

Appendix II: Other initiatives

Many different approaches are used to measure progress and kindred concepts. Some are outlined here, together with some of the more significant measurement projects underway in Australia and overseas.

Pressure–State–Response model

Some analysts categorise their indicator sets according to the Pressure–State–Response (PSR) model. This model is often referred to in the environmental literature. It was developed primarily for considering sustainable development and the interactions between the environment and the economy – so it is less suited to *Measuring Australia's Progress* which focuses on progress in the economic, social and environmental domains, rather than on environmental sustainability.

Under this approach, indicators are classified according to whether they signal:

- ◆ a pressure on the natural environment
- ◆ the state or condition of the environment
- ◆ the extent of society's response.

The United Nations (UN) has replaced the term 'pressure' with 'driving force', though the UN's model is essentially the same.

The PSR framework implies causality: a pressure modifies the state of the environment and this triggers a response from society. The Organisation for Economic Co-operation and Development (OECD) warns that a PSR framework:

‘tends to suggest linear relationships in the human activity-environment interaction. This should not obstruct the view of more complex relationships in ecosystems and in environment-economy interactions.’

Aggregated indicators

Aggregated indicators seek to combine disparate measures of progress into just one number.

For example, to measure the quality of life in a nation, the United Nations Development Program compiles a Human Development Index (HDI). It is presented as an alternative to national accounting measures such as Gross Domestic Product (GDP) for measuring the relative socioeconomic progress of nations. The HDI is aimed primarily at measuring change in developing countries. A country's HDI is composed of life expectancy, educational standards and average incomes. Each of the components is given equal weight.

Other approaches, such as the Genuine Progress Indicator (GPI), attempt to adjust traditional measures of economic activity, such as GDP, to account for changes to environmental and social capital. For example, a GPI might begin with GDP, then make allowances such as:

- ◆ Spending to offset social and environmental costs ('defensive expenditure') is taken out.
- ◆ Longer term environmental damage and the depreciation of natural capital are accounted for.
- ◆ Changes in income distribution are included (reflecting the view that an additional dollar means more to the poor than to the rich).
- ◆ Estimates of the costs (financial, social and psychological) of unemployment, underemployment and overwork might be included.

There is not yet a consensus on how many of these things should be valued in dollar terms.

The Australia Institute has calculated a Genuine Progress Indicator for Australia. Details are at:

<http://www.gpionline.net>.

National accounting frameworks

The System of National Accounts (SNA 1993) provides an international framework for economic accounting. Australia's national accounts record the essential elements of the Australian economy: production; income; consumption; accumulation of assets and liabilities; and wealth.

Some countries, including Australia, are beginning to explore ways of incorporating environmental and social effects into a national accounting framework. The System of Integrated Environmental and Economic Accounting (SEEA) complements the SNA by providing a common framework for examining interactions between the economy and the environment.

The Dutch Government has also made progress in compiling a System of Economic and Social Accounting Matrices and Extensions (SESAME). This system is an extension to the standard national accounts framework. For each variable, it permits analysis of both the national total value and its distribution among socioeconomic groups (categories of employed persons etc.) Key features in a system of accounting matrices are data integration and multiple classifications, which provide links (both conceptual and numerical) between monetary and non-monetary units. Such a system can be used to analyse the links between the structure of an economy, people and the environment.

The Ecological Footprint

The Ecological Footprint measures the land area and other resources affected by a population – both the land occupied directly by housing and the like, and the land and other resources used to produce goods and services, to take in the waste generated, and so on.

Balancing Act - a triple bottom line analysis of the Australian economy

Triple bottom line accounting is a term used to describe reporting that goes beyond a financial “bottom line” to assessing and reporting on the three spheres of sustainability: economic, social and environmental. In the CSIRO report, *Balancing Act*, the principle of triple bottom line reporting is applied at a national economic sector level for 135 sectors of the Australian economy (e.g. Electricity supply, Dairy cattle and milk, Retail trade, Banking). It uses an input-output analysis, which is an internationally accepted method of dealing with economic interdependencies. The analysis has merged the System of National Accounts input-output tables published by the ABS, with a range of social and environmental indicators. For more information see <<http://www.cse.csiro.au/research/balancingact/index.htm>>

Other triple bottom line reporting initiatives are:

The 2002 *Global reporting initiative guidelines* provide a framework for reporting on the linked aspects of sustainability: the economic, the environmental and the social. See <<http://www.globalreporting.org>>

The Australian Department of the Environment & Heritage publishes Australian guidelines for environmental reporting of organisations in *Triple bottom line reporting in Australia: a guide to reporting against environmental indicators* (2003). See <<http://www.deh.gov.au/industry/corporate/reporting>>

The Intergenerational Report

The *Charter of Budget Honesty Act 1998* requires the Treasurer to publish an Intergenerational Report (IGR) at least once every five years, assessing the sustainability of current government policies for the following 40 years, including taking into account the financial implications of demographic change. The first IGR was released in May 2002 with the 2002–03 Federal Budget, see Budget Paper No. 5 at:

<<http://www.budget.gov.au/2002-03/bp5/html/index.html>>

The next IGR is to be published not later than the time of the 2007–08 Budget, reflecting its focus on long-run issues.

