Waste[1]

Generated and treated waste in 2019

During 2019, in Montenegro, 1 276 244.6 t of waste was generated of which 753 239.0 t or 59.0% in sectors Manufacturing, mining and quarrying and other industries. Of total amounts of generated waste during 2019, 328 711.6 t of hazardous waste or 25.8%.

Compared to the previous year, there was an increase of 1.2% in relation to the total amount generated; Agriculture, forestry and fishery sector recorded a decrease of 7.3%, sectors of Manufacturing, mining and quarrying and other industries decreased of 0.7%; construction sector recorded increase of 2.1%; Service activities sectors recorded increase of 14.4% and households increased of 1.7%.

In 2019, 340 822.6 t of municipal waste was generated or 5.6% more than in 2018. Public utility enterprises collected 308 103.6 which is 95.5% of total collected amounts. Generated municipal waste per capita amounted 547.9 kg which is for 5.6% more than in previous year.

Total amounts of treated waste including export in 2019 was 1 169 592.7 t, which is 7.6% more than in previous year. From total treated amounts, 633 920.9 t was landfilled/disposed or 54.2%. Recycled amounts of waste recorded an increase compared to the previous year of 74.5%, due to increased recycling of construction waste.

Total amount of treated municipal waste including export, in 2019 was 324 080.3 t which is 8.6% more than in 2018. From total treated amounts, 282 384.4 t was landfilled/disposed or 87.1%.

Table 1. Generated and treated amouts of waste

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	2018	2019
Agriculture, forestry and fishery (A)	14 844.5	13 764.6
Manufacturing, mining and quarrying and other industries (B, C, D i E)	758 186.2	753 239.0
Construction (F)	138 006.0	140 901.9
Service activities (G - U)	95 767.0	109 585.2
Households	254 356.0	258 753.9
Generated - total	**1 261 159.7**	**1 276 244.6**
of which municipal waste	322 772.9	340 822.6
Waste treatment including export - total	**1 087 372.1**	**1 169 592.7**
of which treatment of municipal waste including export, total	298 551.3	324 080.3
Index treatment/generated waste	**86.2**	**91.6**

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[1] Recalculated data for period 2011-2019 are available on the following link: Data

Table 2. Generated amounts of hazardous and non hazardous

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	2018		2019	
	hazardous	non hazardous	hazardous	non hazardous
Agriculture, forestry and fishery (A)	8.9	14 835.6	10.2	13 754.4
Manufacturing, mining and quarrying and other industries (B, C, D i E)	336 749.2	421 437.0	326 002.9	427 236.1
Construction (F)	127.9	137 878.1	75.9	140 826.0
Service activities (G -U)	2 963.6	92 803.4	2 610.0	106 975.2
Households	14.9	254 341.1	12.6	258 741.3
Generated - total	**339 864.5**	**921 295.2**	**328 711.6**	**947 533.0**

Table 3. Collected and generated amounts of municipal waste

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	2018	2019
Municipal waste collected by Public utility enterprises	291 431.1	308 103.6
Municipal waste collected by waste collectors, waste brought to landfill sites by natural persons and directly exported from original producers	12 025.7	14 464.3
Total amounts of collected municipal waste	**303 456.8**	**322 567.9**
Amounts of waste from citizens that are not included in the system of public collection of municipal waste	19 316.1	18 254.7
Total	**322 772.9**	**340 822.6**

Table 4. Municipal waste per capita

	2018	2019
Estimated number of population by middle of year	622 227	622 028
Number of days during the year	365	365
Total amounts of collected municipal waste, t	303 456.8	322 567.9
Total collected municipal waste per capita per year, kg	487.7	518.6
Total collected municipal waste per capita per day, kg	**1.3**	**1.4**
Total generated amounts of municipal waste, t	322 772,9	340 822.6
Total generated municipal waste per capita per year, kg	518.7	547.9
Total generated municipal waste per capita per day, kg	**1.4**	**1.5**
Percentage of population coverage by municipal waste collection services	**85.0**	**86.2**

