



Resources & Waste
Advisory Group



SDG Indicators 12.4.2 and 12.5.1

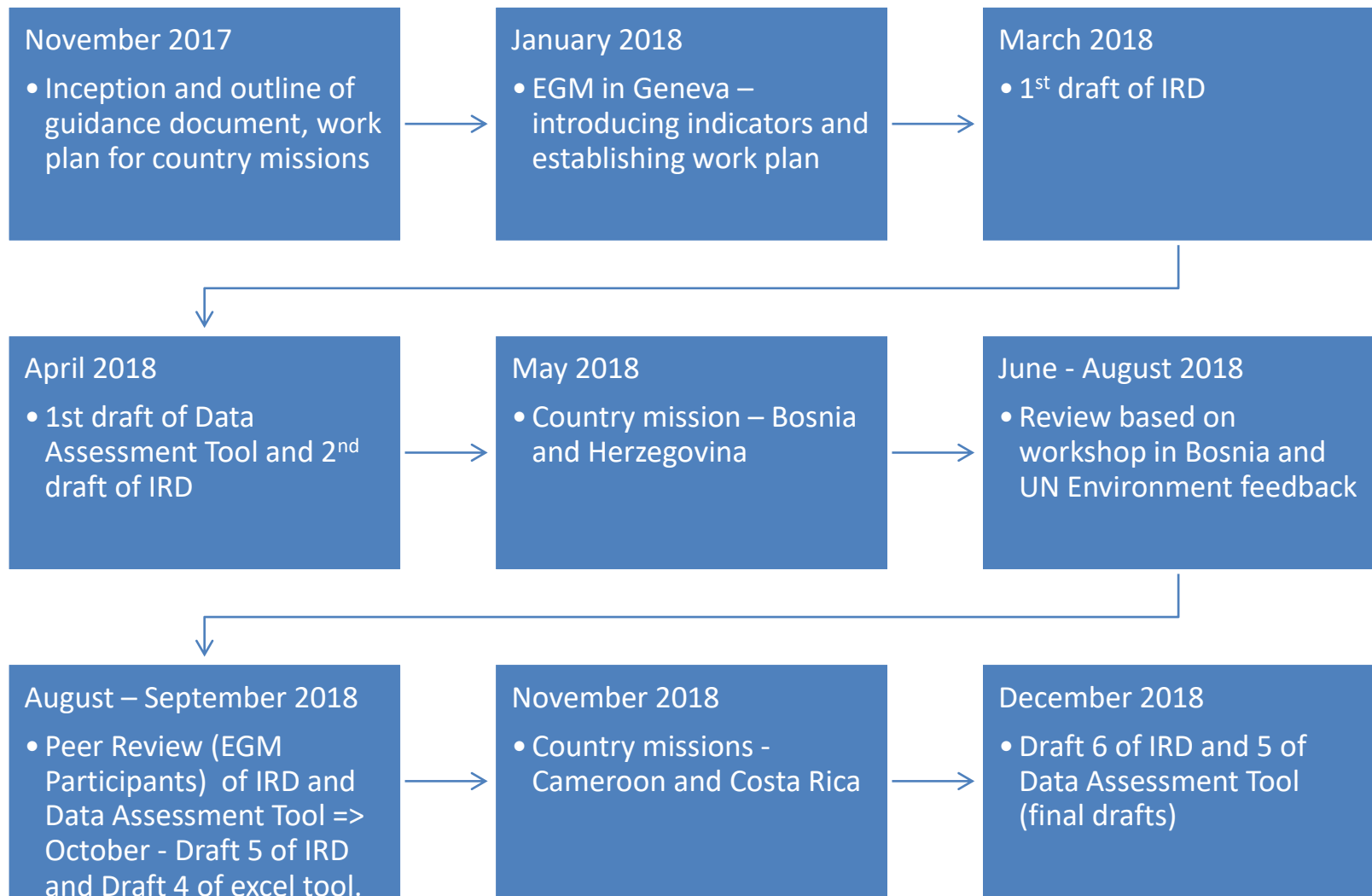
12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment

12.5.1 National recycling rate, tons of materials recycled

Introduction

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
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

