



Integration of accounts for analytical purposes: Some reflections based on work at the OECD

Daniel Clarke, Researcher/Analyst

8th Joint OECD/UNECE Seminar on SEEA Implementation
13-15 March, 2023



“The connectivity and coherence of information sourced from the accounts of the SEEA Central Framework are particularly important when the indicators are designed to provide information about both the environmental effectiveness and the economic efficiency of policies, or are established to support structural policy analyses. Relevant functions include measuring progress towards sustainable development and monitoring the integration of economic and environmental policies.”

Extract from the **SEEA Applications and Extensions (2012)**



@OECD_Stat



OECD Statistics



www.oecd.org/sdd



www.stats.oecd.org

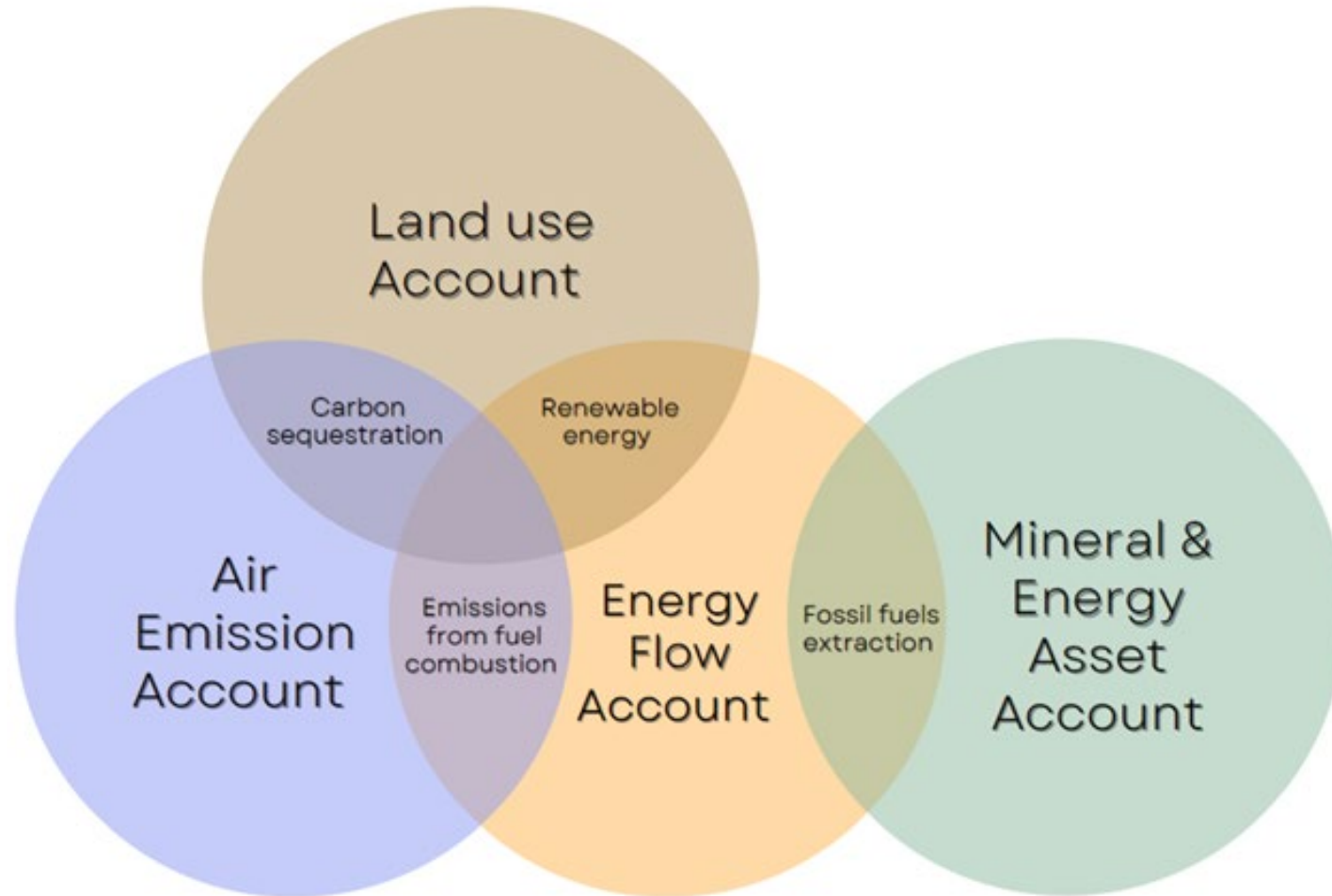


Cross-accounts integration: food for thought?

