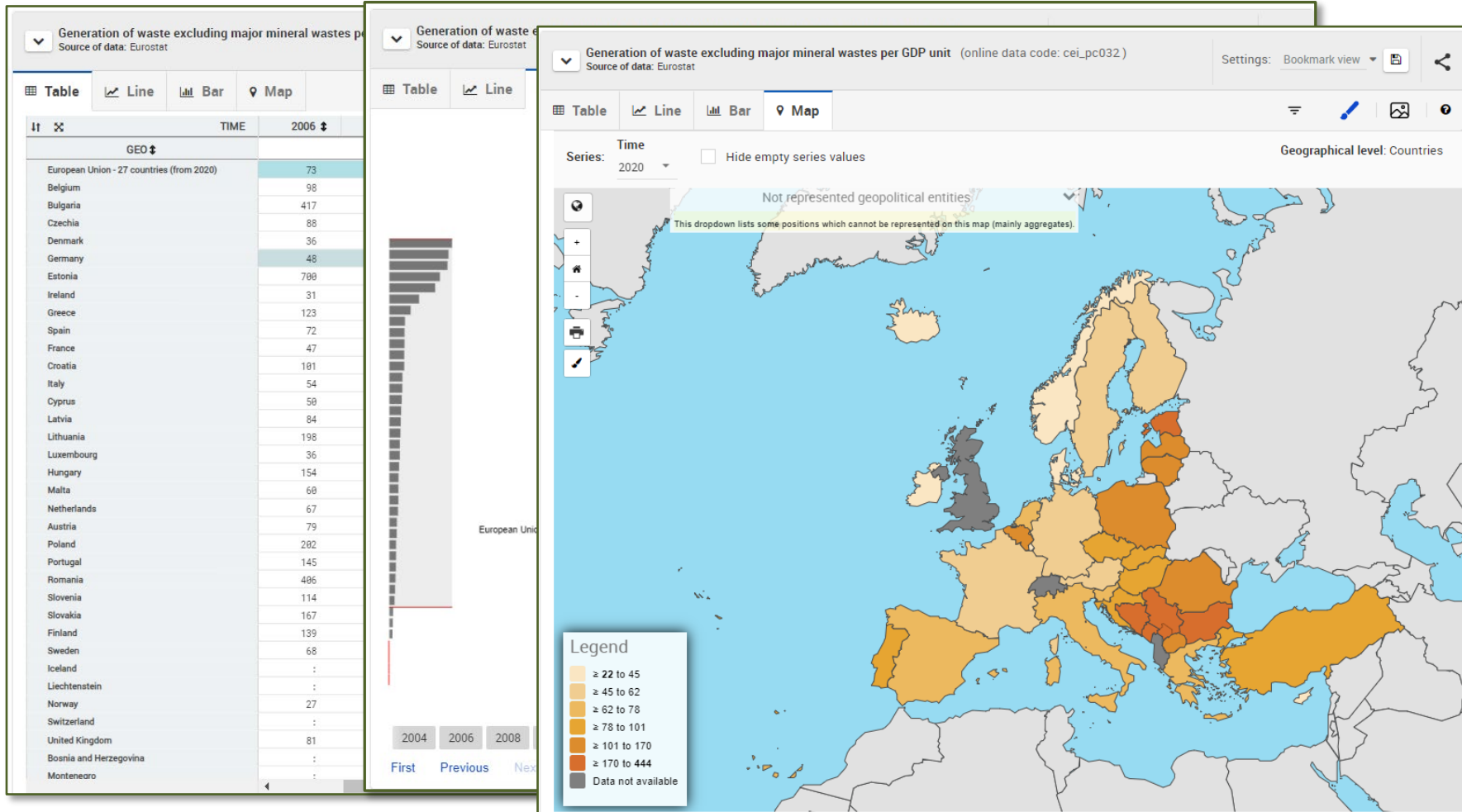
https://ec.europa.eu/eurostat/cache/metadata/en/c_ei_pc032_esmsip2.htm

Metadata for GDP:

https://ec.europa.eu/eurostat/cache/metadata/en/n_ama10_esms.htm

STATISTICS AND INDICATORS: WASTE GENERATION INTENSITY / PER UNIT OF GDP

Generation of waste *excluding major mineral wastes*, per GDP unit



STATISTICS AND INDICATORS: WASTE GENERATION INTENSITY / PER UNIT OF GDP



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<https://www.eea.europa.eu/en/analysis/indicators/waste-generation-and-decoupling-in-europe>