Progress up to current status



Main revisions of after peer review and pilot country missions

- More clear terms and definitions, adjusted wording of sub-indicators and guidance document
- Slightly adjusted calculation methodology for some sub-indicators
- Additional and updated gap filler suggestions
- Some examples included in the guidance document
- Additional questions and fields included in the data assessment tool



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SDG Indicator 12.4.2

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

Proposed sub-indicator levels

Indicator 12.4.2 – Hazardous Waste

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

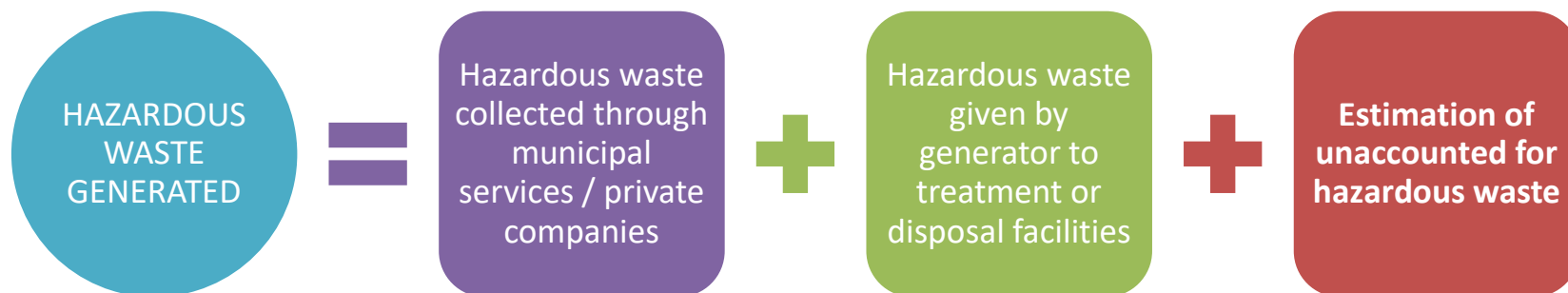
Level 2 - reporting of national data and meaningful sub-indicators, such as:

- 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*

12.4.2 Hazardous Waste sub-indicators

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

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



N.B.1 The above includes exports and excludes imports

N.B.2 In absence of country-specific data, generic rates of hazardous waste generation are suggested as gap-fillers

12.4.2 Hazardous Waste sub-indicators

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

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



HAZARDOUS
WASTE
GENERATED

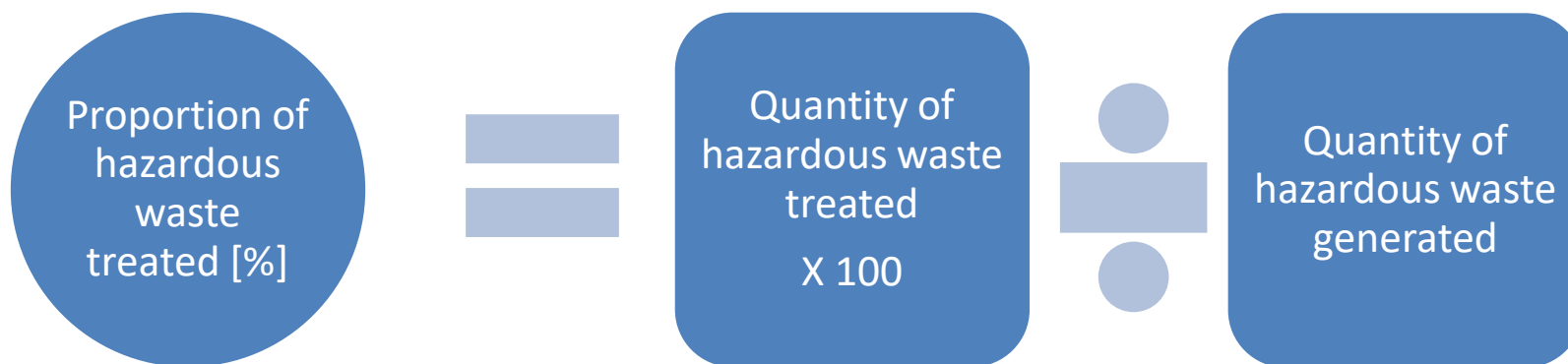
Gap fillers:

