

Amount of waste generated from industry 2014

The release comprises selected statistical data on the quantities of generated and treated waste from industry in 2014. The waste from industry covers sectors: B (Mining); C (Manufacturing); D (Electricity, gas and steam supply), and E (Water supply, sewerage, waste management and remediation).

In 2014, industrial sectors in Montenegro generated 778 902 tonnes of waste

Of the total 778 902 tonnes of waste generated in industry, mining sector generated 320 036 tonnes, i.e. 41.1%; manufacturing sector 68 989 tonnes, i.e. 8.9%; electricity, gas and steam supply 368 591 tonnes, i.e. 47.3%, and water supply, sewerage, waste management and remediation 21 286 tonnes, i.e. 2.7%.

The ratio of hazardous and non-hazardous waste per sector shows the following trend: mining sector (hazardous waste almost 100%); manufacturing sector (95.3% of non-hazardous waste, 4.7% of hazardous waste); sector electricity, gas and, steam supply (non-hazardous waste almost 100%); and water supply, sewerage, waste management, and remediation (99.3% of non-hazardous waste, 0.7% of hazardous waste).

Of the total generated and stored waste in the amount of 872 973 tonnes in 2014, companies in the industry treated by themselves 811 303 tonnes of waste, of which 1.3% of waste recovered by themselves; 86.5% waste disposed; and 12.2% of waste in temporary storage. They exported 12 550 tonnes of waste, and delivered the remaining amount (49 120 tonnes) to other companies in Montenegro.

Within the own processing activity, the most common operation was back-filling (68%), followed by recycling (22%), incineration (7%), while other methods of recovery amount 3%. On disposal sites, companies in the industry disposed approximately 3 tonnes of waste in 2014.

Industrial companies in Montenegro directly exported 12 550 tonnes of waste in 2014, of which 81% is the waste from construction; 12% of waste from wood processing; 6% packaging; and over 1% of waste paper.

Table 1. Industrial waste generated by sector, 2014

in tonnes					
MONTENEGRO	Mining and quarrying	Manufacturing	Electricity, gas and steam supply	Water supply, sewerage, waste management and remediation	Total
Non-hazardous waste	19	65 774	368 493	21 127	455 413
Hazardous waste	320 017	3 215	98	159	323 489
TOTAL	320 036	68 989	368 591	21 286	778 902

Table 2. Industrial waste generated by groups of the Waste Catalogue, 2014

Amount of waste generated	Non-hazardous, tonnes	Hazardous, tonnes	Total, tonnes
01 Wastes resulting from exploration, mining, quarrying, physical and chemical treatment of minerals	4 269	319 963	324 232
02 Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	20 019	6	20 025
03 Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard	6 902	-	6 902
04 Wastes from the leather, fur and textile industries	2	-	2
05 Wastes from petroleum refining, natural gas purification and pirolytic treatment of coal	-	279	279
08 Wastes from the manufacture, formulation, supply and use (MFSU) of coatings (paints, varnishes and vitreous enamels), sealants and printing inks	0	0	0
10 Wastes from thermal processes	378 248	1 080	379 328
11 Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydrometallurgy	-	2	2
12 Wastes from shaping and physical and mechanical surface treatment of metals and plastics	3 748	4	3 752
13 Oil wastes and wastes of liquid fuels (except edible oils, and those in chapters 05, 12 and 19)	-	1 474	1 474
14 Waste organic solvents, refrigerants and propellants (except 07 and 08)	-	1	1
15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	3 741	25	3 766
16 Wastes not otherwise specified in the list	5 227	445	5 672
17 Construction and demolition wastes (including excavated soil from contaminated sites)	12 121	33	12 154
18 Wastes from human or animal health care and/ or related research (except kitchen and restaurant wastes not arising from immediate health care)	18	-	18
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	11 976	173	12 149
20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	9 142	4	9 146
MONTENEGRO- TOTAL	455 413	323 489	778 902

