

Amount of waste generated from industry 2012

The release comprises selected statistical data on the amount of waste generated from industry in 2012 by Sectors, by Rulebook on waste catalogue and Statistical waste classification.

Of the total 457 610.73 tonnes of waste generated in industry, mining sector has generated 923.55 tonnes, i.e. 0.2%; manufacturing 105 296.22 tonnes, i.e. 23%; and sector of electricity, gas and steam supply 351 390.96 tonnes, i.e. 76.8%.

By sectors, the relationship of non-hazardous and hazardous waste is the following: mining sector (75.8% of non-hazardous waste, and 24.2% of hazardous waste), manufacturing sector (96.7% of non-hazardous waste, 3.3% of hazardous waste,) and electricity, gas and, steam supply (99.97% of non-hazardous waste, 0.03% of hazardous waste).

Table 1 Industrial waste generated by sectors 2012

MONTENEGRO	Mining and quarrying	Manufacturing	Electricity, gas and steam supply	Total
Non-hazardous waste	699.66	101 790.33	351 301.53	453 791.52
Hazardous waste	223.89	3 505.89	89.43	3 819.21
TOTAL	923.55	105 295.22	351 390.96	457 610.73

**Table 2 Industrial waste generated by Rulebook on waste catalogue
2012**

Amount of waste generated		Non-hazardous	Hazardous	Total
Mining and quarrying		699.66	223.89	923.55
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)	0.00	210.86	210.86
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	13.50	0.12	13.62
16	Wastes not otherwise specified in the list	626.06	12.91	638.97
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	60.10	0.00	60.10
Manufacturing		101 790.33	3 505.89	105 296.22
01	Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals	345.50	0.00	345.50
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	1 827.75	0.00	1 827.75
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard	2 539.69	0.00	2 539.69
04	Wastes from the leather, fur and textile industries	2.25	0.00	2.25
07	Wastes from organic chemical processes	1.62	0.00	1.62
08	Wastes from the manufacture, formulation, supply, and use of coatings (paints, varnishes, and vitreous enamels), adhesives, sealants and printing inks	0.00	0.39	0.39
09	Wastes from photographic industry	0.00	0.01	0.01
10	Wastes from thermal processes	17 873.39	2 265.47	20 138.86
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydrometallurgy	0.00	23.70	23.70
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics	64 668.61	7.09	64 675.70
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)	0.00	1 115.38	1 115.38
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)	0.00	1.30	1.30
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	3 178.10	3.75	3 181.85
16	Wastes not otherwise specified in the list	5 427.10	59.89	5 486.99
17	Construction and demolition wastes (including excavated soil from contaminated sites)	999.98	0.00	999.98
18	Wastes from human or animal health care and/ or related research (except kitchen and restaurant wastes not arising from immediate health care)	40.44	0.00	40.44
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use	1 056.31	28.91	1 085.22
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	3 829.59	0.00	3 829.59

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Electricity, gas and steam supply		351 301.53	89.43	351 390.96
01	Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals	650.00	0.00	650.00
10	Wastes from thermal processes	350 050.00	0.00	350 050.00
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics	0.00	0.13	0.13
13	Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)	0.00	29.57	29.57
15	Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	2.08	0.00	2.08
16	Wastes not otherwise specified in the list	1.7	58.53	60.23
17	Construction and demolition wastes (including excavated soil from contaminated sites)	427.75	1.00	428.75
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	170.00	0.20	170.20
MONTENEGRO		453 791.52	3 819.21	457 610.73

**Table 3 Industrial waste generated by statistical waste classification
2012**

Type of waste EWC/Stat Version 4	Description	Chara- cter of the waste ¹	Mining and quarrying	Manufa- cturing	Electricity, gas and steam supply
1	01.1 Spent solvent	1	0,00	1.30	0.00
2	01.2 Acid, alkaline or saline wastes	0	0.00	0.00	0.00
3	01.2 Acid, alkaline or saline wastes	1	0.00	1 426.21	0.00
4	01.3 Used oils	1	44.00	30.17	29.70
5	01.4, 02, 03.1 Spent chemical catalyts	0	0.00	11 553.39	50.00
6	01.4, 02, 03.1 Spent chemical catalyts	1	168.49	1 084.83	0.20
7	03.2 Industrial effluent sludges	0	0.00	429.90	0.00
8	03.2 Industrial effluent sludges	1	0.00	38.71	0.00
9	03.3 Sludges and liquid wastes from waste treatment	0	0.00	0.00	0.00
10	03.3 Sludges and liquid wastes from waste treatment	1	0.00	0.00	0.00
11	05 Health care and biological wastes	0	0.00	0.00	0.00
12	05 Health care and biological wastes	1	0.00	0.00	0.00
13	06.1 Metal wastes, ferrous	0	0.00	1 384.45	421.00
14	06.2 Metal wastes, non-ferrous	0	600.00	1 347.16	6.75
15	06.3 Metal wastes, mixed ferrous and non-ferrous	0	0.00	157.61	0.00
16	07.1 Glass wastes	0	0.00	674.21	0.00
17	07.1 Glass wastes	1	0.00	0.00	0.00
18	07.2 Paper and cardboard wastes	0	1.00	2 384.74	0.05
19	07.3 Rubber wastes	0	25.88	329.69	1.70