- **Linking policies and impacts**
 - Leveraging coherence of framework across accounts
 - Environmental-economic policies often have specific demands for granularity
- **Water accounts and ecosystems**
 - Water is essential to ecosystem condition and to services
 - Opportunity to increase policy relevance of water accounts by linking to scale of decision-making and to geospatial information
- **Circular economy**
 - Material flows: resource inputs -> throughput -> residuals; trade statistics
 - Production <> Consumption perspectives
- **Drivers of climate change**
 - Fossil fuel resource inputs -> Energy Accounts -> Emission Accounts



Cross-SEEA integration: climate change example





New AEA and PEFA questionnaires



AIR EMISSION ACCOUNTS

Version February 2023



Physical Energy Flow Account Questionnaire

- **Eurostat:** European countries (EU, EFTA, ENP)
- **OECD:** non-European members of OECD
- **UNSD:** non-European countries, non-OECD member countries

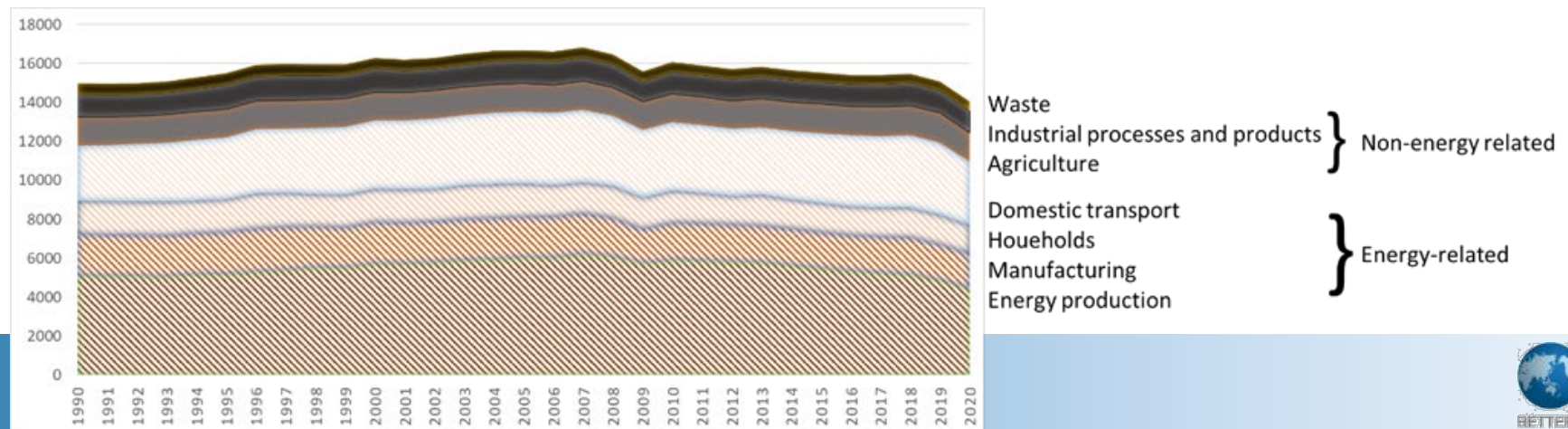
See also: <https://www.oecd.org/statistics/data-collection/environmental-economic-accounts.htm>



Some expected benefits from integrated AEA and PEFA data cubes

- External validation (plausibility)
- Strong interest to linking AEA to Inventories (e.g. target-setting)
 - Importance of bridging items
- Increased granularity for analysis – e.g. for looking at shares of emissions from fossil fuel combustion

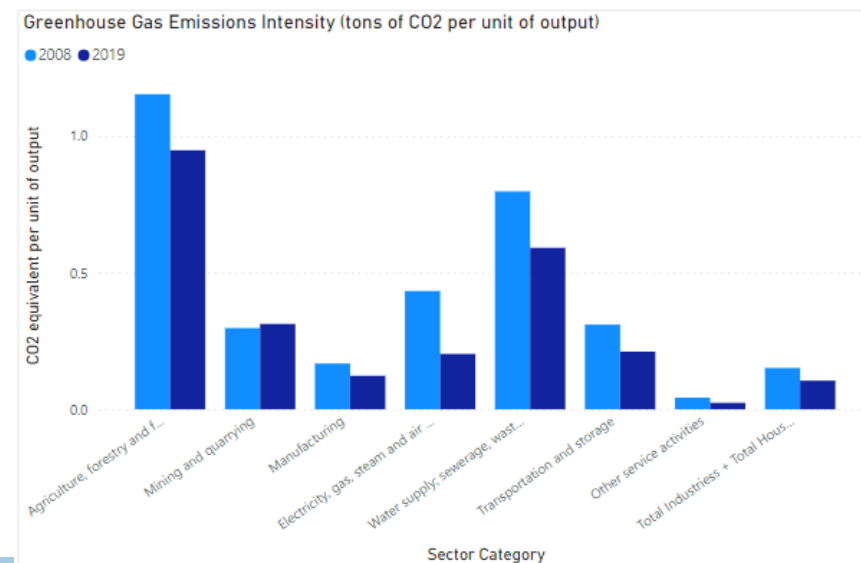
GHG emissions from energy and non-energy sources, OECD 1990 to 2020 (inventories basis)
millions of tonnes





