



# AREA C

## Development of Global Databases for SEEA

UNCEEA meeting  
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SEEA





## Moving towards 2025 objectives

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- Progress on the five priority accounts
  - Air emissions
  - Energy flow
  - Material flow
  - Land cover
  - Water flow
- Objectives and priorities for 2025 and beyond
- Discussion

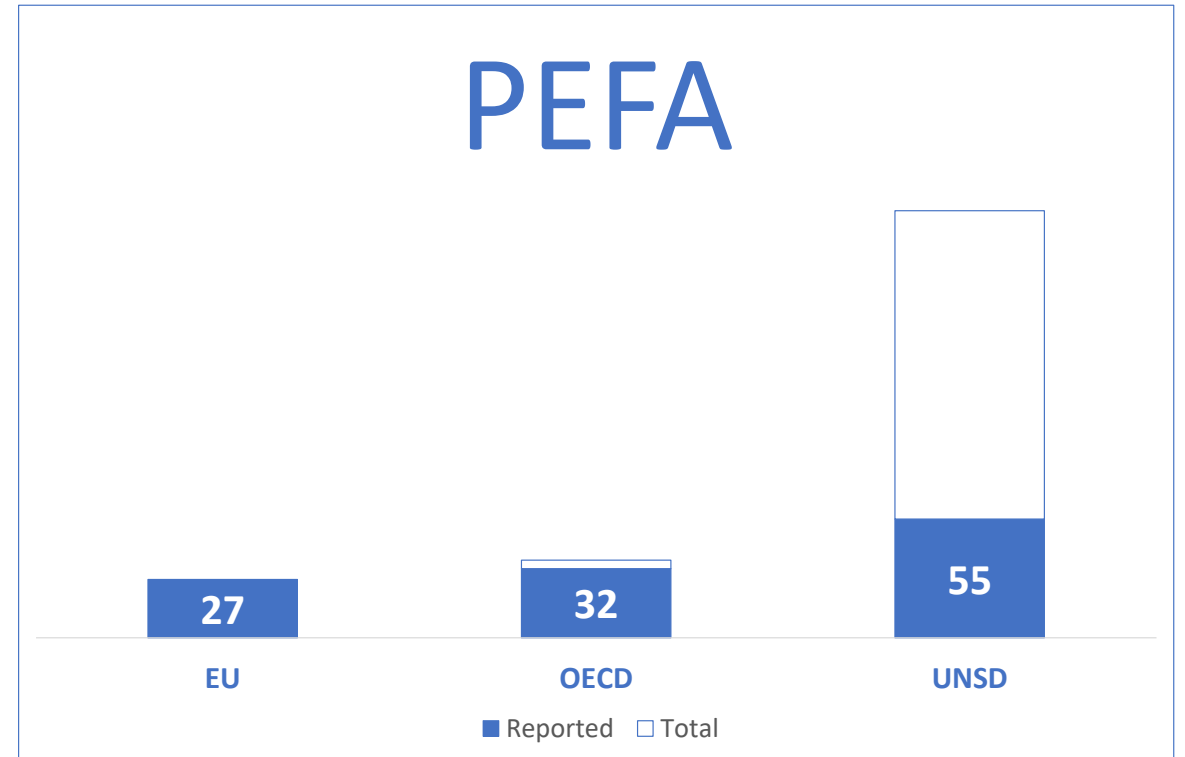
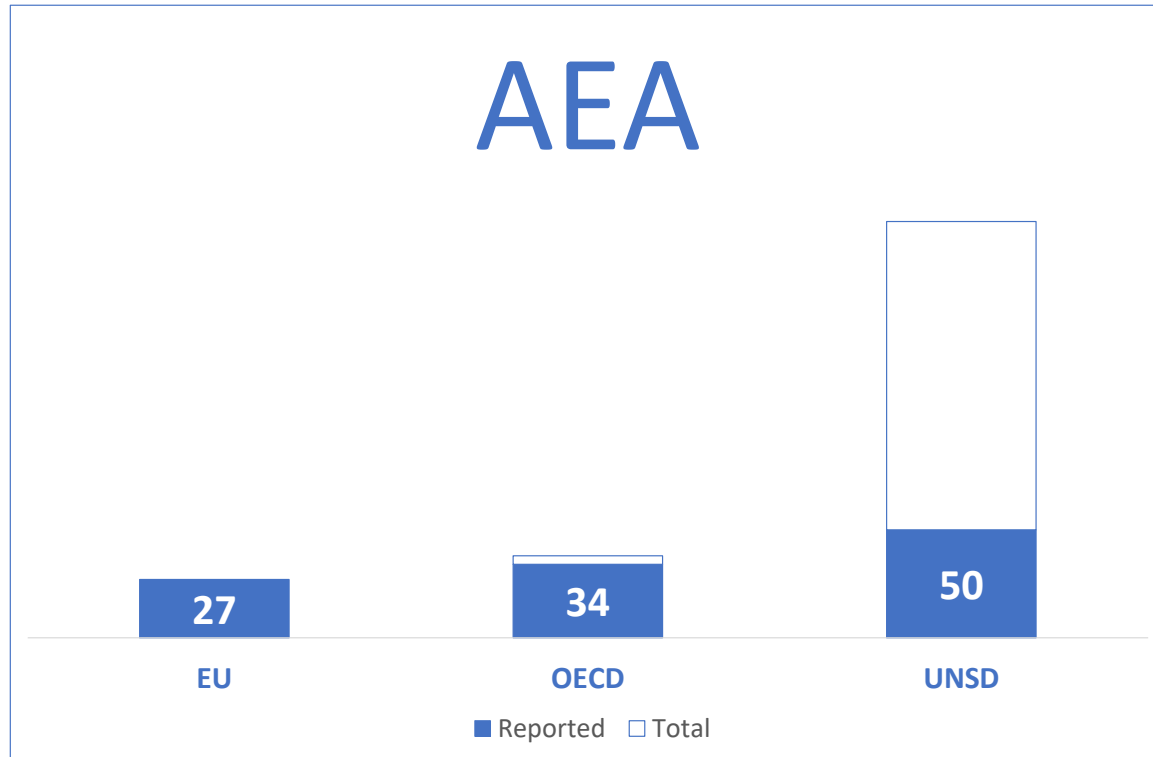


