



# AREA C

## Development of Global Databases for SEEA

UNCEEA meeting  
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SEEA





# Content

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- Progress made
- Way forward
- Linkages with G20-DGI
- Discussion



# Progress made

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## **Air Emissions Accounts (AEA) & Physical Energy Flow Accounts (PEFA)**

**Geographical coverage/ international comparability:** new reporting templates OECD/UNSD

- Tier system
- SEEA-SDMX standards
- Pilot data collection run in Q2-2022. Validation ongoing
- Tested in a diverse group of countries with differing levels of data availability and SEEA experience
  - Australia, Canada, Colombia, Costa Rica, Indonesia, Kenya, Mexico, New Zealand
- Results to be reviewed by the SEEA Central Framework Technical Committee and submitted to the UNCEEA for approval
- Questionnaires will be presented to G20 Data Gaps Initiative (DGI) (virtual workshop)

## **Air Emissions Accounts (AEA)**

**Granularity:** Maritime Transport CO<sub>2</sub> emissions **OECD** ongoing

**Timeliness/Frequency:** Quarterly AEA(GHG) **IMF/OECD/IEA/Eurostat/UNSD**

Data available IMF e-book in preparation



# Progress made

## Economy-Wide Material Flows Accounts (EW-MFA)

### **Global Manual (2021)**

UNEP & International Resource Panel (UNEP-IRP), Eurostat, UNSD and OECD

Built on Eurostat Economy-wide material flow accounts handbook,

Extensions to address specific issues of

- resource-extractive economies and
- subsistence economic activities

that are more prevalent in middle and low income countries.

### **Questionnaire**

Pre-filled questionnaire sent to countries (193 countries for 1970-2019)

Request to revise the data and replace it with national data if possible or necessary

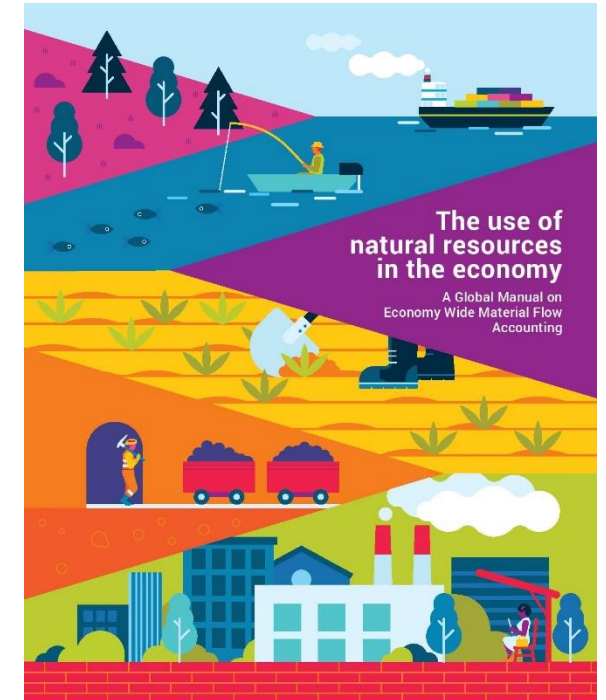
Responses expected by the end of June 2022.

Global estimates replaced with country data by request from the country.

### **Demand-based (footprint) materials**

Ongoing development of an internationally harmonised methodology (input-output based approach) OECD, UNEP and Eurostat .

A summary report with methodological guidance and an updated roadmap and measurement agenda will be available by end of 2022.





# Land Account:

## advancement towards global land cover SEEA database

1/2

### First Technical Expert Meeting (December 2021)

Basque Centre for Climate Change, Eurostat, FAO, OECD, UNCCD & UNSD

#### **Goal**

Better understand the different international databases on land cover (and land use) and their strengths and weaknesses **with respect to the SEEA.**

#### **Way forward**

- i. Develop an ontology of LC classes that would help meet the various information needs, while promoting harmonization;
- ii. Identify a minimum common list of classes  
Build transition matrices
- iii. Development of a reporting template (UNSD / ARIES for SEEA)

### Follow-up: 2<sup>nd</sup> Technical Expert Meeting

Organised by UNSD, FAO & OECD

Scheduled for H2 2022



# Land Account:

## advancement towards global land cover SEEA database

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### Methodological Developments

#### Questionnaire

FAO in collaboration with other international organisations

Goal: describe the diversity of approaches to document and apply land cover and land use classifications and statistics.