- What a Waste 2.0 (2018)
- E-Waste tool provided by EU and UNU
- Hazardous healthcare waste - WHO

12.4.2 Hazardous Waste sub-indicators

*Hazardous waste generated per capita and **proportion of hazardous waste treated, by type of treatment.***

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



N.B. 1 Excluding exports but including imports

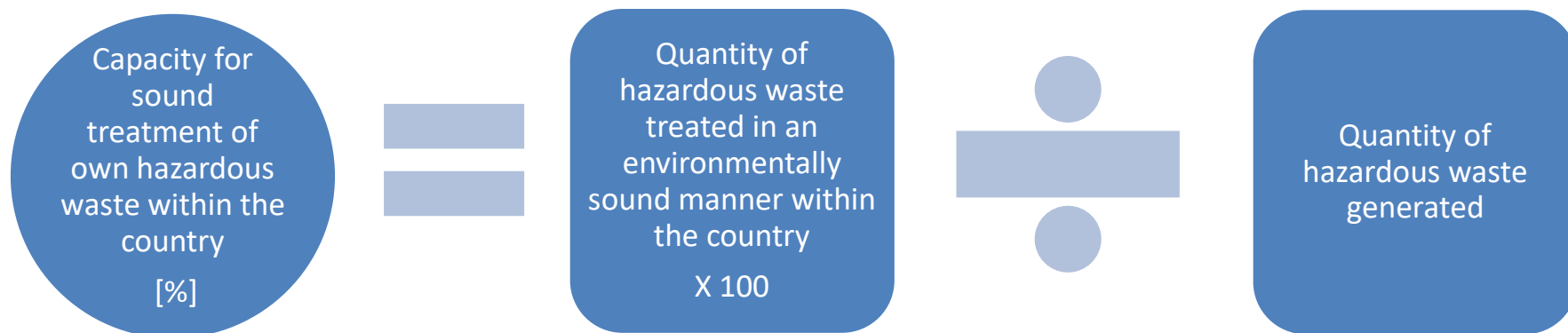
N.B. 2 All quantities for the reference reporting year

12.4.2 Hazardous Waste sub-indicators

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

Purpose: to acknowledge countries who treat hazardous waste within their country



(expressed as a % for the reference year)

N.B. Excluding exports,
excluding imports

12.4.2 Hazardous Waste sub-indicators

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

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

B) Country capacity for treatment of hazardous waste from other countries

Purpose: to acknowledge countries which have developed their capacity to import and treat hazardous waste from other countries

C) Hazardous waste exported in order to be soundly treated

Purpose: to acknowledge countries which have taken the initiative to export their hazardous waste for sound treatment, rather than dispose of it inadequately

12.4.2 Hazardous Waste sub-indicators

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

D) Hazardous Waste Intensity of Production

Purpose: to characterize how 'clean' a country's production processes are by linking hazardous waste generation to the Domestic Material Consumption



(expressed as a number for year Y)

N.B. A lower score is better → less hazardous waste generated per unit of DMC

Disaggregation

Indicators could be further disaggregated depending on the country's policy information needs:

- By generating sector / by ISIC codes;
- By type of landfilling: controlled vs. uncontrolled, specialized hazardous waste landfills, etc.
- By type of treatment per each generating sector;
- By type of recycling operation;
- By territorial division;
- Etc.

Data sources and collection process

Possible data providers:

- Hazardous waste generators;
- Hazardous waste collectors/operators;
- Hazardous waste treatment facilities;
- Environmental protection authorities;
- Basel Convention focal points;
- Statistics office.