Are we sustaining Australia

The Australian Government's 2002 report *Are We Sustaining Australia: A Report Against Headline Sustainability Indicators for Australia* is Australia's first report against a set of 24 headline sustainability indicators. The indicators were selected to collectively measure national performance against the core objectives of the National Strategy for Ecologically Sustainable Development (NSESAD).

The Report, and the indicators against which it reports, were developed in consultation with all Australian Government agencies, other jurisdictions, key stakeholders and the general public. The Report is not intended to be comprehensive, but rather to give a broad view, reflecting on a wide range of issues with a relatively small amount of information.

It is not possible from this first report to assess whether or not our way of life is sustainable. This is because there are no time series data as yet for several of the indicators of ecological integrity and biodiversity. In addition, there are limited time series data for the indicators of natural resource management and for the environmental and some of the social aspects of individual and community wellbeing. Rather, this Report provides a snapshot against which future trends can be seen.

A table on the next page compares the ABS Measures of Australia's Progress with *Are We Sustaining Australia*.

The Report is available at: <<http://www.deh.gov.au/esd/national/indicators/report/index.html>>

Comparing dimensions and indicators, MAP and Are We Sustaining Australia

<i>Measures of Australia's Progress</i>		<i>Are We Sustaining Australia</i>	
<i>Headline dimension</i>	<i>Headline indicator</i>	<i>Dimension</i>	<i>Indicator</i>
Health	Life expectancy at birth	Healthy living	Disability adjusted life years
Education and training	Percentage of people aged 25–64 with a non-school qualification	Education and skills	Percentage of people aged 25–64 with non-school and/or upper secondary qualifications
Work	Unemployment rate		
National income	Real net national disposable income per capita	Industry performance	Real GDP per capita
Economic hardship	Average real equivalised weekly disposable income of households in the second and third deciles of the income distribution	Living standards and economic wellbeing	Gross per capita disposable income; Gross National Income per capita
National wealth	Real net national worth per capita	Economic security	National net worth (absolute and per capita)
Housing	No headline indicator		
Productivity	Multifactor productivity	Economic capacity	Multifactor productivity
The natural landscape (biodiversity)	Threatened species; Annual area of land cleared	Biodiversity and ecological integrity	Threatened species and endangered ecological communities; Proportion of sub-regions with a) greater than 30% of original vegetative cover; and b) greater than 10% protected
The natural landscape (inland waters)	Water management areas, proportion where use exceeded 70% of sustainable yield	Sustainable management of water	Water management areas, proportion where use exceeded 70% of sustainable yield
		Freshwater health	Sites with high in-stream biodiversity
The natural landscape (land)	Salinity, assets at risk	Land health	Catchment condition index
		Sustainable management of forests	Total area of all forest type
		Sustainable management of agriculture	Net value of rural land
The air and atmosphere (air quality)	Fine particles, days health standards exceeded in major urban areas	Air quality	Air pollutants, days health standards exceeded in major urban areas; SO _x , NO _x and particulate emissions
The air and atmosphere (atmosphere)	Total net greenhouse emissions	Climate change	Total net greenhouse emissions
		Management of energy	Renewable energy use as a proportion of total
Oceans and estuaries	No headline indicator	Coastal and marine health	Estuarine condition index
		Sustainable management of fish	Percentage of major Commonwealth harvested fish species classified as fully or under-fished
Family, community and social cohesion	No headline indicator		
Crime	Victims of household and personal crimes		
Democracy, governance and citizenship	No headline indicator		
		Economic and gender equity	Ratio of female to male full-time weekly earnings
		Economic and educational equity	Year 12 completions: top and bottom socioeconomic deciles
		Economic and health equity	Life years lost: top and bottom socioeconomic quintiles
		Locational equity	Year 12 completions: urban and rural

Growing Victoria Together

In November 2001, the Hon. Steve Bracks M.P., Premier of Victoria, launched *Growing Victoria Together*, a document that expresses a broad vision for the future of Victoria through a list of goals and priority actions. This Victorian State Government document also lists indicators or targets that will be used to demonstrate progress towards the articulated goals.