#### Land Cover Legend Registry (LCLR)

Site developed and maintained by FAO to provides access to available land cover legends developed with the final aim of providing a common reference structure for the comparison and integration of data for any generic land cover classification system, thus ensuring the ability to exchange land cover data.

#### Advisory Group

Advise the ISO technical committee on Geographic Information /Geomatics (ISO/TC 211)

Develop a new standard on **Land Use** to complement the existing ISO standard on the physiognomic aspects Land Cover (reviewed in 2019).





# Water Accounts

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## **Pilot work to populate core water accounts (pragmatic approach)**

### **Questionnaires**

Eurostat/OECD questionnaire section on inland waters

UNSD/UNEP water statistics questionnaire.

These questionnaires ensure a quasi-global country coverage and are broadly aligned with the SEEA Central Framework and related Water Accounts.

FAO Aquastat questionnaire.

Differences and synergies were reviewed in 2019-20 and discussed among the four partner organisations - OECD, Eurostat, UNSD and FAO. Some of the differences identified are addressed through amendments in the questionnaire. Other differences remain and are explained and highlighted.

### **Data collection on water**

Scheduled for Q4-2022.

### **Further work subsequent to the data collection**

Work to evaluate the structure of the questionnaire tables and the variables needed to populate core water accounts as proposed in the SEEA Technical Note on Water Accounting, and to find ways to integrate data from other sources to fill gaps (e.g. earth observation, ARIES for SEEA water accounts) will subsequently resume.

**The outcomes will be presented to the UNCEEA in 2023.**



# Current data availability

Accounts	Geographical	Time
<i>Air emissions</i>	<u>Reported data</u> : AUS, CAN, EU, CHE, COL, ISL, KOR, NOR, NZL, SRB, TUR, UKR	2000- <b>2020</b>
	<u>Estimated by IOs</u> : <b>JPN, KAZ</b> , RUS, USA	2008- <b>2020</b> <b>Now available by June 2022</b>
	<u>Quarterly GHG</u>	<u>Estimated by IOs</u> : 2010Q1- <b>2021Q4</b>
	<u>Air Transport</u>	2019M1- <b>2022M3</b>
<i>Physical Energy Flow</i>	AUS, BHU, BWA, CAN, COL, CRI, EU, FJI, GEO, JAM, KEN, MYS, MUS MEX, FSM, PLW, PRY, RSA, TUR	2008- <b>2020</b>
<i>Economy-wide material flows</i>	<b>Global</b> Demand-based (footprint)	1970- <b>2019</b>
<i>Land (cover)</i>	<b>Global</b> (countries, macro-regions, metropolitan areas)	1992- <b>2019</b>
<i>Water (resources, use)</i>	Selected countries depending on data availability (EU, OECD, other)	1970- <b>2019</b> (limited availability for some variables and years)





## Continued improvement of the 5 Area C priority accounts

- **Reporting templates** (tier system)
  - Expand geographical coverage
    - a) support countries to implement the priority accounts and
    - b) develop and implement estimation methodologies for filling the gaps and improving timeliness (AEA-EW-MFA).
  - Enhance the international comparability
  - Improve the efficient data exchange (e.g. SDMX)
- **Granularity**
  - Consistent use of international standards and classifications
  - Maritime transport



# Opportunity to link up with international initiatives

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## Data Gaps Initiative (DGI-Phase 3)

- Originally established in 2009 by Finance Ministers and Central Bank Governors (FMCBG)
  - set recommendations to support enhanced policy analysis of emerging risks and
  - close the data gaps identified following the global financial crisis.
- Phase 2 concluded in 2021
- A new phase of the DGI is expected to be approved in July 2022.
  - Four pillars:
    1. **climate change <- SEEA**
    2. household distributional information,
    3. fintech and financial inclusion, and
    4. access to private and administrative data and data sharing.
  - Additional recommendations on the carbon footprint of foreign direct investment, government climate-impacting subsidies, and mitigation and adaptation current and capital expenditures.
  - SEEA questionnaire templates could be used for the DGI (workshop 2022)



The committee is requested to comment on:

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1. Progress made
  - priority accounts
  - the main challenges and
  - the timeliness of their release
2. Roadmap and the planned activities
  - Reporting templates (priority accounts)
    - ongoing development and
    - potential application
3. Linkages with international initiatives such as the G20-DGI.



- Many thanks for your attention!