House of Representatives Standing Committee on Environment and Heritage

Inquiry into a Sustainability Charter

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Summary

This submission supports the inquiry's recommendation to create a national Sustainability Charter for Australia in principle, and further, strongly supports the statement that such a Charter would only be effective if endorsed by the Council of Australian Governments. We present the following observations and propositions to further this debate.

1. Australia presently has a sustainability Strategy, the *National Strategy for Ecologically Sustainable Development* (NSESD), which is nearly fifteen years old. There is a point of view that this Strategy is long overdue for revision, both because it has a narrow conceptual foundation compared with present notions of sustainability, and also that it is presented in a format and a language which is not easily accessible to, or understood by the general public.
2. Revision of the NSESD followed by the creation of a Charter would provide the timely opportunity for all Australians to make necessary perceptual shifts about the concept of sustainability - from one of environmental protection policy to one of integrating environment policy with economic and social strategies, and from one of vague, intangible rhetoric to one of measurable outcomes of specific strategy objectives.
3. A sustainability Charter and the sustainability Strategy are seen as two parts of the same conceptual framework in which the Charter is the head document, written in simple aspirational language in summary form that communicates to the wider Australian public the main principles, key fields of action, objectives and targets (framed from environmental social or economic positions) and indicators for measuring progress of the Strategy.
4. A sustainability Charter should be framed in a way that aligns with the United Nation's basic principles of sustainability and meets its criteria for an Australian National Sustainable Development Strategy (NSDS), while also emphasising the uniqueness of Australia's historical, ecological, socio-cultural, and economic circumstances.
5. In addition a sustainability Charter should describe the key structural and operational elements of the sustainability Strategy in a way which encourages public engagement.
6. A pre-requisite to creating a sustainability Charter would be the establishment of an independent National Council for Sustainable Development (NCSD) which would be tasked to coordinate government, industry and public input, as well as providing the mechanism for integration and balance of policy issues across all tiers of government. Its authority is envisaged to be similar to that of the National Competition Council.
7. Sustainability assessment of built environments remains problematic because no agreed methodology exists.

Preamble

We thank the Committee for the opportunity to contribute to the *Discussion Paper: Inquiry into a Sustainability Charter* (Discussion Paper). Our focus is to flesh out the nature of a Sustainability Charter that integrates policy areas which balance environmental impacts together with social and economic concerns. This focus is broader than sustainable development in a built environment context.

In this submission we draw on the principles of sustainability as established by the United Nations through its various commissions on Environment and Development from 1972[1] and from the more recent (since 1992) work of the Commission on Sustainable Development (CSD), as the benchmark against which key elements of a sustainability Charter may be identified. A brief background of the UN, Australia and some other countries approaches to NSDS is outlined to provide context for subsequent proposals.

What is an Australian Sustainability Charter?

Definitions of *charter* tend to follow or embellish that given in Oxford dictionary as;

1.(n) written grant of rights esp. by sovereign or legislature; written description of organisation's functions etc.

A search of Australian government agencies which have a charter (eg Office of Regulation Review, Department of Foreign Affairs and Trade), reveals a range of approaches and proximity to dictionary definitions. One interesting model is the charter written by the Department of Health and Aged Care which is embedded in its *National Environmental Health Strategy Implementation Plan* (2000). This sets out guiding principles in addition to entitlements and responsibilities of public, industry and government sectors as a basis for implementing the strategy. Apart from noting the connectivity between the Charter and the Strategy, we do not endorse this model as appropriate for sustainability.

We consider an Australian Sustainability Charter to be defined as,

An Australian Sustainability Charter would describe the principles related to obligations, activities and impacts in the environmental, social and economic realms so that the members of our present and future society are able to meet their needs and fulfil their greatest potential. It would be linked to a strategy that proposes key fields of action following from the principles, objectives and targets against these fields and indicators of trajectories in meeting the objectives. The Sustainability Charter would be a dynamic document that would have an impact on institutions at every level of society.

Background

Sustainability; UN Commissions & guidelines

The concept of sustainable development, as first articulated in *Our Common Future* - well known as the Brundtland Report - (UN General Assembly 1987) declared that;

- *….the "environment" is where we all live; and "development" is what we all do in attempting to improve out lot within that abode.*
- *Environment and development are not separate challenges; they are inexorably linked. These problems cannot be treated separately by fragmented institutions and policies.*
- *The concept of sustainable development provides a framework for the integration of environment policies and development strategies*

The notion that sustainable development at the global level can only evolve by the action of every nation to take ownership of and responsibility for developing, implementing and maintaining its own NSDS can be traced back to the Brundtland Report[2]. Australia has been a signatory to a number of subsequent UN initiatives[3] which reinforced the need for effective, dynamic national strategies. Slow and erratic uptake by nations prompted the UN Commission for Sustainable Development (CSD) to produce a comprehensive set of guidelines, *"Guidance in preparing a national sustainable development strategy: managing sustainable development in the new millennium"* (UN Guidelines 2002). These guidelines, together with the Johannesburg Summit *Plan of Implementation 2002,* emphasised an important shift in the perception of sustainable development from its early emphasis on environmental protection to the integration of environment policy with economic and social development strategies.

A strong argument exists for a NSDS to be modelled on the UN Guidelines; firstly because they implicitly enshrine sustainability principles, and secondly because ongoing global assessments compiled by CSD from member States' data would be more reliable if they were based on a consistent strategy framework among countries[4]. Australia's National Strategy for Ecologically Sustainable Development (NSESD) was released ten years before the UN Guidelines, therefore its review is considered worthwhile on this count alone.

Sustainability strategy vs. Sustainability charter

The scope of a sustainability Strategy as described in UN Guidelines is one which takes a whole-of-country approach to ensure balanced policy decision making when evaluating how social and economic policies impact on environmental issues, and how social equity is embedded in all policy decisions, as overarching characteristics of sustainability. This approach further requires that decision making not only be integrated across environmental, social and economic aspects of issues, but also be integrated vertically from local to national government levels and horizontally across all economic sectors[5]. Given this all-embracing, connective quality of a national sustainability Strategy, it is difficult to imagine that a sustainability Charter is anything but a head document to the Strategy.

Therefore this submission proposes that the only appropriate purpose of a sustainability Charter would be to provide the aspirational overview of a national sustainability Strategy, in effect like the executive summary of a report, albeit in simplified language. In this analogy, since an executive summary is written only after the report is complete, the substantive and priority issues contained in a Charter would be found in the Strategy itself in a more detailed and technical format. Examples of National Sustainability Development Strategies which have been implemented in the UK, Switzerland and Sweden are among

several which illustrate this approach (although none of them term the head document a Charter).

