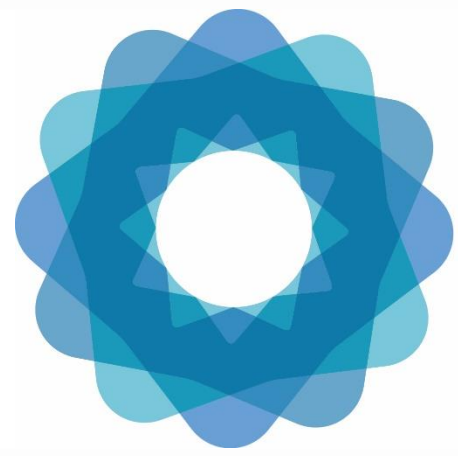


System of Environmental Economic Accounting



System of
Environmental
Economic
Accounting

Introduction to the SEEA and SEEA-Energy

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United Nations Statistics Division



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The Need for Natural Capital Accounting

- Nature and the services it provides support almost every aspect of human well-being
- But headline indicators like GDP, the unemployment rate and inflation do not capture the full economic contributions of nature
- Traditional accounts don't help us understand how the depletion of natural resources and degradation of the environment affect the economy and wellbeing



Benefits of an Accounting Framework

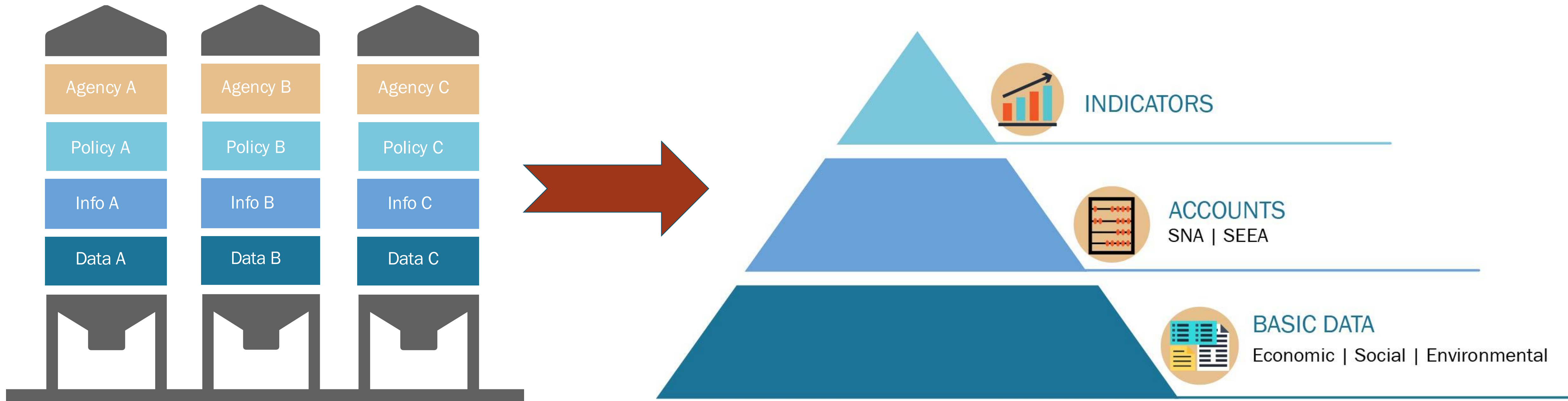
- Presents environmental and economic information together in a consistent way
- Allows for environmental data to be integrated with existing System of National Accounts measures
- Provides:
 - International comparability
 - Broad credibility
 - Replicability
- *Transforms data into information*

The SEEA as a Unifying Framework

- SEEA accounts integrate numerous data sources, combining economic information with environmental information on areas such as
 - Energy
 - Air emissions
 - Agriculture and forestry
 - Ecosystems and many more
- These data sources are combined to produce an integrated set of accounts and develop policy relevant indicators



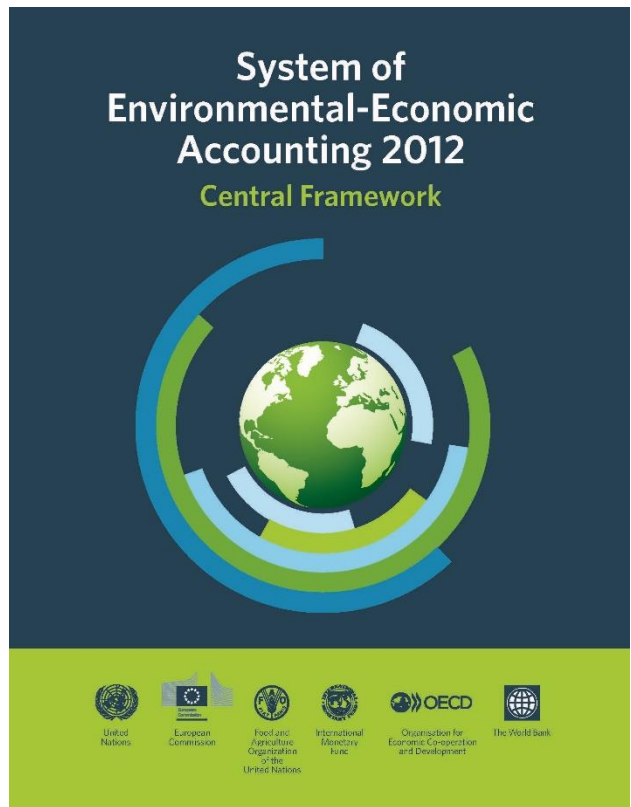
From data silos to integrated information



