



Barriers to Effective Climate Change Adaptation

PRODUCTIVITY COMMISSION

SUBMISSION BY THE AUSTRALIAN BUREAU OF STATISTICS

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The Australian Bureau of Statistics (ABS) welcomes the opportunity to contribute to the Productivity Commission draft report of April 2012 *Barriers to Effective Climate Change Adaptation*. This submission focuses on those aspects of the draft report that are particularly relevant to the ABS with relevance to monitoring, evaluation, statistics and modelling. It therefore focuses on Chapter 4 - Assessing reforms and setting priorities, Chapter 6 - Information provision and Chapter 11 - Environmental and health services.

The Australian Bureau of Statistics is Australia's official national statistical agency. It provides statistics on a wide range of economic, social and environmental matters, and covers government, business and the population. The ABS is only one of a number of national, state and local government agencies that contribute to the overall pool of information. The scientific community, other government bodies, industry associations, and individual companies also contribute.

Summary

Australia faces critical challenges in water, energy, food security, biodiversity management, reduction of emissions and solid waste, and adaptation to climate change; while the Government has placed a high priority on managing these challenges, comparatively little is known about the connections between the state, condition and price of these issues and socio-economic outcomes. The ABS acknowledges that there is a pressing need for detailed, robust and on-going statistical information, not only on the economy and society, but also on the environment, and should incorporate household, consumer, commercial, industrial and government activities, their structures and pressure on environmental resources.

ABS' role in the collection and dissemination of statistics

The Australian Bureau of Statistics was established under legislation by the Australian Bureau of Statistics Act 1975 as the central statistical agency for the Australian government, and by arrangements with their Governments, for the State and Territory governments. In this role the ABS collects, compiles, analyses and disseminates statistics and related information, including statistics related to environmental issues. The ABS has a program of statistical collections that covers the use of natural resources environmental practices and behaviours of households, businesses, land owners and governments.

The ABS also has a legislated role to ensure statistical coordination across Government to avoid duplication, obtain compatibility between, and the integration of, statistics compiled by official bodies, and to maximise the utilisation, for statistical purposes, of the information available to statistical bodies. To undertake this coordination role the ABS is required to formulate and ensure compliance with standards for operations of official bodies for statistical purposes, and to provide advice and assistance to official bodies in relation to statistics.

As Australia's national statistical agency, the ABS also has an essential function in the leadership and coordination of the national statistical system. Underpinning this role is the National Statistical Service (NSS) initiative that seeks to improve the full suite of information produced by government. NSS links producers and users of statistics to narrow the gap between the supply of, and need for, information to ensure a better information base for all Australians. The information base includes important statistics generated as a by-product of the administrative processes of government, as well as the outputs of statistical collections conducted to support government activities. The key benefit of this initiative is the availability of a larger range of relevant and high quality statistics for informed decision making.

Integrating bio-physical, economic and social statistics to facilitate informed decision making

The state of the environment not only underpins the Australian economy and quality of life, but is in turn affected by economic activity and social factors. Therefore, it is critical for the economic and social good that appropriate and effective management of the environment is undertaken.

To ensure this is achieved, environmental policies require a good-quality set of environmental statistics which encompass bio-physical, economic and social components.

The ABS has a long history of collecting economic and social data and is well positioned to contribute this expertise to enable this information to be combined with data collected in relation to the bio-physical aspects.

In the report "Beyond GDP" the Stiglitz Commission¹ noted:

'What we measure affects what we do; and if our measurements are flawed, decisions may be distorted. Choices between promoting GDP and protecting the environment may be false choices once environmental degradation is appropriately included in our measurement of economic performance. So too, we often draw inferences about what are good policies by looking at what policies have promoted economic growth; but if our metrics of performance are flawed, so too may be the inferences that we draw.'

It is noted in the Productivity Commission (PC) report that approaching adaptation through cost and benefit analysis has its limitations because environmental aspects are not taken into consideration. The ABS produces a range of products that integrate socio-economic and environmental information.

An example of integrated information sets that provide a comprehensive picture of environmental issues is *Measuring Australia's Progress* (ABS cat. no.1370.0), which is designed to help Australians address the question, 'Is life in Australia getting better?'. It provides a selection of economic, social and environmental statistical evidence with which Australians can form their own view of how our country is progressing.

¹ Stiglitz, Sen and Fitoussi. 2009. *Report of the Commission on the Measurement of Economic Performance and Social Progress*. http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf

More recently the ABS produced *Completing the Picture, Environmental accounting in Practice* (ABS cat. no. 4628.0.55.001). This publication examined a number of complex issues facing policy makers in Australia, such as climate change and natural resource management, and illustrated how information can be used to further improve the decision making process.

Linking economic statistics with environmental statistics provides a broader understanding of values that are often in competition. The ABS has worked towards accomplishing this task and bases its work on the statistical standard of the United Nations System of Environmental and Economic Accounting (SEEA).

This type of statistics is appropriate for national and regional evaluations.

Linking environmental data with socio-economic data will assist policy makers by:

- enabling analysis of the impact of economic policies on the environment and vice versa
- providing a quantitative basis for policy design
- identifying the socio-economic drivers, pressures, impacts and responses that affect the environment
- supporting greater precision in the development of environmental regulations and resource management strategies
- providing indicators that express the relationships between the environment and the economy
- following an international standard (facilitating international comparisons)
- organising information within a conceptual framework that ensures consistency, completeness and accountability over time

International work on monetary valuation methods related to the environment is progressing in the further development of SEEA (with relevance to pages 69 and 214 of the PC report). The SEEA experimental ecosystem accounts will provide the measurement framework for the capacity of the ecosystem to provide services to humanity, as well as the flow of services provided by the ecosystems².

Some key features of good data collection and storage practices including the importance of frameworks and standards to enable the integration of information in a coherent fashion

It is noted in the report (Chapter 6) that there are a number of areas where provision of information can be improved upon, both textual and statistical, and that this lack of information is the most commonly cited barrier to adaptation. Statistics is one important component. It is also noted in the PC report that information is easy to access (p. 105) yet it is essential that the information also be coherent and comprehensive.

The ABS is working closely with the Department of Sustainability, Environment, Water, Population and Communities and the Bureau of Meteorology to support the National Plan for Environmental Information Initiative. This Australian Government program is intended to improve the quality and accessibility of environmental information for decision making. The ABS is committed to ensuring that environmental information (which includes biophysical, social and economic components) is available to support current and future research needs and that priority is given to bringing together nationally important data collections and resources to ensure that relevant data is: (a) more accessible, visible and useable across data sets and repositories; (b) more consistent, uniform and

² United Nations Economic and Social Council. Report of the Committee of Experts on Environmental-Economic Accounting Statistical Commission Forty-third session 28 February-2 March 2012 Item 3 (e) of the provisional agenda

accurate; (c) captured and managed to international standards; (d) generated, deposited and accessed efficiently; and (e) made available in appropriate formats for advanced analysis; and (f) supported by quality statements and supportive metadata.