

Museums Australia

## **MUSEUMS AND SUSTAINABILITY**

### **Guidelines for policy and practice in museums and galleries**

Sustainability means using, developing and protecting resources at a rate and in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic and community needs.<sup>1</sup>

#### **1. INTRODUCTION**

Museums Australia has developed this document to assist museums<sup>2</sup> of all sizes achieve appropriate best-practice in sustainability.

Museums have several clear roles in this field.

##### *Education*

One role is in community education about sustainability. Museums have an important role in civic engagement and should seek ongoing relationships with community organisations, civic groups and employers. Museums can play a key role in informing debate so communities are better placed to contribute to decisions that will shape social values and government policies. Museums can bring people together across differences and, in so doing, can help to promote individual and collective engagement with the ideas and issues of sustainability.

##### *Operations*

Museums play another role as organisations in their own right. They should adhere to sustainable practices in the way they undertake their own operations. They can serve as models of good practice in a wide range of activities including the management of their resources, decision-making and policy development.

##### *Collections*

Museums also have a role in the sustainable development and management of natural and cultural heritage collections. Australian museums, galleries and other historical collections hold an estimated 41 million objects. They are an important national asset and a legacy for future generations. However, they may become a future liability if we fail to collect, conserve and document with our long-term obligations and liabilities in mind.

These guidelines aim to give Australian museum practitioners an understanding of the ways in which they and their museums can contribute to all aspects of sustainability. Museums Australia hopes that this document will stimulate the development of sustainability policies and practices in many Australian museums. Museums Australia encourages the governing bodies of each museum organisation to adopt the principles of sustainability into their own policy framework.

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<sup>1</sup> State of Oregon, USA, 'Development of a State Strategy Promoting Sustainability in Internal State Government Operations', Executive Order EO-00-07, May 2000, accessible at: [http://www.oregonsolutions.net/execOrder/sustain\\_eo.cfm](http://www.oregonsolutions.net/execOrder/sustain_eo.cfm)

<sup>2</sup> Museums Australia's definition of 'museum' includes museums of art, history and science. See section 5.3 of the Constitution of Museums Australia.

## 2. BACKGROUND

Governments and communities worldwide are working to integrate sustainability into decision-making at all levels.

Business and industrial organisations are seeking new approaches to development that contribute to environment and society now, without degrading them for the future. Many companies are recognising that economic goals can be complemented by environmental and social targets, and that all three areas can contribute to an organisation's own sustainability.

There is increasing recognition that cultural factors play a key role in sustainability. Quality of life is determined by many factors including health, income, level of education, cultural diversity and environmental quality. The social well-being of the human population is integral to making sustainability a reality. Sustainability and a flourishing cultural life are interdependent.<sup>3</sup>

Education for sustainability is vital and it is here that museums can play a key role. The wider issue of education for sustainability was first raised at the 1992 United Nations Conference on Environment and Development at the Rio Earth Summit. Chapter 36 of *Agenda 21*, the action plan adopted by the Conference, set out broad proposals for reorienting public education, awareness and training towards sustainable development<sup>4</sup>. It looked to all countries to initiate national strategies that would increase public awareness of sustainability and promote training and capacity building to move society towards a future where the environment, society and the economy are in balance.

Since then consensus on the requirement for sustainability education has emerged from a wide range of international United Nations' conferences. Perhaps the most important document to emerge has been the 1996 Report of the International Commission on Education for the 21st Century, *Learning: The Treasure Within*, commonly known as the Delors Report.<sup>5</sup> This document recognises the importance of learning to live together and to shape education systems to deal with sustainability at both local and global levels.

The community will require a greater understanding of the interdependence of the economy, environment and social and cultural issues, to be able to identify sustainable and unsustainable practices. People will be challenged to envisage a sustainable future so they will know what to aim for and be able to think through the consequences of their actions and behaviour. Museums are in a position to play a vital role in this process.