Figure 1. Waste generation and decoupling per capita in the EU-27

Index (2010=100)



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STATISTICS AND INDICATORS ON WASTE GENERATION AND WASTE COMPOSITION

Waste generation by economic activities households, EU, 2020 (% share of total waste)

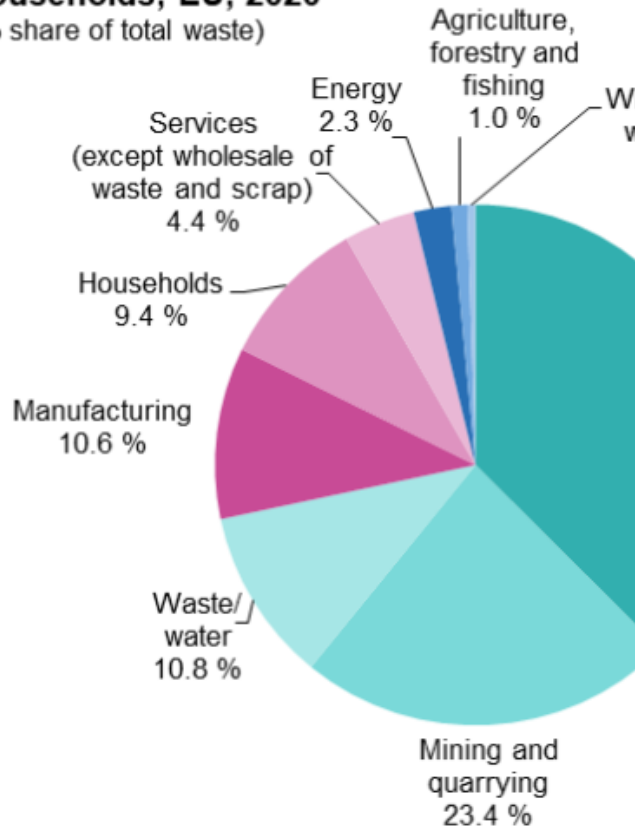


Table 1: Waste generation by economic activities and households, 2020
(% share of total waste)

	Mining and quarrying	Manufacturing	Energy	Waste/water	Construction and demolition	Other economic activities	Households
EU	23.4	10.6	2.3	10.8	37.5	5.9	9.4
Belgium	0.0	20.9	1.5	31.4	30.5	7.9	7.8
Bulgaria	81.6	4.2	5.2	2.9	1.6	2.5	2.0
Czechia	0.3	12.1	1.1	15.5	42.9	12.2	15.9
Denmark	0.1	5.4	3.9	7.5	54.8	10.3	18.0
Germany	1.3	13.7	2.0	12.0	56.3	5.1	9.8
Estonia	15.2	24.6	35.0	4.6	9.8	7.4	3.4
Ireland	9.4	22.4	1.0	12.6	32.6	10.1	12.0
Greece	31.7	11.1	5.3	11.4	19.1	5.5	15.9
Spain	2.3	12.4	0.8	20.8	30.8	11.5	21.3
France	0.1	6.0	0.3	8.1	68.6	6.3	10.8
Croatia	11.6	7.5	1.1	16.3	23.8	19.5	20.2
Italy	0.8	15.2	0.9	24.6	37.8	4.1	16.6
Cyprus	6.9	9.5	0.1	6.6	50.2	9.8	17.0
Latvia	0.0	17.0	4.1	33.7	9.7	12.9	22.6
Lithuania	1.0	32.7	2.3	18.4	8.3	16.3	20.9
Luxembourg	1.1	6.5	0.3	3.5	82.1	4.2	2.2
Hungary	0.8	15.2	11.4	12.1	25.4	7.5	27.6
Malta	1.1	0.9	0.0	2.5	85.3	4.7	5.6
Netherlands	0.1	10.6	0.4	7.4	65.4	8.7	7.4
Austria	0.1	7.5	0.6	3.5	76.5	5.2	6.7
Poland	36.6	16.1	6.6	13.4	13.0	6.6	7.8
Portugal	0.1	17.8	1.3	22.9	10.7	15.4	31.8
Romania	84.3	4.6	3.1	2.0	0.9	2.2	3.0
Slovenia	0.1	17.9	12.1	3.8	6.3	51.4	8.4
Slovakia	1.6	24.0	5.5	8.9	9.0	32.5	18.5
Finland	75.1	8.2	0.8	1.0	11.8	1.0	2.1
Sweden	76.5	3.1	1.2	4.5	9.3	2.3	3.1
Iceland	0.0	24.2	0.0	2.0	3.6	31.0	39.2
Liechtenstein	0.0	1.1	0.0	0.3	92.5	0.1	6.0
Norway	1.3	13.6	1.6	8.0	44.2	12.9	18.4
Montenegro	25.3	2.5	29.0	0.3	13.8	10.5	18.5
North Macedonia	35.1	35.0	0.5	17.9	3.8	7.7	0.0
Serbia	78.0	1.9	13.5	1.1	1.2	0.9	3.5
Türkiye	25.6	19.2	22.6	0.3	0.0	5.8	26.5
Bosnia and Herzegovina	11.3	27.3	46.3	0.0	1.3	0.4	13.4
Kosovo (*)	19.9	9.4	52.5	0.3	0.2	3.1	14.6

