

# Municipal waste

1 Contact	
1.1 Organization	The Statistical Office of the Slovak Republic
1.2 Address	Lamačská cesta 3/C, 840 05 Bratislava
1.3 Contact name	Marianna Pobožná
1.4 Organization unit	Cross-sectional Statistics Department
1.5 Phone number	+421 2 50236 341; +421 2 50236 784
1.6 Email address	info@statistics.sk
2 Metadata update	
2.1 Date of last update	02.03.2023
3 Statistical presentation	
3.1 Data description	
<p>Data on municipal waste, which was created in municipalities of the Slovak Republic per year. Data on municipal waste are published by region, way of waste management and waste subgroups. Data on indicators such as the amount of municipal waste per capita, the proportion of recovered and disposed of waste, the recycling rate and the landfill rate are also published.</p> <p>Tab.1005 - Amount of municipal waste by way of disposal (in tonnes) for the SR and regions</p> <p>tab.3001-Quantity of municipal waste by waste subgroups (in tonnes) for the SR and regions</p> <p>tab.3002-relative indicators of municipal waste management (amount of municipal waste per capita kg / capita; percentage of recovered municipal waste in %; recycling rate and municipal waste landfill rate in %) for Slovakia and regions.</p> <p>tab. 3801-Quantity of municipal waste according to the waste code (in tonnes) for the SR, regions and districts</p> <p>tab.3802-Municipal waste and small construction waste from municipalities according to the waste treatment categories (in tonnes) for the SR, regions and districts</p>	
3.2 Classification system	
<p>The following classifications are used to compile waste data:</p> <p>Classification of Statistical Territorial Units (NUTS)</p> <p>Classification of waste types in accordance with Act No.365 / 2015, establishing the Waste Catalog</p> <p>Classification of waste management activities in accordance with Act No.366/2015 on registration and reporting obligations</p>	

### 3.3 Sector coverage

Municipal waste statistics are collected for municipalities and towns of the Slovak Republic.

### 3.4 Statistical concepts and definitions

The main terms and definitions used to generate municipal waste statistics are:

- \*Act no. 79/2015 On waste in the wording of later regulations
- \*Act No.460/2019 of implementing some provisions of the Waste Act, as amended
- \*Act No.371 / 2015, which lays down some provisions of the Waste Act
- \* Regulation No.365/2015 of establishing the Waste Catalog as amended
- \* Regulation No.366/2015 on registration obligation and reporting obligation, as amended
- \*WFD 2008/98 / EC Waste Framework Directive
- \*COMMISSION REGULATION (EU) NO Regulation (EC) No 849/2010 of the European Parliament and of the Council of 27 September 2010 No. 2150/2002 on waste statistics
- \*Handbook on Waste Statistics - Handbook on Collection of Waste and Production Data - 2013 Issue and Other Updates

Waste is a movable thing or substance which the holder discards, intends to discard or is obliged to discard in accordance with this Act or special regulations.

Municipal waste is:

(a) mixed municipal waste and separately collected household waste, including paper and paperboard, glass, metal, plastic, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste including mattresses and furniture.

(b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to household waste.

Municipal waste does not include waste from production, agriculture, forestry, fisheries, septic tanks and sewage networks and treatment plants, including sewage sludge, old vehicles or construction and demolition waste.

Municipal waste, including separately collected municipal waste components, is classified in Group 20 according to the Waste Catalog.

Waste producer shall mean any original producer whose activity generates waste or who carries out treatment, mixing or other operations with waste if it results in a change in the nature or composition of the waste.

Waste management is the collection, transport, recovery, including sorting and disposal of waste, including the supervision of these activities and the subsequent management of disposal sites, and includes the actions of the trader or intermediary. The municipality is responsible for the management

of municipal waste generated in the territory of the municipality and of small construction waste generated in the territory of the municipality, unless this Act provides otherwise.

