UN environment programme

21 June 2024, Vienna, Austria

Global Material Flows Database

Session 8: Production of selected important indicators for waste and materials management policies, including circular economy
REGIONAL TRAINING ON THE PRODUCTION AND USE OF WASTE AND CIRCULAR ECONOMY STATISTICS AND INDICATORS

Ekaterina Poleshchuk

UNEP is the custodian agency for 25 SDG indicators, including:

- **8.4.1/12.2.1 Material footprint**, material footprint per capita, and material footprint per GDP

- **8.4.2/12.2.2 Domestic material consumption**, domestic material consumption per capita, and domestic material consumption per GDP

To report SDG indicators
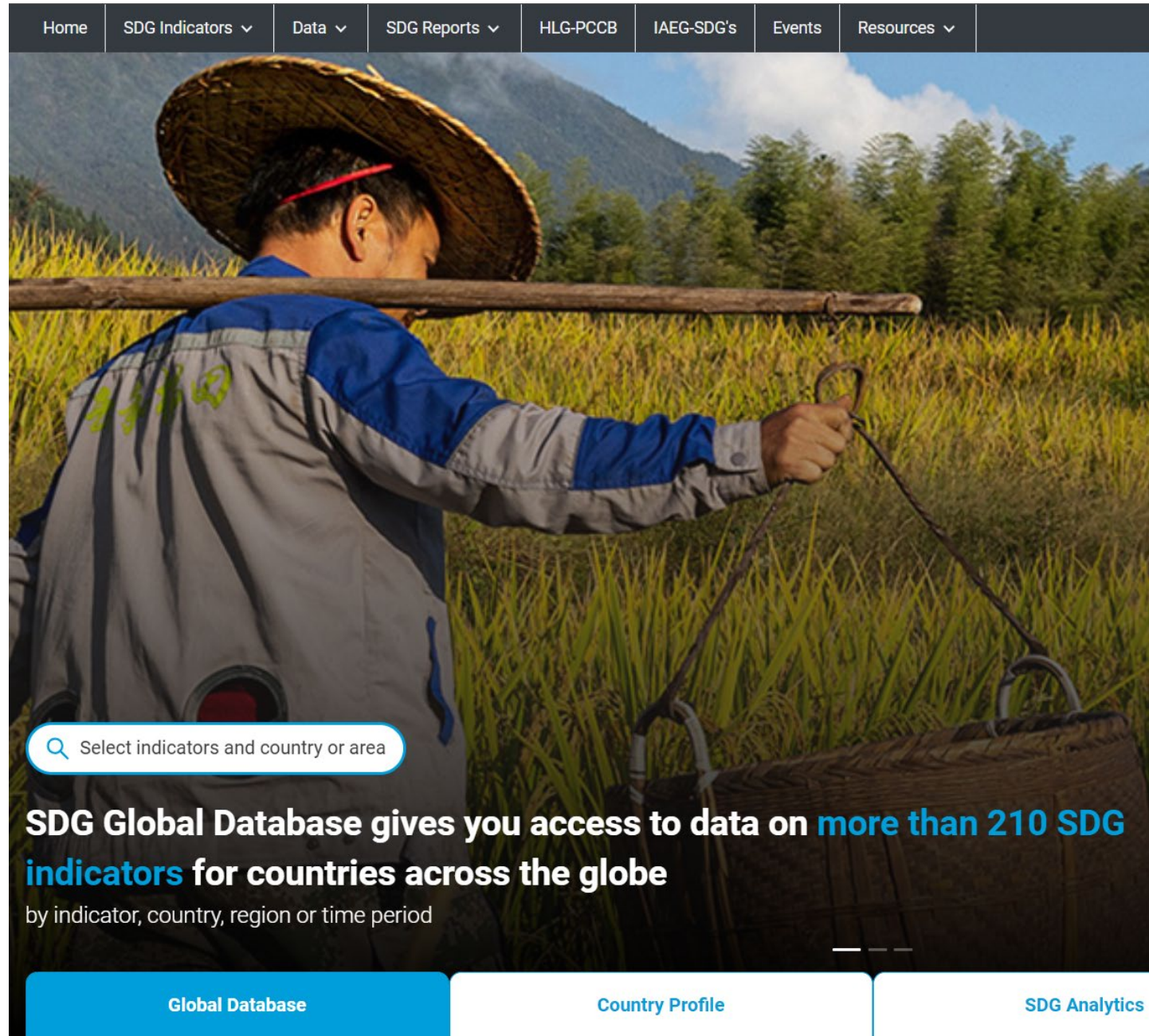8.4.1/12.2.1 and 8.4.2/12.2.2 to the
Global SDG Database, UNEP uses:

