

An Australian environmental accounting platform

The Bureau of Meteorology (the Bureau) is developing a platform for producing environmental accounts that will be useful to Australians and will help to integrate environmental information into decision-making.

The National Plan for Environmental Information initiative

Governments, industry, and the community need comprehensive, trusted, and timely environmental information for making sound decisions about the major issues affecting Australia's natural assets.

Established in mid-2010, the **National Plan for Environmental Information** (NPEI) initiative is an Australian Government programme for improving the quality and accessibility of environmental information.

A key activity for delivering on the NPEI's objectives is the development of an environmental accounting platform.

Environmental accounting platform

The platform is built on the proposition that environmental accounting is a powerful way to factor Australia's unique natural estate and its contribution to our well-being into policy and decision-making. The platform will include guides, standards, tools, and exemplars and will be the basis for producing a series of credible, legitimate, relevant, and enduring environmental accounts.

The environmental accounting process driving the platform is based on the *Guide to environmental accounting in Australia* (the Guide). The process creates a clear purpose for each account and identifies the best available scientific knowledge.

The platform draws on existing well-established environmental accounting models, in particular the System of Environmental-Economic Accounting (SEEA—see page 2). The platform responds to the multiple perspectives for framing an environmental account and recognises that many types of accounts are based on non-monetary values.

As environmental and accounting knowledge continues to advance, the platform will be maintained to ensure the ecosystem conceptual models at the heart of each account remain current.

How will Australia benefit?

Improved accounting of changes in environmental assets, over both the short- and long-term, will enable us, as Australians, to better measure the status of their environment and the quality of their stewardship of the country's land, air, and water resources. This knowledge will enable more efficient investment decisions and improved environmental management.



Figure 1: Developing a platform for producing environmental accounts.



What are environmental accounts?

Environmental accounts are strongly structured tables that provide organised information for a clearly defined decision-making purpose. They are systematic and comparable and use standard definitions based on accepted measurement and accounting theory. The systematic structure of accounts enables people to reorganise complex data and reveal information that is otherwise hidden

Accounts become more powerful through the development of comprehensive and consistent data over long time-series. The rigour of standards, statistical units, accounting periods, and crosschecking methods are essential for the credibility of environmental accounting.

Environmental accounts use biophysical measures (e.g., area, volume, weight); derived or composite measures, such as an index; or, where appropriate, monetary measures. Specific types of accounts can be developed depending on the perspective and requirements of the account user.

Environmental accounts can be viewed from different perspectives:

- From a social perspective, they can contribute to measuring human wellbeing.
- From an environmental perspective, they can be used to ascertain changes in the environment, ecosystems, and their functioning.
- From an economic perspective, they can measure natural inputs to the economy and how the economy impacts on the environment (e.g., through pollution and waste).

Guide to environmental accounting in Australia

The Guide presents the context and conceptual basis for the environmental accounting platform. It is for policy makers, scientists, and accounting practitioners and is in three parts: the first is an introduction to environmental accounting and for what it can be used; the second details the concepts, principles, and practicalities of framing and producing environmental accounts; and the third is a compendium of technical reference material.

The Guide includes the Joint Perspectives Model, which presents the four integrated systems of

environmental accounting: the physical Earth, living, human cultural, and economic systems.

System of Environmental-Economic accounting

The specific, operational-level environmental accounting framework used by the platform is the SEEA. The SEEA has recently been reviewed, revised, and extended to cover integrated environmental and ecosystem accounting and enjoys widespread international endorsement and adoption.

The SEEA framework is flexible and powerful and provides the technical concepts, classifications, and accounting rules needed to design and produce biophysical environmental accounts.

While biophysical accounts are valuable for many purposes, the SEEA framework provides the added advantage of strong links into the economic system, which enables joint views of environmental and economic interactions.

Why is the Bureau involved?

The Bureau is well placed to take a role in environmental accounting by building on its capability to deliver high quality information about fundamental physical processes in the environment, such as weather, climate, water, and oceans, in addition to its delivery of the National Water Account.

A collaborative approach

The Bureau is collaborating with the Australian Bureau of Statistics to develop environmental accounts. The Bureau of Meteorology will focus on biophysical accounting of Australia's natural capital and ecosystem assets at regional and national scales. Together, the bureaus will produce integrated environmental—economic accounts.

The Bureau is working with key partners to ensure the platform can deliver environmental accounts to meet policy and decision-making needs. Partners include Australian Government agencies, in particular: the Department of the Environment; the Murray–Darling Basin Authority; regional natural resource management organisations; and the research sector.

For more information

For further information about environmental accounting, visit www.bom.gov.au/environment/activities/accounts.shtml or contact environment@bom.gov.au