The ABS assisted the Victorian State Government with identifying priorities for indicator production through the *Indicators of Wellbeing in Regional and Rural Communities* project, which began in 2000. This consultancy had a particular focus on wellbeing indicators at the sub-State level and culminated in the delivery to the State Government of a Victorian Framework for Indicators of Regional Wellbeing in March 2002.

Since the launch of the project three annual reports have been published 2002–03, 2003–04, and 2004–05. More information on *Growing Victoria Together* can be accessed at:

<<http://www.growingvictoria.vic.gov.au>>

Tasmania Together

Tasmania Together is a long-term social, environmental and economic plan for the Tasmania's development for a period of 20 years. It provides an overarching framework for planning, budgeting and policy priorities for the government and non-government sectors.

The process of creating *Tasmania Together* was driven by the Community Leaders' Group (CLG), a 22 member group of Tasmanians representing a broad cross-section of the community. The role of the CLG was to consult widely with the Tasmanian community to identify their vision and goals and to oversee the development of benchmarks. The process was completed and the *Tasmania Together* document launched in September 2001.

The *Tasmania Together* document contains:

- ◆ A vision, 'Together we will make Tasmania an icon for the rest of the world by creating a proud and confident society where our people live in harmony and prosperity.'
- ◆ 24 goals in five groups (Community, Culture, Democracy, Economy and Environment).
- ◆ 212 benchmarks.

In October 2001, a nine-member Tasmania Together Progress Board was established to monitor, promote and report on Tasmania Together. The Tasmania Together Goals and Benchmarks are now integral to the State's budget process and the Board has been active in fostering initiatives by government, business and the general community. To date, three Progress Reports (2002, 2003, 2004) have been tabled and in 2006, a review of the project at the 5-year point was commenced.

More information on *Tasmania Together* is available at:

< <http://www.tasmaniatogether.tas.gov.au> >

South Australia's strategic plan

The South Australia Strategic Plan has been developed in an effort to improve the future wellbeing and prosperity of South Australians. It aims to provide better access to important services such as health and education, to preserve and improve the environment, promote innovation and creativity.¹⁴ The South Australian government is engaging the community to encourage support and commitment to the Plan.

Over the next ten years the South Australia Strategic Plan aims to reach 79 measurable targets to achieve these outcomes. These areas are concerned with growing economic prosperity, improving health and wellbeing, attaining sustainability of the use of natural resources, fostering creativity, building community participation, and expanding opportunities in education, for Indigenous people and for disadvantaged groups such as the homeless.

More information on *South Australia's Strategic Plan* is available at:

< <http://www.SAplan.org.au> >

Other initiatives

There are countless initiatives at the international, national and sub-national level around the world. A selection is mentioned below.

- ◆ The Australian Collaboration (a group of major national non-governmental organisation peak bodies including: Australian Conservation Foundation, Australian Council of Social Services, Australian Consumers Association, Australian Council for Overseas Aid, Federation of Ethnic Communities' Councils of Australia, and National Council of Churches) produced two reports *Where are we going: comprehensive social, cultural and environmental reporting*, and *A Just and Sustainable Australia*. They can be found at:

<<http://www.australiancollaboration.com.au/booksreports>>
- ◆ The OECD's report (2001) *The Well-being of Nations: the Role of Human and Social Capital* covers the integration of societal wellbeing measures with economic and environmental ones. It can be found at:

<<http://www.SourceOECD.org>>
- ◆ The Danish government report entitled *Structural Monitoring International Benchmarking of Denmark*, comparing Denmark's performance on a wide range of social, economic and environmental criteria with a number of countries, can be found at:

<<http://www.fm.dk/1024/vispublikationesForside.asp?artikelid=4503>>
- ◆ Statistics New Zealand's *Monitoring Progress Towards a Sustainable New Zealand*, at:

<<http://www.stats.govt.nz>>
- ◆ In 2004, the USA's General Accounting Office, as part of their Key National Indicators Initiatives (KNII) published a report *Informing our nation: Improving how to understand and assess the USA's position and progress*. More information is at:

<<http://www.gao.gov/mpi>>
- ◆ The Irish Central Statistical Office's *Measuring Ireland's Progress*, at:

<<http://www.cso.ie/publications/measuringprogress/indicatorsreportfull.pdf>>
- ◆ In March 2005, the UK Government launched a new Sustainable Development Strategy, called *Securing the Future*, which sets out the vision of sustainable development through to 2020. It builds on the 1999 strategy, *A better quality of life*.

The Strategy highlights four priority areas for action: sustainable consumption and production, climate change and energy, protecting natural resources and enhancing the environment, creating sustainable communities and a fairer world:

See: <<http://www.sustainable-development.gov.uk/progress/index.htm>>
- ◆ Other useful references are provided by the International Institute of Sustainable Development's web site, at:

<<http://www.iisd.ca>>