Data collection means:

- Official reports at national/entity/generator level;
 - Questionnaires
 - Sample studies extrapolated at sector/national level.
-



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SDG Indicator 12.5.1

National recycling rate, tons of material recycled

Proposed Sub-indicator levels

Indicator 12.5.1 – Recycling Rate

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

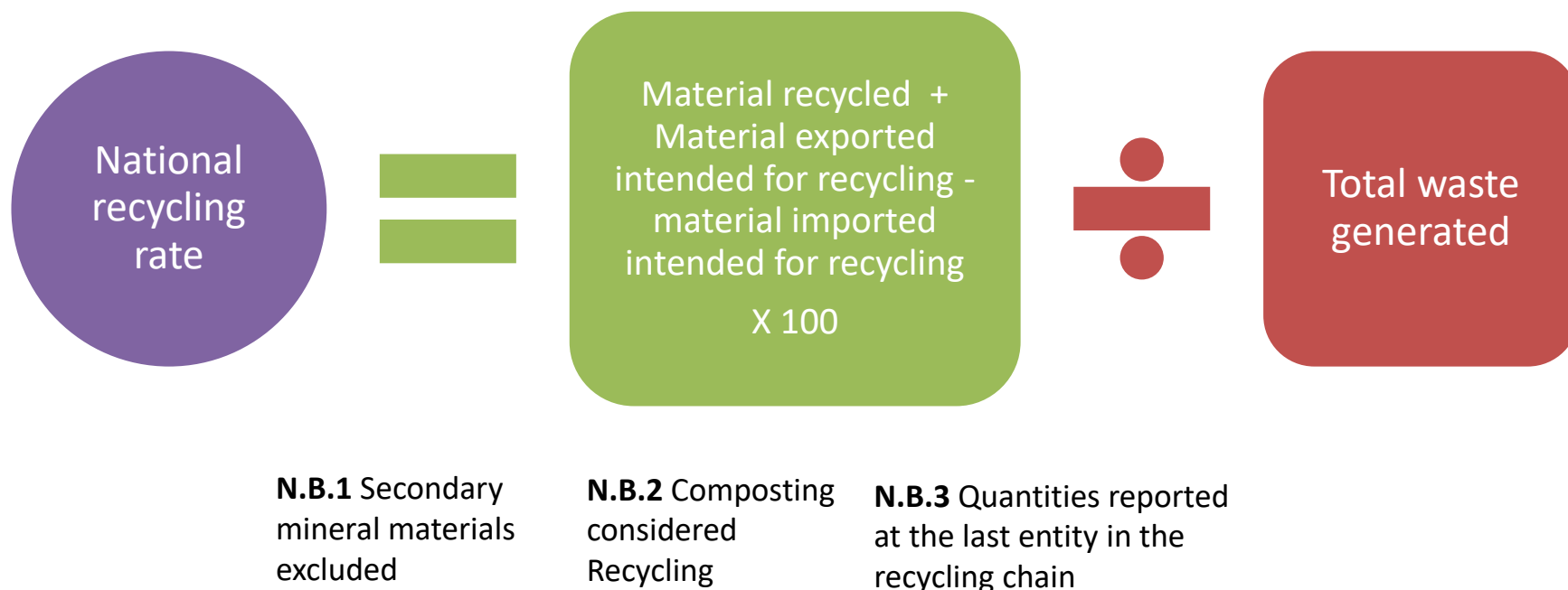
Level 2 - reporting of national data and meaningful sub-indicators, such as:

- A. Recycling rate by material flow for metals using DMC*
- B. Packaging waste recycling rate*
- C. WEEE recycling rate*

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

Level 1 – with the use of gap-fillers and country-specific data

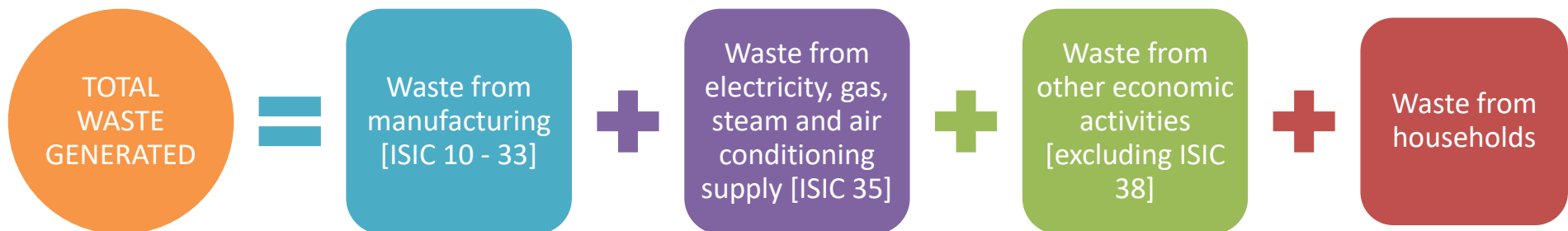


Whenever country-specific data exists, it should replace the gap-fillers.

