

Statistical survey on municipal waste	
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Reference Metadata in ESMS 2.0 structure	
1	Contact
1.1	Contact organisation
State Statistical Office	
1.2	Contact organisation unit
Department for environment, energy and transport	
1.3	Contact name
Suzana Stojanovska	
1.4	Contact person function
Advisor	
1.5	Contact mail address
Dame Gruev 4, 1000 Skopje, Republic of North Macedonia	
1.6	Contact email address
suzana.stojanovska@stat.gov.mk	
1.7	Contact phone number
+ 003892 3 295 650	
1.8	Contact fax number
+ 003892 3 111 336	
2	Metadata update
2.1	Metadata last certified
16/04/2024	
2.2	Metadata last posted
16/04/2024	
2.3	Metadata last update
16/04/2024	
3	Statistical presentation
3.1	Data description
Data on: amount of collected and generated municipal waste, type and amount of municipal waste, municipal waste treatment, number and active surface on active landfills are disseminate. Indicator on generation of municipal waste per capita is compiled and disseminated.	
3.2	Classification system
National classification of activities NKD Rev.2 (by NACE Rev.2) which is harmonized with European NACE Rev. 2 classification from 01.01.2008.	
3.3	Sector coverage

Full coverage of enterprises with the main economic activity of collection on waste (Sector E/Д - Water supply; sewerage, waste management and remediation activities, (only Division 38 - Activities on collection, treatment and disposal of waste; material recovery, according to NKD Rev.2.

3.4 Statistical concepts and definitions

The environmental statistics on Municipal waste is based on Eurostat's Manual on waste statistics-A handbook for data collection on waste generation and treatment, (2013) and Guidance on municipal waste data collection, (2020).

Municipal waste statistics is based on data on municipal waste collected by public collection which includes the amounts of municipal waste collected within the implementation of the obligatory municipal public utility service for the collection of municipal waste.

Data on generated amounts of municipal waste by statistical regions and municipalities are statistically processed and estimated per the entire population of Republic of Macedonia. The reason for such estimation is that some settlements have no established public communal enterprise and are not under the collection system.

Data collection is based on the definition of municipal waste which state that it is mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, bio-waste, wood, textiles, waste electrical and electronic equipment", and "mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households.

Municipal waste does not include waste from production, agriculture, forestry, fishing, septic tanks and sewage network and treatment, including sewage sludge, end-of-life vehicles or construction and demolition waste.

Definitions:

Waste is a material or object from one of the groups of waste specified in the List of Waste (Commission Decision of 18 December 2014 amending 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council), which the owner discards or intends or is required to discard. To protect the environment or other public benefits, waste must be collected, submitted for processing or disposal, transported, recovered or disposed of in a prescribed manner.

Hazardous waste is waste which displays one or more of the hazardous properties listed in annex of Commission Regulation (EU) No. 1357/2014 of 18 December 2014 replacing Annex III to Directive 2008/98 / EC of the European Parliament and of the Council on waste and repealing certain directives.

Municipal waste is waste from households and similar waste from trading, manufacturing, business services and other activities and also from the public sector.

List of Waste (LoW) is a list of hazardous and non-hazardous waste defined by Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council. Waste is classified into groups according to its origin. In addition to the name, each waste has a six-digit number. If the waste is hazardous, the number is followed by an asterisk. The generator of waste is responsible for the classification of waste into the appropriate group.

Waste producer is anyone whose activities produce waste (original producer) and/or anyone who carries out pre-processing, mixing or other operations resulting in a change in the nature or composition of this waste.

Waste collector is a legal entity or an individual entrepreneur that performs the activity of waste collection in accordance with the Regulation on Waste.

Waste processor is a legal entity or an individual entrepreneur that performs the activity of waste recovery in accordance with the Regulation on Waste and has the environmental permit for waste recovery from the Ministry of the Environment and Spatial Planning.

Waste disposer is legal entity or an individual entrepreneur that performs the activity of waste disposal in accordance with the Regulation on Waste and has the environmental permit for waste disposal from the Ministry of the Environment and Spatial Planning.

Waste management covers collection, transport, recovery and disposal of waste, including supervision of such operations and after-care of disposal sites, and of a dealer or broker.

Waste collection is waste assuming, including its previous storage for purposes of transport, to a waste treatment facility.

Waste treatment includes recovery or disposal operations, including preparation for recovery or disposal. A waste treatment contractor may commence with waste treatment activities after obtaining an environmental permit for waste treatment from the Ministry of the Environment and Spatial Planning.

Waste recovery is a procedure the main result of which is that waste is usefully applied in the facility in which it has been processed, or in other economic activities in a way that it replaces other materials which would otherwise be used to fulfil a particular function,

or is prepared to meet this function. The list of recovery procedures is set out in Annex 2 to the Regulation on Waste, but this does not exclude other possible recovery procedures. In the environmental permit for waste recovery code (R) is determined, according to which the processor recovers the waste.