Waste treatment is the activity of recovery or disposal of waste, including preparation of waste prior to recovery or disposal, unless otherwise provided in this Act.

Waste recovery is an activity whose main result is the beneficial use of waste to replace other materials in a production activity or in the wider economy, or to ensure that waste is readily available for this function; the list of waste recovery activities is given in Annex no. 1 of the Waste Act.

Recycling is any waste recovery operation by which waste is reprocessed into products, materials or substances intended for the original purpose or other purposes, if § 42 sect. 12, § 52 sect. 18 and 19 and § 60 sect. 15 does not provide otherwise; recycling also involves the reprocessing of organic material. Recycling does not include energy recovery and reprocessing into materials to be used as fuel or backfilling operations.

Waste disposal is an activity that is not recovery, even if the secondary result of the operation is the recovery of substances or energy; the list of waste disposal activities is given in Annex no. 2 of the Waste Act.

### **3.5 Statistical unit**

The statistical units used to compile municipal waste statistics are:  
\* Municipalities and towns of the Slovak Republic

### **3.6 Statistical population**

Statistics of municipal waste are compiled for the whole territory of the Slovak Republic, the region, district and for all types of municipal waste and ways of its management.

### **3.7 Reference area**

The statistics for municipal waste are available for the SR together and divided into 8 regions.

### **3.8 Time coverage**

The Statistical office database contains data on municipal waste since 2002.

### **3.9 Base period**

Not applicable.

## 4 Unit of measure

Data on municipal waste in the Statistical office database are available in thousand ton nes. The data for the basic indicators are also expressed as the share of municipal waste per kilogram / inhabitant, recycling rate and landfill rate in % and fees for household household waste in Euros /pers.

## 5 Reference period

The reference period is the calendar year.

## 6 Institutional mandate

### 6.1 Legal acts and other agreements

Data on municipal waste collected by the Statistical Office of the Slovak Republic ZP 6-01 Annual questionnaire on municipal waste from the municipality included in the Program of State Statistical survey, issued for a three-year period in the Collection of Laws of the Slovak Republic. The reporting obligation to submit statistical statements to entities is based on Act no. 540/2001 Codex on State Statistics as amended (§ 18 sect.3) and cannot be rejected (§ 18 sect.8). The Statistical Office of the Slovak Republic is responsible for protection obtained confidential data and guarantee their use exclusively for statistical purposes.

### 6.2 Data sharing

Statistical information from the municipal waste survey is a source for fulfilling the obligations of the Slovak Republic arising from the requirements of the European statistical system, the requirements of international institutions and to meet the needs of the national information system. The outputs are provided to international and national organizations on a regular annual basis.

Data on municipal waste are reported annually on a voluntary basis to Eurostat as one of the indicators of sustainable development (SDI). This is a joint reporting to Eurostat / OECD.

On a national level, we provide data on municipal waste to the MoE on the basis of the Agreement on Mutual Cooperation in the Field of Statistics concluded between the Statistical Office of the Slovak Republic and the Ministry of the Environment of the Slovak Republic.

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## 7 Confidentiality

### 7.1 Confidentiality - policy

Protection of statistical confidentiality (protection of confidential statistical data) is a system of interconnected measures in the area of legislative, methodological, organizational, technical, security and personnel, preventing leakage of confidential statistical data or premature disclosure of statistical information. Bodies executing state statistics are obliged to ensure the protection of confidential

statistical data from misuse in the manner set out in § 25a and § 29 and 30 of Act No. 540/2001 Codex about state statistics as amended. The principles of the application of confidential statistical data protection are available on the SO SR website at:

<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/confidential>

## 7.2 Confidentiality - data treatment

Amendment to Act No. 79 / 2015 on waste as amended from 1.11.2021 obligation to the village: § 81 Management of municipal waste and small construction waste point 7) The municipality is excluded obligations according to § 14 par. 1 letter j) mandatory:

"publish on its website data on municipal waste from the municipality in scope     - 109a.)     state statistical survey according to a special regulation for the period of the previous calendar year until May 31 of the relevant calendar year."