The question of sustainability, how it can be incorporated into all areas of government and society, and how progress towards sustainability can be made and measured, is the subject of ongoing debate, particularly with regard to culture.<sup>6</sup>

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<sup>3</sup> Some argue that culture is so important in the achievement of sustainability that it should be a separate pillar of sustainability, so that instead of the 'triple bottom line', or the three pillars, social, environmental and economic, we should aim to address the 'quadruple bottom line'. Whether one agrees that 'culture' should be recognised as a separate 'pillar', or that it is part of social sustainability, cultural communities and creative industries are key economic and social drivers. The City of Toronto, for instance, argues that 'a lively cultural community and a healthy economy are like an equation.' Culture is an integral component of sustainability and should therefore be a part of a sustainability policy. See *The Creative City. A Workprint*, City of Toronto, 2001, accessible at: <http://www.city.toronto.on.ca/culture/creativecity.htm>

<sup>4</sup> *Agenda 21*, UN Conference on Environment and Development, Rio Earth Summit, 1992, accessible at: <http://www.un.org/esa/sustdev/agenda21.htm>

<sup>5</sup> *Learning: The Treasure Within. Report of the International Commission on Education for the 21<sup>st</sup> Century*, UNESCO, Paris, 1996, accessible at: <http://www.unesco.org/delors/treasure.htm>

<sup>6</sup> See Hawkes J., *The Fourth Pillar of Sustainability: Culture's essential role in public planning*, Common Ground Publishing and Cultural Development Network, Melbourne, 2001.

For museums sustainability principles should guide both their day-to-day operations and their role in the community. Therefore all other Museums Australia policies should be seen as components of an overarching Sustainability Policy. These policies include:

Museums Australia: *Women's Policy: Guidelines for Museum Programs and Practice*

Museums Australia: *Previous Possessions, New Obligations: Policies for Museums in Australia and Aboriginal and Torres Strait Islander Peoples*

Museums Australia: *Gay and Lesbian Policy Guidelines for Museum Programs and Practice*

Museums Australia: *Cultural Diversity Policy*

### **3. DEFINITIONS**

#### **3.1 Sustainability**

Definitions of sustainability are many and varied, but common to them all are the natural environment, the economy and society - generally, all three together. Most are not about maintaining life precisely as it is today. They focus on the rate of change to the natural environment and the importance of maintaining equity between generations. Many see sustainability as a continually evolving process.

The most widely used definition is that of Norwegian Prime Minister Brundtland in 1987:

sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.<sup>7</sup>

The concept has come to mean living on the earth's income rather than eroding its capital. It means keeping the consumption of renewable natural resources within the limits of their replenishment. A sustainable activity is one that can be carried out without damaging the long-term health and integrity of natural and cultural environments. It also means passing on to future generations an equal or preferably enhanced stock of economic, natural, social and human capital.

#### **3.2 Environment**

Environment is the surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans, the built environment and their interrelations.

#### **3.3 Economy**

The economy represents the exchanges and resources of a community. The two central concerns of the economy are the efficient allocation of available resources and the problem of reconciling finite resources with a virtually infinite desire for goods and services.

#### **3.4 Society**

Society is the most general term for the body of institutions and relationships within which a relatively large group of people live. It is also the most abstract term for the condition in which such institutions and relationships are formed.

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<sup>7</sup> *Our Common Future*, World Commission on Environment and Development, OUP, Oxford & New York, 1987.

### **3.5 Culture**

Culture is the expression of a society's aesthetic, moral and spiritual values, of its understanding of the world and of life itself; culture transmits the heritage of the past and creates the heritage of the future.

## **4. SUSTAINABILITY AND MUSEUMS**

### **4.1 Education and Advocacy**

Social learning and behavioural change are fundamental to achieving sustainability. Museums have a role in building collaborative relationships and using education and research to raise awareness, to encourage the development of new skills and the ability to embrace and adapt to change. Museums must be aware of social issues such as equity and must work to be inclusive of all sectors of the community.

A strong statement of commitment from the Chief Executive Officer and/or Board indicates to stakeholders the importance placed on sustainability. Openness, including recognition of the difficulties of achieving objectives, can be more effective than rhetorical statements.

### **4.2 Decision-making**

Decision-making should involve the precautionary principle. The Rio Declaration defines the precautionary principle as follows:

Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. Precautionary action requires assessment of the costs and benefits of action, and transparency in decision-making.<sup>8</sup>

Until new measures of 'progress' are well documented and accepted, museums should strive towards integrating economic, environmental and social factors into all decision-making. As well, museums should ensure the most efficient and effective use of human, natural and financial resources, taking full cost accounting into consideration.