- National data collected from
  countries

*These data are reported with footnote "C"
(country)*

and

- Global estimates from the
  Global Material Flows Database,
  developed by UNEP-IRP

*These data are reported with footnote "E"
(estimate)*

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The use of natural resources in the economy

A Global Manual on Economy-Wide Material Flow Accounting

Methodological support

Global manual on EW-MFA:

[UNEP (2023). The use of natural resources in the economy: A Global Manual on Economy-Wide Material Flow Accounting](#)

- First published in 2021
- Revised in 2023

Translated into:

- Arabic, French, Russian
- Spanish is coming

Global Material Flows Database

Supporting evidence-based decision-making by policy and business communities

Here

- Coverage: 217 countries/territories

- Period: 1970 – 2024

- Aligned with the SEEA Central Framework

- Provides indicators on extraction and direct trade of raw materials, as well as indirect trade flows (including material footprints)

- Material categories: biomass, fossil fuels, metals, non-metallic minerals (disaggregated into 13 sub-categories)

- Main data sources: FAO, UNSD, UN COMTRADE, IEA, US EIA, World Mining Data, British Geological Survey, US Geological Survey

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Domestic Extraction of World in 1970-2024, by material group

- Metal ores
- Fossil fuels
- Non-metallic minerals
- Biomass

Sources:
MaterialFlows.net
UNEP-IRP Global Material Flows Database
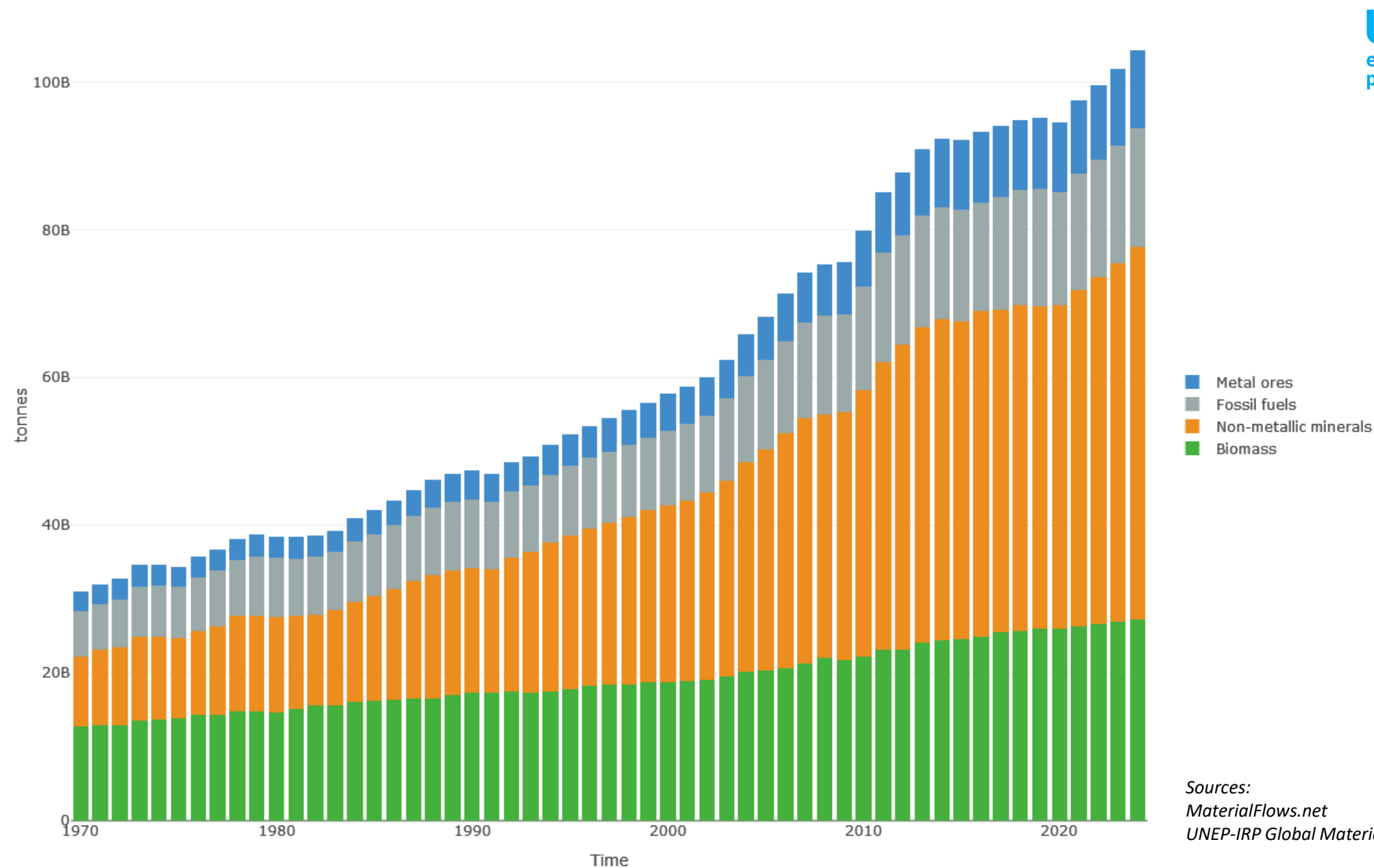
National Data: Data collection tool

United Nations Environment Programme