# PROGRESS ON THE FIVE PRIORITY ACCOUNTS



# 2023 Global data collection: encouraging results

## Geographical coverage





# Main takeaways from 2023

Experimental

Dissemination limited to validated data

Comparability

**Important differences and gaps remain:**

Breakdown by economic activities (ISIC)

Length of time series and

Timeliness

AEA

- Breakdown by pollutant
- Global Warming Potential (GWP)
- Biomass (inclusion/exclusion in GHG-total )

PEFA

- Supply use balance
- # energy balance

Reconciliation

Bridging items not always reported

Guidance

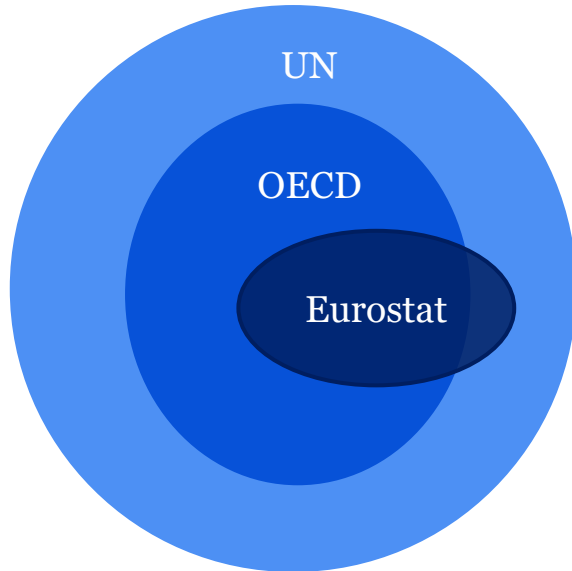
Needed on important underlying concepts (e.g., residence-based)

Consistency Energy ↔ Emissions





# 2024 Global data collection: AEA & PEFA, *Annual*



IMF-G20 DGI-3

## Further alignment of the questionnaires

**AEA** Inclusion of the worksheet for CO<sub>2</sub>\_ROAD  
GHG-total excl. / incl. CO<sub>2</sub> from biomass

**PEFA** Table C (Physical use table of emission-relevant use  
of energy flows (related to fuel combustion))  
Memo items on own energy use  
Extra column/row for statistical differences