Table 5. Treated amounts of waste by treatment procedures

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	2018	2019
Waste removal (R1-R11)	**47 594.1**	**84 077.0**
of which waste recycling (R2-R11)	46 970.5	81 980.7
Waste disposal (D1-D7, D10-D12)	**981 467.0**	**984 049.1**
of which incineration (D10)	0.8	0.6
of which landfilling (D1)	618 658.8	633 920.9
Waste export	**58 311.0**	**101 466.6**
(R) + (D), total	1 029 061.1	1 068 126.1
(R) + (D) + export, total	**1 087 372.1**	**1 169 592.7**

Tabela 6. Treatment of municipal waste

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	2018	2019
Municipal waste removal (R1-R11)	**6 681.1**	**4 033.0**
of which waste recycling (R2-R11)	6 676.3	4 031.5
Municipal waste disposal (D1-D7, D10-D12)	**281 134.9**	**301 452.8**
of which landfilling (D1)	260 901.1	282 384.4
Municipal waste export	**10 735.3**	**18 594.5**
(R) + (D) - total	287 816.0	305 485.8
(R) + (D) + export - total	**298 551.3**	**324 080.3**

METHODOLOGICAL NOTES

Data on waste are collected through following surveys: Survey on municipal waste, Survey on waste collection and processing and Survey on generated waste. Reporting method is used for data collection for the Survey on municipal waste and Survey on waste collection and processing, while the data on generated waste are collected through interview method.

The reporting units for the Survey on municipal waste are public utility enterprises, with the permit issued by Secretariat for Local Government for performing public service of municipal waste collection and transportation. For the Survey on waste collection and processing, reporting units are all enterprises that have permits for waste collection, treatment and export/import and issued by Nature and Environmental Protection Agency, as well as enterprises that manage landfill sites.

The Survey on generated waste covers all business entities with 10 and more employees whose main activity is defined in sectors B - Mining and quarrying, C - Manufacturing, D - Electricity, gas, steam and air conditioning supply, E - Water supply; sewerage, waste management and remediation activities, A – Agriculture, forestry and fishing, F – Construction, G - Wholesale and retail trade; repair of motor vehicles and motorcycles - group 45.2 Maintenance and repair of motor vehicles, M - Professional, scientific and technical activities - division 75 Veterinary activities, Q - Human health and social work activities - classes: 86.10 Hospital activities, 86.21 General medical practice activities, 86.23 Dental practice activities and 86. 90 Other human health activities according to Classification of activities 2010.

Data on generated waste were processed using statistical methods in order to obtain greater coverage and international data comparability. Data on generated amounts of waste in Service activities are obtained by compiling data from different surveys: data on waste generated in service activities (G - Wholesale and retail trade; repair of motor vehicles and motorcycles - group 45.2 Maintenance and repair of motor vehicles, M - Professional, scientific and technical activities - division 75 Veterinary activities, Q - Human health and social work activities - classes: 86.10 Hospital activities, 86.21 General medical practice activities, 86.23 Dental practice activities and 86. 90 Other human health activities), data on amounts of waste collected by original waste producers from Survey on waste collection and processing and data on collected waste in manufacturing and service activities from Survey on municipal waste.

Waste is any substance or object which the holder has discarded or intends to discard or is obliged to discard in accordance with the law.

Non-hazardous waste is waste whose composition and properties do not have any of the characteristics of hazardous waste.

Hazardous waste is waste containing elements or compounds having one or more of the following hazardous properties: explosiveness, reactivity, flammability, irritability, harmful, toxic, infectious, carcinogenic, corrosiveness, mutagenicity, teratogenicity, eco-toxicity, the property of abrasion and the property of release of toxic gases by chemical or biological reaction and sensitivity / irritability, as well as waste from which, after a delay, other matter may arise that has any of the hazardous properties.

Municipal waste is waste from households or when performing activities whose properties are similar to waste from households.

Mixed municipal waste is the waste from the household left after separation of some municipal waste fractions for which the possibility of selective collection is envisaged including communal waste packaging.

The original waste producer is any person whose activities produce waste.

Waste treatment is the procedure for removal of and/or disposal of waste, including preparation prior to removal and/or disposal. Data on waste treatment includes internal waste treatment.