QUESTIONNAIRE ON ECONOMY-WIDE MATERIAL FLOW ACCOUNTS for the SDG indicators 8.4.1/12.2.1 and 8.4.2/12.2.2
(EW-MFA Questionnaire for SDGs)

Country:

Deadline for returning the EW-MFA Questionnaire for SDGs:

If you have any questions, please contact us at the following email address: unep-ewad-sdgs@un.org

TABLE OF CONTENTS

Sheet	Title	Status
Intro & Contents	Introduction and table of contents	*for information*
Methodology & Guidance	Methodological sources and guidance for working with this Questionnaire	*for information*
Description & Definitions	Description of tables and definitions	*for information*
Table A	**Domestic extraction**	*to review / re-fill in*
Table B	**Imports of materials**	*to review / re-fill in*
Table C	**Exports of materials**	*to review / re-fill in*
Table D	Headline indicators	*filled automatically*
Table E	**Material flow accounts in raw material equivalents**	*to review / re-fill in*
Table F	**Supplementary information from the country**	*to fill in*

Last update: June 1, 2024

Intro & Contents | Methodology & Guidance | Description & Definitions | Table A | Table B | Table C | Table D | Table E | Table F

National Data: Data collection process

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The **UNEP IRP** provides estimates on Domestic material consumption and Material footprint

UNEP communicates with countries (sends a pre-filled questionnaire to countries for review or replace the data with national data)

In April 2022, UNEP sent out a pre-filled questionnaire to 193 UN Member States (NSOs)

National SEEA focal points were also informed

Countries revise/replace the data with national data if possible/needed and provide feedback to UNEP

