

A Constructive Comparison Across the Atlantic to Implement and Use Natural Capital Accounts

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The need for natural capital accounting stated over 100 years ago:

“The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.” — Theodore Roosevelt, August 29, 1910, Denver, Colorado

Context

- Researchers in the European Union (EU) and the United States (US) have advanced development of Natural Capital Accounts (NCA) during the past decade.
- NCA use and applications to inform policy and natural resource management decisions have also been developed, but effective use of NCA requires availability of accounts.
- This presentation describes efforts between researchers and practitioners in the EU and the US to cooperate in addressing the challenge of using NCA on both sides of the Atlantic.

Background

- **Special issue of *Ecosystem Services*** (Accounting for Natural Capital: lessons learned from applications in Europe and the United States, last update 20 June 2022).
- **Session at ACES (A Community of Ecosystem Services) 2022**, Washington, DC, December 2022 (Applying Natural Capital Accounts in the European Union and the United States: A Synthesis)
- **Session at EAERE (European Association of Environmental and Resource Economists) Conference**, Limassol, Cyprus, June 2023 (Policy Session 1: Exploring the policy uses of Natural Capital Accounting: a dialogue across the Atlantic)
- **EU-US Dialogue on Natural Capital Accounts, 2024**

EU-US Dialogue on Natural Capital Accounts, 2024

- Session 1: Governance, January 19, 2024
- Chair: Carl Shapiro (American University and USGS, Emeritus)
- Presenters: Petri Ekkehard (ESTAT) “Proposal for a regulation on European ecosystem account”
- Scott Wentland (BEA) “Governance and NCA in the US: An Overview”
- Session 2: From pilot to systematic production, February 1, 2024
- Chair: Marialuisa Tamborra (EC- JRC)
- Presenters: Ken Bagstad (USGS) “Natural capital accounting: From pilot to production in the U.S.”
- Alessandra La Notte (former JRC) “Natural Capital Accounts in Europe: from pilot to production”
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EU-US Dialogue on Natural Capital Accounts, 2024 (cont.)

- Session 3: Panel discussion on policy uses, February 22, 2024
- Chair: Carl Shapiro (American University and USGS, Emeritus) and Marialuisa Tamborra (EC- JRC)
 - US panelists
 - Eli Fenichel (Yale University)
 - Travis Warziniack (U.S. Forest Service)
 - Bryan Parthum (U.S. Environmental Protection Agency)
 - EU panelists
 - Björn Dohring (DG Economic and Financial Affairs)
 - Anne Teller (DG Environment)
 - Andrej Ceglar (European Central Bank)

From pilot to systematic production

- Initial point of reference for pilot applications in both the US and the EU is the System of Environmental and Economic Accounts – Ecosystem Accounts (SEEA EA), which provides a comprehensive framework, reference classifications, and a series of accounting formats

From pilot to systematic production -- EU

- In the EU, there are three different channels of practices to test the SEEA EA modules: extent, condition, and services.
- The testing phase started with the INCA (Integrated system for NCA) project
- INCA is a top-down initiative that brings together different European institutions to test and implement SEEA EA
 - Eurostat – steered testing phase
 - European Environment Agency – data provider
 - Joint Research Centre – scientific hub
 - DG Environment – policy actor
 - DG Research and Innovation – enhancing synergies with relevant EU-funded research projects
- At the end of five years, INCA released ecosystem extent account and nine ES accounts for the 27 EU member states
- ESTAT grants to national statistical offices for experiments in ecosystem accounting
- As a result of the testing phase, the EU adopted a regulatory approach through the amendment of the EU Regulation on European environmental economic accounts

From pilot to systematic production -- US

- Initial NCA development in the US began in the 1990's with work on mineral accounts with the then existing Bureau of Mines
- In 2002 and 2008, the H. John Heinz III Center for Science, Economics and the Environment published "The State of the Nation's Ecosystems," an effort to identification of strategic indicators of the condition and use of US ecosystems to develop periodic high-quality, and non-partisan reports
- In the mid-2000's, the White House Council on Environmental Quality convened an effort to develop environmental indicators across Federal agencies
- In 2016, a spontaneous and ad hoc collaboration of scientists, practitioners, and managers initiated an effort to develop experimental accounts for land, water, and ecosystems.
- Separate efforts in the US were developed satellite accounts for Oceans and Outdoor Recreation
- In 2022, the White House and Department of Commerce established an Interagency Policy Working Group to develop a US National Strategy.
- The Working Group evolved into the Policy Working Group on NCA

Governance

- Different institutions and policies in the EU and US concerning NCA development and management
- The EU has a centralized system with Eurostat (European Statistical Office) as a coordinating agency
- Eurostat manages and collects NCA applications across the EU
- Most statistical data in the EU are collected by EU member states – Eurostat provides guidelines for consistency
- For the production of Ecosystem Accounts in the 27 Member States, Eurostat will make available guidelines, tools, training sessions, and materials
- In the US, there is a decentralized system. The development of environmental statistics is distributed across several government and non-governmental organizations
- There is no uniform set of statistics relating to the environment, nor is there a lead agency. Several science and environmental agencies have independent responsibilities
- In January 2023, the White House released the “National Strategy to Develop Statistics for Environmental-Economic Decisions.” The strategy calls for a US system of NCA and associated environmental-economic statistics. It explicitly highlights the importance of informing government decisions

Policy Uses

- Although development and production of NCA differs in the US and the EU, the use of accounts is still limited on both sides of the Atlantic
- The EU has a time advantage with production of NCA beginning in 2026
- The US is planning to conduct a stepwise pilot until 2031, before beginning actual production

Conclusions

- Collaboration efforts are important to advance NCA production and use
- Governance is an important factor in advancing NCA implementation
- Expanded efforts and participation and research are needed to develop NCA applications to inform decisions
- The NCA community needs to be broad, including scientists, practitioners, and decision makers from the physical, biologic, economic, and social science disciplines.

Questions for consideration

- The focus of the current effort is on advancing NCA use to inform environmental-economic decisions. ***How can we identify topics that can benefit most from future international collaboration?***
- The current effort is a spontaneous collaboration that was initiated after a USGS visit to the JRC in 2019. ***How might additional perspectives be added to future collaborative studies of NCA opportunities and challenges?***
- The current effort is examining (1) Governance; (2) Development Status; and (3) Applications. ***Are there additional topics that should be considered from a collaborative process?***