Data for waste can be provided in accordance with §30 of Act No. 540/2001 on state statistics as amended.

(5) Data shall not be considered as confidential statistical data:

- a) which is processed in public parts of public administration information systems,
- b) which is made available on the basis of the right to free access to information according to a special     - 9g.)     regulation,
- c) whose publication the statistical unit has unequivocally agreed to,
- d) which was created by summarizing a sufficient number of at least three confidential statistical data so that it is not possible to derive confidential statistical data about a specific statistical unit.

## 8 Release policy

### 8.1 Release calendar

Municipal waste statistics are not included in the first publication calendar.

### 8.2 Release calendar access

Not applicable.

### 8.3 User access

The dissemination policy is formulated in accordance with the Act on State Statistics, the Development Strategy of the Statistical Office of the Slovak Republic, the dissemination strategy of Eurostat and the Code of Practice for European Statistics.

The principles of publication and provision of statistical information are available on the website of the Statistical Office of the Slovak Republic at:

<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/principles>

## 9 Frequency of dissemination

Yearly.

## 10 Accessibility and clarity

### 10.1 News release

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### 10.2 Publications

Publication Waste in the SR, available on the website of the SO SR at:

[Link](#)

Statistical Yearbook of the Slovak Republic - contains selected indicators also for the area of municipal waste.

link

<https://slovak.statistics.sk/wps/portal/ext/products/publikacie/catalogue>

Basic information about publications, dates of publication and language version is provided in the Publishing Program. All publications are available on the web portal of the Statistical Office of the Slovak Republic. The editorial program is available on the website of the SO SR at:

link

<https://slovak.statistics.sk/wps/portal/ext/products/publikacie/catalogue>

### 10.3 On-line database

Statistical office databases: DATAcube, STATdat, access at:

<https://slovak.statistics.sk/wps/portal/ext/Databases>

<http://slovak.statistics.sk/>

[http://datacube.statistics.sk/#!/view/sk/VBD\\_SK\\_WIN/zp1005rs/v\\_zp1005rs\\_00\\_00\\_00\\_sk](http://datacube.statistics.sk/#!/view/sk/VBD_SK_WIN/zp1005rs/v_zp1005rs_00_00_00_sk)

[http://datacube.statistics.sk/#!/view/sk/VBD\\_SK\\_WIN/zp3001rr/v\\_zp3001rr\\_00\\_00\\_00\\_sk](http://datacube.statistics.sk/#!/view/sk/VBD_SK_WIN/zp3001rr/v_zp3001rr_00_00_00_sk)

[http://datacube.statistics.sk/#!/view/sk/VBD\\_SK\\_WIN/zp3002rr/v\\_zp3002rr\\_00\\_00\\_00\\_sk](http://datacube.statistics.sk/#!/view/sk/VBD_SK_WIN/zp3002rr/v_zp3002rr_00_00_00_sk)

[http://datacube.statistics.sk/#!/view/sk/VBD\\_SK\\_WIN2/zp3801rr/v\\_zp3801rr\\_00\\_00\\_00\\_sk](http://datacube.statistics.sk/#!/view/sk/VBD_SK_WIN2/zp3801rr/v_zp3801rr_00_00_00_sk)

[http://datacube.statistics.sk/#!/view/sk/VBD\\_SK\\_WIN2/zp3802rr/v\\_zp3802rr\\_00\\_00\\_00\\_sk](http://datacube.statistics.sk/#!/view/sk/VBD_SK_WIN2/zp3802rr/v_zp3802rr_00_00_00_sk)

Complete data on municipal waste are published on the SÚ SR portal until the end of October after the reference period in various classifications and structures in the DATAcube database.