### **4.3 Activities**

Through their activities, museums have an integral role in promoting and implementing sustainability in society. Museums have a far-reaching, deeply rooted connection with their communities. Museums should showcase for staff and the public their own efforts to work towards sustainability in all aspects of their work.

Museums can build on their community links with greater vitality and engagement, becoming places where conversations take place and where change is incubated through:

- Building the public's awareness and practical knowledge of sustainability by encouraging civic discussion, research and disseminating success stories in exhibitions;
- Assisting in the education of the community for sustainability by creating an understanding of how natural, economic and social systems work and are interdependent;

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<sup>8</sup> Principle 15, *The Rio Declaration on Environment and Development*, 1992, accessible at: <http://www.unep.org/unep/rio.htm>

- Assisting in the building of community capacity through forums, conferences and other events that provide an opportunity for public discussion on sustainability;
- Recognising the value of, and integrating where possible, traditional knowledge and intergenerational considerations.

#### **4.4 Policies**

Policies should take a long-term perspective, which considers both present and future generations through:

- Marking a transition away from unsustainable behaviours;
- Establishing clear goals and measurable indicators;
- Incorporating the concept of sustainability into missions, visions and organisational structures;
- Treating social, economic and environmental goals as interdependent.

#### **4.5 Operations and functions**

Operations should reflect principles of sustainability through:

- Pricing products and services to cover long-term social, economic and environmental costs;
- Ensuring that waste is eliminated as resources are used more efficiently and returned safely to productive use, for example through re-use and recycling;
- Ensuring that resources are protected and used efficiently.

### **5. GENERAL SUSTAINABILITY PRINCIPLES FOR MUSEUMS**

Some general sustainability principles that support museum practice and operations include the following:

- 5.1 Policies must take a long-term perspective, including both present and future generations.
- 5.2 Social, economic and environmental goals must be treated as interdependent.
- 5.3 The price of a product or a service must cover its long-term social, economic and environmental costs.
- 5.4 Sustainability must be incorporated into missions, visions and organisational structures.
- 5.5 Policies should mark a transition away from unsustainable behaviours.
- 5.6 Clear goals and measurable indicators are needed to guide policy.
- 5.7 Decision-making should involve the precautionary principle (see section 4.2).
- 5.8 Decision-making should involve the community and other stakeholders.
- 5.9 Opportunities for access to information, participation in decision-making and access to justice should be available to all.
- 5.10 Sustainability is a global objective. When acting locally, we should be thinking globally – environmental, social and economic problems are global in extent.
- 5.11 The concept of waste is eliminated as resources are used more efficiently and returned safely to productive use, for example through recycling.
- 5.12 Museums should build the public's awareness and practical knowledge of sustainability by showcasing success stories in exhibitions and by coordinating broader discussion and research on sustainability.
- 5.13 Museums should assist in the education of the community for sustainability by creating an understanding of the interdependence of natural, economic and social systems.
- 5.14 Museums should assist in the building of community capacity by involving community in decision-making on research, exhibitions and other public programs.

## **6. PRACTICAL APPLICATIONS FOR SUSTAINABILITY IN MUSEUMS**

The following list offers sustainability guidelines for museums to consider. The list is not exhaustive.

### **6.1 Economic Aspects of Sustainability**

Responsible financial decisions must include the long-term sustainability of the community and environment. The current reliance on economic growth statistics alone as the basic measure of prosperity and progress, implicitly devalues the importance of our natural and social capital, including natural resource wealth and environmental quality. This practice also fails to distinguish economic activities that contribute to well-being from those, like crime and pollution, that cause harm. At present there are no guidelines to assist in evaluating budgeted activities, programs and policies to ensure that they are sustainable. The need for better measures of progress is widely acknowledged and various indicators of progress are being trialled around the world.

