Indicators 12.4.2 & 12.5.1

SDG and Environment Statistics Unit - UNEP

TARGET 12·4

RESPONSIBLE MANAGEMENT OF CHEMICALS AND WASTE

TARGET 12·5

SUBSTANTIALLY REDUCE WASTE GENERATION

SDG Target 12.4 and Indicator 12.4.2

Goal 12: Ensure sustainable consumption and production patterns.

Target 12.4:

"By 2020, 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"

UNSD and UNEP are the custodian agencies for this indicator

Methodology – Approach

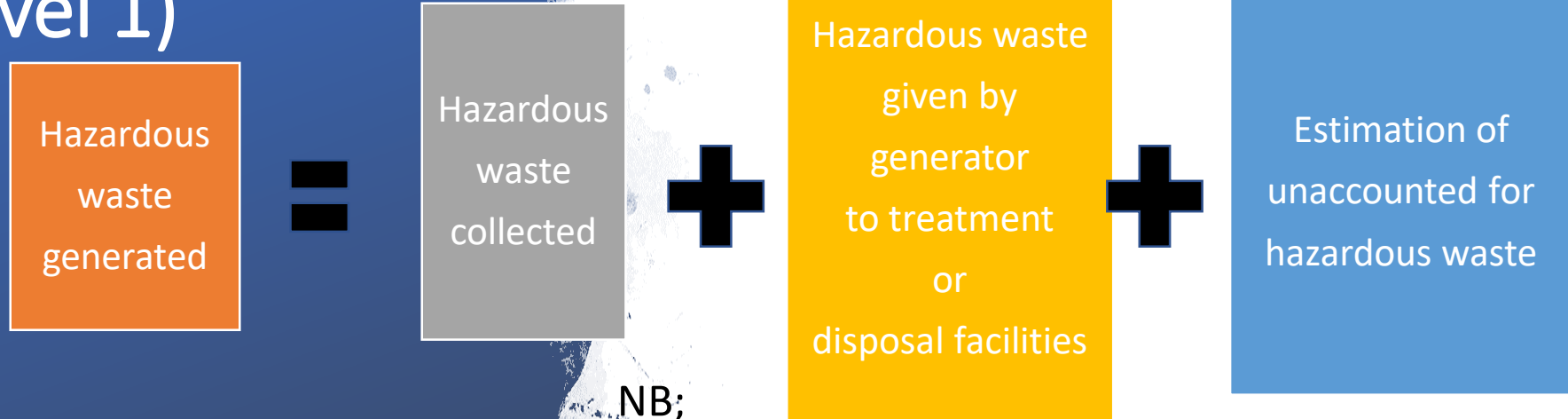**Level 1 – global dataset which includes modelling of data gaps but is based on national official statistics**

Level 2 - reporting of national data and meaningful sub-indicators, such as:

A. *Country capacity for sound treatment of own hazardous waste within the country.*

B. *Country capacity for treatment of hazardous waste from other countries*

C. *Hazardous waste exported in order to be soundly treated*

D. *Hazardous waste intensity of production*

Hazardous waste generated (in tonnes and per capita)

Methodology – Computation (Level 1)

Hazardous waste generated

$=$

Hazardous waste collected

$+$

Hazardous waste given by generator to treatment or disposal facilities

$+$

Estimation of unaccounted for hazardous waste

NB;

- The above includes exports and excludes imports
- In absence of country-specific data, generic rates of hazardous waste generation are suggested as gap fillers – mostly obtained from EU countries

Methodology — Computation (Level 1)

Proportion of hazardous waste treated, by type of treatment.

Proportion of hazardous waste treated $=$ $\dfrac{\text{Quantity of hazardous waste treated during reporting year*}}{\text{Total quantity of hazardous waste generated during the reporting year}} \times 100$

N.B.

*Hazardous waste treated in the country plus materials exported for treatment minus the materials imported for treatment.

- Excluding exports but including imports
- All quantities for reference reporting year

SDG Target 12.5 and Indicator 12.5.1

Goal 12: Ensure sustainable consumption and production patterns.