### 10.4 Micro-data access

Micro data is not published. Access to anonymised microdata may only be made for scientific purposes by research entities:

- universities and other higher education organizations

- scientific research organizations or institutions.

The conditions for granting access to confidential statistical data for scientific purposes can be found on the website of the Statistical Office of the Slovak Republic at:  
<https://slovak.statistics.sk/wps/portal/ext/services/infoservis/access>

## 10.5 Other

Specific outputs are provided to international (OECD, Eurostat), national organizations (Ministry of Environment, Slovak Environmental Agency, Slovak Hydrometeorological Institute).

## 10.6 Documentation on methodology

The methodology for municipal waste statistics is based on the international manual for waste statistics 2013 collection and reporting on municipal waste data. The manual in English can be found on the Eurostat website at:

Guidance on municipal waste data collection- [link](#)

Methodological information on municipal waste statistics can be found in the municipal waste survey form ŽP 6-01, in publications and tables in the public database of the SO SR.

## 10.7 Quality documentation

Internal documentation of the SO SR to ensure the quality of statistical outputs:

- Guideline for the application of mathematical-statistical methods for statistical survey  
MET-3/2012

- Methodological guideline - Quality indicators of statistical outputs and statistical processes  
MET-2/2012

A report on the quality of municipal waste data for Eurostat is prepared on an annual basis (Word document in the structure as requested by Eurostat)

# 11 Quality management

## 11.1 Quality assurance

The SO SR has a quality management system in place. The Quality Manual contains a description of the quality management system and the fulfillment of the requirements of ISO 9001. Application of the manual in practice ensures that all activities that affect the quality of the products produced are planned, managed, reviewed, evaluated and meet the requirements accepted in the order. The Quality Guide is available at:

[https://slovak.statistics.sk/wps/wcm/connect/9ca43aa4-bfaf-4101-9dae-5263aa834df7/Prirucka\\_kvality.pdf?MOD=AJPERES&CVID=mu8R9IM&CVID=mu8R9IM](https://slovak.statistics.sk/wps/wcm/connect/9ca43aa4-bfaf-4101-9dae-5263aa834df7/Prirucka_kvality.pdf?MOD=AJPERES&CVID=mu8R9IM&CVID=mu8R9IM)

The Code of Practice for European Statistics is the basis of the entire quality management system:  
<https://slovak.statistics.sk/wps/portal/ext/aboutus/key.documents/code.of.practise>

## 11.2 Quality assessment

The quality of the statistics for municipal waste is very good, as it is an exhaustive survey on which in-depth checks are carried out.

The data collection process is ensured within the integrated statistical information system, in which data collection controls are built to ensure the quality of the output information.

## 12 Relevance

### 12.1 User needs

The main users of data on municipal waste are: Eurostat, OECD, central state administration bodies of the SR such as Ministry of Environment, Slovak Environmental Agency, Institute of Environmental Policy, students, etc.

Monitoring the recycling rate of municipal waste is one of the indicators of Agenda 2030.

### 12.2 User satisfaction

Since 2009, the Statistical Office of the Slovak Republic has been conducting surveys of customer satisfaction with its products and services at two-year intervals. Surveys aim to gather information about users' interest and opinion on the provision and quality of statistical products and services. The obtained information is a valuable source for directing further activities of the SO SR. The results of the satisfaction survey in 2017 are available on the website of the Statistical Office of the Slovak Republic at:

<https://slovak.statistics.sk/wps/portal/ext/aboutus/marketing/survey.of.satisfaction>

In this survey, the field of municipal waste statistics was linked to other environmental statistics as well as agriculture statistics, and therefore does not accurately reflect satisfaction with this particular statistic. However, communication with customers for specific requirements shows that users of municipal waste statistics are mostly satisfied.

### 12.3 Completeness

The data are complete, covering the whole territory of the SR and data for all types of municipal waste and methods of disposal are available.

Complete time series of data are available in the public database of the SO SR and in the Eurostat database.