Here are some ways in which museums can contribute to sustainability:

- Museum financial decisions should be based on careful consideration of the impact on the environment, economy, human health and community well-being;
- Museums should keep abreast of the development of indicators used to measure the social, environmental and cultural implications as well as economic costs;
- Museums should promote sustainable industries through procurement policies which support industries seeking to enhance their resource efficiency (energy, water and materials) and to reduce waste and pollution;
- Museums should aim for sustainable collecting practices in conjunction with community needs and other collecting organisations and individuals;
- Museums should work towards sustainability reporting, that is reporting not just on the economic bottom line, but also on the ‘triple bottom line’ - the social, environmental and economic impacts of operations.

### **6.2 Sustainable Collection Management**

Larger, better resourced museums can play a leadership role in their communities, through offering assistance to smaller museums, community groups and organisations as well as to individual collectors, on sustainable collection management.

Museums are committed to the long-term preservation of collections and information that helps communities to understand their natural and cultural heritage.<sup>9</sup> Museums are required to develop and implement policies that guide the management of, and access to, collections and information. Australian museums have a strong tradition of preserving and exhibiting tangible heritage (moveable and fixed), and of contributing to the understanding and preservation of intangible heritage.

The following are some examples of issues to consider in sustainable collection management:

- Museums should set ‘sustainability goals’ for collection management and access in the context of present and potential resources. These resources might include the capacity of storage areas, the accessibility of conservation services, the environmental costs of

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<sup>9</sup> The Museums Australia *Code of Ethics for Art, History and Science Museums* is one of the sources for this commitment.

operating storage and display environments and the ability to research and communicate the significance of items in the collection;

- Museums should review collection policies to ensure that the growth of collections and de-accessioning of items from collections is managed in the context of agreed sustainability goals;
- Museums should review exhibition and communication policies to ensure that the display and interpretation of items from the collection, and the use of information about intangible heritage, can conform with agreed sustainability goals.

### **6.3 Education for Sustainability**

Museums have an important role in education for sustainability. They can be showcases for demonstrating what can be achieved in the workplace and can provide community education on sustainability.

Following are some ways in which museums can educate for sustainability:

- Museums build on and showcase their own progress towards sustainability;
- Through partnerships, museums showcase the progress of others;
- Museums develop partnerships with the local community in sustainability awareness projects and information sharing;
- Museums provide forums for the presentation of new knowledge and the debate of important sustainability issues such as reconciliation, poverty, population, global warming and biodiversity;
- Museums assist community groups with their work by advising and adding to their knowledge on sustainability;
- Museums present complex issues, such as global warming, in ways that are inclusive and accessible – both in publications and in displays.

### **6.4 New Museum Buildings**

There are many challenges facing museums that seek to incorporate sustainability principles into building and construction practices. These include large and variable numbers of visitors, tightly specified temperatures and humidity, feature lighting, air leakage through doors and existing grand facades. These and other challenges need to be addressed in innovative ways.

It has been estimated that building construction consumes 40% of the world's total energy, 25% of its wood harvest and 16% of its water.<sup>10</sup>

Sustainable building integrates building materials and methods that promote environmental quality, economic vitality and social benefit through the design, construction and operation of the built environment. Sustainable building merges sound, environmentally responsible practices into one discipline that looks at the environmental, economic and social effects of a building or built project as a whole.<sup>11</sup>

Planners should work with architects to design for sustainability. The major areas where sustainability principles can be incorporated are in decisions concerning site, water, energy, indoor environmental quality, materials and waste.

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<sup>10</sup> Quoted in City of Seattle, *Sustainable Building Policy*, 2002, accessible at: <http://www.cityofseattle.net/light/conservesustainability>

<sup>11</sup> *ibid.*

Realistic feasibility assessments should be made when planning new museums to ensure that the scope and scale of operations are sustainable in the long term.

Factors to be considered include:

- passive solar design;
- the use of renewable energy sources such as solar/wind power;
- the use of collected rainwater to replace mains water consumption;
- on site treatment and reuse of grey water (non-potable water often from showers, washing machines, sinks etc);
- demolition of buildings only when it is not economical or practical to reuse, adapt or extend existing fabric;
- the use of appropriate plantings for external surrounds, for example deciduous or evergreen trees to create microclimates in winter and summer;
- life-cycle costs of products associated with construction, operation, maintenance and disposal;
- efficient use of resources and maximising use of local materials.