Australia's national strategy for ESD

Australia's NSESD was developed around the time of the Brundtland report in the late 1980s, and adopted in 1992. It has never since been substantially reviewed in light of the substantial perceptual shift in the concept of sustainability. Indeed the very title alludes to this by continuing to retain the adverb 'ecologically'. This NSESD exhibits shortcomings both in structure and its operation and cannot be benchmarked against UN Guidelines. Attention is drawn to these matters in Appendix 3.

Other country examples of a NSDS

Both the Discussion Paper *Inquiry into a Sustainability Charter* and the *Sustainable Cities* report make reference to Sweden's NSDS as an example of what an Australian Sustainability Charter may look like. While the Swedish example exhibits identifiable characteristics of a NSDS based on UN Guidelines, other examples exist from countries which have undergone two or three cycles of NSDS development and therefore provide wider information of the dynamic quality of a national strategy, in the sense described in the Discussion Paper;

"As Mr Chris Davis, Chief Executive officer of the Australian Water Association told the Sustainable Cities inquiry 'sustainability is a journey not a destination.'"

National Sustainable Development Strategies of the United Kingdom and Switzerland are two examples of countries which have taken this journey. Their cases can be compared to Australia's NSESD, in which one gets the impression that the vital life signs of the journey seem to have been extinguished somewhere in the mid 1990s.

It must be noted that none of these country examples limit their sustainability Strategy to environmental issues concerning the built environment as implied in the Discussion Paper; rather they speak of the human capacity to cooperatively pursue goals for future survival.

United Kingdom

In March 2005 the UK released a 186 page booklet with the cover title *Securing the future: delivering UK sustainable development strategy*. It contains seven chapters prefaced by a two-page introduction by Prime Minister Tony Blair, and updates the 1999 NSDS, which in turn revised the 1994 strategy, by announcing;

- A new integrated vision building on the 1999 strategy
- Five principles
- Four agreed priorities
- A new indicator set, which is more outcomes focussed (Hall 2005)

In the main it is written in simple language with attractive page layout and stimulating graphics; the executive summary, which encapsulates the entire strategy summary, is detailed in twelve pages. Each chapter retains a similar format which addresses a specific policy issue, its goals, indicators, and public participation needed to partnership the government to achieve the goals; clearly an aspirational document. Particular concerns of the built environment are outlined in a three-page vision statement titled *Sustainable Communities* (Annex-A), and so embedded within the wider NSDS.

Switzerland

The Swiss Federal Council released its forty-two page booklet titled *Sustainable Development Strategy 2002* in March 2002. This version updates its 1997 NSDS and

consists of four Parts plus an Appendix which connects the 1997 strategy with the present one. The one-page introduction by the Federal Council outlines both the strategy and its commitment. The methodology for integrating sustainable development into all policy areas is addressed in part-2.4, while part-3, *Action Areas & Measures* outlines the nine priority policy areas being targeted.

Switzerland's dedication to pursue a NSDS in accord with CSD criteria is demonstrated in its new Federal Constitution (1999) which has enshrined sustainable development at several points, including Article-2 as an overarching purpose of the Confederation, Article-73 binding all levels of government and Article-54 relating to foreign policy goals.

Sweden

Sweden's Ministry for Environment, based on Government Communication 2001/02:172, released its thirty-five page booklet cover titled *National Strategy for Sustainable Development 2002*, in June 2002. The back cover also informed;

Sustainable development is the overall objective of the Government's policy. This report is a summary of the Communication "A National Strategy for Sustainable Development" (Comm. 2001/02:172), which describes the Government's efforts towards sustainable development.

The document states immediately that it is a summary of the NSDS. The heart of the document lies in the section *Core Areas*, listing eight priority policy area issues. The section *Implementation and policy instruments* addresses the broad tenets of the UN Guidelines. Like the previous examples it is drafted in simple language, accessible to the wider community, although the absence of a top level government commitment statement to the strategy is noticeable.

Characteristics of the UK and Swiss strategies – and to some extent the Swedish – which are not found in the Australian strategy are;

- summary of the broader strategy documentation
- available in booklet form as well as internet for wide public access
- written in simple language and illustrated for wider public understanding
- prefaced by a commitment from the highest political leadership
- emphasise public, industry and government partnerships to achieve objectives
- identify a specific list of priority policy issues for national focus
- create an independent commission to guide government in implementation

Suggested key elements of a Sustainability Charter

From the position previously stated - that a sustainability Charter and a sustainability Strategy represent different levels of the same conceptual framework – it is considered that the function and content of a Charter is to summarise and highlight key aspects of the Strategy in a format aimed to inform and engage the wider public. To inspire participation from the widest reaches of society it is suggested that a Charter describe both structural and operational elements of the Strategy in addition to reflecting the current priority policy areas, their objectives, action plans and targets for achievement. Such information would indicate commitment, transparency and unity by governments and would accord with the principles of a NSDS outlined in the UN Guidelines. Fundamental is the issue;

"There is no one type of approach and no single formula by which national sustainable development strategies can or should be undertaken… What is important is the consistent application of the underlying principles, and ensuring that economic, social and environment objectives are balanced and integrated." (UNGuidelines p 8)

Suggested key structural elements

Structural elements of an effective sustainability Strategy which would be given voice in a Charter include, while not limited to, matters of national ownership, political leadership, management structures, public participation, partnerships and related matters of socio-cultural equity. These are identified in the UN Guidelines and summarised here.

Ownership[6]

Identity with, ownership of, and responsibility for the NSDS would be included in the Charter by statements to the effect that the NSDS, while consistently applying the principles of sustainable development and ensuring that environment, social and economic objectives are balanced and integrated, is framed to respond to the uniqueness of Australia's historical, cultural, ecological and economic circumstances.

Leadership[7]

Political leadership in the development, implementation and maintenance of the Strategy would be identified in the Charter by a statement of full commitment by top political leadership. Such a commitment given only at ministerial level would compromise the principle of integrated policy decision making. Leadership statements would also commit to capacity building of financial and resource bases, including institutional change.

Management[8]

The management engine (eg the National Council for Sustainable Development - NCSD) which drives the Strategy would be described in the Charter as a demonstration of transparency and accountability. And since the concept of sustainable development is to provide a framework for the integration of environment policy with social and economic strategies, the management body's composition and authority to achieve this function needs to be clear.

The UN Guidelines note that a NCSD which does not have representation from national finance or planning ministries or from local government or from outside of government, and does not have influence at the highest levels of national government, will most likely be ineffective in its role.

Public participation[9]

Broad public participation (not merely public consultation) in the decision making process is stressed by the UN Guidelines as both a pre-requisite of sustainable development – to legitimise the process - and a basic principle of social equity. Associated issues include the participation of disadvantaged groups in society and the building of partnerships between government, industry and community sectors. Principles of engaging public participation would be described in a Charter together with specific methods in action plans which address priority policy issues.

