

System of Environmental Economic Accounting

# **Overview of the SEEA and its application**

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## Information needs for sustainable development



#### **Sustainable development initiatives**

- 2030 Sustainable Development Agenda
- Inter-agency Expert Group on the Sustainable Development Goals
- International initiatives
  - > OECD's Green Growth Strategy, WAVES, VANTAGE, UNEP-led Green Economy programme, CBD Aichi Targets, TEEB





#### **Sustainable development: Integration**

- The economy impacts the environment and the environment impacts the economy
- Need to understand these inter-linkages and incorporate them into policy design





#### **Environment-Economy: Integration**



- Environmental policy mustconsider a number of differentnatural systems which areinterconnected
  - E.g. Water-Energy-Food-Climate Change nexus
- Policy should recognize synergies and trade-offs between these different systems



#### **Statistics for Sustainable Development**

- Sustainable Development Policy should:
  - > Take an integrated approach: Policy should be based on a better understanding of interactions and tradeoffs between the different realms of sustainability
  - > Be based on evidence: Policy should, to the greatest extent possible, be informed by rigorously established evidence
- To achieve this, an information system is needed to support policy analysis and decisions, which provides integrated information on;
  - > The multiple issues relevant to sustainable development
  - > The interconnections between these issues



### Silo Approach → Integrated Statistics



#### Accounts to integrate statistics:

- Linking policy needs and statistics
- Understanding the institutional arrangements
- Integrated statistical production process/chain and services
- Consistency between basic data, accounts and tables and indicators



#### Silo Approach → Integrated Statistics







## The SEEA: responding to information needs



### The System of Environmental Economic Accounting (SEEA)

- An internationally agreed statistical framework to measure the environment and its interactions with economy
- The SEEA Central Framework was adopted as an international statistical standard by the UN Statistical Commission in 2012
- The SEEA Experimental Ecosystem Accounts complement the Central Framework and represent international efforts toward coherent ecosystem accounting





#### The SNA and SEEA: Systems of integrated information





#### **SEEA Conceptual Framework**





#### **Policy Quadrants and the SEEA**





#### Integration of environmentaleconomic information

- The SEEA provides a tool for the effective integration of environmental economic data
- This integration can take a number of forms:
  - > Presentation of different information using common format and classifications
  - > Presentation of descriptive statistics and indicators on pressure, state, response
  - Construction of analytical models for environmental-economic analysis



#### Integrated environmental and socioeconomic data for policy

- Enable analysis of the impact of economic policies on the environment and vice versa
- Identify the socio-economic drivers, pressures, impacts and responses affecting the environment
- Provide a quantitative basis for policy design, including;
  - > Productivity analysis
  - > Natural resource management
- Support greater precision for environmental regulations and resource management strategies
- Provides indicators that express the relationships between the environment and the economy



#### **Integrated data for policy-an example**

#### Energy policy

- Energy supply and use tables in monetary and physical terms provide information on, among others,
  - > Energy dependency
  - > Industry reliance on particular sources of energy
  - > Profile of energy products supplied and used
- Useful for evidence based policies on energy to better meet the needs of the economy in a more efficient manner
- Integrated nature allows for links to be made with other sectors



### International policy initiatives and implementation of the SEEA



## SEEA has been adopted by many international policy initiatives





#### **Sustainable Development Goals and SEEA**

The SEEA is an important statistical framework for monitoring the SDGs in an integrated way





#### **SEEA based SDG Indicators**

Using the SEEA to calculate SDG indicators can result in higher quality indicators in terms of;

- **Policy Relevance and Utility:** Presentation of highly relevant environmental-economic information;
  - > Aggregates and indicators as headline numbers to frame discussions
  - > Descriptive statistics offering a richer understanding of policy issues
  - > Coherent Data for environmental-economic modelling
- **Analytical Soundness:** A vehicle for harmonization of environment statistics to ensure methodological coherence of
- **Measurability and Practicality:** A vehicle to achieve an integrated production process for indicators by consolidating data collection and compilation



#### **Integrated Architecture for SDGs**

Architecture of integrated global and national monitoring requires methodological consistency across themes and levels of monitoring.

The SEEA should be the methodological basis for:

- 1. The integration of environmental economic indicators for the SDGs.
- 2. The disaggregation of aggregate 'global indicators' to inform national policy





### Indicators based on Standards

- Higher quality
- International comparability
- Comprehensive basis for (dis)aggregation

#### **Statistical Standards**

**Aligned Definitions and Classifications** 

- Improved capacity to compare and/or combine statistics from different sectors
  - Basis for coherent and comprehensive data sets









#### **Implementation Tools**

- Implementation Strategy
- Implementation Guide and Diagnostic Tool
- Technical Notes and Core Tables
- Compilation Guidelines
  - Water
  - More being developed...
- SEEA Training
  - Current online and in-person phase
  - In-depth modules being further developed



#### **THANK YOU**

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