Table 3. Industrial waste generated by Statistical classification of waste, 2014

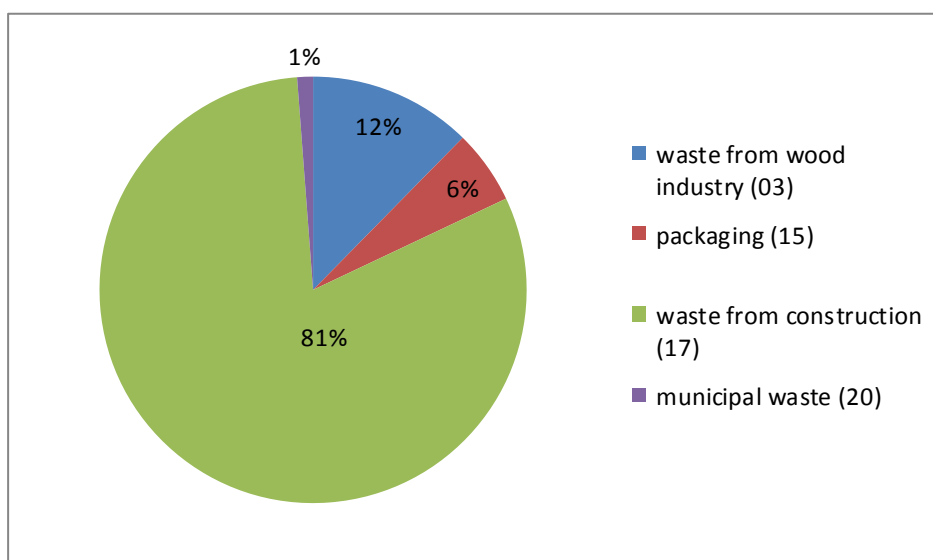
EWC/Stat Version 4	Description - Type of waste	Character of the waste ¹⁾	Mining and quarrying, tonnes	Manufacturing, tonnes	Electricity, gas and steam supply, tonnes	Water supply, sewerage, waste management and remediation, tonnes
01.1	Spent solvent	1	-	1	-	-
01.2	Acid, alkaline or saline waste	1	-	375	-	-
01.3	Used oils	1	28	292	3	5
01.4, 02, 03.1	Spent chemical catalysts	0	0	5 507	-	0
01.4, 02, 03.1	Spent chemical catalysts	1	22	1 440	-	0
03.2	Industrial effluent sludge	0	-	3 448	-	-
03.2	Industrial effluent sludge	1	-	77	-	152
06.1	Metal wastes, ferrous	0	-	1 692	470	9 468
06.2	Metal wastes, non-ferrous	0	1	759	16	24
06.3	Metal wastes, mixed ferrous and non-ferrous	0	-	96	-	81
07.1	Glass wastes	0	-	196	-	-
07.2	Paper and cardboard wastes	0	-	809	-	3
07.3	Rubber wastes	0	10	370	17	3
07.4	Plastic wastes	0	-	686	-	0
07.5	Wood wastes	0	-	6 903	-	-
07.6	Textile wastes	0	-	2	-	-
08 (EXCL. 08.1, 08.41)	Discarded equipment (excluding discarded vehicles, batteries and accumulators)	0	-	0	47	-
08 (EXCL. 08.1, 08.41)	Discarded equipment (excluding discarded vehicles, batteries and accumulators)	1	2	16	59	0
08.41	Batteries and accumulators wastes	0	-	103	-	-
08.41	Batteries and accumulators wastes	1	2	1	-	1
09.1	Animal and mixed food waste	0	-	18 755	-	-
09.2	Vegetal wastes	0	-	1 064	-	0
09.3	Slurry and manure	0	-	205	-	-
10.1	Household and similar wastes	0	9	8 386	-	43
10.2	Mixed and undifferentiated materials	0	-	3 998	-	744
10.3	Mixed and undifferentiated materials	1	-	17	4	-
11	Common sludge	0	-	1	-	10 193
12.1	Construction and demolition wastes	0	-	284	-	-
12.2, 12.3, 12.5	Other mineral wastes	0	-	8 800	-	67
12.2, 12.3, 12.5	Other mineral wastes	1	319 962	362	32	-
12.4	Combustion wastes	0	-	2 757	367 943	-
12.4	Combustion wastes	1	-	635	-	-
12.6	Soils	0	-	-	-	284
12.7	Dredging spoil	0	-	-	-	218
12.8, 13	Waste from waste treatment, solidified, stabilised or vitrified waste	0	-	952	-	-
MONTENEGRO			320 036	68 989	368 591	21 286