The SNA and SEEA: Systems of Integrated Information



One Environment: Two Perspectives



CENTRAL FRAMEWORK *Assets*



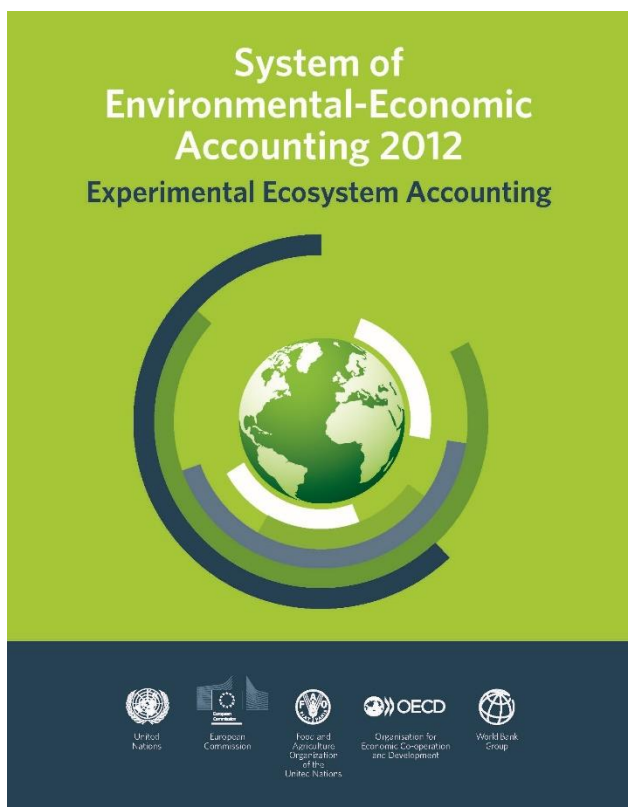
Timber



Water



Fish



ECOSYSTEM ACCOUNTING *Services*



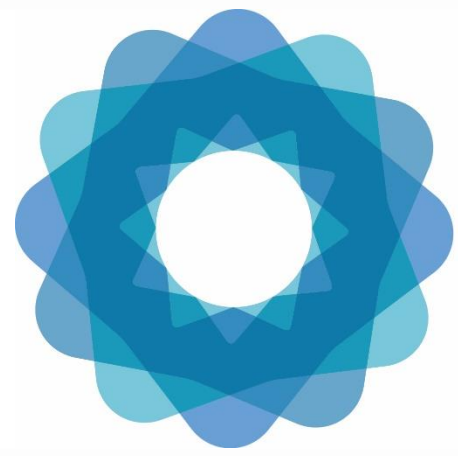
Forests
e.g. flood control



Rivers
e.g. water purification



Coasts
e.g. recreation



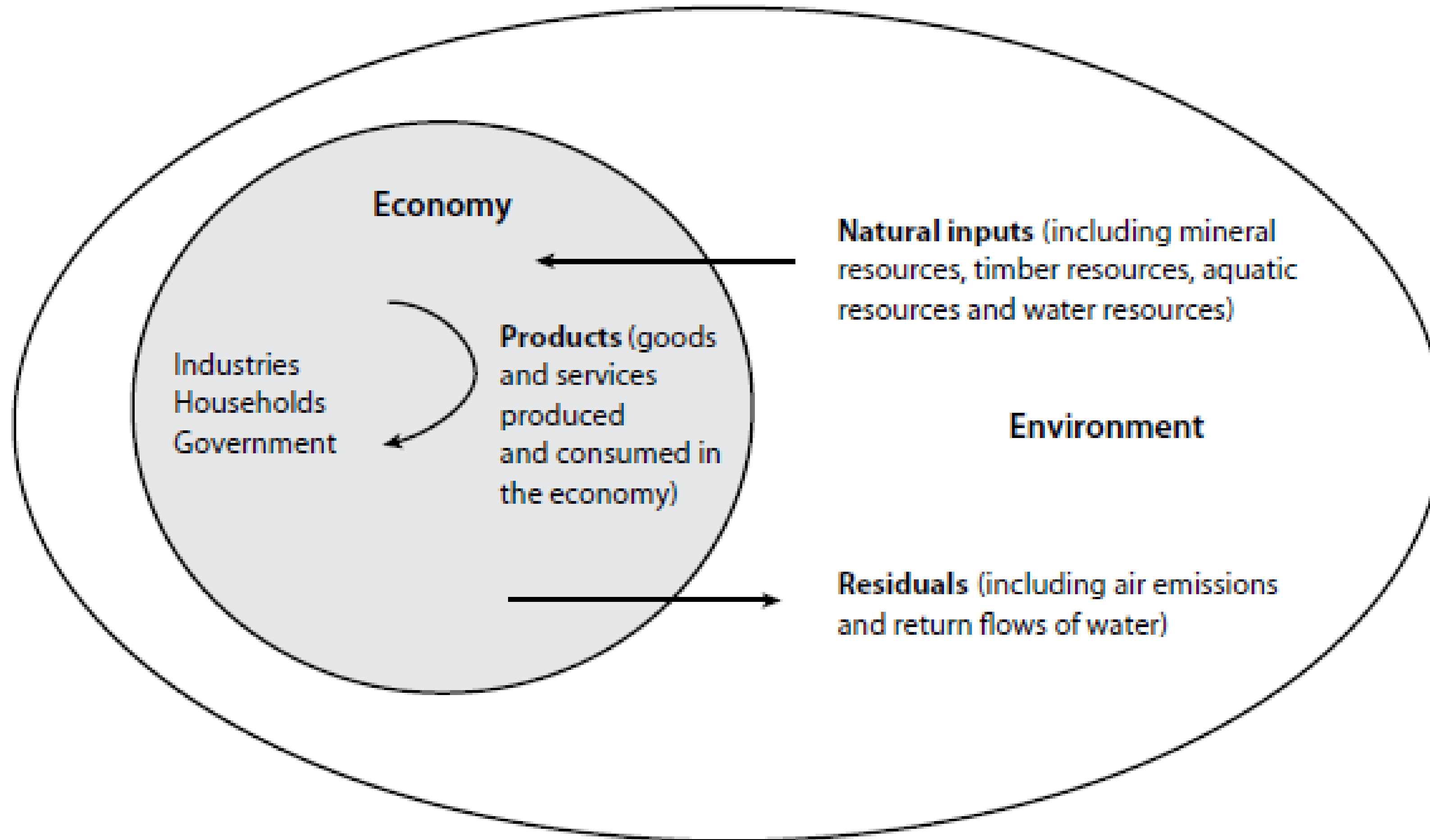
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The SEEA Central Framework



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The Environment-Economy Nexus