Suggested key operational elements

The ongoing operational process of implementing and maintaining a NSDS may be summarised in simple terms as; setting and integrating *policy*, stating policy *objectives* and *targets* to achieve the objectives, defining *indicators* to measure progress toward targets, a methodology for *monitoring* and *evaluation*, a method of regular *reporting* (including especially to the public), a feedback loop to adjust policy, targets or indicators, and an *auditing* regime to assess performance of the operational process. Such a process structure is dynamic and is able to respond to the basic nature of sustainable development, including uncertainty (political, environmental, economic and social change) at various spatial (national, state/regional, local) and temporal (short, intermediate, long) scales.

A similar operational process is applied in the ISO 9001 *Quality Management System* (QMS) for corporate entities which supply goods or services to customers, in which the purpose is to strive for continual improvement in its delivery of services, leading to increased customer satisfaction. ISO 14001 *Environmental Management System* (EMS) employs the same methodology, as does the Australian Standard AS 8003-2003 *Corporate Social Responsibility* (CSR).

It is therefore proposed that a Charter incorporate these key operational elements for public awareness of the process, which importantly would reference a supplementary document – similar to an annual report - to inform the public of current status of the strategy in terms of progress, achievements, changes, in simplified form and on a regular basis.

Policies, objectives and targets[10]

The UN Guidelines stress that a NSDS should not be seen as a new plan or as a separate planning process in parallel with existing processes, but rather one that adapts and integrates existing processes to comply with sustainable development principles. Setting and integrating environmental, social and economic policy where issues interact is the first step in the operation of a NSDS. Establishing priorities, objectives and setting targets for achieving policy is the next step in the process. While this submission makes no comment about the content of policies, objectives and targets *per se*, it proposes that a Charter would necessarily describe the principle of integrated policy, objectives and targets as well as the methodology for balancing policy and transparently account for trade-offs (particularly priority objectives and targets) in summarised form for public awareness.

Indicators[11]

Indicators should be evidence-based measures linking policy objectives to targets and are therefore a decision-making tool in the monitoring and evaluating processes of strategy development and integration. Evidence-based here means grounded in robust evidence that satisfy the tests of *credibility, transferability, reliability* and *objectivity*[12]. Despite a dazzling array of indicator sets available in Australia (and elsewhere) there are a similar

dazzling array of gaps. There is often little evidence to show a direct linkage to policy objectives, and consequently they are rarely found in reporting together with timelines and targets.

A 'starting-point' indicator set for a NSDS, developed by the UNs CSD and tested in twenty-two countries over several years (DiSano, 2001), adopted a 'theme/sub-theme' framework grouped under social, environmental, economic and institutional aspects (Appendix-1). The set can be accessed on the CSD website. It supersedes the original 'driving force–state–response' framework, based on expert and country feedback that the latter framework, while suitable in the environmental context, was not as appropriate for the social, economic and institutional indicators[13]. The current framework was adopted because it *"re-focused to emphasize policy issues or main themes related to sustainable development"*.

In Australia, progress of the NSESD is measured by a set of 24 headline indicators, created by identifying 21 'values' from the 3 core objectives of the Strategy[14] (Harrison 2001). The set can be accessed on the DEH website (Appendix-2). Noticeably no indicator sets have been published to monitor progress in achieving policy objectives described in parts 2 and 3 of the strategy, notwithstanding this commitment in Chapter 33 of the NSESD.

Monitoring, assessment and evaluation[15]

UN Guidelines place special emphasis on the monitoring and evaluation (M&E) and auditing (assessment) phase of the development and implementation processes of a NSDS because it is the practical driver of institutional change which helps to mainstream sustainability into the work culture (given appropriate leadership). Yet at the same time it cautions that this is an area in which many national strategies place little emphasis. These difficulties would be familiar to anyone who has participated in audit (*assessment*) and review (*evaluation*) processes in the development and implementation of a QMS, EMS or CSR. The performance of NSESD is discussed in Appendix 3.

Reporting

"The committee's recommendation for a sustainability charter was to introduce a national set of objectives that the Australian community could relate to and identify with. The charter would therefore include a system of public reporting." (Discussion Paper p4)

Three levels of sustainability reporting currently exist in Australia. The first is NSESD reporting to the CSD as part of its signatory obligations to the Rio and Johannesburg summits. The second level may be loosely described as a potpourri of public reporting via both NSESD Headline Indicators and State of the Environment at both national and State scales. The third level is a class of voluntary 'triple bottom line' reporting at both public and private corporate sector scale.

Australia's reporting to CSD includes a sixty-one page, undated national self-assessment report and responses to questionnaires. Australia participates in CSD forums with its delegation led by DEH and AGO, therefore potentially presenting an environmentally weighted perspective.

With regard to the NSESD, only one report has been published (2001)[16] in a format which itemised desirable and actual trends of the headline indicators (up or down), although no targets or future timelines were established. On the other hand, the State of the Environment reporting provides a wealth of data and information over its seven themes. There is no information that these reporting formats are connected.

Triple Bottom Line (TBL) reporting process is undertaken by private and public corporate entities in which annual reports list social and environmental performance together with financial performance. Australian Standard AS 8003-2003 *Corporate Social Responsibility* implicitly imposes a form of TBL reporting (Appendix 4).

A Sustainability Charter and institutional change

The UN Guidelines recognise that institutional change is a basic pre-requisite to successful development and implementation of a NSDS, and the inclusion of such information in a sustainability Charter is considered important to inform the public of the leadership role of governments and to provide for a measure of accountability. However, the UN Guidelines also caution that "many countries may find integration, coordination and mainstreaming of policy objectives as the most challenging task." Chapter-16 of the Australian NSESD has made such provisions, yet the evidence outlined in Appendix 5 indicates a total failure to implement the strategy. This should be avoided in any future Strategy by the formation of an independent Council for Sustainability whose functions should include,

- Providing advice to Governments on policy integration and balance
- Auditing the Strategy outcomes and processes
- A national repository for sustainability information and data
- Ensuring adequate levels of public participation and industry partnerships
- Coordinating policy areas and participation between tiers of government
- Dissemination of the Charter and Strategy to the widest public audience
- Monitoring and reporting progress or change of priority areas of the Strategy

From ESD to a sustainable built environment

In recent years political, governmental administrative and commercial rhetoric in the built environment has blurred the meanings of the words "*environmental*" and "*sustainable*". Far from being a trivial matter of semantics, this produces quite different development strategies and outcomes. The propensity to address single criteria environmental issues under the guise of sustainability or 'a-part-of-sustainability' has been well known to many commentators for years. For example Williamson et al (2003) say,

"*….'ecological', and 'environmental' are labels that embody the notion that the design of buildings should fundamentally take account of their relationship with and impact on the natural environment.*" (p1)

Curwell and Deakin (2002), when reviewing the BEQUEST model for sustainable urban development, remarked;

"The 'S' word is almost everywhere, but what does it mean? It is now routinely misapplied in situations where ten or even five years ago the words 'environmental', 'environmentally friendly' or 'ecological' might have been applied. It overlooks the wider socio-economic and equity dimensions of the term."