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20	07.4	Plastic wastes	0	1.00	129.84	0.03
21	07.5	Wood wastes	0	1.50	2 803.33	2.00
22	07.5	Wood wastes	1	0.00	0.00	0.00
23	07.6	Textile wastes	0	0.00	2.81	0.00
24	07.7	Waste containing PCB	1	0.00	17.00	0.00
25	08 (EXCL.08.1, 08.41)	Discarded equipment (excluding discarded vehicles, batteries and accumulators)	0	0.00	2 401.67	0.00
26	08 (EXCL. 08.1, 08.41)	Discarded equipment (excluding discarded vehicles, batteries and accumulators)	1	1.16	26.98	56.57
27	08.1	Discarded vehicles	0	0.00	0.00	0.00
28	08.1	Discarded vehicles	1	0.00	0.00	1.50
29	08.41	Batteries and accumulators wastes	0	0.18	51.05	0.00
30	08.41	Batteries and accumulators wastes	1	10.24	1.80	0.45
31	09.1	Animal and mixed food waste	0	0.00	59.85	0.00
32	09.2	Vegetal wastes	0	0.00	680.45	0.00
33	09.3	Slurry and manure	0	0.00	800.00	0.00
34	10,1	Household and similar wastes	0	60.10	1 089.77	170.00
35	10,2	Mixed and undifferentiated materials	0	10.00	5 910.58	650.00
36	10,2	Mixed and undifferentiated materials	1	0.00	0.00	1.00
37	10,3	Sorting residues	0	0.00	0.00	0.00
38	10,3	Sorting residues	1	0.00	28.91	0.00
39	11	Common sludges	0	0.00	9.20	0.00
40	12,1	Construction and demolition wastes	0	0.00	300.00	0.00
41	12,1	Construction and demolition wastes	1	0.00	0.00	0.00
42	12.2, 12.3, 12.5	Other mineral wastes	0	0.00	68 362.12	0.00
43	12.2, 12.3, 12.5	Other mineral wastes	1	0.00	23.30	0.01
44	12,4	Combustion wastes	0	0.00	745.00	350 000.00
45	12,4	Combustion wastes	1	0.00	826.69	0.00
46	12,6	Soils	0	0.00	0.00	0.00
47	12,6	Soils	1	0.00	0.00	0.00
48	12,7	Dredging spoil	0	0.00	0.00	0.00
49	12,7	Dredging spoil	1	0.00	0.00	0.00
50	12.8, 13	Waste from waste treatment, solidified, stabilised or vitrified waste	0	0.00	183.50	0.00
51	12.8, 13	Waste from waste treatment, solidified, stabilised or vitrified waste	1	0.00	0.00	0.00
TOTAL				923.55	105 296.22	351 390.96

1) 1-Hazardous waste, 0-Non-hazardous waste

METHODOLOGICAL NOTES

The data on industrial waste in 2012 were collected by statistical surveys *Statistical Survey on waste generated in the industry*. The survey used the reporting method, and the geographical aspects covered are business entities that carry out its production activities in the whole territory of Montenegro. The report includes all businesses with 10 or more employees whose primary activity is defined in the mining sector, manufacturing, and electricity, gas and steam supply, i.e. areas 05-35 of the Classification of Activities 2010.

For the data used was of *Rulebook on waste catalogue and waste classification* (Official Gazette of Montenegro 64/11) which is compliant the European List of Wastes (LOW), and contains more than 800 types of waste systematized according to their characteristics and place of origin in 20 groups.

Of these 20 groups, the most is based on activities in which waste is generated, while some groups are based on materials and processes.

The waste is defined by a code of 6 digits, where the first two digits are a group of other two sub-groups of waste. Hazardous waste in the Waste Catalogue is marked with *.

The Waste Catalogue is a list of the properties and place of origin, classified into groups, subgroups and types of waste from industries whose products are producing the waste.

Waste is any substance or subject that the holder discarded or intends to discard it in compliance with the Law (Law on Waste Management, Official Gazette of Montenegro 64/11 as of 29 November 2011).

The waste producer is the original waste producer or any person who performs the pre-treatment, mixing or other processes that change the quality or composition of waste.

Industrial waste is the waste generated in production processes in industry and handicrafts, and differs from municipal waste in their composition and characteristics.

Hazardous waste is the waste containing elements or compounds that have one or more of the following hazardous properties: explosiveness, reactivity, flammability, irritability, harmfulness, toxicity, infectivity, carcinogenicity, corrosiveness, mutagenicity, teratogenicity, eco-toxicity, etching property and property release toxic gases by chemical or biological reaction and sensitivity/irritability, as well as waste from which, after a delay may occur another substance containing some of hazardous characteristics.

Non-hazardous waste is the waste that by composition and characteristics does not possess some of characteristics of hazardous waste.

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