



METHODOLOGICAL EXPLANATION

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WASTE COLLECTION AND TREATMENT

This methodological explanation relates to the data releases:

- Waste, Slovenija, quarterly (First Release)



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1 PURPOSE

The purpose of the Waste Collection and Treatment (ODP/ČL) survey is to obtain, process and present data on the type (municipal and other) and the amount of waste collected and treated by the method of their treatment (recovery/disposal).

2 LEGAL FRAMEWORK

- [Annual Programme of Statistical Surveys \(LPSR\) \(only in Slovene\)](#)
- [National Statistics Act \(OJ RS, No. 45/95 and 9/01\)](#)
- [Regulation \(EC\) No 2150/2002 of the European Parliament and of the Council of 25 November 2002 on waste statistics](#), CELEX No. 02002R2150-20050614
- Decree on Waste (Official Gazette of RS, Nos. [37/15](#), [69/15](#), [129/20](#), [44/22](#)- ZVO-2, [77/22](#)).

3 UNIT DESCRIBED BY THE PUBLISHED DATA

The unit described by the published data is waste according to:

- The waste type (hazardous, non-hazardous), classified according to the European List of Waste - LoW and the European Waste classification - EWC-Stat)
- Type of waste treatment (export, waste storage, other treatment)

4 SELECTION OF OBSERVATION UNIT

The units observed within the quarterly Waste – Collection and Treatment (ODP/ČL) survey are all business entities from different sections of activities, which are entered in the register of waste collectors at the Slovenian Environment Agency and have collected/received waste from other business entities.

The survey also includes all business entities to which the municipality has granted the right to implement the mandatory public services of municipal waste collection.

The units observed within survey are also business entities that, within the scope of their activity, collect waste from other business entities for the purpose of further recovery or disposal and are entered in the records of waste processors at the Slovenian Environment Agency (ARSO) for recovering or disposing of waste from other waste holders or have an environmental permit for the recovery and/or disposal of waste, including landfill operators (municipal

waste landfill sites, industrial waste landfill sites and hazardous waste landfill sites) and also contractors for mechanical biological treatment of mixed municipal waste (MBO facility managers).

This survey includes also business entities that carry out recovery (with the exception of internal recycling, which is exempt from reporting) or disposal of their own waste resulting from their activity.

The coverage is full. The survey includes about 400 units.

5 SOURCES AND METHODS OF DATA COLLECTION

Data are collected quarterly.

The data source is the waste record sheets obtained from an administrative source - IS-Odpadki application managed by the Slovenian Environment Agency (ARSO).

The IS-Odpadki application is intended for electronic support in the recording of shipments of waste with record sheets and is used also for the annual reporting on waste and its management.

6 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 Decision 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.

Separately collected fractions are waste from a subgroup of "Separately collected fractions" and separately collected packaging waste that is municipal waste from a subgroup of "Packaging", including separately collected packaging waste from municipal waste from the List of Waste (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).

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 Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)). A collector can start collecting waste after obtaining the decision of entry into the record of waste collectors from the Slovenian Ministry of the Environment and Spatial Planning (MOP) – ARSO.

Waste processor is a legal entity or an individual entrepreneur that performs the activity of waste recovery in accordance with the Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)) and has the environmental permit for waste recovery from the Ministry of the Environment and Spatial Planning - Slovenian Environment Agency.

Waste disposer is legal entity or an individual entrepreneur that performs the activity of waste disposal in accordance with the Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)) and has the environmental permit for waste disposal from the Slovenian Ministry of the Environment and Spatial Planning – Slovenian Environment Agency.

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.

Separate waste collection is a collection, where the waste streams are separated according to the type and nature of the waste to facilitate a specific type of waste treatment.

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 Slovenian Ministry of the Environment and Spatial Planning – Slovenian Environment Agency.

Mechanical-biological treatment of waste is the treatment of waste prior to its disposal at a landfill with a combination of mechanical and biological treatment operations. The purpose of mechanical waste management processes is to extract specific substances from waste that are unsuitable for further biological treatment and to improve the biodegradability of the remaining waste by

increasing its suitability for biodegradation and homogeneity. The purpose of biological waste management processes is to decompose organic matter in waste by aerobic and anaerobic methods with subsequent aerobic treatment. Mechanical-biological treatment of waste results in a significant reduction of biodegradable substances in waste, the volume of waste, the water content of it, the ability to generate landfill gases, and significantly improves the properties of the leachate and the stability of the deposited waste.