Commenting on the effectiveness of recent voluntary environmental assessment tools which certify 'green' buildings, Cole (2006) gives emphasis to the difference between the meanings of environmental and sustainable;

"It is difficult to imagine that a sustainable system of production and consumption will emerge from simply tweaking current practices"

With this background it is noted that the Discussion Paper identifies water, energy, transport and ecological footprint as likely key elements of a sustainability Charter

although no distinction is made as to whether they would be addressed only in the built environment context or as broader, national issues.

Recent measures in the regulatory arena of the built environment demonstrate that there are risks when focus is specifically placed on issues of natural resource consumption and the generation of emissions and waste. Such cases are often expressed in terms of avoiding negative environmental impacts, demanding action in the name of sustainability but without appropriate balanced consideration of the social and economic impacts of the issue. Furthermore, given the inter-connected nature of natural phenomena, the risk of making inappropriate decisions based on isolating a particular environmental issue and 'solving' it in the traditional Newtonian mechanistic way, is only likely to increase the uncertainty of eventual outcomes. Some current examples of problematic building and urban planning regulation are summarised in Appendix 6.

One important decision making technique for evaluating sustainability issues of production and consumption in the built environment is Life Cycle Assessment (LCA). The 1998 *National Greenhouse Strategy* recommended the development of a national LCA framework and inventory database. Today, eight-years later and unlike most other developed countries, Australia still does not possess either a national materials inventory database or a national framework for impact assessment. (see Appendix 7)

Concluding remarks

An Australian sustainability Charter is considered to necessarily be a critical part of an Australian Sustainability Strategy. Its purpose would be to summarise the Strategy in a form accessible to the widest public audience. As both an aspirational and living document it needs to identify priority sustainability policies and provide continuous updating of progress of policy objectives.

A fundamental revision of Australia's existing National Strategy on Sustainable Development and the formation of an independent Council on Sustainable Development to coordinate and guide government are pre-requisites in the creation of a Sustainability Charter that will successfully contribute to a national commitment to sustainable development.

The key elements of a sustainability Charter would include both *structural* (ownership, leadership, management, public participation) elements and *operational* (priority environmental (eg energy, water, waste, emissions), social, and economic issues, targets, indicators, monitoring and evaluation, assessment, reporting) elements.

Notes

1. The 1972 United Nations Environment Programme (UNEP) Conference on the Human Environment, popularly known as the Stockholm Declaration, stated 26 principles centred on human freedoms and responsibility to protect the global environment. It is often referred to as a precursor to sustainable development, with an environmental emphasis.

2. Our Common Future states;

"No single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications. Yet irrespective of these differences, sustainable development should be seen as a global objective."

3. Two examples include

"Agenda 21 … reflects a global consensus and political commitment at the highest level on development and environment cooperation. Its successful implementation is first and foremost the responsibility of Governments. National strategies, plans, policies and processes are crucial in achieving this." (Agenda 21, 1.3)

"States should…Take immediate steps to make progress in the formation and elaboration of national strategies for sustainable development and begin their implementation by 2005. Such strategies which integrate economic, social and environmental aspects of sustainable development should be pursued in accordance with each county's national priorities." (Johannesburg Plan of Implementation p162)

4. "Comprehensive analysis of the performance of the national strategies mentioned above is inadequate. Only a few strategies have been adequately assessed an devaluated, especially in terms of their outcomes. There is, however, fairly reliable broad knowledge residing in different institutions – The United Nations, UNDP Capacity 21, World Bank and OECD/DAC that clearly shows the kind of challenges faced and lessons learned from the strategy formulation and implementation experience." (UNGuidelines p 15)

5. "A national strategy for sustainable development should be comprehensive, balanced as well as vertically and horizontally integrated. Vertical integration refers to incorporating community (local) level concerns and actions into national decision making processes." (UNGuidelines p.18)

6. "Every country needs to determine, for itself, how best to approach its sustainable development strategy preparation and implementation depending upon the prevailing political, historical cultural, ecological circumstances. Therefore, a "blueprint" approach for national sustainable development strategies is neither possible nor desirable. " (UNGuidelines p 8)

7. "A key element of successful national sustainable development strategies is the existence of a strong political commitment from the top leadership as well as from local authorities of a country". (UNGuidelines p 22)

8. "Create a national council for sustainable development. National Councils for Sustainable Development (NCSD) have members drawn from government, civil society, private sector and academia. "Establish an engine to drive the process. Often a Secretariat is formed, comprising committed staff with good management skills, both from inside and outside the government. The Secretariat may be answerable to a national steering committee or a national council for sustainable development with broad representation, but this entity has to be influential at the highest political level" (UNGuidelines p 23)

9. "One of the fundamental prerequisites of sustainable development is broad public participation in decision-making. The involvement of the civil society and the private sector in strategy development strengthens the planning process by building broad legitimacy for the process, by engaging partners whose support will be needed for effective implementation. Public participation is also an objective in its own right and a fundamental equity principle of sustainable development;

Promote and build partnerships with the civil society, private sector and external organizations." (UNGuidelines p 19)

10. "Design a system for harmonizing key economic, social and environment related policies. Such a process would enable a country to avoid contradictions among policies and ensure that policies are mutually supportive; "Establish goals and objectives of the strategy, and set broad targets for achieving objectives through appropriate forums" (UNGuidelines p 25)

11. "Develop a set of sustainable development indicators. In this context, the Commission on Sustainable Development has now published its revised set of indicators of sustainable development that can be used as a convenient starting point for developing a set of national indicators. Other indicator sets are also available that can be used as additional resource information." (UNGuidelines p 25)

12. A key element of well rounded, robust evidence is that the methods and conclusions are capable of confirmation or refutation. It is noted that 'ecological footprint' does not seem to satisfy this criterion.

13. CSD Sustainable Development Indicators

"This change in organizational framework has been prompted by the experience of countries that assisted CSD in testing and developing indicators of sustainable development. An expert group advising CSD, as well as the testing countries themselves, recommended the adoption of a theme approach." (DiSano p.19)

"…the Expert Group on Indicators of Sustainable Development recommended that the indicator framework be re-focused to emphasize policy issues or main themes related to sustainable development". (DiSano p.21)

14. Australia's headline indicator set related to NSESD was developed around 1999.

"The framework for the indicator set is based on three core objectives - for each of these objectives, a set of 'values' has been identified, each value representing one key aspect of the objective."

