

Data assessment tool” for drafting waste management related indicators

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UN Environment Programme
(UNEP)

Virtual Meeting on: Resource Efficiency in the Arab Region, Monitoring Progress of SDG 12 and Building Back Better after COVID-19- 7-8 Oct



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Introduction



- The way in which societies use and care for natural resources fundamentally shapes the well-being of humanity, the environment and the economy.
- One of the core objectives of the 2030 Agenda for Sustainable Development is to decouple economic growth from resource use and environmental degradation, notably through improved resource efficiency.
- Waste is generated at a massive and growing rate but is not always managed appropriately, leading to greenhouse gas emissions, pollution, and health hazards.
- The richest countries alone consume on average 10 times as many materials as the world's poorest, and the efficiency of resource use at a global level is now falling as a number of emerging economies grow rapidly.

Introduction

- With ongoing population growth and rapid urbanization, the optimization of waste systems is critical. Fortunately, this presents a tremendous opportunity to recover valuable resources and create employment, while mitigating these negative impacts.
- A critical way of reducing the burden of waste is by **preventing its production** in the first place, such as with the expanded concept of the **6 Rs**:



Introduction



- Many types of waste can be **reframed as a resource**: e-waste, for example, often contains valuable metals such as gold, while the nutrients in food waste can be captured as compost.
- Improving waste management is critical for the achievement of the following Sustainable Development Goals:



SDGs indicators related to waste



- **6.3.1** - Proportion of wastewater safely treated



- **11.6.1** - Municipal Solid Waste



- **12.3.1** - Food Loss and Waste
- **12.4.1** - Reporting to Multi Environment Agreements
- **12.4.2** - Hazardous Waste (includes e-waste)
- **12.5.1** - National Recycling Rate (includes e-waste)



- **14.1.1** - Coastal Eutrophication and Plastic Litter

SDG INDICATOR 6.3.1

“Proportion of domestic and industrial wastewater flows safely treated”



Waste related indicators under UNEP

- Indicator 6.3.1 tracks the percentage of wastewater flows from households, services and industrial premises that are treated in compliance with national or local standards.
- The household component includes both sewage and faecal sludge, treated on-site and off-site, and is monitored as part of the sanitary chain with direct links to indicator 6.2.1 on access to sustainably managed sanitation services.

٦.٣.١ نسبة مياه الصرف الصحي
المعالجة بطريقة آمنة

SDG INDICATOR 11.6.1

“Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities”



Waste related indicators under UNEP

١. ٦. ١ نسبة النفايات الصلبة للمدن،
التي تُجمع بانتظام ويجري تفرغها نهائياً
على نحو كاف، من مجموع النفايات
الصلبة للمدن، حسب المدينة

- The goal of this indicator aims to generate the proportion of municipal solid waste regularly collected and that is adequately treated and disposed out of all the total municipal waste generated by the city.
- Urban households and businesses produce substantial amounts of solid waste that must be collected regularly, recycled or treated and disposed properly in order to maintain healthy and sanitary living conditions.

١٢. ٣. ١ مؤشّر الخسائر
الغذائية العالمية

Waste related indicators under UNEP

SDG INDICATOR 12.3.1b

“Food waste index”



- Disaggregation of food waste by destination is important for understanding the best way to optimize the use of food waste for fertilizer. It is estimated that 1.15 to 2.41 million tonnes of plastic are entering the ocean each year from rivers. More than half of this plastic is less dense than the water, meaning that it will not sink once it encounters the sea.
- This indicator aims to decrease the economic and environmental burdens of loss and waste, while maintaining food and feed safety, in addition to decreasing food insecurity.

SDG INDICATOR 12.4.1

“Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information are required by each relevant agreement”



- The indicator is process-oriented, focusing on compliance with the obligations that contribute to the overall target of achieving the environmentally sound management of chemicals and all wastes throughout their life cycle.

