Ocean Accounts Updates

Dr Ben Milligan, University of New South Wales, Co-Chair, Global Ocean Accounts Partnership
Institutional and political context:

**UN system** – UN Stats Commission request to ESCAP and UNEP to develop technical guidance on ocean accounts

**High Level Panel for a Sustainable Ocean Economy** – 13 Heads of Government request recommendations on development of ocean accounts

**National policy demand** – emergence of integrated national strategies for developing the “blue” or “ocean” economy.

**National pilot activities** – diverse focus, at least 10 countries.
Focus of interest from HLP countries:

Identify how growth and employment are underpinned by specific ecosystem conditions and functions: **Invest $X to restore ocean to condition Y = Z benefits.**

Identify where (and where not) and how marine ecosystems perform better than convention coastal infrastructure: e.g. when do mangroves or wetlands provide more benefits than concrete?

A **common set of facts** for different parts of government: environmental protection, infrastructure development, planning and finance, transport, fisheries, energy, etc.

**HLP countries:** Australia, Canada, Chile, Fiji, Ghana, Indonesia, Jamaica, Japan, Kenya, Mexico, Namibia, Norway, Palau, Portugal.
Fragmentation is a big problem

- Climate data
- National census
- Fish stock assessments
- Shoreline maps
- Ecological assessments
- Tourism data
- Hydrographic data
- Biogeochemical data
- Ocean industry statistics
- Laws and policies
- Pollution data
Technical progress towards ocean accounts
Asia and the Pacific Regional Expert Workshop on Ocean Accounts

1 AUG 2018 TO 3 AUG 2018
BANGKOK, THAILAND

Based on our Assessment of capacity development needs of the countries in Asia and the Pacific for the implementation of Sustainable Development Goal 14, the region needs strengthening of technical capacity, coordination, governance, data and statistics, awareness, stakeholder engagement and partnerships.

Vital information to monitor and evaluate progress towards SDG 14 is available, but it is fragmented across scientific domains, policy frameworks and institutions.

ESCAP and UN Environment are leading a global effort to develop statistical guidance based on the System of Environmental Economic Accounting (SEEA). The Ocean Accounts Platform will provide guidance on electing, prioritizing and standardizing data of national, regional and global importance, so that it can be integrated with other provide measures and statistics.
Spatial framework for ocean accounting

Assigned information:
- Environmental / ecological conditions
- Ecosystem asset type
- Economic conditions
- Social and governance conditions
- Risk and resilience conditions
- Other relevant information
Table structure of ocean accounts

Ocean environment

- Environmental assets (stocks of natural capital)
- Flows to environment (supply and use of residuals: waste, emissions, etc)
- Flows to economy (supply and use of natural inputs and ecosystem services)

The economy
- (stocks of financial and non-financial assets)
- (supply and use of goods and services)

Benefits & costs
- (summary tables focusing on flows)

National wealth
- (summary tables focusing on stocks)

Governance
- (characteristics and consequences of decision-making processes)

Social and governance context
### Table 13. Governance table: spatially explicit conditions (at end of accounting period)

<table>
<thead>
<tr>
<th>Zoning</th>
<th>Spatial Unit 1</th>
<th>Spatial Unit 2</th>
<th>Spatial Unit 3</th>
<th>Measurement Units</th>
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<tbody>
<tr>
<td>Jurisdictional zone (e.g. Internal Waters, Territorial Sea, EEZ/CS)</td>
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<td>Type classification based on national laws and policies</td>
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<td>Management or planning zone (e.g. protected area, private property, aquaculture, energy development, submarine cable corridor, etc)</td>
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<td>Type classification based on national laws and policies</td>
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<tr>
<th>Rules and decision-making institutions</th>
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<th>Spatial Unit 3</th>
<th>Measurement Units</th>
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<td>Activity 1 (e.g. small-scale fishing)</td>
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<td>Written comments and references to official sources</td>
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<td>Activity 2 (e.g. industrial fishing)</td>
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<td>Written comments and references to official sources</td>
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<td>Activity 3 (e.g. wind farm development)</td>
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<td>Written comments and references to official sources</td>
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<th>Social circumstances</th>
<th>Spatial Unit 1</th>
<th>Spatial Unit 2</th>
<th>Spatial Unit 3</th>
<th>Measurement Units</th>
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<td>Topic 1 (e.g. Public health)</td>
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<td>Appropriate indicators</td>
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<td>Topic 2 (e.g. Poverty)</td>
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<td>Appropriate indicators</td>
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<td>Topic 3 (e.g. Social inclusion)</td>
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<th>Risk and resilience</th>
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<th>Spatial Unit 2</th>
<th>Spatial Unit 3</th>
<th>Measurement Units</th>
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<td>Topic 1 (e.g. Flood / storm surge risk)</td>
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<td>Appropriate indicators</td>
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<td>Topic 2 (e.g. Resilience)</td>
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<td>Appropriate indicators</td>
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### Table 14. Governance table: monetary conditions per sector (at end of accounting period)

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<tr>
<th>Industry 1 (e.g. shipping)</th>
<th>Industry 2 (e.g. fisheries)</th>
<th>Industry 3</th>
<th>Government</th>
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<tbody>
<tr>
<td>Protection and management expenditure</td>
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<tr>
<td>Environmental goods and services provided</td>
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<tr>
<td>R&amp;D expenditure</td>
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<td>Tax less subsidies</td>
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</tbody>
</table>
Key headline outputs of ocean accounts