Twenty one values have been identified based on the three core objectives described in Part-1 of the NSESD, and twenty four indicators created from the values. The three core objectives (and indicators) of the NSESD are;

- enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations; (Indicators 1-14)
- provide for equity within and between generations; (Indicators 15-18) and
- protect biological diversity and maintain essential ecological processes and life support systems. (Indicators 19-24)

15. "Monitoring, assessment, evaluation and learning play a central role in a national sustainable development strategy as part of the cyclical process of continuous improvement towards sustainable development." (UNGuidelines p.32)

16. Environment Australia 2002 *"Are We Sustaining Australia? Report Against Headline Sustainability Indicators"*

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Appendix 1 – United Nations CSD Theme Indicator Framework

SOCIAL		
Theme	**Sub-theme**	**Indicator**
Equity	Poverty (3)	% of population living below Poverty Line
		Gini Index of income inequality
		Unemployment rate
	Gender Equality (24)	Ratio of average female wage to male wage
Health (6)	Nutritional status	Nutritional status of children
	Mortality	Mortality rate < 5-years old
		Life expectancy at birth
	Sanitation	% of population with adequate sewage disposal facilities
	Drinking water	Population with access to safe drinking water
	Healthcare delivery	% of population with access to primary health care
		Immunization against infectious childhood disease
		Contraceptive prevalence rate
Education (36)	Education level	Children reaching Grade-5 of primary education
		Adult secondary education achievement level
	Literacy	Adult literacy rate
Housing (7)	Living conditions	Floor area per person
Security	Crime (36, 24)	Number of recorded crimes per 100,000 population
Population (5)	Population change	Population growth rate
		Population of urban formal and informal settlements
ENVIRONMENTAL		
Theme	**Sub-theme**	**Indicator**
Atmosphere (9)	Climate change	Emissions of greenhouse gases
	Ozone layer depletion	Consumption of ozone depleting substances
	Air quality	Ambient concentrations of air pollutants in urban areas
Land (10)	Agriculture (14)	Arable and permanent crop land area
		Use of fertilizers
		Use of agricultural pesticides
	Forests (11)	Forest area as a percentage of land area
		Wood harvesting intensity
	Desertification (12)	Land affected by desertification
	Urbanization (7)	Area of urban formal and informal settlements

ENVIRONMENTAL (cont…)		
Theme	**Sub-theme**	**Indicator**
Oceans, Seas & Coasts **(17)**	Coastal Zone	Algae concentration in coastal waters
		% of total population living in coastal areas
	Fisheries	Annual catch by major species
Fresh Water **(18)**	Water quantity	Annual withdrawal of ground & surface water as a % of total available water
	Water quality	BOD in water bodies
		Concentration of faecal coliform in fresh water
Biodiversity (15)	Ecosystem	Area of selected key ecosystems
		Protected area as % of total area
	Species	Abundance of selected key species
ECONOMIC		
Theme	**Sub-theme**	**Indicator**
Economic structure (2)	Economic performance	GDP per capita
		Investment share in GDP
	Trade	Balance of trade in goods and services
	Financial status (33)	Debt to GNP ratio
		Total ODA given or received as % of GNP
Consumption & production patterns (4)	Material consumption	Intensity of material use
	Energy use	Annual energy consumption per capita
		Share of consumption of renewable energy resources
		Intensity of energy use
	Waste generation & management (19-22)	Generation of industrial & municipal waste
		Generation of hazardous waste
		Generation of radioactive waste
		Waste recycling and reuse
	Transportation	Distance travelled per capita by mode of transport
INSTITUTIONAL		
Theme	**Sub-theme**	**Indicator**
Institutional Framework (38, 39)	Implementation of SD strategy (8)	National Sustainable Development Strategy
	International Cooperation	Implementation of ratified global agreements
	Information access (40)	Number of internet subscribers per 1,000 inhabitants
Institutional Capacity (73)	Communication infrastructure (40)	Main telephone lines per 1,000 inhabitants
	Science& Technology	Expenditure on Research & development as % of GDP
	Disaster preparedness and response	Economic & human loss due to natural disasters

Appendix 2 - NSESD Headline Sustainability Indicators

Objective 1: (a) enhancing individual and community well-being and welfare		
Value-1	HIS-1	Gross National Income (GNI) per capita
	HIS-2	Gross per capita disposable income
Value-2	HIS-3	Percentage of people aged 25-64 who have attained upper secondary and/or post secondary level qualifications – including vocational training
Value-3	HIS-4	Disability Adjusted years life expectancy (DALE)
Value-4	HIS-5	Number of occasions where concentrations of pollutants exceeded NEPM standards for ambient air quality in major urban areas
	HIS-6	Total SOx, NOx and particulate emissions
Objective 1: (b) economic development that safeguards the welfare of future generations		
Value-5	HSI-7	Multi-factor productivity (GP per combined unit of labour & capital
Value-6	HSI-8	Real GDP per capita
Value-7	HSI-9	(i) National Net Worth (ii) National Net Worth per capita
Value-8	HSI-10	(i) Surface water units within 70% of sustainable yield (ii) Groundwater management units within 70% of sustainable yield
Value-9	HSI-11	Total area of all forest type
Value-10	HSI-12	Percentage of major Commonwealth managed harvested wild fish species classified as fully or under fished
Value-11	HSI-13	(i) Renewable energy as a proportion of total (ii) Total renewable and non-renewable energy use
Value-12	HSI-14	Net value of agricultural land use (nya)
Objective 2: (a) providing equity within generations		
Value-13	HSI-15	Adult female full-time average weekly earnings as a proportion of adult male full-time average weekly earnings
Value-14	HSI-16	% difference in year-12 completion rate between bottom and top socio-economic decile
Value-15	HSI-17	(i) % difference in burden of life years lost due to disability between bottom and top socio-economic quintile (ii) Percentage difference in burden of life years lost due to mortality between bottom and top socio-economic quintile
Value-16	HSI-18	% difference in year-12 completion rates between urban & remote locations
Objective 3: protect biodiversity & maintain ecological processes & life support systems		
Value-17	HSI-19	(i) Proportion of bio-geographic sub-regions > 30%of original vegetative cover (ii) Proportion of bio-geographic sub-regions > 10% of the sub-region's area in protected areas
	HSI-20	(i) Number of extinct, endangered and vulnerable species (ii) Number of endangered ecological communities
Value-18	HSI-21	Total net greenhouse gas emissions
Value-19	HSI-22	Estuarine condition index
Value-20	HSI-23	River condition index (nya)
Value-21	HSI-24	Catchment condition index

Appendix 3 – Evaluation of NSESD structural and operational elements

The NSESD is accessed on the Department of Environment and Heritage (DEH) website, although there is no link to it on the home page. It is structured into four parts. The background and overview in part-1 of the strategy, framed by one goal, three core objectives and seven guiding principles, is delineated from the specific policy issues in part-2 (contained in 8 sectoral chapters) and part-3 (contained in 22 inter-sectoral chapters)

Therefore the need to distinguish between the 3 core objectives in part-1 and specific policy objectives in parts 2 and 3 is an important but not immediately apparent aspect of the strategy, particularly since it incorporates carry-over effects to indicators, monitoring, evaluation, auditing and reporting. It is suggested that the three core objectives in part-1 (which may indeed be described as aspirational) are by themselves too broad and vague to form the basis of a sustainability Charter which would inform and stimulate public action. On the other hand, the objectives in parts 2 and 3 appear to be too numerous and detailed to be contained within an aspirational document. The potential for a sustainability Charter to bridge this gap clearly exists.