## 13 Accuracy and reliability

### 13.1 Overall accuracy

The overall accuracy of municipal waste statistics is very good. The SO SR makes a great effort to prevent the occurrence of errors in the data and performs consistent data verification to detect errors.

### 13.2 Sampling error

Not applicable . The survey for municipal waste is exhaustive, not selective.



### 13.3 Non-sampling error

To prevent non-sampling errors, i. errors in the process of collection and processing The Statistical Office of the Slovak Republic has integrated in the integrated statistical information system (ISIS) logical and data checks at the level of micro-data as well as at the level of aggregated data, which are performed during data collection and processing.

## 14 Timeliness and punctuality

### 14.1 Timeliness

The electronic questionnaire itself provides many arithmetic and logical controls between variables that we distinguish between serious and informative. In the event of serious errors in the form, this is not accepted and, in consultation with the reporting agent, is corrected to be correct and entered into processing. With these tools we try to minimize errors already in the collection itself and then during data processing.

In the municipal waste survey for non-responders, data are not imputed or calculated. We get the completed questionnaire from municipalities in case of no response.

### 14.2 Punctuality

Publication dates are respected.

## 15 Coherence and comparability

### 15.1 Comparability - geographical

Municipal waste statistics are compiled for the entire territory of the Slovak Republic. Geographical areas (regions) take into account the location of the producer and the recipient of the waste.

### 15.2 Comparability - over time

Basic data is comparable over the entire time series. By implementing the revised international standardization validation methodology, several new indicators were introduced in 2016 and some methodological clarifications were made, but did not cause significant changes in the time series.

### 15.3 Coherence - cross domain

### 15.4 Coherence - internal

## 16 Cost and burden

The ŠÚ SR regularly monitors the workload of intelligence units. As part of the optimization of statistical surveys, it takes measures aimed at reducing their burden.

The cost and workload at the level of European statistical products and its monitoring is the responsibility of the Directorate Group for Resources within Eurostat.

## **17 Data revision**

### **17.1 Data revision - policy**

The revision policy governs the basic rules and general procedures by which the pre-drafted data is later revised as well as applied in revisions for other reasons. The revision policy and calendar is available on the Statistical office of the SR website at:  
[https://slovak.statistics.sk/wps/portal/ext/products/revisions\\_](https://slovak.statistics.sk/wps/portal/ext/products/revisions_)

### **17.2 Data revision - practice**

The data are considered definitive for the first disclosure and are not usually revised. In the event of any revision (even in previous years), a note is given in the databases and in the relevant Statistical office of the SR publications that the data have been revised. Changes in methodology are reported after their introduction in the form of methodological notes or notes to published data.

## **18 Statistical processing**

### **18.1 Source data**

Municipal waste statistics are compiled on the basis of an exhaustive survey of ZP 6-01 - Annual Survey on Municipal Waste from the Municipality. Data on municipal waste from other sources are collected by the Ministry of Environment of the SR.

Data on municipal waste from municipalities and environmental protection costs are the result of the Statistical office of the SR survey (annual statistical survey on municipal waste from ŽP 6-01 municipalities - exhaustive, all municipalities of the SR are reporting units (approx. 2900) The SR is drawn from the administrative sources of the Ministry of Environment of the Slovak Republic

### **18.2 Frequency of data collection**

Yearly.

### **18.3 Data collection**

Electronic data collection enabling reporting units to fill in online statistical forms online in the SO SR's integrated statistical information system.

Since 1 January 2016, reporting units (legal entities, natural persons - entrepreneurs) have been obliged to submit statistical reports electronically in accordance with the amendment to Act no. 540/2001 Coll. on state statistics as amended by Act no. , Which contains new rules for the submission of statistical reports.

Statistical survey on municipal waste: annual, exhaustive statistical survey, reporting units are all municipalities of the SR.