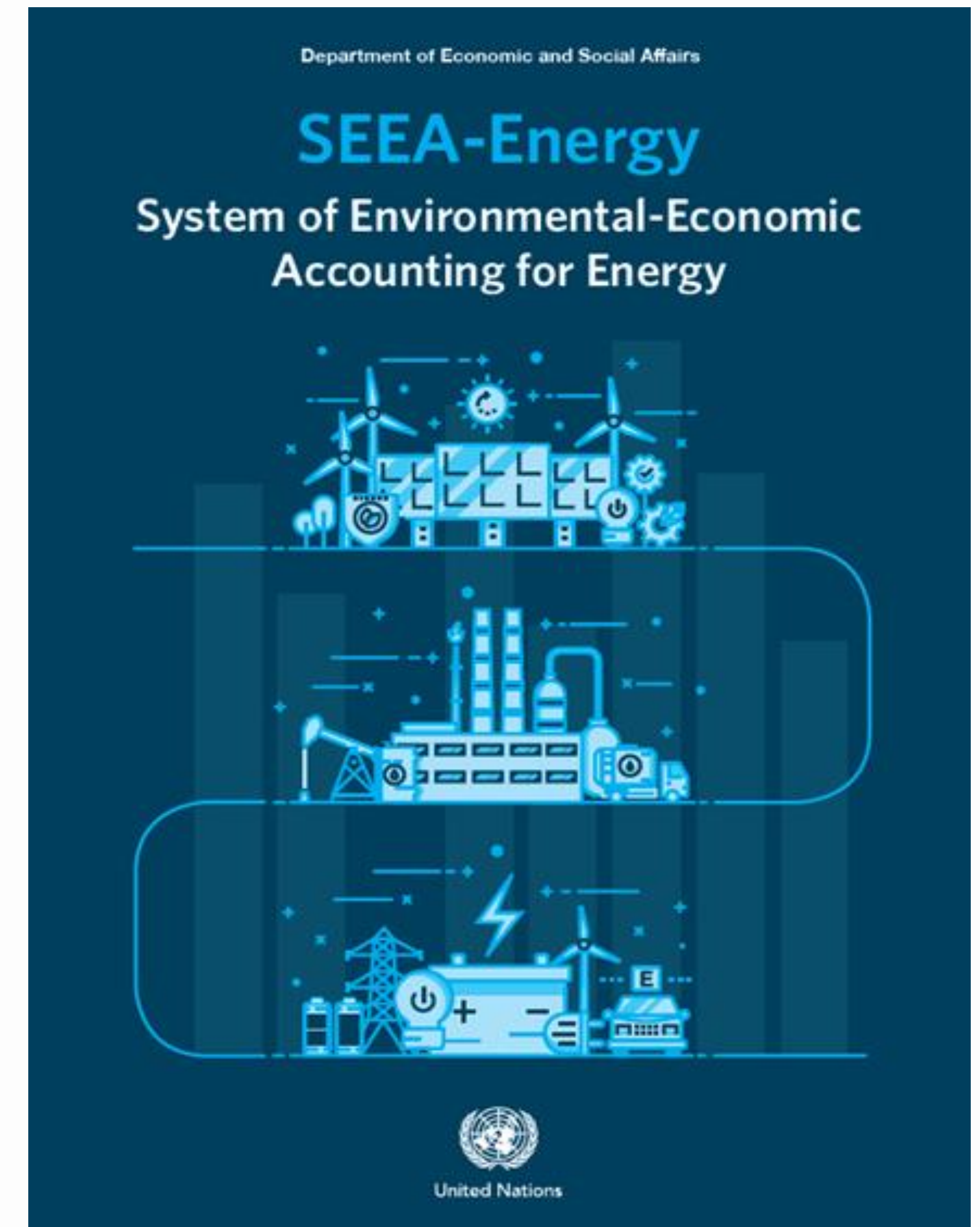


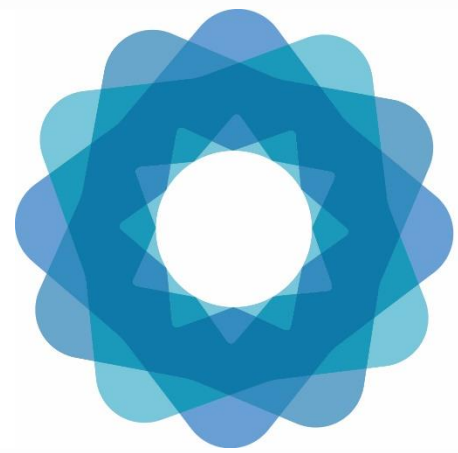
SEEA-Central Framework Accounts

- **Flow accounts:** supply and use tables for natural inputs, products, and residuals (e.g. waste, wastewater)
 - > Physical and/or monetary values
- **Stock accounts:** for environmental assets over an accounting period
 - > Physical and/or monetary values
- **Activity / purpose accounts:** explicitly identify environmental transactions already existing in the SNA.
 - > e.g. Environmental Protection Expenditure (EPE) accounts, environmental taxes and subsidies
- **Combined physical and monetary accounts:** bring together physical and monetary information for derivation indicators, including depletion adjusted aggregates

SEEA-Energy

- Fully consistent with the SEEA Central Framework
- Agreed concepts, definitions, classifications, tables, and accounts related to energy supply and use and stocks of energy resources
- Supports analysis of role of energy within the economy and relationship between energy-related activities and environment
- Builds upon energy statistics, closely related to energy balances
- Three main types of information on energy
 - > Supply and use of energy (flows)
 - > Stocks and changes in stocks of energy
 - > Other economic aspects related to energy
- Physical and monetary accounts





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Applications of the SEEA



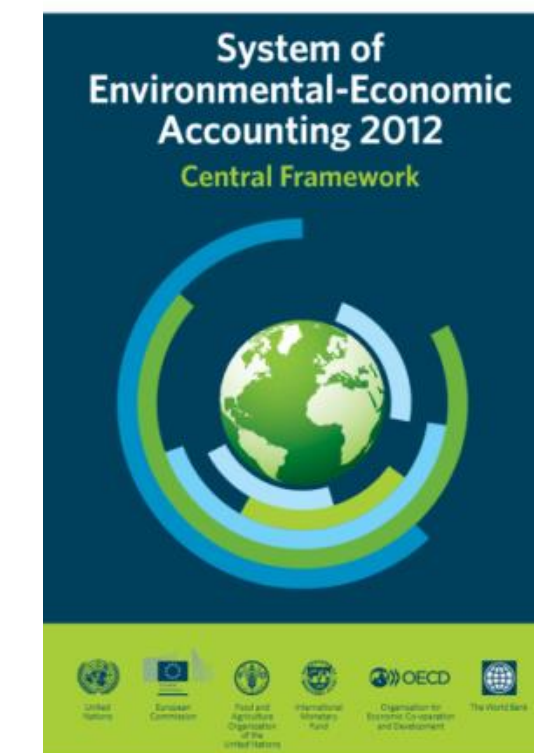
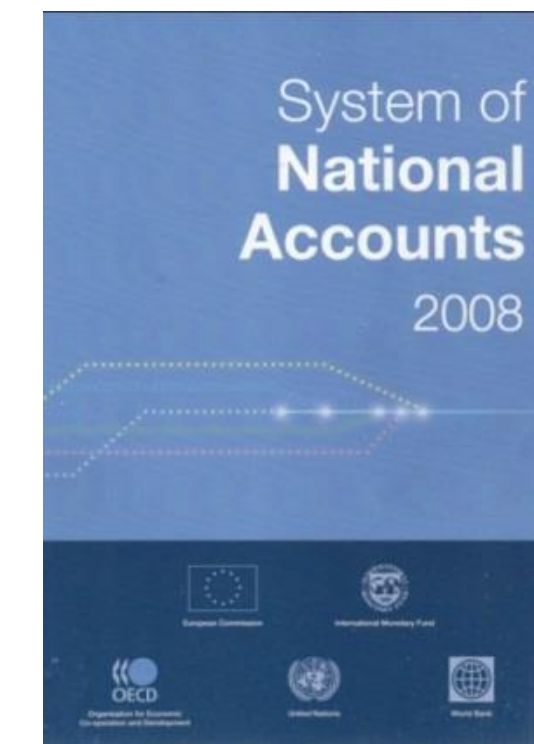
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Indicators based on standards

