Implementing the SEEA: The Australian Experience

Conference on
Global Implementation of SEEA

New York
June 2013

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Outline of presentation

History of environmental accounting in Australia

- Timeline of environmental accounting in Australia
- Recognition of potential usefulness
  - Government and media

Key lessons

- Need sustained high level institutional support
- Importance of international engagement
- Producing accounts requires strong partnerships
- Experimental accounts are very useful
- Accounts get better over time and usefulness increases when repeated
- Communication is essential

Timeline of environmental accounting in Australia
(Brief and only showing first time of account production)

1991 Greenhouse Gas emissions (Department of Environment)

1993 SNA revision and 1st edition of SEEA (EC, IMF, OECD, UN, WB)

1995 Natural resources on balance sheet (ABS)

1996 Energy account (ABS)

1998 Mineral account (ABS)

1999 Fish account (ABS)

Environmental expenditure, local government (ABS)

2000 Water account – PSUT (ABS)

Greenhouse gas emission accounts (ABS)

2003 SEEA revision (UN)

2008 SNA revision (EC, IMF, OECD, UN, WB)

2011 Land account (ABS)

Water account – Asset (BOM)

2012 SEEA Central Framework (EC, FAO, IMF, OECD, UN, WB)

Completing the Picture (ABS)

Environmental Taxes (ABS)

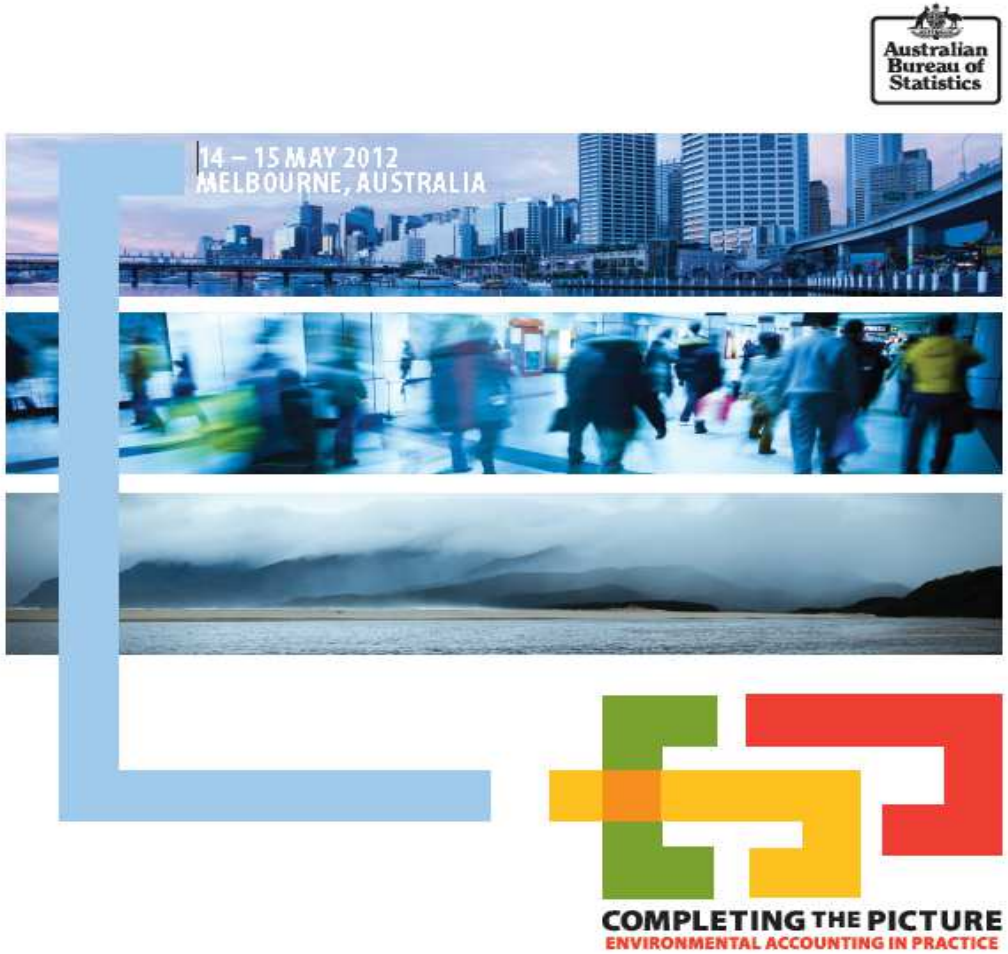
2013 SEEA Experimental Ecosystem Accounting and Application and Extensions (UN, et al)

2013 Waste accounts (ABS)

Ecosystem accounts (DSE)

Environmental Accounting Landscape (BOM)

Completing the Picture: Landmark publication following adoption of SEEA Central Framework in 2012



- Issues linked to accounts, including climate change, green growth and sustainability

http://www.abs.gov.au/ausstats/abs@.nsf/mf/4628.0.55.001

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Environmental accounting in Australia

Water Account, Australia
Physical and monetary SUT
(ABSl)

ABS Energy Account
Physical and monetary SUT
(ABS)

Experimental Waste Account
(ABS)

ABS Experimental Land Accounts
(ABS)

Experimental Ecosystem Accounts
(Victorian government)

Victoria Water Account
(Victorian government)

