

I – Waste

Proposed revision of metadata



Waste indicators in the Online Guidelines

See <https://www.unece.org/env/indicators.html>

STATISTICS



H4. Age of road motor vehicle fleet (updated October 2014)	PDF	XLS	PDF
I. Waste			
I1. Waste generation (updated October 2014)	PDF	XLS	PDF
I2. Management of hazardous waste (updated October 2014)	PDF	XLS	PDF
I3. Waste reuse and recycling	PDF	XLS	PDF
I4. Final waste disposal	PDF	XLS	PDF
J. Environmental financing			
J1. Environment protection expenditure		Placeholder	

I-1: Waste generation

See <https://www.unece.org/env/indicators.html>

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Time series data on the indicators for 1990-2013, Table I-1. Waste generation:

Please fill in marked-in-blue cells manually; marked-in-grey cells will fill in automatically with formulas applied.

		Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006
Waste generation by source											
1	Agriculture, forestry and fishing (ISIC 01-03)	1000 t/ year									
2	Mining and quarrying (ISIC 05-09)	1000 t/ year									
3	Manufacturing (ISIC 10 - 33)	1000 t/ year									
4	Electricity, gas, steam and air conditioning supply (ISIC 35)	1000 t/ year									
5	Construction (ISIC 41 - 43)	1000 t/ year									
6	Other economic activities excluding ISIC 38	1000 t/ year									
7	Households	1000 t/ year									
8	Total waste generation (Rows 1+2+3+4+5+6+7)	1000 t/ year	0	0	0	0	0	0	0	0	0
Population and GDP											
9	Population of the country	Million people									
10	GDP at PPP at constant prices (2011)	Billion international dollars									
11	Waste from economic activities per unit of GDP (Rows 1+2+3+4+5+6 / row 10)	kg / 1000 international dollars	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
12	Households waste per capita (Row 7 / row 9)	kg / capita	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Same as UNSD/UNEP questionnaire, no changes needed

In new metadata database described as indicators:

- I-1.3 Waste generation intensity per unit of GDP
- I-1.1 Households waste generation intensity per capita

I-2: Management of hazardous waste

See <https://www.unece.org/env/indicators.html>

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Time series data on the indicators for 1990-2013, Table I-2: Management of hazardous waste

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
1	Stock of hazardous waste at the beginning of the year	1000 t									
2	Hazardous waste generated during the year	1000 t									
3	Hazardous waste imported during the year	1000 t									
4	Hazardous waste exported during the year	1000 t									
5	Import - export (Row 2 - row 3)	1000 t	0	0	0	0	0	0	0	0	0
6	Total hazardous waste treated or disposed during the year	1000 t									
7											
8	Recycling	1000 t									
9	Incineration	1000 t									
10	Landfilling	1000 t									
11	Other disposal (specify in footnote, please)	1000 t									
12											
13	Stock of hazardous waste at the end of the year (Rows 1 + 2 + 3 -4 -6)	1000 t	n/a								

of which

Proposed change: add "Incineration, of which with energy recovery" and "Incineration, of which without energy recovery"

Then the recommended waste statistics are fully in line with the UNSD/UNEP questionnaire

/a

I-3: Waste reuse and recycling

See <https://www.unece.org/env/indicators.html>

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Time series data on the indicators for 1990-2012, Table I-3. Waste reuse and recycling:

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	20
Municipal waste											
1	Municipal waste managed Value from table I-4a, row 2	1000 t/ year									
2	From which reuse and recycling Value from Table I-4a, row 3	1000 t/ year									
3	From which reuse and recycling 100 x (row 2 / row 1)	%									
Non-hazardous industrial waste											
5	Total non-hazardous waste Value from Table I-4b, row 1	1000 t/ year									
6	From which reuse and recycling Value from Table I-4b, row 2	1000 t/ year									
7	From which reuse and recycling 100 x (row 6 / row 5)	%									
Hazardous waste											
9	Hazardous waste managed Value from Table I-2, row 4	1000 t/ year									
10	From which reused and recycling Value from Table I-2, row 5	1000 t/ year									
11	From which reuse and recycling 100 x (row 10 / row 9)	%									
Total waste											
13	Total waste managed Row 1 + 5 + 9	1000 t/ year									
14	From which reuse and recycling Row 2 + 6 + 10	1000 t/ year									
15	From which reuse and recycling 100 x (row 14 / row 13)	%									

Reuse and recycling are different things. Usually statistics and indicators measure recycling.

Categories are neither mutually exclusive nor exhaustive, therefore they cannot be summed up to “total waste”.

I-4a: Final waste disposal: Management of municipal waste

See <https://www.unece.org/env/indicators.html>



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Time series data on the indicators for 1990-2012, Table I-4a.

UNSD/UNEP Questionnaire, table R3 (2018)

Proposal: Complete alignment with UNSD/UNEP Questionnaire

	Unit	1990	1995	2000	2001	Line	Category	Unit	1990	1995	19
1	Municipal waste collected	1000 t/year				1	Total amount of municipal waste generated	1000 t			
2	Municipal waste managed	1000 t/year					Municipal waste collected from households	1000 t			
3	From which reuse and recycling	1000 t/year					Municipal waste collected from other origins	1000 t			
4	From which composting	1000 t/year				4	Total amount of municipal waste collected (=2+3)	1000 t			
5	From which incineration without energy recovery	1000 t/year				5	Municipal waste imported for treatment/disposal	1000 t			
6	From which incineration with energy recovery	1000 t/year				6	Municipal waste exported for treatment/disposal	1000 t			
7	From which landfilling on a controlled site	1000 t/year				7	Municipal waste managed in the country (=4+5-6)	1000 t			
8	From which landfilling on a non-controlled site	1000 t/year				8	Amounts going to: Recycling	1000 t			
9	From which other disposal (specify in the footnote, please)	1000 t/year				9	Composting	1000 t			
10	From which (from row 2) hazardous waste	1000 t/year				10	Incineration	1000 t			
						11	of which: with energy recovery	1000 t			
						12	Landfilling	1000 t			
						13	of which: controlled landfilling	1000 t			
						14	Other, please specify in the footnote	1000 t			

I-4b: Final waste disposal: Management of non-hazardous industrial waste

See <https://www.unece.org/env/indicators.html>

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Time series data on the indicators for 1990-2012, Table I-4b. Final waste disposal: Management of non-hazardous industrial waste: *(country name)*

	Unit	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1 Total amount generated	1000 t/year															
2 From which recycling	1000 t/year															
3 From which composting	1000 t/year															
4 From which incineration without energy recovery	1000 t/year															
5 From which incineration with energy recovery	1000 t/year															
6 From which landfilling on a controlled site	1000 t/year															
7 From which landfilling on a non-controlled site	1000 t/year															
8 From which other disposal (specify in the footnote, please)	1000 t/year															

No changes proposed

Waste: Proposal for additional indicators and statistics



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SDG Indicators:

- **11.6.1 - Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities:** tier II
- **12.4.2 – Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment:** currently tier III; to be added once there is an agreed methodology
- **12.5.1 – National recycling rate, tons of materials recycled:** currently tier III; to be added once there is an agreed methodology

Other policy relevant information (in alignment with UNSD/UNEP questionnaire 2018):

- **Total E-waste generated**
- **Total E-waste collected**
- **Total population served by municipal waste collection**
- **Urban population served by municipal waste collection**
- **Rural population served by municipal waste collection**
- **Composition of municipal waste**

Next Steps

STATISTICS



1. Consideration of comments of JTF and update of database
2. Sharing of draft metadata with experts
3. Revised metadata sheets to all JTF members for comments or approval