From r. 2016 data collection is in progress. The data are recorded by reporting units - municipalities in the statistical information system by completing and submitting the electronic form by 28 February xxxx on the SO SR website [www.statistics.sk](http://www.statistics.sk).

A statistical unit that is free of internet connection or signal can also meet the reporting obligation by delivering a completed form in paper form of the SO SR - workplace in Nitra, Rázusova 9, 949 55 Nitra 1.

A sample form of the ZP 6-01 statistical form intended for download and subsequent printing and completion in paper form is published on the SO SR website in the menu Metadata / Patterns of statistical forms.

#### **18.4 Data validation**

Data validation is embedded in the integrated statistical information system of the SO SR. The following checks are distinguished when collecting data:

- 1- formal checks carried out automatically in the data collection process
- 2- informal controls to check the complexity and relationships between variables.

From the point of view of the severity of errors:

I - Infomatic Errors - Provide additional information that is needed for the process of checking and correcting data. They provide information on possible overruns of specified limits, partial non-response, etc.

Z - material errors - indicating specific errors that need to be corrected or justified by the reporting agent. These errors are discussed by the SO SR staff with the reporting unit and corrected.

The IISIS system also defines controls and algorithms for creating outputs that ensure their desired quality.

Data are recorded by reporting agents - municipalities in the statistical information system. The system automatically checks the recorded data by using programmed algorithms and reporting significant and informative errors. Completed statistical forms are checked at KP in Nitra. If a KP error is detected in Nitra, it contacts the municipality concerned and asks for data correction or explanation. Subsequently, additional checks are carried out on the collected data at the headquarters of the SO SR, e.g. comparison with data from previous reference years at the aggregate level for regions, for waste types, for loading activities and so on.

#### **18.5 Data compilation**

The municipal waste survey is exhaustive. The collected data are summarized by individual classifications.

Collection and processing takes place electronically at KP in Nitra, subsequent inspections and approval of the outputs by the investigator responsible at the headquarters of the Slovak Statistical Office.

Data and information required in the municipal waste statistical survey (ZP 6-01):

Waste Codes (Chapter 20) - Detailed 6-digit codes listed in the Slovak Waste Catalog (in accordance with European Standard)

Waste List)

Waste identification - name of waste

Recovery and Disposal Codes - Waste Recovery (R), Waste Disposal (D) and Temporary Waste Storage Instead of

origin codes (Z) listed in annex to statistical form ZP 6-01

Y codes - codes for hazardous waste listed in the annex to statistical form ZP 6-01

Amount of municipal waste in tons

Description of the municipal waste survey:

1. Description of used reporting unit: All municipalities of the SR

2. Description of the reporting system: Annual survey on municipalities

3. Waste types: All waste codes according to Chapter 20

4. a) Total no. collectors / municipalities (population): approx. 2900, b) number of selected collectors / municipalities selected for the survey: all

(c) the number of responses used to calculate totals: all municipalities

5. Method used to distinguish between household sources and commercial activities: only data on the whole available: municipal waste

6. Population serving the collection system for mixed domestic and similar waste, in%: about 98% of the territory is covered

## 18.6 Adjustment

Data are not modified. The municipal waste statistics data published are aggregated data reported by municipalities.

## 19 Comment

In accordance with recommendation of the Ministry of the Environment of the SR, from year 2016 the R12 recovery code is not included in the "other recovery" column the whole, but part of the data is allocated into the columns for the final waste treatment categories on the basis of type of waste (material recycling or composting).

From ref. year 2020, following the change in the methodology proposed by the Ministry of Environment of the SR, data on municipal waste from other sources (collected by the Ministry of Environment of the SR) are added to data on municipal waste from municipalities (collected by the Statistical Office of the SR from towns and municipalities).

From ref. year 2020, the following types of waste are not included in the outputs for municipal waste: 20 03 08 - Small scale construction and demolition waste, 20 03 06 - Waste from sewage cleaning and 20 02 02 - Soil and stones