



# UNSD/UNEP Questionnaire on Environment Statistics and its application to SDG environment-relevant indicators



شعبة الإحصاءات في الأمم المتحدة (UNSD) و برنامج الأمم المتحدة للبيئة (UNEP)  
استمارة الإحصاءات البيئية لعام 2016



UNSD

قسم : النفايات

### جدول المحتويات

الإرشادات	المقدمة، الخطوات التي ينبغي اتباعها، وصف الجداول
التعاريف	قائمة التعاريف
جدول النفايات 1	إنتاج النفايات حسب المصدر
جدول النفايات 2	إدارة النفايات الخطرة
جدول النفايات 3	إدارة النفايات البلدية
جدول النفايات 4	تركيب النفايات البلدية
جدول النفايات 5	إدارة النفايات البلدية - بيانات على مستوى مدينة
جدول النفايات 6	صفحة المعلومات التكميلية



UNSD

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استمارة الإحصاءات البيئية لعام 2016

الفرع: المياه

### قائمة المحتويات

الإرشادات	مقدمة، الخطوات التي تتبع، وصف الجداول وجدول التحويل
التعاريف	قائمة التعاريف
الجدول 1م	موارد المياه العذبة المتجددة
الجدول 2م	استخراج المياه العذبة واستخدامها
الجدول 3م	صناعة إمدادات المياه (ISIC 36)
الجدول 4م	إنتاج المياه العادمة ومعالجتها
الجدول 5م	السكان الموصولون بمعالجة المياه العادمة
الجدول 6م	صفحة المعلومات التكميلية



Consultative meeting on the implementation framework for the environmental dimension of the 2030 agenda in the Arab region

Cairo, Egypt, 18-21 September 2017

Environment Statistics Section, United Nations Statistics Division

# Waste Questionnaire

## Waste

R1: Generation of Waste by Source

R2: Management of Hazardous Waste (SDG-related)

R3: Management of Municipal Waste (SDG-related)

R4: Composition of Municipal Waste

R5: Management of Municipal Waste – City Data (SDG-related)

<http://unstats.un.org/unsd/environment/questionnaire.htm>

# Table R2: Management of Hazardous Waste

Line	Category	Unit
1	Stock of hazardous waste at the beginning of the year	tonnes
2	Hazardous waste generated during the year	
3	Hazardous waste imported during the year	
4	Hazardous waste exported during the year	
5	<b>Hazardous waste treated or disposed of during the year (=6+7+9+10)</b>	
6	<i>Amounts going to:</i> Recycling	
7	Incineration	
8	<i>of which:</i> with energy recovery	
9	Landfilling	
10	Other, please specify in the footnote	
11	Stock of hazardous waste at the end of the year (=1+2+3-4-5)	

Those variables highlighted in yellow are of interest to SDG monitoring.

# Table R3: Management of Municipal Waste

Line	Category	Unit
1	Municipal waste collected from households	1000 t
2	Municipal waste collected from other origins	
3	<b>Total amount of municipal waste collected (=1+2)</b>	
4	Municipal waste imported for treatment/disposal	
5	Municipal waste exported for treatment/disposal	
6	<b>Municipal waste managed in the country (=3+4-5)</b>	
7	<i>Amounts going to:</i> Recycling	
8	Composting	
9	Incineration	
10	<i>of which:</i> with energy recovery	
11	Landfilling	
12	<i>of which:</i> controlled landfilling	
13	Other, please specify in the footnote	
14	Total population served by municipal waste collection	%
15	Urban population served by municipal waste collection	
16	Rural population served by municipal waste collection	

# Table R5: Management of Municipal Waste – City Data

Line	Category	Unit
1	Total population of the city	1000 inh.
2	Percentage of city population served by municipal waste collection	%
3	Municipal waste collected from households	1000 t
4	Municipal waste collected from other origins	
5	<b>Total amount of municipal waste collected (=3+4)</b>	
6	<i>Amounts going to:</i> Recycling	
7	Composting	
8	Incineration	
9	<i>of which:</i> with energy recovery	
10	Landfilling	
11	<i>of which:</i> controlled landfilling	
12	Other, please specify in the footnote	



# The 17 SDGs





# Selected environmentally-related SDG indicators

- UNSD involved in the methodological development or data collection (through the UNSD/UN Environment Questionnaire on Environment Statistics – Waste section) of four indicators of two goals.