Indicators based on Standards

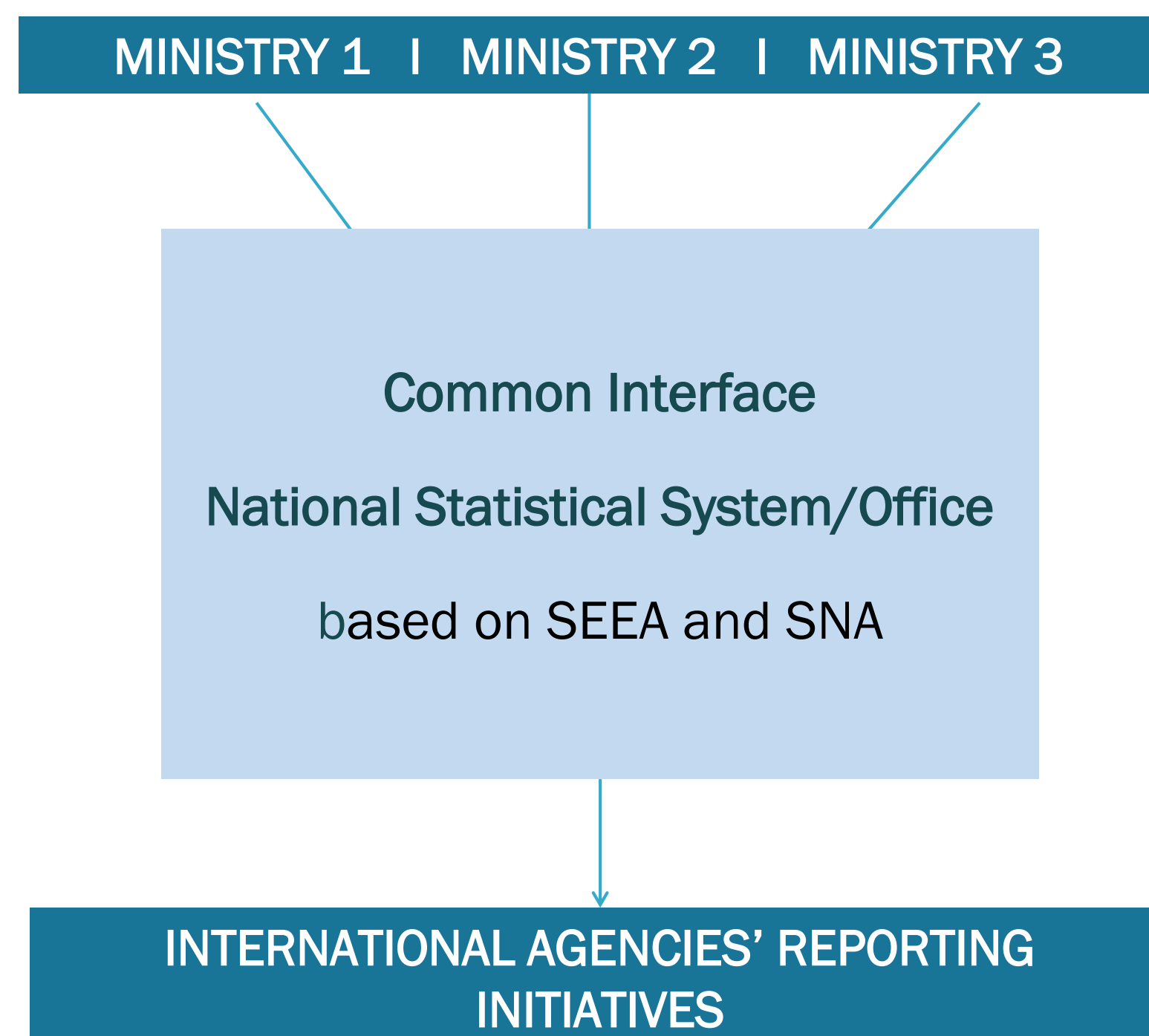
- Higher quality
- International comparability
- Comprehensive basis for (dis)aggregation
- Standards for Statistics
- Aligned definitions and classifications
- Improved capacity to compare and/or combine statistics from different sectors
- Basis for coherent and comprehensive data sets

Frameworks to coherently integrate information:



Streamlined reporting

Methodological Consistency resulting from implementation of the SEEA reduces reporting burden of national ministries/agencies:

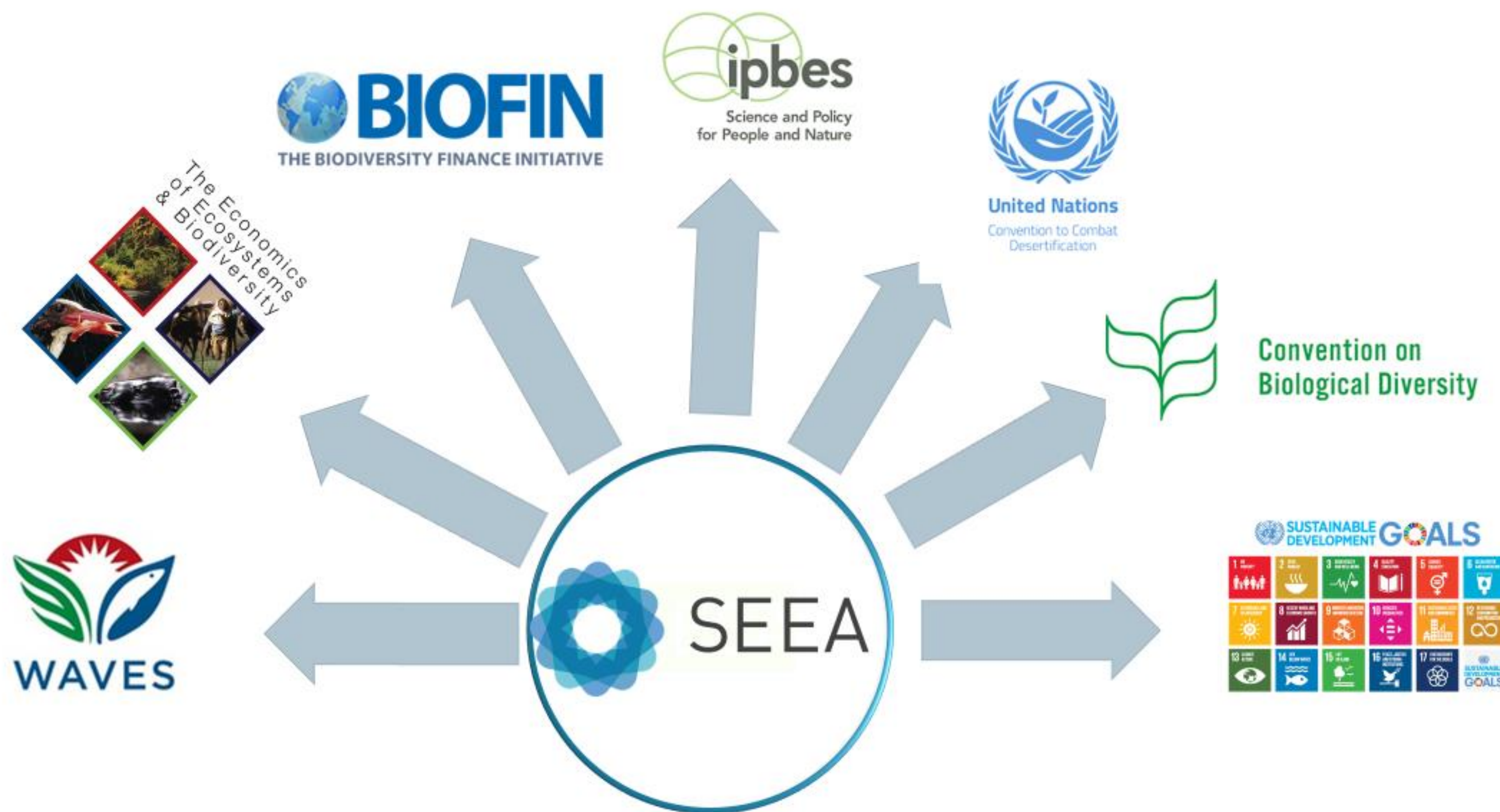


- Single data system to inform indicators
- Data compiled once for many purposes
- Reduced need for countries to make arduous data adjustments for international reporting

Facilitates streamlined reporting process for reporting initiatives

- Consistent definitions, classifications and spatial units at national and international level allows for **direct transmission of information**

The SEEA as a Supporting Framework



The SEEA supports the SDGs

The SEEA provides information for 40 indicators for 9 SDGs

GOAL 2: Zero Hunger

GOAL 6: Clean Water and Sanitation

GOAL 7: Affordable and Clean Energy

GOAL 8: Decent Work and Economic Growth

GOAL 9: Industry, Innovation and Infrastructure

GOAL 11: Sustainable Cities and Communities

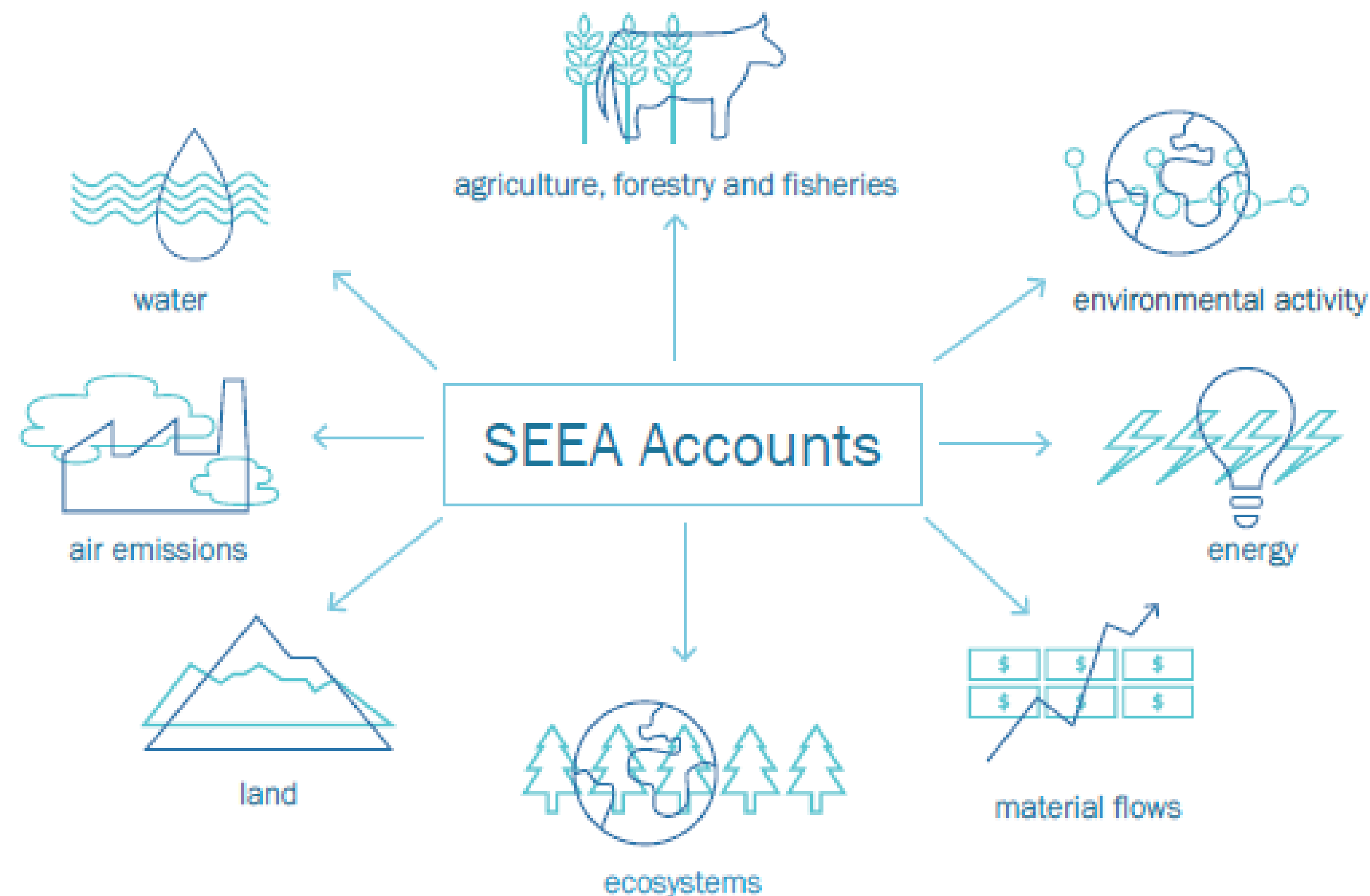
GOAL 12: Responsible Consumption and Production

GOAL 14: Life Below Water

GOAL 15: Life on Land



SEEA Accounts and Climate Change



Air emission accounts describe a wide range of GHG emissions and air pollutants by responsible economic activities.