Source: Eurostat (online data code: env_wasgen)

(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.

Source: Eurostat (online data code: env_wasgen)

STATISTICS AND



Primary waste
Waste excluding m
Other mineral wastes
Mineral waste from co
Secondary waste (W0
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Sludges and liquid wast
Meta
Discarded equipment (e
Acid, alk
Health care

2004 2006 2008 2010

First Previous Next

Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (online data code: env_wasgen)
Source of data: Eurostat

Settings: Default

Table Line Bar Map

	TIME	2020	2020	2020	2020
GEO	European Union - 27 cou... ↓	Belgium ↓	Germany ↓	Estonia ↓	
WASTE ↓					
Total waste		2 153 950 000	68 061 590	401 156 266	16 170 358
Primary waste (TOTAL minus SEC)		2 008 880 000	63 446 704	355 195 948	15 861 324
Secondary waste (W033+W103+W128_13)		145 070 000	4 614 886	45 960 318	309 034
Spent solvents		2 150 000	121 983	653 832	521
Acid, alkaline or saline wastes		4 630 000	576 811	984 481	3 828
Used oils		3 920 000	105 823	1 071 807	3 679
Chemical wastes		16 650 000	756 294	2 765 402	1 325 744
Industrial effluent sludges		11 290 000	405 363	1 674 413	24 554
Sludges and liquid wastes from waste treatment		9 360 000	1 062 244	611 182	70 102
Health care and biological wastes		2 070 000	76 810	399 905	2 227
Metal wastes, ferrous		64 190 000	2 343 821	9 580 935	464 785
Metal wastes, non-ferrous		8 620 000	692 364	1 425 173	51 554
Metal wastes, mixed ferrous and non-ferrous		9 370 000	424 518	533 997	16 781
Glass wastes		17 850 000	1 714 352	3 506 496	50 803
Paper and cardboard wastes		43 490 000	3 940 453	7 164 678	105 954
Rubber wastes		2 920 000	67 622	601 391	37 434
Plastic wastes		19 030 000	994 896	3 097 163	43 142
Wood wastes		48 280 000	4 148 524	13 324 306	133 007
Textile wastes		1 950 000	179 605	281 041	3 958
Waste containing PCB		40 000	1 326	15 376	2
Discarded equipment (except discarded vehicles and b...		5 860 000	196 144	1 326 530	13 377
Discarded vehicles		8 010 000	439 846	756 946	22 991
Batteries and accumulators wastes		1 600 000	75 756	261 423	4 494
Animal and mixed food waste		25 240 000	1 351 967	1 718 744	41 043
Vegetal wastes		53 640 000	7 522 808	12 715 049	71 560
Animal faeces, urine and manure		13 950 000	86 858	660 787	123 361
Household and similar wastes		131 700 000	4 648 980	21 318 713	338 587
Mixed and undifferentiated materials		39 780 000	1 966 572	6 554 734	53 863
Sorting residues		89 140 000	2 356 313	19 890 201	115 555
Common sludges		17 270 000	868 691	1 623 035	58 155
Mineral waste from construction and demolition		305 650 000	20 788 008	89 279 198	796 502
Other mineral wastes (W122+W123+W125)		561 240 000	1 978 763	32 659 130	5 273 663
Combustion wastes		77 690 000	3 123 514	11 553 312	5 048 483
Soils		448 060 000	2 815 477	127 294 940	1 670 289
Dredging spoils		62 700 000	1 032 755	393 012	76 982

EC Data Browser (Latest commit 84a264302, built on 2024-05-03T15:35:35.540Z)

REGIONAL TRAINING ON THE PRODUCTION AND USE OF WASTE AND CIRCULAR ECONOMY STATISTICS AND INDICATORS

Thank you !

Working Group on Environmental Monitoring and Assessment

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