June

Questionnaires  
Sent to countries

July/Sept

Questionnaires  
returned to IOs

Restricted Use - À usage restreint

Dec/Jan

Dissemination

Validation



# Air and Maritime Transport: further developments

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- Estimation of GHGs other than CO<sub>2</sub>



- Territory approach



# Economy-Wide Material Flows Accounts

## Global Database

UNEP-IRP updated the Material Flows Database (Dec 2023)

- 200 countries and territories
- Period 1970-2024
- Core indicators (Domestic Extraction, Exports, Imports, Physical Trade Balance, Domestic Material Input, ecc)



## SDG indicators

MFA data are one of the sources for SDG indicators (reported in March 2024)

## Validation

Non-EU countries UNEP contact to validate estimates (replace it with national data).  
EU countries data taken from the Eurostat Database.

## EW-MFA Compiler

UNEP–CSIRO XLSX tool for supporting countries in developing the EW-MFA

## Methodology

Revised Global Manual on Economy-Wide Material Flow Accounting

*Compiler and the Global Manual translated into Arabic, French and Russian*





# Land Cover Accounts

## Questionnaire

- Data
  1. National classes and their mapping with SEEA classes
  2. 14 SEEA classes
  3. Conversion matrices
- Metadata
- Feedback form

## Pilot-test (2024-Q4)

- OECD: its member countries
- FAO (in coordination with UNSD): rest of the world

## Policy demands (OECD only)

Three additional subclasses to “grasslands and tree-covered” areas  
i) undisturbed, ii) semi-natural and iii) planted.

## Frequency

Data collection: every 3 years (proposal)

Align with Eurostat's data collection on ecosystem accounts





# Physical Water Flow Accounts (PWFA)

## Feasibility study (OECD, 2024)

- Stocktake
  - Existing SEEA water accounts
  - Data sources that could support compilation
- Development of basic PWFA for certain countries
- Report with conclusions

NOTE: UNSD contributing; Eurostat also conducting feasibility studies (2024-25)

## Preliminary findings

- 8 OECD countries produce water accounts today
- 4 different templates available
- Potential datasources: JQ - IW, Aquastat, waterGAP
- Possible to compile basic water accounts, but need detailed water statistics, additional assumptions and calculations





# 3 possible scenarios are emerging

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## 1) **Water statistics**

- 1) Industry breakdown
- 2) Similar indicators as from water accounts
- 3) Needed to compile water accounts

## 2) **SEEA accounts**

- 1) Provide complete picture of water flows in the economy
- 2) Develop joint questionnaire for data collection by OECD, UN, Eurostat

## 3) **Ecosystem accounts**

- 1) As water provisioning and/or water regulating services
- 2) Ecosystem accounts may provide a spatial breakdown better suited for policy issues (for instance flooding, water scarcity)



## Data available at:

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- UN
  - <https://data.un.org/SdmxBrowser/start>
- OECD
  - <https://data-explorer.oecd.org/>
- Eurostat
  - <https://ec.europa.eu/eurostat/data/database>
- UNEP
  - <https://www.resourcepanel.org/global-material-flows-database>



# WAY FORWARD



## Summary and way forward

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- **Complete** current five-year period (2021-25)
    - Pursue activities on AEA, PEFA, EW-MFA
    - Pilot test Land cover questionnaire
    - Finalise the feasibility studies on Water flow accounts (3 scenarios)
  - **Start preparing** the next five-year period (2026-30)
    - Revise the existing list of priority accounts
    - Expand the list additional accounts to include
      - Environmental (harmful/ potentially environmentally damaging ) subsidies
      - Climate change expenditure accounts
- Align with DGI-3 recommendations!*



# DISCUSSION



## The committee is requested to comment on:

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1. Progress made for the five priority accounts
2. Feasibility studies on Water and Land cover accounts
3. Road map for the period 2026-30
  - Re-assessment of the existing priority accounts
  - Consider the addition of new accounts
    - environmentally harmful subsidies *or*
    - investments on climate change mitigation and climate change adaptation (expenditure) accounts





Thank you for your attention!

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