Energy accounts describe the supply and use of various types of energy resources by different industries and households. They assess issues around energy efficiency, decoupling and energy transition.

Ecosystem accounts such as carbon accounts describe storage and sequestration of carbon in the form of spatially explicit maps.

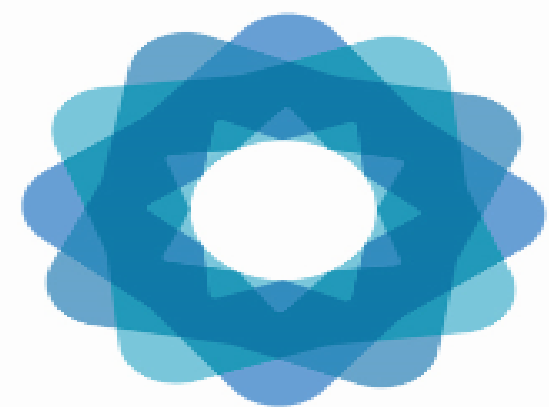
Environmental activity accounts detail expenses made on protection and restoration, as well as taxes and subsidies.

Land accounts track changes in land cover and land use over time by economic ownership.

The SEEA Enables a Transformative Biodiversity Agenda

- Aichi Target 2
- Post-2020 global biodiversity framework
- A consistent monitoring framework
- Helps make the case for protecting biodiversity by showing links to well-being
- Provides information on the drivers of biodiversity loss
- Can help track effectiveness of investments and policies aimed at biodiversity protection





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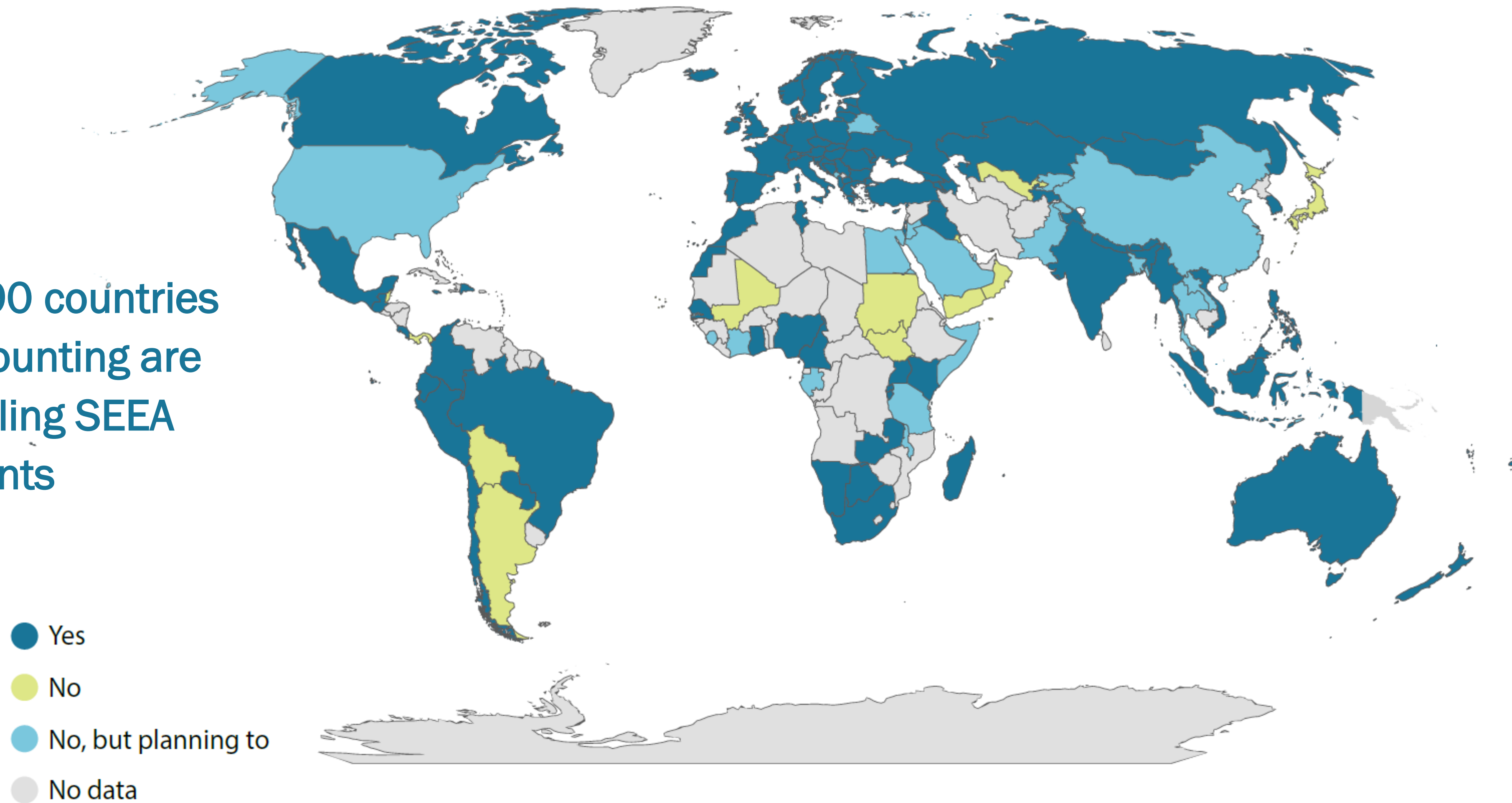
IMPLEMENTATION OF THE SEEA



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Status of SEEA implementation

Over 90 countries
and counting are
compiling SEEA
accounts



SEEA Implementation Strategy

- Joint strategy for SEEA Central Framework and Experimental Ecosystem Accounts

OBJECTIVES:

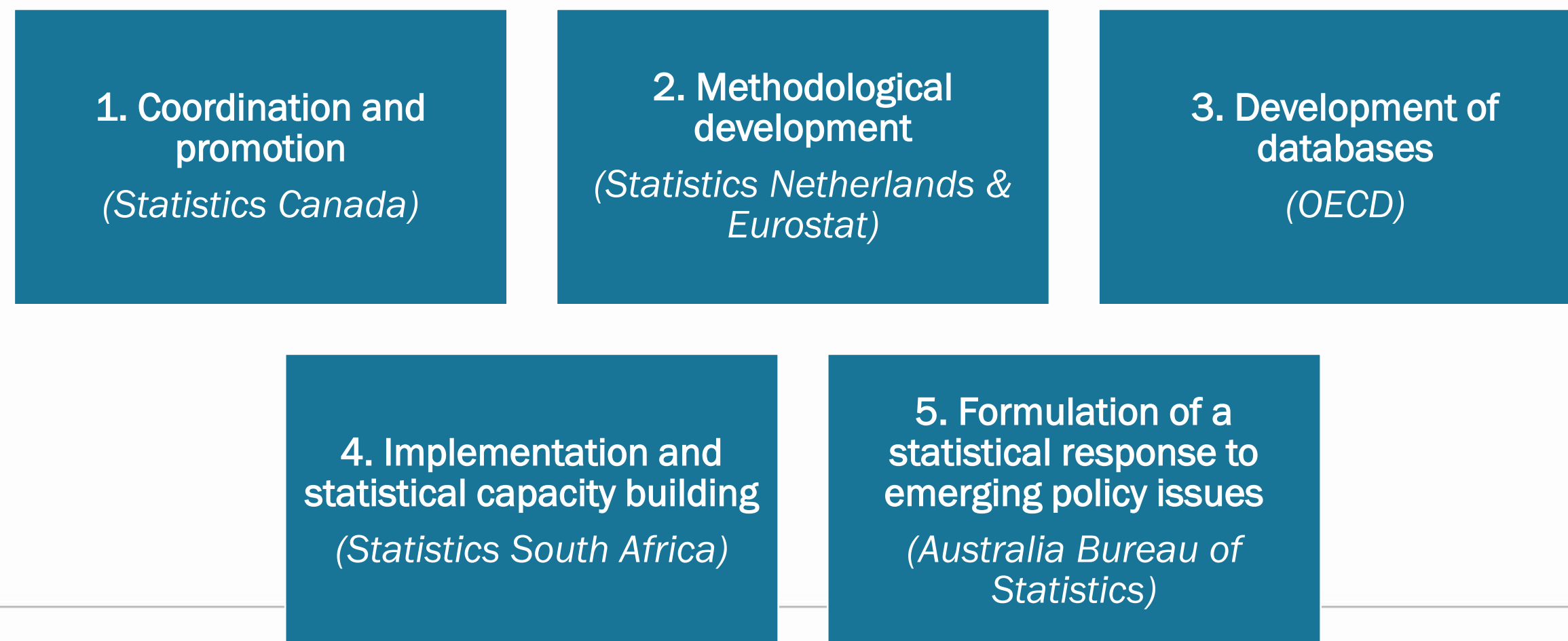
- Adoption of the SEEA as the **measurement framework for sustainable development**
- Mainstreaming of SEEA implementation in countries as part of the modernization statistical production process
- Establishment of technical capacity for regular reporting on a minimum set of SEEA accounts

TARGETS FOR 2020

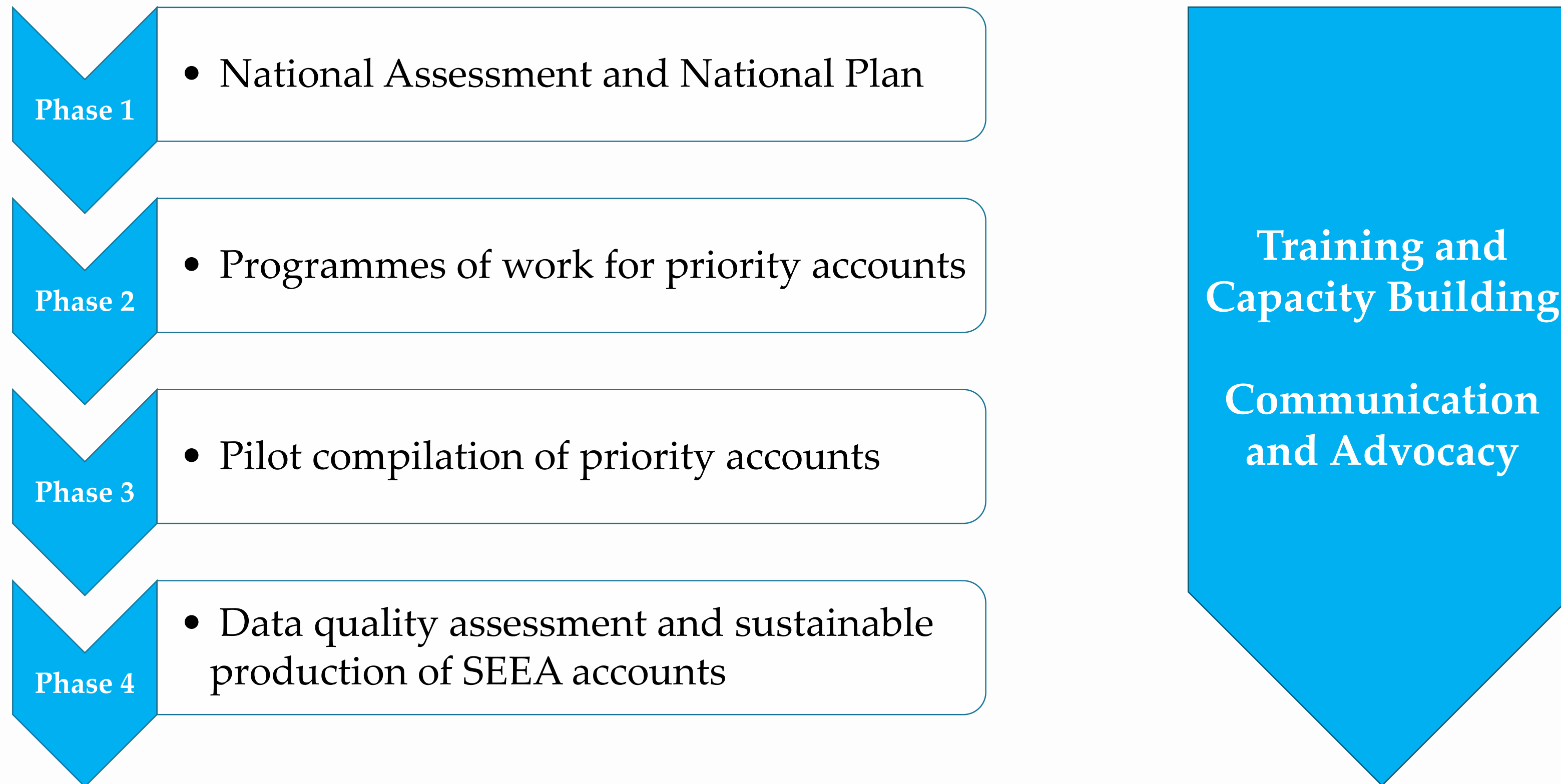
- **100 countries** with ongoing programmes on SEEA Central Framework
- **50 countries** initiating work on SEEA Experimental Ecosystem Accounting