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

Level 1 – with the use of gap-fillers and country-specific data



N.B. Excludes Construction waste, agricultural waste and quarrying and mining waste

Whenever country-specific data exists, it should replace the gap-fillers.

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

Level 1 – with the use of gap-fillers and country-specific data

Gap fillers:

- What a Waste 2.0 (2018)
- IPCC Guidelines (revision expected June 2019)
- Global Waste Management Outlook
- Waste Atlas

Waste generation rates provided in the Guidance document for: municipal waste per region, per income level, industrial waste and E-waste per income level respectively, special waste streams.

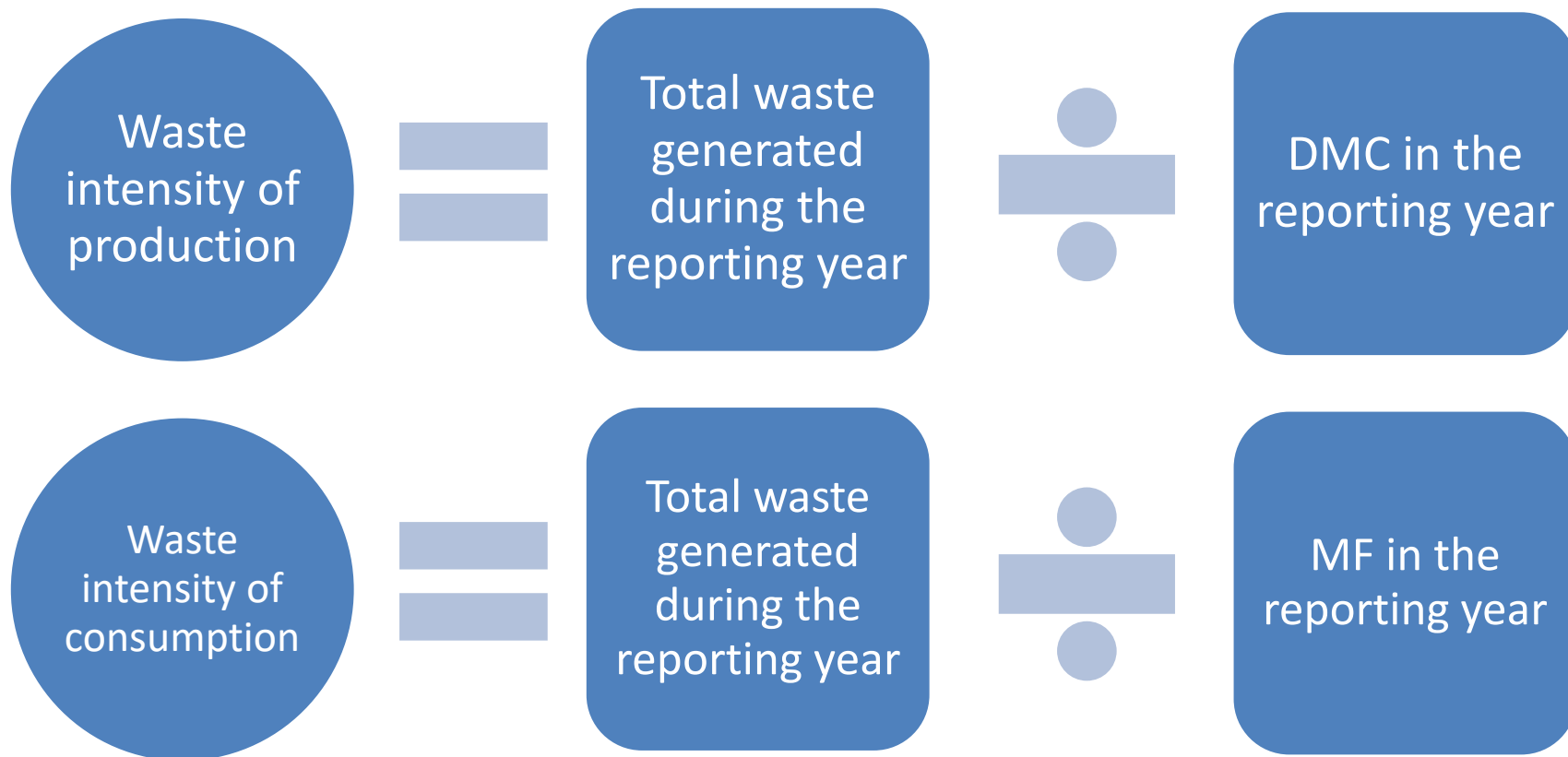
*Whenever country-specific data exists, it should replace the gap-fillers.
Several methods/tools are indicated in the guidance document.*