An evaluation of the NSESD based on the suggested structural and operational elements described in this submission are summarised below, with the intent that the inquiry will consider and weigh these factors during its deliberations for a Charter.

Ownership

Nowhere in part-1 of the NSESD are there statements which recognise the UN Guidelines commitment to the principles of sustainable development, while commenting on the unique circumstances of Australia's historical, political, socio-cultural and ecological make-up. In fact concern is stressed primarily for environmental protection within financial capacities of various independent tiers of government, while the roles of government, industry and public appear somewhat detached.

Leadership

The NSDS of UK and Switzerland are examples of leadership commitment to the public, in accordance with UN Guidelines. The UK strategy has identified Cabinet as taking ultimate accountability for the NSDS, with a lead role by DEFRA. By comparison, Australia's NSESD contains a single note of endorsement by CoAG, although the content of this endorsement is not found in the NSESD, but in a CoAG communiqué archive dated 7 December 1992 under the issue titled *Environment – ESD and Greenhouse*, where it starts by announcing;

The Council endorsed the National Strategy for Ecologically Sustainable Development (ESD), noting that implementation would be subject to budgetary priorities and constraints in individual jurisdictions.

This starting point of the endorsement violates two basic principles of sustainability; firstly by subjugating the Strategy to be a sub-set of 'Environment', and secondly by holding economic policy to have primacy over ESD matters. The CoAG endorsement continues;

The Council noted that the ESD Steering Committee and the National Greenhouse Steering Committee will report to Heads of Government within 12 months, and biennially thereafter, on the implementation of the Strategies seeking input and comment from business, unions and community groups on the Strategies.

Whatever the reports to Heads of Government may have been, the issue of ESD has never appeared again in the subsequent 16 communiqués of CoAG meetings up to and including February 2006. The CoAG website's list of *Issues by Subject* has no subject on sustainable

development nor ESD. The Intergovernmental Agreement on the Environment, proclaimed on 1 May 1992, no longer exists on the CoAG website; and further, of the 31 Ministerial Councils listed in the 2005 compendium of *Commonwealth-State Ministerial Councils*, there isn't one on either sustainable development or ESD. Neither of the two Australian Prime Ministers in power since the 1992 NSESD was released has made a commitment statement on behalf of government which is attached to the strategy (unlike the pre-release version which contained a statement from Prime Minister Hawke).

Management

The UK created a Sustainable Development Commission (SDC) to act as government's independent advisor in 2000. According to the new strategy, it intends to strengthen both the role and resources of the CSD, including a watchdog as well as an increased advisory role.

It is known that Australia has no equivalent independent commission to manage NSESD and further that its management resides within DEH. Such a structure does not accord with UN Guidelines since it alone cannot provide a concessus for balancing policy areas. We believe this to be a fundamental weakness of the Strategy. Furthermore, our persistent enquiries to DEH were not able to establish a section, unit or person in the department responsible for the Strategy (including a staff listing at the Department's switchboard).

Public participation

The first step in public participation is awareness and knowledge. Given that hard copies of the NSESD have been out of print for some time, access to the strategy is available only to those with computer internet access or from selected libraries. In the time available for this submission we have not been able to research the amount of access to the strategy that can be made by schools, community groups, etc.

In reading individual chapters of parts 2 and 3 of the strategy, the style of writing gives little indication of governments' willingness to partnership with the public in achieving its stated objectives and action plans. Such a style of communication can be compared with the UK strategy document, which not only emphasises this relationship but maps the ways in which it can be achieved chapter by chapter.

Policies, objectives and targets

While an assurance is given in the introduction to the NSESD about a balanced approach, it is in fact addressing the core objectives and principles, stating;

These guiding principles and core objectives need to be considered as a package. No objective or principle should predominate over the others. A balanced approach is required that takes into account all these objectives and principles to pursue the goal of ESD.

UN Guidelines however, stress the need for balancing the environmental, social and economic policies on issues. No guidelines or processes are described in parts 2 and 3 of the NSESD for doing this, and consequently, no method or guidelines for establishing trade-offs between potential conflicting policy of issues.

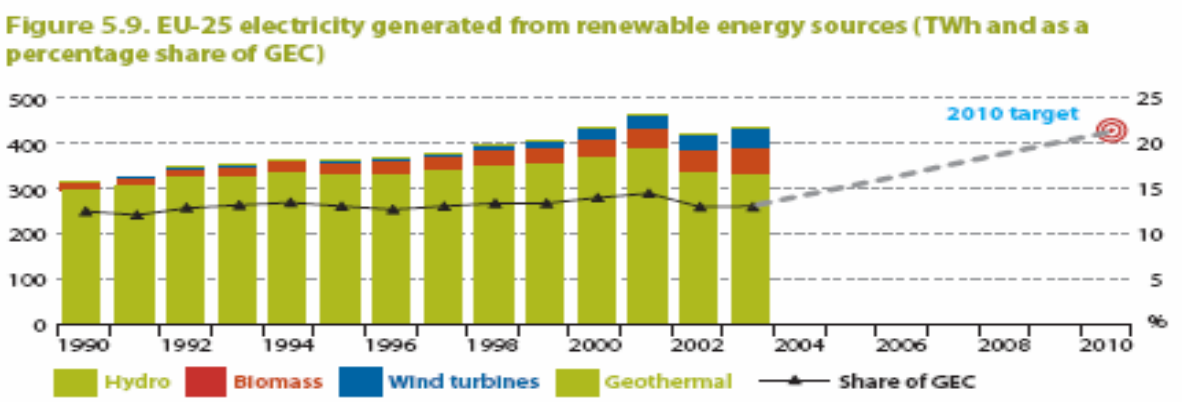
Specifically no targets or indicators have been announced to monitor progress of these policy objectives, despite assurances given in chapter-33 of the NSESD that;

"to monitor and review the implementation and effectiveness of actions contained in this Strategy at the program, sectoral and national levels"

Indicators

A comparison of the UNCSD and Australian headline indicator sets in Appendices 1 and 2 offer a practical insight into the differing perceptions of the concept of sustainability, and hence the need for Australia to revise its Strategy.