Make cities and human settlements inclusive, safe, resilient and sustainable



Ensure sustainable consumption and production patterns

11 SUSTAINABLE CITIES  
AND COMMUNITIES

# Make cities and human settlements inclusive, safe, resilient and sustainable

- Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

=> Indicator 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities



## Indicator 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)

- Custodian Agencies: UN-Habitat and UNSD; partner agencies: UN Environment
- UNSD involved in the methodology and in the data collection
- Issues:
  - No internationally agreed definition of urban solid waste
    - => Invent one: What should be in? Plastics dumped into oceans?
    - => Use a proxy: Municipal waste ?
  - What is adequate final discharge?
  - Denominator: Waste "collected" or "generated" ? => Difficult to estimate municipal waste generated.
  - Who could be the national source in the country?
  - Definition of a minimum number or size of cities a country should report on.
  - OECD/Eurostat do not collect data at the city level. Eurostat did a pilot at the European regions level => No city level for "developed" countries.



## Indicator 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)

- Using the four variables, a prospective estimate of the indicator can be derived.
- Adequate final discharge: Recycling, composting and incineration with energy recovery.
- Time series exist for waste “collected” in the UNSD/UN Environment Questionnaire at the city level. UNSD so far does not collect on municipal waste generated.

Table R5, line:	Category	Unit
5	<b>Total amount of municipal waste collected</b>	1000 t
6	Recycling	
7	Composting	
9	Incineration with energy recovery	

$$\text{Indicator} = (\text{Lines } 6 + 7 + 9) / \text{Line } 5$$



12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



## Ensure sustainable consumption and production patterns

- Target 12.4: By 2030, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.
  - => Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment
  - => Indicator 12.5.1: National recycling rate, tons of material recycled



## Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment (Tier III)

- Custodian Agencies: UN Environment and UNSD (more specifically the BRS Secretariat); partner agencies: OECD and Eurostat
- UNSD involved in the methodology and data collection
- Issues:
  - Terminology of the UNSD/UN Environment Questionnaire and national reports under the Basel Convention not harmonized.
  - Definition of treatment: recycled and incinerated or incinerated with energy recovery? (The Basel Convention does not have a definition of treatment)
  - Inclusion of imports-exports => As they can be important for some countries, they should be included.
  - Year of treatment can be different from year of generation.



# Indicator 12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment (Tier III)

- Inclusion of imports-exports in the denominator => use of line 5: Hazardous waste treated or disposed of during the year.
- Treatment defined as recycled and incinerated.
- Using the four variables below, prospective estimates of the indicator can be derived, one per capita, and two for the types of treatment.
- Both data from the UNSD/UN Environment Questionnaire and the national reports under the Basel Convention should be viewed as complementary (e.g. in terms of number of countries reporting) and can be used for quality checks.

Indicator = Line 2/Population

Indicator = Line 6/Line 2

Indicator = Line 7/Line 2

Table R2, line:	Category	Unit
2	Hazardous waste generated during the year	tonnes
5	Hazardous waste treated or disposed of during the year	tonnes
6	Recycling	tonnes
7	Incineration	tonnes



## Indicator 12.5.1: National recycling rate, tons of material recycled (Tier III)

- Custodian Agencies: UN Environment and UNSD; partner agencies: OECD and Eurostat
- UNSD involved in the methodology and data collection
- Issues:
  - Difficult to have a statistics representing all waste, and other types of waste (hazardous waste) already monitored by other indicators => use of municipal waste as a proxy.
  - Discussion with respect to municipal waste “collected” as opposed to municipal waste “generated” is also a feature (as in indicator 11.6.1).
  - Year of generation or collection can be different from year of recycling.
  - Inclusion of imports-exports of municipal waste.



## Indicator 12.5.1: National recycling rate, tons of material recycled (Tier III)

- Using two of the three variables, a prospective estimate of the indicator can be derived.
- UNSD collects data only on “municipal waste collected”.
- Imports-exports can be either included (line 6) or not (line 3).

Table R3, line:	Category	Unit
3	Total amount of municipal waste collected	1000 t
6	Municipal waste managed in the country	
7	Recycling	

Indicator = Line 7/Line 6; or

Indicator = Line 7/Line 3



## ESCWA region's data

- 7 out of the 18 ESCWA countries have provided data for at least one year in the 2016 collection round for the Questionnaire which can be utilized for SDG indicator compilation.
- There are 24 variables in the Questionnaire which can be used in SDG indicator compilation.
- Of the 7 countries providing data for SDG compilation, data were provided for between 7 and 18 of those 24 variables.