Recycling is any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

Waste disposal is a procedure which is not recovery, even if it is a secondary consequence of the reclamation of substances or energy. The list of disposal procedures is set out in Annex 3 to the Regulation on Waste (OJ RS, No. 37/15 and 69/15), but this does not exclude other possible disposal procedures. In the environmental permit for waste disposal code (D) is determined, according to which the disposer disposes the waste.

Landfill is a waste disposal site for the deposit of the waste onto or into land (i.e. underground), including internal waste disposal sites (i.e. landfill where a producer of waste is carrying out its own waste disposal at the place of production), and a permanent site (i.e. more than one year) which is used for temporary storage of waste.

3.5 Statistical unit

Enterprises.

3.6 Statistical population

All enterprises whose main activity is collection and treatment of waste belonging to section E/Д (division 38) according to NACE Rev. 2.

3.7 Reference area

Republic of North Macedonia

3.8 Time coverage

Since 2008 onwards.

3.9 Base period

Not applicable.

4 Unit of measure

Tonne.

5 Reference period

Calendar year.

6 Institutional mandate

6.1 Legal acts and other agreements

NATIONAL LEGISLATION

Law on State Statistics ("Official Gazette of the Republic of Macedonia" No. 54/1997, 21/2007, 51/2011, 104/2013, 42/2014, 192/2015, 27/16, 83/18, 220/18, 31/20)

(<https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/>)

The Programme of Statistical Surveys 2023-2027 ("Official Gazette of the Republic of North Macedonia" No. 29/23.)

(<https://www.stat.mk/en/about-us/legal-acts/program-for-statistical-surveys/>).

EUROPEAN LEGISLATION

Regulation No. 2150/2002 of European Parliament and Council.

6.2	Data sharing
Data on municipal waste are sharing with the Ministry of Environment and Physical Planning based on the document Memorandum of understanding. Data exchange is made with MANU due to preparation of Greenhouse gases inventory.	
Data are transmitted to Eurostat (via Edamis). Eurostat collects data by regular annual questionnaire for municipal waste.	
7	Confidentiality
7.1	Confidentiality - policy
<p>1. The protection of individual data is regulated by the Law on State Statistics (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/).</p> <p>2. The basic principles and activities undertaken to ensure data confidentiality are described in the Policy on Statistical Confidentiality. (https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/).</p>	
7.2	Confidentiality - data treatment
Pursuant to Article 38 of the Law on State Statistics (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/) and the Policy on Statistical Confidentiality. (https://www.stat.mk/en/about-us/policies-and-strategies/policy-on-statistical-confidentiality/), individual data are not published. However, if access is granted to microdata from the relevant survey, then the methods used to prevent data disclosure should be specified.	
8	Release policy
8.1	Release calendar
The date of data publication is determined in the Advance Release Calendar, which is updated quarterly.	
8.2	Release calendar access
https://www.stat.mk/en/publishing-calendar/#/	
8.3	User access
All users have equal access to statistics at the same time: this means that the publication dates are announced in advance and no user has access to official statistics before they are published. Statistical data are first published in the "News Releases" edition on the website of the State Statistical Office at 12:00.	
9	Frequency of dissemination
Annual	
10	Accessibility and clarity
10.1	News release
News Releases are published and they are available on the website of the SSO in the section: "News Releases" (https://www.stat.mk/en/all-new-releases).	

News release Municipal waste published annually and it is available on the website of the SSO in the section: "News Releases" (<https://www.stat.mk/en/stat/industry-energy-and-environment/environment/municipal-waste/municipal-waste-2023/>)

10.2 Publications

Data on municipal waste is published in:

-Publications:

Statistical Yearbook,

<http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=34&rbrObl=37>

Environmental statistics,

http://www.stat.gov.mk/PrikaziPublikacija_1.aspx?rbr=703

Regions in Republic of North Macedonia

http://www.stat.gov.mk/PrikaziPublikacija_1.aspx?rbr=736

10.3 On-line database

MAKStat database-Environment

http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat_ZivotnaSredina/325_ZivSr_reg_08_11_KomOtp_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef

10.4 Micro-data access

The use of microdata by external users is possible only for research purposes and is done in accordance with the Law on State Statistics (Article 41, Article 42 and Article 43). Access to anonymised microdata is defined by an internal procedure of the State Statistical Office.

(<https://www.stat.mk/en/about-us/procedures/rules-for-access-to-anonymised-microdata-for-research-purposes/>).

10.5 Other

At the request of users, data are also prepared in a form according to their needs.