Australia's inability to establish quantitative targets for policy indicators (fundamental to managing a NSDS) can be seen by comparison, for example, with the EU approach.



Monitoring, assessment and evaluation

The NSESD's commitment to the monitoring and evaluation phases of developing and implementing the Strategy is stated in Chapter-33 in part by a clear commitment to *"monitor and review implementation of actions contained in the strategy at detailed levels by the ICESD including 2-yearly reports to COAG and guidance to program managers."*

The Discussion Paper informs that "An Intergovernmental Committee on ESD (ICESD) monitors implementation and reports to Heads of Government", as stated on the NSESD website. This is contradicted by Australia's reply to the CSD "Guidelines for reporting on national sustainable development strategies" in 2003, which stated;

"Implementation was originally overseen by an Intergovernmental Committee on Ecologically Sustainable Development, and later by various Councils of Australian and State and Territory Government Ministers and COAG."

The National Competition Council submission to the Productivity Commission's 2004 inquiry into a *Review of National Competition Policy Reforms* elicits sharp contrast in the effectiveness between ESD and NCP strategy achievements and makes reference both to policy failure and the role of ICESD as follows;

"The Intergovernmental Committee on Ecologically Sustainable Development (ICESD) was tasked with the role of monitoring progress and reporting directly to CoAG. ICESD, however, was an unwieldy organisation consisting of a large membership with diverse views. It reported once, in 1996, and was then dissolved (p. 160)"

Since the ICESD was dissolved in 1996 no indicator sets have been published and no reports are available on the ESD website, there is little evidence to suggest that this commitment to monitoring has been carried out.

Reporting

Australia's reporting to CSD includes a 61-page, undated national self-assessment report and responses to questionnaires. Australia participates in CSD forums with its delegation led by DEH and AGO, therefore presenting an environmentally weighted perspective.

With regard to public reporting of the NSESD, only one report has been published (2001) in a format which itemised desirable and actual trends of the headline indicators (up or down), although no targets or future timelines were established. On the other hand, State of the Environment reporting provides a wealth of data and information over its seven themes. However no connection between these two formats is evidenced.

Sustainable development and the built environment

The Discussion Paper identifies the built environment as a possible key element of a Sustainability Charter. The NSESD does not recognise the built environment as an issue *per se*, although one objective in chapter-14 is to "enhance the quality, accessibility and relevance of ESD-related data", which many would agree has already been achieved by the production of national *State of the Environment* reports of 1996 and 2001. One of its seven themes titled 'human settlements' contains a wealth of data organised under an impressive list of both social and environmental indicators, although there is no evidence to suggest linkages to the NSESD policy objectives has been made. Opportunities for integration of the two documents exist, particularly in the alignment of indicator sets and their connection to policies.

The Discussion Paper and the Sustainable Cities report also acknowledge that many issues of the built environment which may desirably be addressed within a national Sustainability Charter, fall under the jurisdiction of either State or Local government. The UNGuidelines recognise this issue as one of the complexities faced by federal governmental systems, but assert that this challenge must be addressed to meet the principle of vertical integration of policy making, from local up to commonwealth jurisdictions.

Appendix 4 - Triple Bottom Line Reporting

Origin of the term 'Triple Bottom Line' is popularly attributed to John Elkington from his 1997 book *Cannibals with forks*, which was aimed squarely at private sector corporate accountability in response claims that a number of entities, overzealous in pursuit of increasing their financial bottom line, were creating significant negative environmental and social impacts. Elkington proposed that future corporate prosperity would require transparently reporting environmental and social aspects of their corporate activities in addition to financial performance.

TBL and the Global Reporting Initiative

The concept took on a more universal appearance with the release of the first Global Reporting Initiative (GRI) *Sustainability Reporting*, which was subsequently endorsed by the Johannesburg Summit in 2002. The initiative requires an entity to report its activities against a framework of economic, social and environmental performance indicators. This framework is set within its QMS structure where the indicators inform progress toward targets for corporate objectives. International acceptance of this technique by the corporate sector is reported by GRI to have grown steadily since its inception, in parallel with continuous development of the GRI initiative, which has recently released its third edition (G3), as well as companion versions for small and medium enterprises and for developing countries.

TBL and the Commonwealth Government

In June 2003 Environment Australia published a document titled *Triple Bottom Line Reporting in Australia: A guide to reporting against environmental indicators*. stating;

"This Guide is one in a series of three produced by the Commonwealth Government to assist with TBL reporting. Guides providing information on social and economic indicators are also available."

Complementary guides and methodologies for social and economic indicator sets were purportedly under preparation by the Department of Family and Community Services (FaCS), due for release in August 2003 and in 2004 respectively. While these indicator sets have yet to be released, FaCS has produced annual TBL reports from 2002-03 to 2004-05. These reports state that social and economic indicators were drawn from the GRI set. It is concluded that the government's series stalled after the first 2003 initiative.

TBL and Local Government

At a local government level, the International Council for Local Environmental Initiatives (ICLEI) has promoted the concept of TBL reporting as a strategic management tool, and many Councils have reportedly taken up the challenge. Concepts are described in an ICLEI report to Gosford Council in October 2003 titled *Triple Bottom Line best practice in local government*, noting in particular a survey of States' Local Government Acts which required Councils either to practice sustainability principles and/or provide TBL reporting. The results showed a mixture of statutory obligations ranging from full compliance to no requirement.

TBL and the AS 8000 Governance Series standards

Between 2003 and 2004 Standards Australia released a series of standards and handbooks related to Good Governance and Corporate Social Responsibility. They are informative or guidance standards, and not able or intended to cut across Federal and States' legislation

nor international treaties. AS 8003-2003 *Corporate Social Responsibility* does however contain some elements which recur in this submission. First is a reminder on page 4 that;

"The concept of Corporate Social Responsibility is equally applicable to public and private entities, government departments and not-for-profit organisations. The use of the word 'Corporate' should therefore be read in a broad sense as applying to all of these entities."

Secondly the structural elements in Section-2 and the operational elements in Section-3 of the standard take an essentially identical form to ISO 9001 *Quality Management Systems* and ISO 14001 *Environmental Management Systems,* both of which show connections to the UN Guidelines for NSDS. Third, the corporate social responsibility issues identified in clause 5.2.1 of the standard may be plainly construed as a set or performance indicators for TBL reporting; in fact the reporting requirements stipulated in clause 5.2.7 state that;

The entity's key performance indicators for financial, governance, environmental and social performance should be reported. Guidance on how to produce such reports is available from the Global Reporting Initiative.