The **preparation for recovery or disposal** includes processes R12 and R13 from Annex 2 and processes D8, D9, D13, D14, D15 from Annex 3 of the Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)) and it means preparing the waste for recovery or disposal.

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 Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)), 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.

Landfilling is any recovery operation in which suitable non-hazardous waste is used for the purpose of obtaining land in excavation areas or for engineering purposes in landscaping.

Other waste recovery includes other final waste recovery operations such as landfilling and the use of waste to cover landfills.

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 Decree on Waste (OJ RS, No. [37/15](#), [69/15](#), [129/20](#), [44/22](#) - ZVO-2, [77/22](#)), 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.

Other waste disposal covers other final waste disposal operations such as permanent storage of 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, but excluding:

- Facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere

- Storage of waste prior to recovery or treatment for a period less than three years as a general rule
- Storage of waste prior to disposal for a period less than one year

Submission of waste is waste submission for further waste management with the record sheet.

Leaving waste is waste submission for further waste management without the record sheet, when this is permitted under a special regulation governing the management of certain types of waste.

7 EXPLANATIONS

7.1 CLASSIFICATIONS

In the context of the data publication the following classifications are used:

- List of Waste (LoW). It is 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: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014D0955>
- Waste recovery operations (Operations R). Set out in Annex 2 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0098&qid=1475136465792>
- Waste disposal operations (Operations D). Set out in Annex 1 of Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0098&qid=1475136465792>
- The European Statistical Classification of Waste (EWC-Stat). Published within Annex 1 of Commission Regulation (EU) No 849/2010 of 27 September 2010 amending Regulation (EC) No 2150/2002 of the European Parliament and of the Council on waste statistics: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0849>
- Standard Classification of Activities (NACE Rev. 2). It is published on the SURS website (Methods and Classification - Classifications and code lists - Economic classification): <https://www.stat.si/StatWeb/en/Methods/Classifications>
- Nomenclature of Territorial Units for Statistics (NUTS). It is published on the SURS website (Methods and Classification - Classifications and code lists - Territorial code list): <https://www.stat.si/StatWeb/en/Methods/Classifications>

7.2 DATA PROCESSING

DATA EDITING

Data were edited by using appropriate individual corrections.

Due to incomplete data on the amount of municipal waste collected through public waste collection, some aggregate values are estimated based on data from the previous year. The release only presents data on the collected amount of waste and the planned waste treatment procedures. Imports, exports and temporary storage of waste are not taken into account within this release.

For more, see the general methodological explanations [Statistical data editing](#).

WEIGHTING

Weighting was not performed.

SEASONAL ADJUSTMENT

Seasonal adjustment was not performed.

7.3 INDICES

Indices are not published.

7.4 PRECISION

The survey is not conducted on the basis of a random sample.

7.5 OTHER EXPLANATIONS

8 PUBLISHING

- SiStat Database: [Environment](#) - Waste; the data are published in the form of an absolute value.
- First Release (Environment, Waste): »Waste, Slovenia, quarterly«.

9 REVISION OF THE DATA

9.1 PUBLISHING OF PRELIMINARY AND FINAL DATA

Data for the year 2023 are provisional and can be corrected and supplemented with new data. The data for the observed quarter become final with the publication of the next quarter's data.

Publishing of provisional and final data is planned. Due to the needs of users for timely information, provisional data are published that meet the criteria of the quality of official statistical data but do not meet the quality that can be met with complete coverage. Data are revised when recent, more complete and better data can significantly contribute to the quality of data-based decision-making.

9.2 FACTORS INFLUENCING COMPARABILITY OVER TIME

There are no breaks in time series, so all points in time are comparable.

10 OTHER METHODOLOGICAL MATERIALS

Methodological materials on SURS's website are available at <https://www.stat.si/statweb/en/Methods/QuestionnairesMethodologicalExplanationsQualityReports>.

- Questionnaire:
 - SURS does not collect data for this survey by using a questionnaire.
- Quality report for the survey:
 - Waste Collection and Treatment (ODP/ČL)

Theme: Environment, SubTheme: Waste

- Methodological explanations:
 - Waste Collection

Theme: Environment, Subtheme: Waste

- Methodological explanations:
 - Waste Recovery / Disposal

Theme: Environment, Subtheme: Waste

- Quality report for the survey:
 - Waste Collection (ODP-zbiranje)

Theme: Environment, Subtheme: Waste

- Quality report for the survey:
 - Waste Recovery / Disposal (ODP-obdelava)

Theme: Environment, Subtheme: Waste