## **6.5 Procurement**

Sustainable procurement has emerged as a responsible approach to the acquisition of products and services. It assumes that the life-cycle impacts of products are considered when procurement decisions are made, and that products and services purchased or used contribute to societal well-being.

Factors to consider in purchasing decisions include:

- Assessing the life cycle impacts of products and services;
- Investigating the claims of 'green' products and purchasing products that meet appropriate 'green' or 'eco' standards;
- Choosing suppliers who take back packaging for reuse, or purchasing packaging that can be recycled;
- Finding a supply of paper with maximum recycled content, bearing in mind the need for sound archiving practices;
- Investing in copiers and printers that do double-sided copying and printing;
- Using refillable toner cartridges for printers;
- Purchasing appliances with a 4-star (or better) energy rating;
- Developing and implementing a long-term sustainable purchasing policy and action plan;
- Appointing a sustainability manager/coordinator and a sustainability committee.

## **6.6 Waste Management**

The dumping of waste in landfill can cause air, soil and groundwater pollution and contributes to global warming. Waste disposal to landfill also represents a loss of resources. Waste minimisation, reuse and recycling should be practised to extend the use of natural resources and reduce energy use in the creation of new products. Where a local council does not have a policy for recycling, museums can develop an advocacy package to have one implemented.

Some examples include the following:

- Develop contracts and agreements that are environmentally sensitive with waste management providers;
- Conduct an assessment of waste in museum operations;

- Develop an exhibition masterplan that facilitates reuse and recycling of display props and furniture;
- Reuse goods and recycle items that cannot be used or repaired – donate unwanted goods to other museums, or to community charities;
- Ensure the availability of recycling facilities for the public and staff;
- Compost organic wastes from catering operations and lunchrooms;
- Appoint a waste management coordinator.

## **6.7 Water Management**

Water is a precious resource and must be protected.

Examples of how to practise water conservation and efficiency:

- Be conscious of water used and investigate ways to use less;
- Replace water inefficient fixtures with water-saving devices, including spring-loaded taps, dual-flush toilets and low-flow showerheads.

## **6.8 Energy Management**

Although there have been significant advances in ‘green power’, burning of fossil fuels is still the major source of energy production. Carbon dioxide produced from this burning adds to the world’s greenhouse gas emissions, which are impacting on climate.

Examples of what can be done:

- Conduct an energy audit of operations;
- Conduct an energy efficiency campaign;
- Include energy-efficiency - and the feasibility of renewable energy - as a primary consideration during maintenance, upgrades, renovations and new building projects;
- Install solar hot water where possible;
- Choose the most energy efficient equipment;
- Purchase ‘green power’ if available, to encourage the development of the renewable energy industry;
- Air condition only those spaces that need it;
- Reduce air leakage through doors and shell of buildings;
- Minimise heat production in air conditioned spaces;
- Install energy efficient lighting.

## **6.9 Motor Vehicle Management**

Cars and trucks using fossil fuels contribute to greenhouse emissions and thus to climate change. Vehicles also contribute to air pollution and harm human health.

Examples of action include:

- Purchasing energy efficient vehicles;
- Retrofitting older vehicles to use alternative fuels where available;
- Conducting green transport campaigns in the workplace, encouraging employees to travel by public transport, car pool, foot or cycle;
- Strongly promoting public transport availability in museum publicity.

## **6.10 Pollution Management**

A key environmental issue is land and groundwater contamination. Contaminants enter the soil and groundwater through careless waste disposal, dumping of toxic waste, use of fertilisers, accidental spillages and leakage. Museums may contribute to contamination through their research and conservation laboratories, cleaning responsibilities, catering areas and ground maintenance activities.

Some construction/fabrication materials used in museums, such as medium density fibreboard (mdf), and some paints and carpets, may have an adverse impact on collections, human health and/or the environment through off-gassing.

Examples of action include:

- Dealing with existing problems and ensuring contamination does not occur;
- Undertaking an audit of chemical use and disposal – questioning whether there are alternatives to toxic chemicals used;
- Reviewing and updating Disaster Preparedness and Management Plans that deal with accidental spillage.

## **6.11 Workforce Education**

The success of sustainability initiatives in the workplace will depend on staff and volunteer cooperation and understanding. Education and training are vital.