¹⁾ 1-hazardous waste; 0-non-hazardous waste

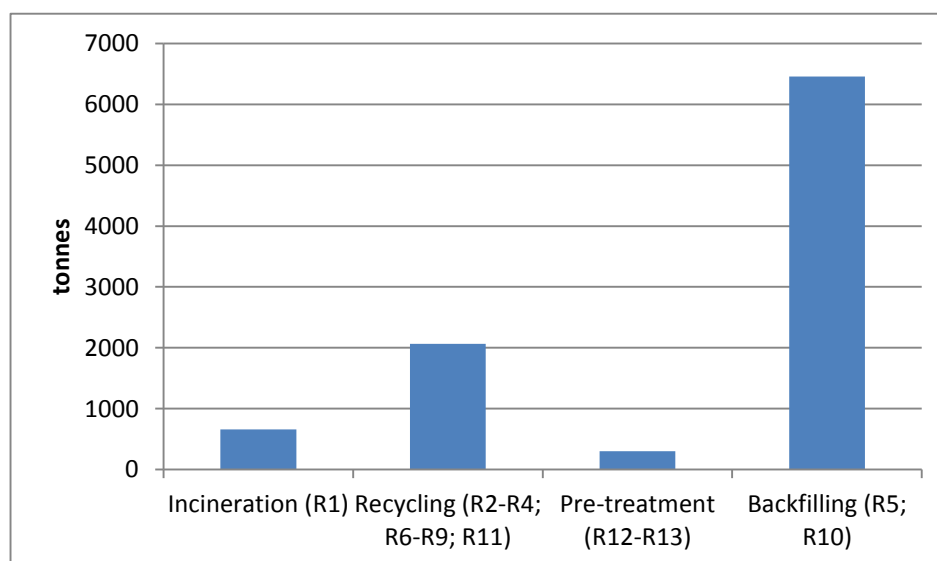
Table 4. Treatment of waste in industrial enterprises 2014

MONTENEGRO	in tonnes				
	Own recovery and disposal	Permanent internal storage	Handed over another in Montenegro	Exported from Montenegro	Total
Non-hazardous waste	391 676	21 523	46 546	12 550	472 295
Hazardous waste	320 934	77 170	2 574	-	400 678
TOTAL	712 610	98 693	49 120	12 550	872 973

Graph 1. Export of industrial waste 2014



Graph 2. Treatment procedures of industrial waste, 2014



METHODOLOGICAL NOTES

The data on industrial waste in 2014 were collected by statistical survey on waste generated in the industry. The survey primarily used the reporting method, and the geographical aspects covered are business entities that carry out its production activities on the whole territory of Montenegro. The report includes all businesses with 10 or more employees whose primary activity is defined in the B-mining sector, C-manufacturing, D-electricity, gas and steam supply, and E-Water supply, sewerage, waste management and remediation i.e. areas 05-39 of the Classification of Activities 2010.

Data on industrial waste for 2014 were processed according to the improved methodology (new statistical methods were introduced in accordance with the Regulation (EC) NO 2150/2002), with the purpose of obtaining more quality and international comparable data. This is the reason why the data for 2014 are not comparable with the data from previous years.

For the collection of data, there was used the Rulebook on waste catalogue and waste classification(Official Gazette of Montenegro No. 59/13 of 26.12.2013.) which is compliant with 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 6–digits code, 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 (LoW) 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.

Statistical Waste Catalogue(EWC-Stat) is a list of waste according to material. Classified on 51 types of waste and divided into hazardous and non-hazardous waste. International reporting is done according to EWC-Stat.

Waste is any substance or subject that the holder discarded or intends to discard it in compliance with the Law .

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.

Published and printed by Statistical Office of Montenegro(MONSTAT)
81000 Podgorica, IV Proleterske br. 2,Phone (+382) 20 230-811, fax (+382) 20 230-814

The release prepared by:

Ms Nataša VUČKOVIĆ

Tel. +382-20-230 937

e-mail: contact@monstat.org