

<b>Indicator (definition)</b>	<b>Municipal waste – generation and treatment:</b> It includes 3 indicators: a) municipal waste generated, b) municipal waste landfilled and c) municipal waste incinerated. The last two indicators are under the general title municipal waste treatment, by type of treatment method. All three of them are measured in kg per capita.
<b>Eurostat Unit</b>	Environment statistics and accounts
<b>Other Commission DGs</b>	
<b>European Statistical System Working Group (WG)</b>	WG Statistics of the Environment, Sub-Group Waste
<b>Date</b>	June 2009

**1. Overall assessment of accuracy and comparability** (Description of quality grades under the following link: [http://circa.europa.eu/Public/irc/dsis/structind/library?l=/general\\_information/quality\\_profiles/annex\\_enpdf/EN\\_1.0\\_&a=d](http://circa.europa.eu/Public/irc/dsis/structind/library?l=/general_information/quality_profiles/annex_enpdf/EN_1.0_&a=d))

A     
  B     
  C     
  Indicator to be Developed

Data is collected from reliable sources applying high standards with regard to the methodology. The concept of municipal waste reflects different waste management practices in municipalities (especially regarding the degree that waste from small businesses and trade is included). This makes the interpretation of differences between countries more difficult, as differences are not only the result of different consumption patterns, but also of waste differences in management practices. The comparability over time is high; restrictions due to changes in methodology are well documented.

### 2. Objective and relevance of the indicator:

The indicator provides quantitative descriptions of the generation and management of municipal waste in each Member State.

“Municipal waste generation” denotes the waste from consumption of households, though similar wastes from sources such as commerce, offices and public institutions are also included. Materials that form municipal waste include paper, cardboard, plastics, glass, metals, food, garden waste and textiles.

The renewed EU Sustainable Development Strategy sets the target of ‘avoiding the generation of waste and enhancing efficient use of natural resources by applying the concept of life-cycle thinking and promoting reuse and recycling’. Relevant progress can be tracked by the indicator.

The priority of the SDS in waste management is recycling (and composting) which can be tracked indirectly from the three indicators presented (municipal waste generated minus waste landfilled and incinerated); supplementary but incomplete direct data is available on the recycling and composting of municipal waste. Incineration and landfill may cause environmental and health problems. Landfilling of untreated waste is the least desirable option as it pollutes the air, groundwater, soil and leads to greenhouse gas emissions. The indicator is presenting trends in municipal waste and is useful for an appraisal of the efficiency of resources waste management. Specific targets for bio-degradable municipal waste going to landfills exist. (a reduction to 35% of the 1995 level by 2016). The current indicator does not distinguish between bio- and non bio-degradable materials. The waste frame directive gives priority to reuse and recovery of waste and the efficient use of resources.

### Restriction of the indicator’s relevance and other characteristics which may lead to restrictions in using it in monitoring and reporting

Municipal waste is only a part of total waste generated.

### 3. Data availability: details

(**t<sub>1</sub>**: earliest reference year available; **t<sub>2</sub>**: latest reference year available in May 2009)

	Member States	Candidate and Acceding Countries	US and Japan	EEA-EFTA <sup>1</sup>
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<sup>1</sup> Municipal waste data on Liechtenstein are included in the Swiss data.

t <sub>1</sub>	1995	1995: TR	-	1995: IS, NO, CH
t <sub>2</sub>	2007	2007: TR	-	2007: IS, NO, CH

#### 4. Overall accuracy

High



Data on the amounts of municipal waste generated and treated are transmitted to Eurostat through a dedicated questionnaire.

Data up to reference year 2003 were collected via the OECD/Eurostat Joint Questionnaire. With the full implementation of the Waste Statistics Regulation (Reg. No. 2150/2002, first reference year 2004) only the questionnaire on municipal waste is being continued to further maintain the long time series for the Structural Indicator and the Sustainable Development Indicator, following the definitions of the Joint Questionnaire. (The amounts of municipal waste can not directly be derived from the data reported under the Waste Statistics Regulation).

These data were compared with the data collected under the Regulation for validation purposes. The manual for the implementation of the Regulation contributed to data quality and to production of harmonized and efficient waste statistics.

National Statistical Institutes collect data from various sources: surveys; administrative sources (e.g. municipalities/ other local authorities, waste collectors at municipal/local level, waste treatment facilities); reporting obligations under other Community Legislation, statistical estimation procedures on the basis of samples or waste related estimators. Member States select the type of survey according to national waste management practices, either at the source of waste generation, at the place waste treatment or at both sides.

For areas not covered by a municipal waste collection scheme the amount of waste generated is estimated. The annual amount of waste is divided by the population on 1 January; the population figures are taken from the Eurostat dissemination database.

EU-aggregates are calculated as the sum of the waste amounts for EU Member States divided by their total population. They are influenced by all breaks in time-series that appear at Member State level in proportion to their population size.

Restricted



(sources, errors, methodology, etc.)

#### 5. Comparability across countries

High



The comparability across countries is considered relatively high as all countries apply the same definition and have high quality data sources. In 7 Member States the coverage of the municipal waste collection system is not complete, ranging from 51% coverage in Romania to 93% coverage in Bulgaria. These countries have added estimates for the municipal waste generated in the areas not covered.

The concept of municipal waste reflects different waste management practices in municipalities, especially regarding to the degree that waste from small businesses, offices and public institutions is included. This makes the interpretation of differences between countries more difficult.

Restricted



#### 6. Comparability over time

High



The comparability of time is only restricted by some documented changes in methods.

Restricted



#### 7. Development perspective for improving the quality of this indicator (including as far as possible an indication of the burden on Member States and respondents.)

The results from the data collection for the second reference year 2006 under Regulation No. 2150/2002 and the overall improvement of data availability and comparability on waste generation and treatment will further improve the quality of the municipal waste data collected with the SI

questionnaire.

### **8. Contribution to the coherence of the set/potential to qualify for an integrated policy analysis**

The three indicators can be used together to provide the amount of waste which is expected to be recycled, however, the supplementary breakdown of the municipal waste treatment side to recycling, composting (incl. anaerobic fermentation), incineration with- and without energy recovery will improve coherence and complete the picture of municipal waste management.

Furthermore, the indicators on municipal waste can be combined with indicators of generation of total waste, household waste, hazardous waste and other waste streams resulting from economic activities for a more comprehensive assessment of waste policy.

### **Relevant European legislation**

Council Regulation No 322/97 of 17 February 1997 and Council Regulation No 1588/90 of 11 June 1990 on the transmission of the data subject to statistical confidentiality to the Statistical Office of the European Communities

#### ***Main legislation:***

- Regulation (EC) No 2150/2002 of the European Parliament and of the Council of November 2002 on waste statistics as amended.

#### ***Reporting on implementation of waste legislation:***

A series of implementation reports on Community waste legislation and data according to reporting annexes to these legal acts are to be sent to the European Commission. Eurostat is currently implementing the Environmental Data Centre on Waste, which will be a single entry point for all reporting obligations on waste.

Data will be transmitted to Eurostat from 2008 onwards, on:

- Data to be reported under the revised Waste Framework Directive;
- Hazardous Waste;
- Landfill of waste;
- Packaging waste;
- Electrical and electronic equipment waste (WEEE);
- End of life vehicles (ELV);
- Sewage sludge;
- Waste oil

(non-exhaustive list)

Up to date information on waste reporting is available on the website of the Environmental Data Centre on Waste: [Environmental Data Centre on Waste](#)

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