Research for expanding the accounts produced and methodology

Environmental Taxes and subsidies, environmental protection expenditure, as well as valuation methods

Researching ecosystem accounts

Biodiversity, Carbon, Ecosystem condition
ABS, SEWPAC, BOM, DCCEE, DAFF
Murray-Darling Basin Authority,
Victorian government
South East Queensland CMA
Wentworth group and universities

Australian Environmental - Economic Accounts (Annual)

http://www.abs.gov.au/ausstats/abs@.nsf/mf/4628.0.55.002

National Accounts Data

Natural resources on National Balance Sheet (Annual)

National Water Account
Physical asset account
(Bureau of Meteorology)

Input-output analysis of energy and greenhouse gas emissions (ABS)

National Carbon Account (Dept. of Climate Change)

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Recognition by government:

2008 Australia 2020 Summit

Australia 2020 Summit April 2008

Support for the development of environmental

http://pandora.nla.gov.au/pan/81461/20080610-0000/www.australia2020.gov.au/final_report/index.html

2009 Review of the Environment Protection and Biodiversity Act

Recommends the develop a system of environmental accounts

http://www.environment.gov.au/epbc/review/index.html

2012 Australia in the Asian Century

Support for the ongoing development and use of environmental accounting in Australia and internationally ” (p. 20 and 30)

www.asiancentury.dpmc.gov.au

Recognition in media: Ross Gittins' articles in major newspapers

2010 Finally some good news about measuring the economy

http://www.theage.com.au/business/finally-some-good-news-about-measuring-our-environmental-economy-20101217-190uw.html

2012 A better way of linking the economy and environment

http://www.theage.com.au/business/a-better-way-of-linking-the-economy-and-environment-20121221-2bry3.html#ixzz2VIsm2Jfa

> "This ''system of environmental-economic accounting'' - SEEA - is a huge project involving the measurement of various environmental dimensions not presently measured and the conversion of physical measures - such as petajoules and gigalitres - into dollar values.
>
> Our Bureau of Statistics is at the forefront of this international development. Its recently published energy, water and land accounts are stepping stones in this great advance.
>
> Publishing integrated economic and environmental accounts won't magically solve all our environmental problems, but it will make it much harder to forget these two aspects of our existence are inextricably joined."

Need sustained high level institution support

Support within the ABS for environmental accounting has been strong for nearly two decades

- Building knowledge and capacity to build accounts takes time
- Building understanding of accounts and how to use them also takes time
- To persevere with accounts, especially with limited funding and sometimes opposition, requires strong commitment and leadership

Support outside the ABS has been variable but increasing

Support for water accounting in Australia driven substantially by a prolonged drought

Importance of international engagement

A key feature of the Australia experience has been the engagement with international processes.

This has allowed:

•Us to learn from the activities of other agencies around the world

•The identification of common theoretical and practical problems and for these to be worked through cooperatively with a highly skilled, knowledgeable and intelligent colleagues

•The establishment of international standards and recommendations which can be applied at a national level (and we would have been unable to develop these with our resources)

Need strong partnerships

Compiling accounts requires partnerships between agencies and between professions.

Government partnerships

- ABS and Bureau of Meteorology (BOM)
- ABS and Dept. of Climate Change (DIICCSRTE)
- ABS and Victorian, Queensland and South Australian Governments
- BOM and CSIRO

Academic institutions and non-government organisations

- ABS and Australian National University, University of Sydney, Queensland University, Wentworth Group

Professions

- Geographic information professionals working hand-in-hand with accountants, economists, scientists and statisticians

Experimental accounts are useful

Virtually every environmental account has been published first as either a research paper or experimental estimates. This approach:

- Provides a practical focus for work and learning by doing
- Allows the development of the accounts to be a collaborative process
- Comments on the results and methodology used to be critiqued ahead of official release
- Potential users to see what an account actually looks like and determine how it could meet particular needs
- Refinement of accounts over time to improve quality, especially the relevance to policy development and evaluation

Accounts get better overtime and usefulness increases when repeated

The repeated production of accounts leads to increased quality and allows efficiencies in compilation process gained through:

- Increased knowledge and skills of staff
- On-going development and use of information technology to support production
- The compilation process to feedback comments to primary data sources and hence improve the quality of the primary data
- Data gaps and deficiencies to be addressed through the identification or creation of new data sources
- The construction of useful indicators from the accounts (e.g. Gross Value of Irrigated Production per ML of water)
- For accounts to be built into the policy process

Communication is essential

Accounts are generally poorly understood by both potential producers and users of accounts.

Communication needs to recognise and target different audiences:

- Producers and users of accounts
- General versus specific users of accounts
- Scientists, economists, accountants, statisticians (especially understanding there world views and motivations for either wanting to produce or use accounts)

Communication needs to go beyond traditional tabular data presentations and to also extend into some of the analysis of the accounts at least in the early phases of implementation

Acknowledgements

A large number of people and agencies are contributing to the development and use of environmental accounting in Australia:

- Bureau of Meteorology
- Department of Sustainability, Environment, Water, Population and Communities
- Department of Climate Change (shortened name)
- Department of Agriculture, Forestry and Fisheries
- Victorian Government
- Queensland Government
- Catchment Management Authorities
- Wentworth Group of Concerned Scientists
- Australian National University
- Queensland University
- University of Sydney
- International colleagues in countries and international organisations