UNCEEA Work Programme

- The UN Committee of Experts on Environmental-Economic Accounting (UNCEEA) is the umbrella body for coordinating efforts in environmental-economic accounting
- A Work Programme 2017-2020 was developed by the Bureau of the UNCEEA and takes a 5-pronged approach to global implementation
- For each area of work, different area leads are responsible for; a) acting as a champion and providing leadership, b) developing more detailed work plans and strategies, and c) coordinating with other members of the UNCEEA



Approach to National Implementation



Considerations for SEEA implementation

Strategic approach to
implementation

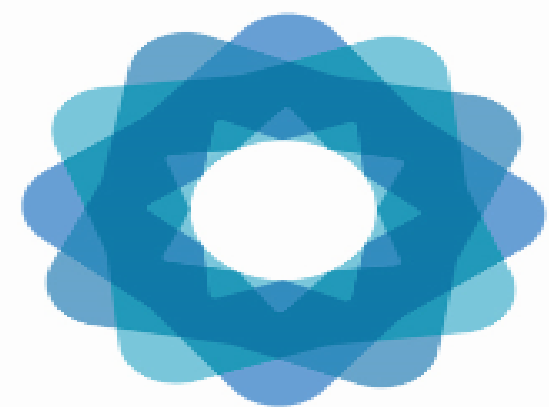
Linking implementation to
policy demands

National ownership

Regional and sub-regional
approach

Capacity building

Communication strategy



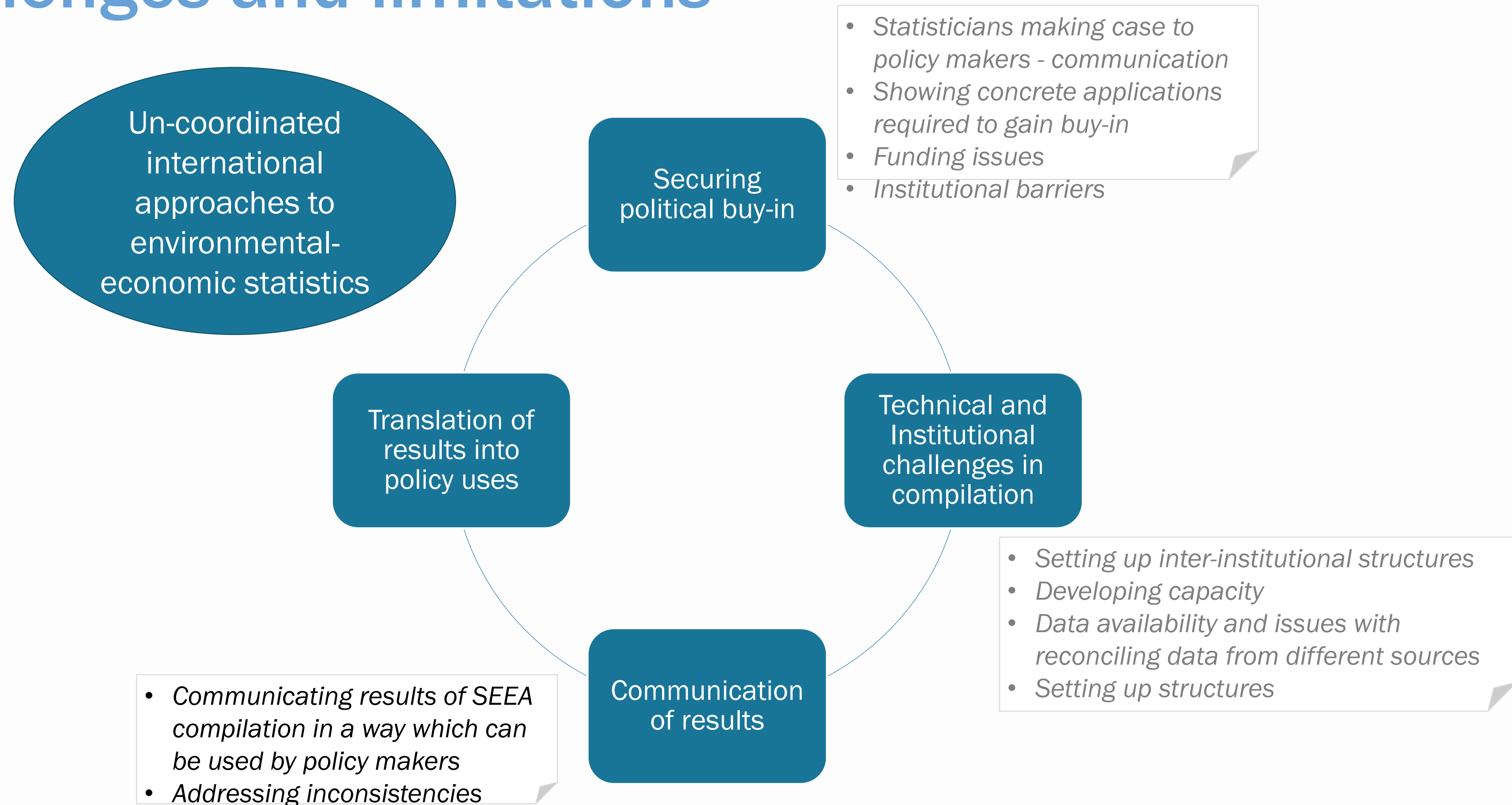
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CHALLENGES, LIMITATIONS, DISCUSSION ITEMS



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Challenges and limitations



Issues for discussion

- Implementation strategy – how does it apply to your country situation?
- The SEEA uses the same accounting structure of the SNA, but there are some differences. If your country compiles the SEEA, are national accountants involved in implementation?
- If your country has compiled SEEA accounts, what have been the technical and institutional challenges in compilation?
- What are the main policy priorities in your country? Can the SEEA and SEEA-Energy help inform them?
- Communication—how to best communicate the benefits of the SEEA to different stakeholders?



THANK YOU

seea@un.org