Integration between the SEEA and the SNA 2025

- In the SNA 2025, net production and income measures will gain prominence... taking into account **depletion of natural capital**, giving an indication of the extent to which economic activity – measured by NDP – is occurring at the expense of the erosion of natural capital stocks
- **Natural capital stocks** in the SNA 2025 will include breakdowns by different *types*:
 - land, non-renewable and renewable energy resources, biological resources, water resources
 - **Renewable energy resources** to be included, with breakdowns for the different types of renewable energy resources such as wind, solar, water and geothermal energy resources
- **Intensity/efficiency measures by activity, decoupling analyses**



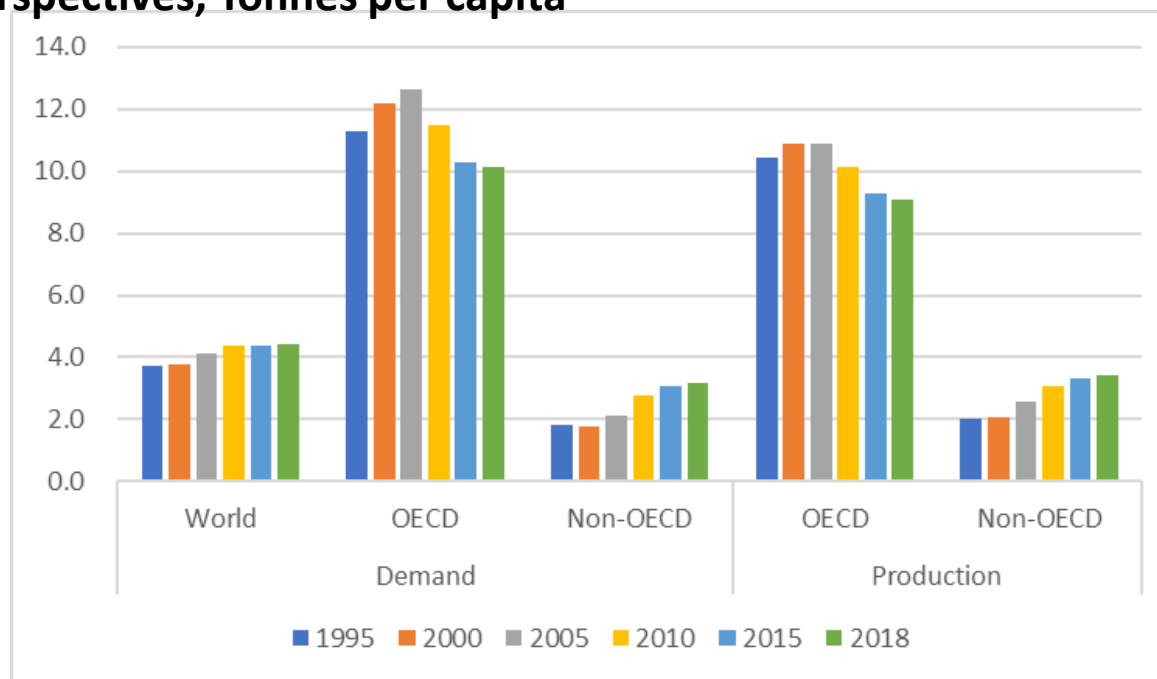


Bringing together production and consumption figures

- Inter-Country Input-Output (ICIO) tables

- Emissions embodied in trade
- Carbon footprint

CO₂ emissions from fossil fuel combustion: production and consumption perspectives, Tonnes per capita



OECD.Stat database: [Carbon dioxide emissions embodied in international trade \(2021 ed.\)](#).



THANK YOU



@OECD_Stat



OECD Statistics



www.oecd.org/sdd



www.stats.oecd.org