Target 12.5:

"By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse"

Indicator 12.5.1:

"National recycling rate, tons of material recycled"

UNEP and UNSD are the custodian agencies for this indicator

Methodology — Approach

Level 1 – global dataset which includes modelling of data gaps but is based on national official statistics

Level 2 - reporting of national data and meaningful sub-indicators, such as:

- *Recycling rate by material flow for metals using DMC*
- *Packaging waste recycling rate*
- *WEEE recycling rate*

Level 1 (global monitoring) Indicators	
National recycling rate	(Material recycled + material exported for recycling – material imported for recycling) / total waste generated (excluding mining, construction and agricultural waste)
Waste intensity	Waste generated divided by Domestic Material Consumption (DMC), as an indicator of waste reduction
e-waste Generation (with United Nations University)	Due to the political importance of reducing e-waste and the current data availability this is included as a Level 1 indicator.
Level 2 (national monitoring) Indicators	
Total Waste Generated (excluding construction, demolition and agriculture) by type, including e-waste	This is the denominator for recycling and useful for understanding the target 12.5 on waste reduction.
National recycling rate total and by type, including e-waste	Based on national data sources

Methodology – Computation (Level 1)

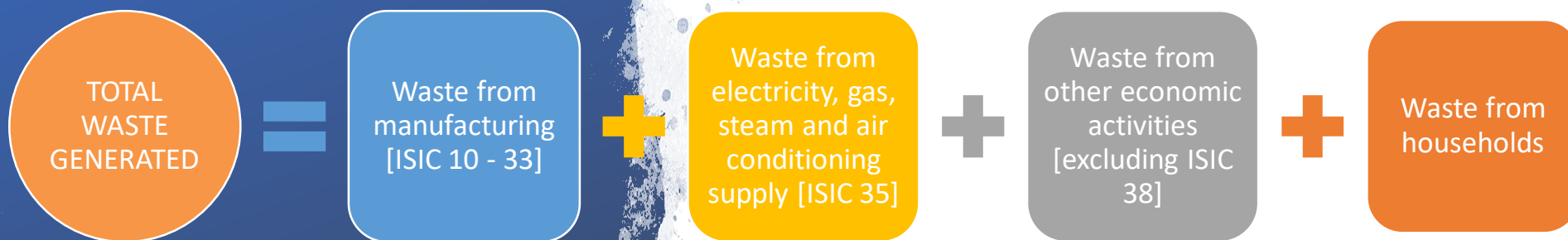**National recycling rate, tons of material recycled**

$$\text{Recycling rate} = \frac{\left(\begin{array}{c}\text{Material recycled} + \text{Material exported intended} \\ \text{for recycling} \\ -\text{Material imported intended for recycling}\end{array}\right) \times 100}{\text{Total waste generated}}$$

NB,
i.   Secondary mineral materials excluded
ii. Composting considered recycling
iii. Quantities reported at the last entity in the recycling chain.
iv. Whenever country specific data exists, it should replace the gap fillers

Methodology – Computation (Level 1)

National recycling rate, tons of material recycled

TOTAL WASTE GENERATED = Waste from manufacturing [ISIC 10 - 33] + Waste from electricity, gas, steam and air conditioning supply [ISIC 35] + Waste from other economic activities [excluding ISIC 38] + Waste from households

NB;
Whenever country specific data exists, it should replace the gap fillers

Methodology – Computation (Level 2)

Packaging waste recycling rate

$$\text{Packaging waste recycling rate} = \frac{\text{Tons of packaging waste recycled + exported for recycling}}{\text{Tons of packaging waste generated}}$$

NB;
- Includes quantities exported for recycling, excludes imports
- Expressed as a % for the reporting year

Methodology – Computation

Recycling rate for E-Waste

E-Waste recycling rate **=** Tons of E-Waste recycled + exported for recycling **÷** Tons of E-Waste generated

NB;
- Includes quantities exported for recycling, excludes imports
- Expressed as a % for the reporting year

Data for both indicators

- Data sources – national governments, including NSOs and Ministries of Environment.

- Data Collection – through government focal points in charge of SPP policy implementation.

- The UNSD/UNEP Questionnaire on Environment Statistics is sent every **2 years** requesting **annual data**.

- Data is now available for all member states that reply to the questionnaire.

- Data is already being collected (2018 questionnaire and the 2020 questionnaire will be sent during this month).

- First data compiling and reporting were done in **2020.**

- Data compilers - UNSD and UNEP (and UNU for e-waste)

Thank you !

UN environment programme

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