Supply and Use Tables and other Economic, Physical, and Biological Data

MEANS

PRODUCT ACCOUNT

GDP

200

300

100

ENDS

INCOME ACCOUNT

NNI

-100

100

% Δ IN BALANCE SHEET

CHANGE IN WEALTH

1

2

3

4

-1

-2

-3

-4

0
Dashboard prototype

Norwegian Ocean Economy Dashboard

HIGH LEVEL PANEL FOR A SUSTAINABLE OCEAN ECONOMY
Blue Paper 8: National accounting for Ocean Productivity, Sustainability, Wealth and Welfare
NOK Base Year 2016

Define the Ocean Economy (Hold CTRL to Select Multiple)
- Building of ships, oil platforms and moduls and other transport equipment
- Oil and gas extraction
- Processing and preserving of fish, crustaceans and molluscs
- Service activities incidental to oil and gas
- Fishing and aquaculture
- Ocean transport

*Blank indicates No Data Available

Define the Reference Year (1978-2016)
- 2015 to 2016

Value Added % Change to 2016
-0.12%

Value Added in Reference Year
495.84bn

Income % Change to 2016
-10.17%

Income in Reference Year
121.11bn

Assets % Change to 2016
1.11%

Produced Assets in Reference Year
1.52T

Click here to explore in detail

IO Table by Industry
- Fisheries Value
- Mining, Oil, and Gas
- Transportation
- Tourism

Income & Other Market Services
- Non-Market Services

Partial Balance Sheet
- Fisheries Stock
- Pollutants
Global Dialogue on Ocean Accounting: 12–15 November 2019 in Sydney

Events • Aug 02, 2019

Update: To register for this event visit [https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting](https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting)


Co-hosted by the University of New South Wales (UNSW), United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the High-Level Panel for a Sustainable Ocean Economy, supported by the World Bank Blue Economy Program.

- **Dates:** 12–15 November 2019.

- **Venue:** John Niland Scientia Building, University of New South Wales, Sydney, High Street, Kensington, New South Wales, 2052, Australia.

- **Agenda:** Plenary and small-group working sessions, focusing on: (1) review and discussion of [draft global technical guidance](https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting) on ocean accounting, (2) presentation and discussion of ocean accounts [pilot projects](https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting), (3) discussion and planning for improving connections between [ocean data, assessments and ocean governance](https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting), (4) high-level policy dialogue on national accounting and the ocean economy. The draft agenda and explanatory note can be [viewed and downloaded here](https://www.surveygizmo.com/s3/5179330/First-Global-Discussion-on-Ocean-Accounting).
Next steps for ocean accounting
Headline HLP recommendations:

Focus all policy decision-making on **three questions, not one**: how will this decision:

1. Change **ocean wealth**, including produced assets (e.g. ports) and non-produced assets (e.g. coral reefs, mangroves, fish stocks).
2. Change **income or welfare** for people?
3. Change **ocean-based economic production**?

Integrated accounts (environment, economy, social) are needed to answer these questions.
Headline recommendations: accounts

When building integrated ocean accounts, use existing internationally agreed frameworks for national accounting:

– System of National Accounts 2008
– System of Environmental-Economic Accounting 2012
– Framework for Development of Environment Statistics

Avoid the prevailing overreliance on GDP
Avoid overreliance on ad hoc assessment
Realistic objectives for ocean accounts

**25 by 25:** at least 25 countries have published ocean accounts by 2025 covering: (1) ocean production (GVA / GDP), (2) ocean income or welfare, (3) ocean wealth including ecosystems.

**50 by 25:** at least 50 countries have published, by 2025, an action plan for developing and maintaining ocean accounts.

**International coordination** focusing on standardization, and inventory of global datasets to support national accounts.
Achieving objectives through partnership

Given current status of ocean accounting, **partnerships are crucial** for building capacity, sharing best practices, and overcoming outstanding challenges.

**Global Ocean Accounts Partnership** established in 2019 lead by ESCAP: membership open to diverse institutions, who make a non-binding commitment to ToR.

First **Global Dialogue on Ocean Accounting**: November 12–15 in Sydney.
Ocean accounts projects around the world:

**Beyond HLPO:** Projects in Bangladesh, China, Costa Rica, EU, Kenya, Malaysia, Myanmar, Netherlands, Samoa, South Africa, Tanzania, Thailand, UK, Vanuatu, Vietnam.

**Within HLPO:** All countries have made some progress towards ocean accounts. The **key gap is integration of environmental and economic data** in a single accounting structure.

*Australia:* DEE / ABS environmental accounts

*Fiji:* Disaggregated economic accounting for ocean sectors

*Indonesia:* Range of pilot programs for different economic and environmental components of ocean accounting

*Japan:* Detailed but discrete environmental datasets and economic acc.

*Palau:* Several relevant pilots and economic data for ocean sectors
Different types of ocean accounts emerging for different capacities and needs: e.g.

**Economic focus**: disaggregation of existing national accounts to support development planning for specific industries and sectors.

**Environmental focus**: better structured information to support pollution monitoring and control, environmental health assessment, environmental regulation and permitting, protected areas and species.

**Integrated focus**: ocean economy development planning, marine and coastal spatial planning, designation of marine protected areas
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<th>MHCLG</th>
<th>DEFRA</th>
<th>JNCC</th>
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