١٢.٤.١ عدد الأطراف في الاتفاقات
البيئية الدولية المتعددة الأطراف المتعلقة
بنفايات المواد الخطرة وغيرها من المواد
الكيميائية، التي تفي بتعهداتها والتزاماتها
في نقل المعلومات على النحو الذي يتطلبه
كل اتفاق ذي صلة

Waste
related
indicators
under UNEP

SDG INDICATOR 12.4.2

“Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment”



- If countries are to better understand how waste are generated, collected and recycled then this will put countries and other stakeholders in a better position to identify how to tackle the issues face for key waste streams (such as metals, e-waste or plastics).
- “E-waste is a growing global challenge that poses a serious threat to the environment and human health worldwide”, said Stephan Sicars, Director of the Department of Environment at the UN Industrial Development Organization.
- Minimizing waste generation and maximizing the recycling of waste is central to the concept of circular economy.

١٢. ٤. ٢ نصيب الفرد من توليد
النفايات الخطرة ونسبة النفايات الخطرة
المعالجة، حسب نوع المعالجة

Waste
related
indicators
under UNEP

SDG INDICATOR 14.1.1

“(a) Index of coastal eutrophication; and (b) floating plastic debris density”

١٤.١.١ (أ) مؤشر
التخثت المغذيات الساحلية؛
(ب) كثافة حطام البلاستيك

Waste
related
indicators
under UNEP

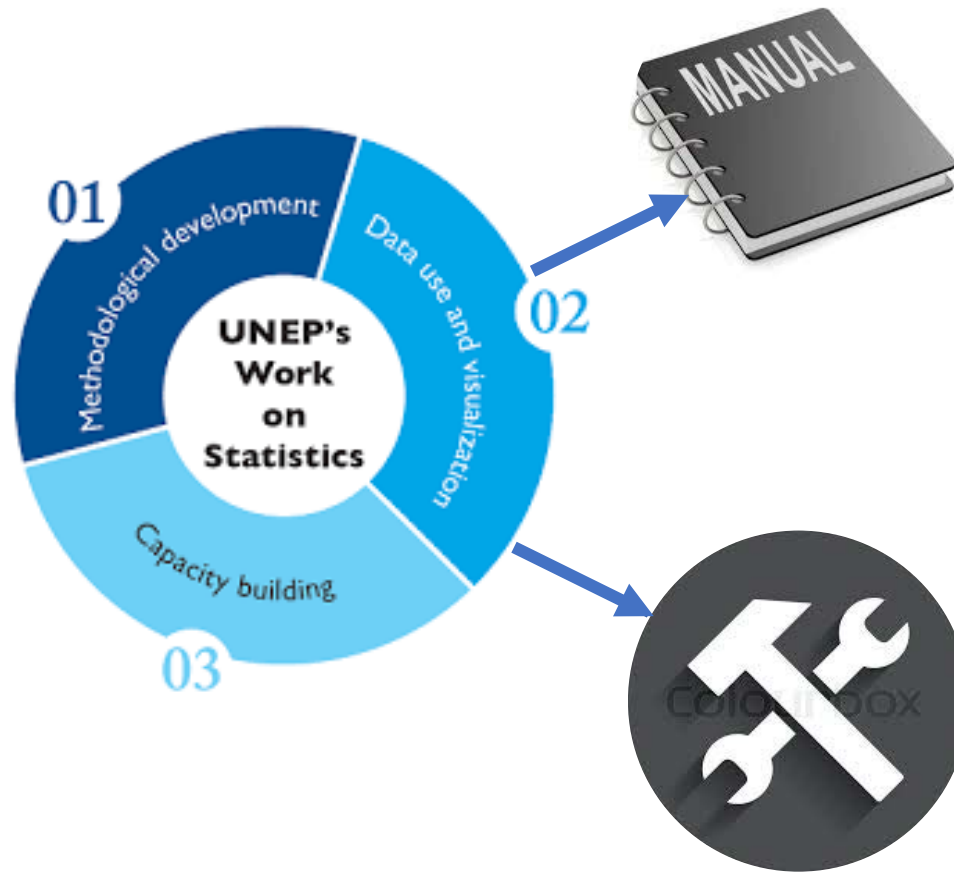


- Coastal areas are areas of high productivity where inputs from land, sea, air and people converge.
- The Indicator is designed in a way to generate data to allow informed decision making towards identifying the state of pollution and pollution flows in oceans.