As of 31 August 2022, UNEP has received feedback from 30 UN Member States

UNEP analyzes the replacement data and prepares them for publication on various platforms (Global SDG database, UNEP WESR)

On 1 March 2023, UNEP reported national DMC data to UNSD for 26 countries

2024 EW-MFA Data Collection and SDG Reporting

- UNEP plans to collect EW-MFA data every two years

- The next data collection is in July 2024

- Eurostat countries will not be included in UNEP data collection in 2024:

  - To report national data for relevant SDGs to the Global SDG Database, UNEP uses Eurostat database

EW-MFA Compiler

Country support tool

- Provides the basic structure required for these accounts, as well as several simple tools for calculating some categories of materials

- Aligned with the EW-MFA global manual

- Published here

- Translated into Arabic, French, Russian, Spanish is coming

E-learning course on EW-MFA

UN environment programme

Module 1: Domestic Extraction	Module 2: Trade Flows	Module 3: Material Outflows	Module 4: Balancing Items
• In 2022	• In 2023	• Planned	• Planned
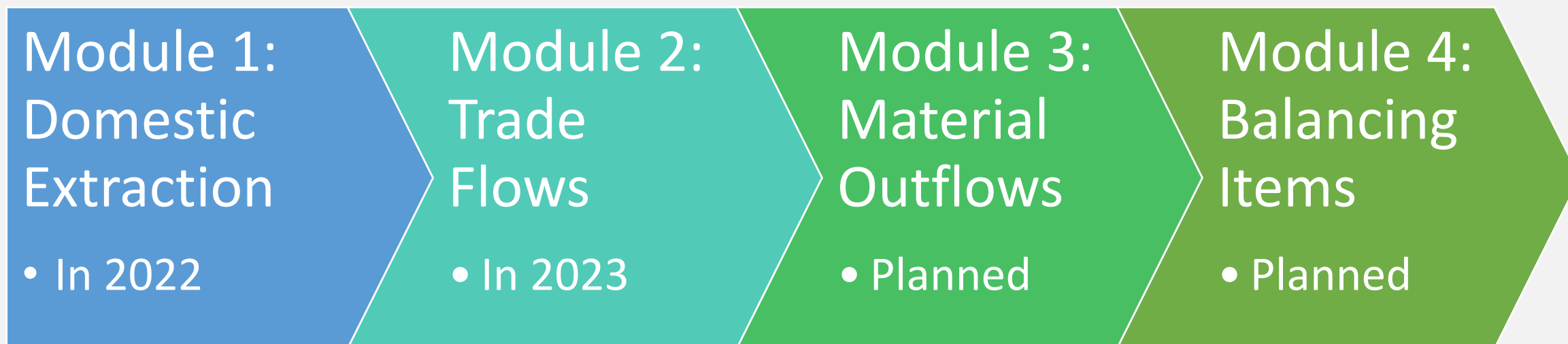
- Developed in collaboration with CSIRO
- Published on the UNEP e-learning platform

Capacity building activities in 2023-2025

on EW-MFA

At the national level

- In 2023: Jordan, Senegal, Ghana, Uganda and Kazakhstan

- In 2024: Namibia, Ecuador, Belarus (UNDP Belarus)

- In 2025: Benin, Kenya, Thailand, Nepal, Colombia, Jamaica

At the regional and global level

- In 2023, two Global Webinars on Geospatial and Other Data Sources for Environment Statistics: Assessing the Impact of the Economy on the Environment
  - [21-23 March for countries in Africa, Latin America and the Caribbean](#)
  - [18-20 April for Asian, Europe and North Africa](#)

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Thank you

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SDG and Environment Statistics Unit
unep-ewad-sdgs@un.org

Presented by:
Ekaterina Poleshchuk
Programme Management Officer / Statistician
ekaterina.poleshchuk@un.org

For reproduction permission and all other issues, please contact Ekaterina Poleshchuk

United Nations Avenue, Gigiri
PO Box 30552 – 00100 GPO Nairobi, Kenya