Examples of action include:

- Holding regular meetings, encouraging input and ideas from all personnel;
- Including sustainability practices in occupational health and safety education and induction kits for new personnel;
- Highlighting achievements to staff, the public, sponsors, industry and government in reports, newsletters, websites and other media.

## **7 THIS DOCUMENT**

### **7.1 History of Document**

‘Museums and Sustainability: Guidelines for Policy and Practice in Museums and Galleries’ was initiated at the Annual General Meeting of Museums Australia in 2001.

The Policy Standing Committee of Museums Australia developed this document during 2001 and 2002. On its recommendation, Museums Australia engaged Dr Sue Graham-Taylor as a consultant author. The document has benefited from comments received from the Regional, Local and Specialist Standing Committee of Museums Australia, as well as from the broad membership of the association. Comment on the draft document was sought from the Council of Australian Museum Directors, the Council of Australian Art Museum Directors, the Museums and Galleries Foundation of NSW, and Environment Australia.

The National Council adopted this document as a policy of Museums Australia on 26 February 2003. The same Council meeting supported the encouragement of museums to implement these guidelines, through articles in *Museum National*, through workshops and presentations at national and state (Branch) conferences, and through other strategies and opportunities that become available from time to time.

## 7.2 Review Process

The Council of Museums Australia will review this policy at the commencement of each newly elected Council's term of office (usually every two years).

## 8 REFERENCES

*Agenda 21*, UN Conference on Environment and Development, Rio Earth Summit, 1992.  
<http://www.un.org/esa/sustdev/agenda21.htm>

City of Seattle, *Sustainable Building Policy*, 2002.  
<http://www.cityofseattle.net/light/conservesustainability>

City of Toronto, *The Creative City. A Workprint*, 2001.  
<http://www.city.toronto.on.ca/culture/creativecity.htm>

Hawkes J., *The Fourth Pillar of Sustainability: Culture's essential role in public planning*, Common Ground Publishing and Cultural Development Network, Melbourne, 2001.

*Learning: The Treasure Within. Report of the International Commission on Education for the 21<sup>st</sup> Century*, UNESCO, Paris, 1996.  
<http://www.unesco.org/delors/treasure.htm>

Museums Australia, *Code of Ethics for Art, History and Science Museums*, 2<sup>nd</sup> edn, 1994.

Museums Australia, *Constitution*, 1994 as subsequently amended.

*Our Common Future*, World Commission on Environment and Development, OUP, Oxford & New York, 1987.

State of Oregon, 'Development of a State Strategy Promoting Sustainability in Internal State Government Operations', Executive Order EO-00-07, May 2000.  
[http://www.oregonsolutions.net/execOrder/sustain\\_eo.cfm](http://www.oregonsolutions.net/execOrder/sustain_eo.cfm)

*The Rio Declaration on Environment and Development*, United Nations Conference on Environment and Development, 1992.  
<http://www.unep.org/unep/rio.htm>

## 9. FURTHER READING

Environment Australia, <http://www.ea.gov.au>.

*Focus on the Future, The Western Australian State Sustainability Strategy: Consultation Draft*, Government of Western Australia, 2002.  
[http://www.sustainability.dpc.wa.gov.au/docs/Draft\\_Strategy.htm](http://www.sustainability.dpc.wa.gov.au/docs/Draft_Strategy.htm)

Krockenberger, M., Kinrade, P. & Thorman, R., *Natural Advantage: A Blueprint for a Sustainable Australia*, Australian Conservation Foundation, Fitzroy, Victoria, 2000.

Lowe, I., 'Shaping a Sustainable Future: the need for fundamental change'. Conference Paper, *Sustainability 2001* – CD of Proceedings of Conference February 2001, Conservation Council of Western Australia, 2001.

*Our Creative Diversity: Report of the World Commission on Culture and Development*, UNESCO, Paris, 1995.

*(significance) A guide to assessing the significance of cultural heritage objects and collections*, Heritage Collections Council, Canberra, 2001.

Yencken D. & Wilkinson D., *Resetting the Compass: Australia's Journey Towards Sustainability*, CSIRO, Collingwood, Victoria, 2001.