Summary

- Worldwide material consumption has expanded rapidly, as has material footprint per capita, seriously jeopardizing the achievement of the Sustainable Development Goal 12 and the Goals more broadly.
- With ongoing population growth and rapid urbanization, the optimization of waste systems is critical. Fortunately, this presents a tremendous opportunity to recover valuable resources and create employment, while mitigating these negative impacts.
- Urgent action is needed to ensure that current material needs do not lead to the over-extraction of resources or to the degradation of environmental resources, and should include policies that improve resource efficiency, reduce waste and mainstream sustainability practices across all sectors of the economy.
- Waste Indicators under UNEP custodianship are: **12.3.1b, 12.4.1, 12.4.2, 12.5.1 and 14.1.1**
- There will be a separate presentation for SDG 12

UNEP's work on Waste Statistics



- ***Global Chemicals and Waste Indicator Review Document***

- ***Data assessment tool***

Global Chemicals and Waste Indicator Review Document



- Aims to strengthen the knowledge base of chemicals and hazardous waste and enhance the capacity of selected countries to track progress towards related SDGs indicators across sectors in order to strengthen the evidence base for policy making and stakeholder action.
- By strengthening the evidence base as well as the science policy interface, the project responds to the need for better information to empower decision makers and stakeholders to act and support policy making aimed at sound management of waste to minimize risks to public health and the environment associated with chemicals and hazardous waste.
- To provide a coherent methodology for measuring the SDGs indicators related to municipal and food waste, hazardous waste and recycling rate.



Global Chemicals and Waste Indicator Review Document

indicators related to municipal and food waste, hazardous waste and recycling rate

- 11.6.1 Municipal solid waste collected and managed in controlled facilities out of total municipal solid waste generated, by the city
- 12.3.1. Food waste
- 12.4.2. Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment
- 12.5.1. National recycling rate, tons of material recycled

Contents

Acronyms

1. Background
2. Introduction
3. Links with existing initiatives
4. Definitions
5. Methodology for Indicator 11.6.1
6. Methodology for Indicator 12.3.1.b
7. Methodology for Indicator 12.4.2
8. Methodology for Indicator 12.5.1
9. Data assessment tool
10. References

Annexes



Data assessment tool

- An excel model which is intended for filling in by each reporting country.
- It is designed to include information on the **overall country situation**, as well as **specific data required** for calculating the indicators based on the methodology included in the “**Indicator Review Document**”.
- The **aim** of this tool is to aid countries in collecting relevant data from national/regional level authorities, identifying data gaps and inconsistencies, sector priorities in terms of both data production/collection as well as waste management in general. Ultimately, the data assessment tool is aimed to inform waste management policy at national level. In addition, it will facilitate national reporting on SDGs, filling in the UNSD/UNEP Questionnaire (waste section), aid in BRS and other MEAs reporting.

The model includes six tabs, as follows:

1. **Introduction** – stating the objectives of the data assessment tool and collecting general information on the reporting country
2. **Glossary of terms** – providing definitions and explanations aimed at ensuring better understanding of the terms used in the model and ultimately improving reported data quality



Data assessment tool

3. **Country information** – collecting details on national and international reporting requirements the country needs to fulfil, it's legislative, policy and institutional framework, as well as the definitions the country uses for terms such as 'waste' or 'recycling', among others.
4. **Gaps and challenges** – aimed at capturing the national priorities related to waste management, as well as the existing gaps and challenges faced by countries in terms of waste management data generation, collection and reporting.
5. **Reporting status** – includes a series of information which is requested for each of the bilateral, regional, multilateral or national agreements/conventions/standards or reporting obligations the country has, as mentioned in the 'Country information' tab
6. **Data collection form** – aimed at collecting actual data to be used in calculating the waste-related SDG indicators, with particular focus on data needed for the calculation of indicators detailed in the present Indicator Review Document. Categories include waste generation, waste collection, waste treatment and disposal, waste recycling and waste movement data.

Countries can customize and add tabs and questions to the tool depending on their specific needs for data collection or policy information.

Thank you !



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