TOTAL WASTE
GENERATED

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled



(expressed as a % for the reporting year)

N.B. A lower score is better → less waste generated per unit of DMC/MF

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

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

A) Recycling rate by material flow for metals using DMC



(expressed as a % for the reporting year)

N.B. Includes quantities exported for recycling, excludes imports

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

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

B) Packaging waste recycling rate



(expressed as a % for the reporting year)

N.B. Includes quantities exported for recycling, excludes imports

12.5.1 Recycling Rate sub-indicators

National recycling rate, tons of material recycled

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

B) Recycling rate for E-WASTE



(expressed as a % for the reporting year)

N.B. Includes quantities exported for recycling, excludes imports

Disaggregation

Data for this indicator can be disaggregated at various levels in accordance with the country's policy information needs. For instance:

- In country recycling and materials exported destined for recycling
- By recyclable material.
- Disaggregation of Recycling Rate by material flow for metal is possible by disaggregated data for ferrous and non-ferrous recycled materials and material flows.

Data sources and collection process

Possible data providers:

- Municipal authorities;
- Private contractors;
- NGOs/community organizations;
- Permitted end of recycling chain entities;
- Processing units;
- Customs offices.

Data collection means:

- Official reports at national/entity/generator level;
- Questionnaires
- Sample studies extrapolated at sector/national level.



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Further research needs

Further research needs

12.4.2 Hazardous waste

- Correlating hazardous waste with chemicals

12.5.1 National recycling rate

- Understanding of typical losses along the recycling value chain
- Pathways of waste 'leakage' from the formal sector towards it becoming uncontrolled waste
- Time-lag of different recyclable materials
- How to reflect more in the indicator low generation rates as a positive aspect (linking with DMC and MF does this to some extent)
- Making a connection between municipal and national recycling rate



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Data assessment tool

Excel model meant to assist countries in applying waste related SDG calculation methodologies

Data Assessment Tool

Microsoft Excel spreadsheet designed to:

- Assemble in one location all the available waste data for a given country
- Provide a snapshot of the country's current waste statistics system
- Highlight gaps and potential areas for improvement/investment.

NOT intended for data collection for international reporting:

- UNSD/UN Environment biennial Questionnaire on Environment Statistics.

Data Assessment Tool

File Home Insert Page Layout Formulas Data Review View Tell me what you want to do... Sign in Share

Clipboard Font Alignment Number Conditional Formatting Styles Cells Editing

17

A B C D E F G H

1 Data assessment tool

2

3

4 The current tool was developed as part of UN Environment's efforts to collect data and assess the status of information available for drafting waste management related indicators, as part of the the 2030 Agenda for Sustainable Development and the subsequent SDGs.

5

6

7 **Objective:** The purpose of this tool is to collect information on waste management practices, to serve the following purposes:

8 1. Provide better understanding of waste management system characteristics and waste management practices for each responding country

9

10 2. Inform policy makers on challenges countries face in terms of waste management data generation and reporting

11

12 3. Provide insight on possible ways to facilitate the improvement of country reporting on waste management data

13 **Instructions for filling in the data assessment tool:** Please fill in the spaces marked in grey. In case no information is available, please leave space blank. Only fill in '0' where actual figures are zero. When quantities are asked in tonnes, these refer to metric tonnes.

