



WATER ACCOUNTS: PRELIMINARY RESULTS OECD FEASIBILITY STUDY

19TH MEETING OF THE UNCEEA – 25-26 JUNE 2024



Outline

- Feasibility study consists of the following elements:
 - A stock take of the current status of compilation of water accounts
 - A stock take of global data sources that may support compiling
 - Develop methods to compile a basic set of PWFA and test i.e. deep dives
 - Draft a report containing the results of the feasibility study



Stocktake parameters

Scope:

- Physical Water Flow Accounts (supply and use tables only)
- 38 OECD countries
- 7 accession countries
- 3 non-OECD countries known to have water accounts

Sources:

- UN 2023 Global Assessment
- Report on water accounts by Global Commission on the Economics of Water
- National Statistical Offices
- Academic studies / think tanks

Criteria:

- More than 1 year in the past 5 years
- One off studies, pilot projects, regional/ per river basin studies, discontinued projects are excluded.



Stocktake results

Results:

- Countries regularly producing water accounts today : Australia, Brazil, Canada, Colombia, Denmark, Germany, Mexico, Netherlands (8).
- Countries with some type of water account in the past: Costa Rica, Finland, Hungary, Israel, Luxembourg, Slovenia, Spain, Sweden, Peru, USA (10).

Other information assessed:

- **Years:** usually 2010s to 2020s
- **Industry breakdown:** level of detail ranges widely (6 to 270 activities registered).
- **Sources used for compilation:** nationally administered surveys, meteorological/hydrological institutes, private research institutions.
- **Templates:** SEEA – water, UNSD / SEEA-CF, Eurostat 2014.
→ Usually the UNSD / SEEA-CF template being used



Data sources

Aquastat, FAO:

- highly aggregated information on water resources, withdrawals and use
- 1960 - present

OECD/Eurostat Joint Questionnaire on Inland Waters (JQ-IW):

- freshwater statistics: resources, abstractions, use, connection rates to wastewater treatment plants and discharges
- Alignment with SEEA
- 1970 - present

WaterGAP:

- Global hydrological model that quantifies human use of ground and surface water, water flows, water storage and water resources.
- 1901 – 2016

Other: UNEP SDG6 app, SCP HAT, ARIES for SEEA.



Different water accounts templates

Template	Columns balance	Rows balance	Column detail	Row blocks	Product detail
UNSD/SEEA CF	Yes	Yes	10	5	11
SEEA water	Yes	No	8	2	14
Eurostat 2014	Yes	Yes	11	3	38
Eurostat 2021	Yes	Yes	12	5	19

Row blocks main differences :

- 2: within the economy, from the env./to the env.
- 3: from env. to economy, within economy, to the env.
- 5: Sources of abstracted water, water, wastewater, return flows, evapotranspiration and incorporation.

Columns main differences:

- From the environment column
- Accumulation column
- Industry detail

Product detail main differences:

- Abstracted water uses: for cooling, irrigation, aquaculture...



Deep Dives

- Using JQ-IW (and WaterGAP) model to fill in simplified water accounts.
- Bulgaria: possible to obtain basic PSUT but
 - Necessity for several assumptions and additional calculations to compile a balanced PSUT
 - Based on detailed water statistics.
- Canada is currently testing a questionnaire on water accounts.



Preliminary findings

Considerations:

- Water accounts provide a comprehensive picture of water flows in the economy
- However, water statistics are already done by ISIC, and can derive almost the same indicators as water accounts.
- Mismatch between accounts being annual and national scope and key policy issues (for instance flooding; water scarcity)

3 Scenarios emerge– tbd at 2025 UNCEEA:

- 1) Focus investment on water statistics
- 2) Maintain water accounts as priority accounts: develop joint questionnaire for data collection by OECD, UN, Eurostat.
- 3) Further development of water accounts through ecosystem accounts



Next steps

- Further explore the potential of the WaterGap model
- Finalize the feasibility study
 - Collaborate with Eurostat and UNSD
- Coordination with WPEI

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