10.6 Documentation on methodology

Methodological explanation, national

http://www.stat.gov.mk/MetodoloskiObjasSoop_en.aspx?id=80&rbrObl=28

Guidance for the compilation and reporting of data on municipal waste

<https://ec.europa.eu/eurostat/documents/342366/351811/Guidance+on+municipal+waste+data+collectio>

10.7 Quality documentation

The quality report is published on the SSO web-site (http://www.stat.gov.mk/Meta_godini_v2.aspx).

The quality report is transmitted to Eurostat via ESS Metadata handler

(<https://webgate.ec.europa.eu/estat/spe/metaconv/home.htm#>). The last refers to the reference year 2023.

11 Quality management

11.1	Quality assurance
<p>The quality of the processes and products in the State Statistical Office is ensured by adhering to the European Statistics Code of Practice (https://www.stat.mk/en/about-us/quality/code-of-practice/) and the Quality Assurance Framework within the European Statistical System (ESS Quality Assurance Framework – https://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V2.0-final.pdf). The quality criteria are also determined in the Law on State Statistics in Article 4b and Article 4c (https://www.stat.mk/en/about-us/legal-acts/law-on-state-statistics/).</p>	
11.2	Quality assessment
<p>The State Statistical Office carries out statistical activities in accordance with the Statistical Business Process Model, which is based on the international model - Generic Statistical Business Process Model (GSBPM). The application of this model and international standards in statistical production ensures a high level of accuracy and comparability of data.</p>	
12	Relevance
12.1	User needs
<p>Data on municipal waste are used by national institutions, (Ministry of environment and physical planning, MANU, Regional center of environment), business associations, nongovernmental organizations, local government units, as well as European and international institutions. Data are used for preparations of strategies and plans for waste management.</p>	
12.2	User satisfaction
<p>Starting from 2009, the State Statistical Office conducts a User Satisfaction Survey every three years.</p>	
12.3	Completeness
<p>Time series from 2008-2021.</p>	
13	Accuracy and reliability
13.1	Overall accuracy
<p>The survey methodology and the data collection method ensure good coverage and accuracy of the data.</p>	
13.2	Sampling error
<p>Not applicable.</p>	
13.3	Non-sampling error
14	Timeliness and punctuality
14.1	Timeliness

T+180 .	
14.2	Punctuality
Data are published on the day announced in the Advance Release Calendar.	
15	Coherence and comparability
15.1	Comparability - geographical
There is geographic comparability of the data disseminated at the national and regional level. Due to the unity of principles, variables, definitions and classifications used there is a high degree of comparability with EU Member States with regard to the survey's results. Geographical comparability is also enhanced due to the relevant Manual of Eurostat and the relevant checks conducted by Eurostat.	
15.2	Comparability - over time
Data from 2008 onwards are calculated according to NKD Rev. 2 and the comparability of time series is ensured.	
15.3	Coherence - cross domain
Coherence between fields is not ensured.	
15.4	Coherence - internal
Internal coherence of data is ensured, data are compared with other surveys from the sector.	
16	Cost and burden
Average time for fill in the questionnaire is 15 minutes.	
17	Data revision
17.1	Data revision - policy
Data revision is made in accordance with the Statistical Data Revision Policy of the SSO: (https://www.stat.mk/en/about-us/policies-and-strategies/data-revision/).	
17.2	Data revision - practice
18	Statistical processing
18.1	Source data
Source of data: Statistical survey on Municipal Waste.	
Framework on which the data source is based: Statistical business register	
Method used for data collection: ESTAT - Full coverage	
18.2	Frequency of data collection
Annual	
18.3	Data collection
Data are collected with the questionnaire of municipal waste (ZS.O.2).	
Questionnaire is sent to enterprises by post (or e-mail). Attached to the questionnaire is a list of settlements for the respective municipality that records settlements covered by a collective waste collection system.	

18.4	Data validation
<p>Data validation is made according to the defined criteria for control. Data validation is performing before and after data entry. For deviations reporting units are contacted. Data check is performed on the final results before their publication.</p> <p>Upon receipt of the questionnaire (by mail or Excel by email) it is archived, recorded, controlled and entered with the application (in Blaze).</p> <p>The application performs the mandatory controls according to the defined validation rules. In case of errors the data providers are contacted.</p> <p>The coverage is controlled which should be 100%.</p> <p>Output data validation:</p> <p>Output data are analyzed and verified, compared to the previous year (years).</p> <p>The variable amount of waste generated is estimated on the basis of the amount of waste divided by population. Settlements not served by a waste collection system shall take into account the amount of waste in a settlement of similar size (ie number of population).</p>	
18.5	Data compilation
<p>After the data is downloaded electronically, the data is controlled according to predefined logical rules, imputation of missing values. The data is then imported into the appropriate input application with built-in online controls. At the end, standardized output tables are prepared with the main results being published.</p>	
18.6	Adjustment
<p>No time series adjustment of data is made.</p>	
19	Comment
A.1	Annexes