14

15

16 **General Information**

17

18 Name

19 Title

20 Affiliation

Introduction Glossary of terms 1 - Country Information 2 - Gaps and challenges 3 - Reporting status 4 - Data collection form

Introduction Glossary of terms 1 - Country Information 2 - Gaps and challenges 3 - Reporting status 4 - Data collection form

Data Assessment Tool – 1. Introduction

	A	B	C	D	E	F	G
1	Data assessment tool						
2							
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14							
15							
16	General Information						
17							
18	Name						
19	Title						
20	Affiliation						
21	Contact information						

Data Assessment Tool – 2. Glossary

Includes **explanations and guidance on the terms** used in the tool, which will clarify and facilitate the process of filling in the tables

- Waste
- Hazardous waste
- Landfilling
- Recycling
- etc.

List not exhaustive, can be completed with other terms that require defining

Data Assessment Tool – 3. Country Info.

Waste-related reporting commitments/requirements at international and national level

- *“Which Multilateral Environmental Agreements has the country adhered to?”*

Legislative and policy framework

- *“Does the country have a waste management strategy?”*

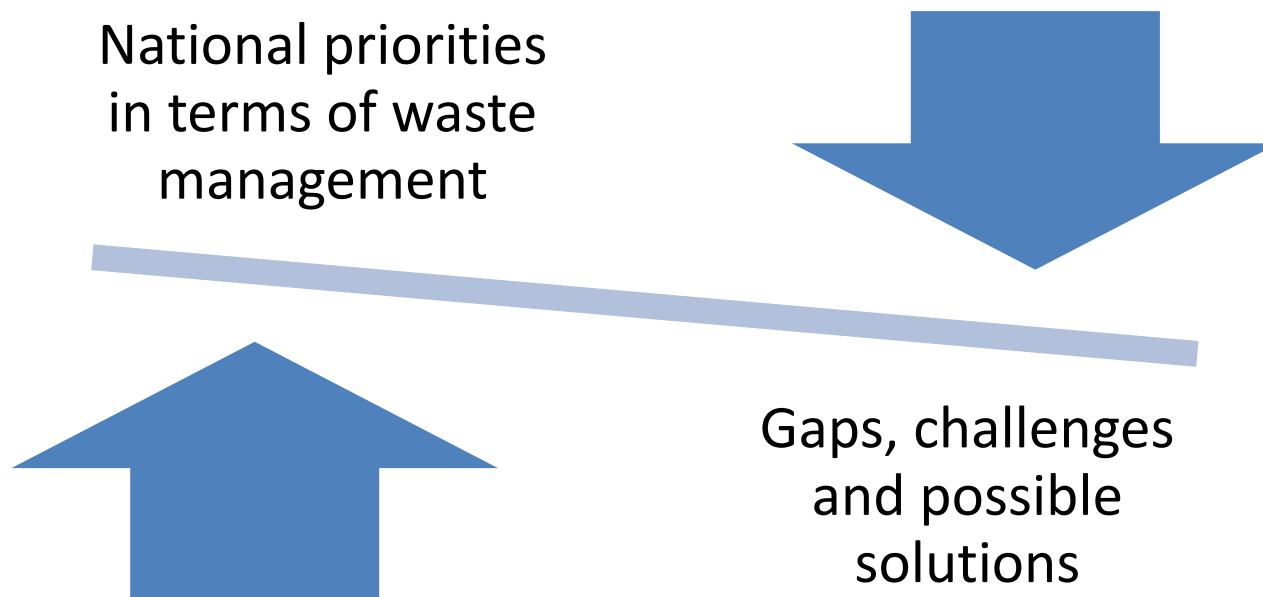
Institutional framework

- *“What entity(s) is(are) responsible for the food waste? (..planning; collection; data reporting...)”*

National definitions

- *“How is recycling defined in your country?”*

Data Assessment Tool – 4. Priorities, Gaps



- Highlights issues of the system
- Informs policy
- Gives indication of development and capacity building needs

Data Assessment Tool – 5. Reporting status

Table to be filled in for each bilateral, regional, multilateral or national agreement/ convention/ requirement

Information on the type of reporting, calendar, data reported, reporting responsibilities

Data Assessment Tool – 6. Data Form

Includes **tables to be filled in with data** on:

Waste generation

Waste collection coverage

Waste treatment and disposal

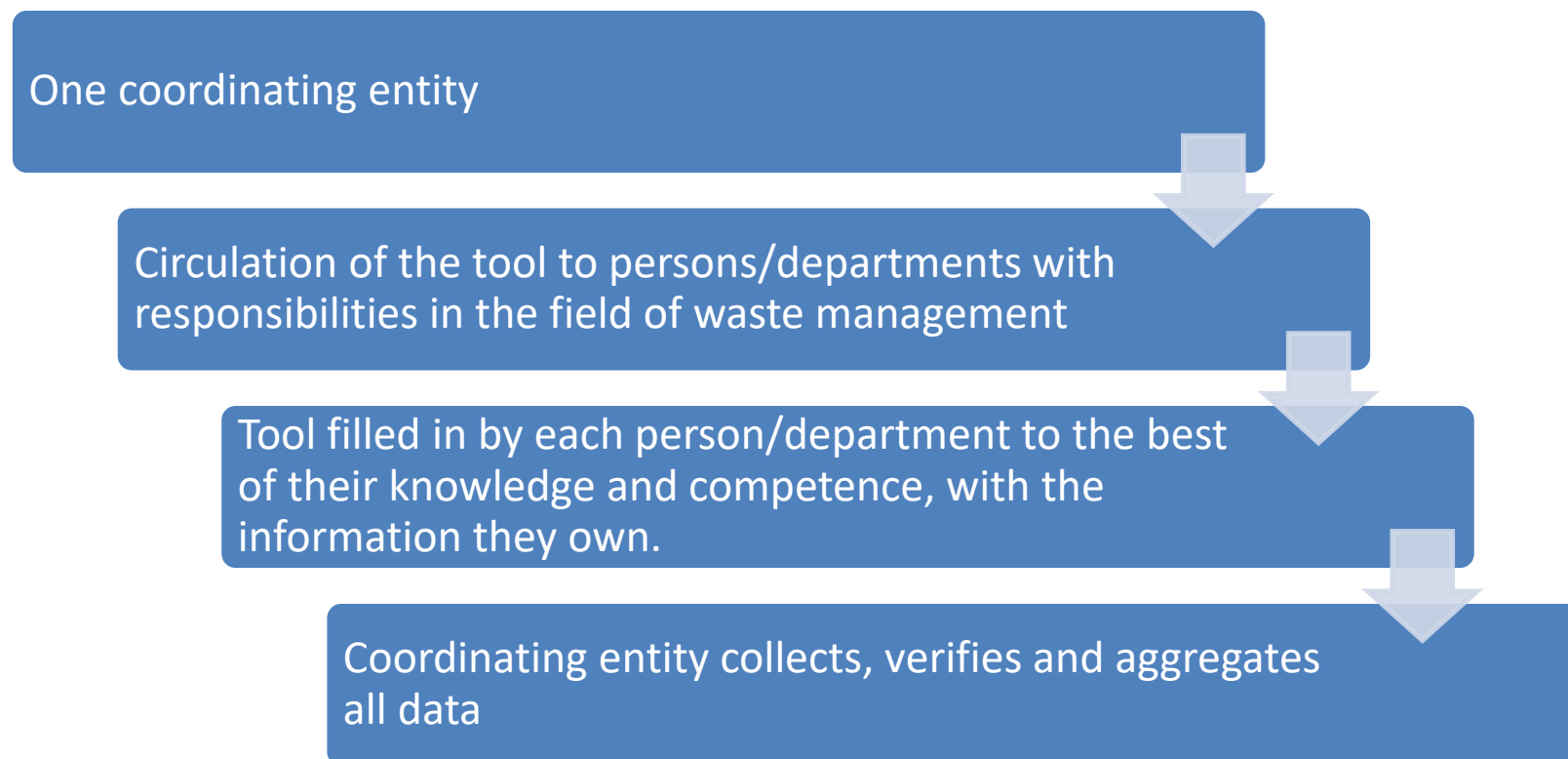
Recycling

Waste movement data

Food waste data

Waste treatment and waste disposal facilities

Data Assessment Tool use process



Designed to eventually be used as a **self-assessment tool**, without input needed from outside actors / international agencies.



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Thank you!

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