In particular, the reference to 'governance' indicators parallels the UN Indicator Guidelines set of 'institutional' indicators and echoes the suggestion in the *Sustainable Cities* report calling for quadruple bottom line reporting.

We are not aware of whole-of-government policy at any tier which requires their agencies to establish QMS, EMS or CSR programmes; however, given that their operational process is so similar to that of a NSDS, implementation of these schemes are considered to promote the mindset to automatically sew the seeds for institutional change at the grass roots level to embrace a NSDS and the processes for vertical integration from a common foundation.

Appendix 5 - NSESD and institutional change

Chapter-16 of the NSESD "Changes to Government Institutions and Machinery" sets out four objectives and action plans to achieve them

Objective 16.1 *to ensure Cabinet processes facilitate the integration of economic, environmental and social considerations into decision making.*

To achieve this objective, the action plan states; "Government will work towards ensuring all Cabinet documents address the relevant ESD implications of the recommendations and conclusions including economic, environmental and social impacts. At the Commonwealth level, this will be articulated in the next edition of the Cabinet Handbook."

The most recent edition of the Cabinet Handbook, (5th Edition, Amended March 2004), makes no reference at all to ESD. At national government level Prime Minister Howard did however announce the formation of a Sustainable Environment Committee of cabinet (2001) as a whole-of-government priority. Its scope includes a number of environmental issues including greenhouse, water, land-clearing, biodiversity and oceans policy. There is no evidence that the committee will address sustainability principles; indeed the very title of the committee suggests otherwise.

Objective 16.2 *to incorporate ESD principles as a fundamental objective of relevant government authorities involved in economic, environmental and social decision making*

Yet a 1999 Productivity Commission report "*Implementation of Ecologically Sustainable Development by Commonwealth Departments and Agencies*" found;

"An important finding of this inquiry is that there is a lack of clarity regarding what ESD means for government policy. ESD is often equated with the environment.

"The extent to which departments and agencies have implemented programs and policies with an explicit ESD focus — as well as the extent to which ESD principles and objectives have been considered and applied in general policy development — varies widely across Commonwealth departments and agencies.

"A common theme among submissions was the need to better institutionalise ESD as part of the policy mainstream." (Productivity Commission Report No.5, May 1999)

Objective 16.3 *to improve the efficiency and effectiveness of the development, implementation and integration of ESD-related policies, clearly define the roles and responsibilities of each level of government, avoid duplication of functions and establish effective processes for cooperation between governments*

Objective 16.4 *to improve the level of consideration given to ESD principles in government purchasing policies and practices*

Yet a 2005 Australian National Audit Office report "*Cross Portfolio Audit of Green Office Procurement"* in a sample of 71 government departments and agencies, concluded overall;

"The audit has identified a small number of better practice examples of green office procurement across the Australian Government. However, overall there were significant shortcomings identified in terms of the application of whole of life cycle costing and in the management of the environmental impacts of procurement decisions." (ANAO Audit Report No.22 2005-06, p24)

Appendix 6 – Building and Planning Regulation

Building Code of Australia (BCA)

The BCA is substantially a national document, administered by the Australian Building Codes Board (ABCB) under the auspices of COAG, although States and Territories retain jurisdictional authority which allows them to add, modify or delete specific requirements.

The traditional purpose and scope of building regulation has been directed to the safety, health and amenity of building occupants and the public, evolving from experience and more recently from building science and engineering theories, in which the building may be analysed as a mechanical system independent of people. However in 2003 the scope of the BCA was expanded to include energy efficiency provisions for residential buildings; and in 2004 the ABCB announced its intention to include further 'sustainability issues' of water, materials and indoor environmental quality. These are clearly environmental issues, and furthermore energy consumption and water use involve the interaction of a building system and its occupants, for which no verified modelling techniques have yet been developed. It is noted that the draft BCA-2007, recently opened for comment, has added the word 'sustainability' to safety, health and amenity as one of the code's four goals.

Whenever the BCA proposes new regulation it must comply with COAG Guidelines, and in particular by preparing a Regulatory Impact Statement (RIS) which provides a level of proof that that the particular regulatory measure is the most appropriate instrument to achieve a policy objective. One criterion of the RIS framework is a cost/benefit analysis; in the example of the BCA introducing energy efficiency regulation, this criterion was justified by weighing the cost of regulating against the cost savings of future energy bills.

Such a process does not accord with the principles of sustainable development on several counts. Firstly, only one agency has been tasked with evaluating, integrating and balancing the economic, environmental and social policy outcomes for a regulatory action. Secondly, the evaluation is made on a single resource issue considered in isolation from others and therefore not concerned with residual environmental, social or economic stress placed on other resources which may occur as a result of this action.. Thirdly, there is arguably no capacity for innovation or trade-offs either within the resource area or between resource areas.

South Australia's Water Efficiency regulation

The 2006 edition of the BCA Vol-2 contains a new South Australian addition under Health and Amenity provisions (p.597) titled *Water Efficiency*. This requires all new build housing to have a rain-water tank installed, connected to the mains supply with a pump and controller and plumbed into the bathroom, laundry or toilet. The water tank is specifically not permitted to be a source of potable water. Unfortunately no requirement exists for an RIS to be produced by the SA Government for regulations introduced via an Appendix to the BCA. This lack of an RIS (open to public scrutiny) means there is no transparency in ensuring the objective of the regulation will be achieved. Research by Williamson and Beauchamp (2006) indicated that these provisions would likely fail on at least four criteria of an RIS. Nonetheless the water efficiency regulation has been promoted by government as part of a set of sustainable water initiatives.

Standards Australia

Standards Australia released a white paper in January 2006 titled *Sustainability in Buildings*, purportedly to harmonise the work of a number of existing committees under the general banner of sustainability. These are described in section-3 and include water, energy, natural resources, waste generation and pollution and transport. The white paper stated that *"In order to create a sustainable building sector, policies to achieve eco-efficiency are required."*, which unequivocally states a position of addressing environmental issues. Yet even though it later acknowledged its understanding of the meaning of sustainability, the white paper provided a popular qualifier: *"..initial focus of SA's sustainability effort will be focused on environmental sustainability aspects."*

In contrast ISO/CD 15392 *Sustainability in Building Construction – General Principles* notes that it addresses environmental, social and economic aspects, spatial and temporal relevance, building products and services, building processes and perspectives of concern from stakeholders. Most importantly, clause 5.2 of ISO/CD 15392 states "There are three primary *aspects* of sustainability– economic, environmental, and social. They are inextricably linked to each other, are interdependent and to be balanced. They must be considered equally."

BASIX – Building Sustainability Index

The New South Wales Government introduced energy and water consumption controls on residential development applications in July-2004. It evolved simply from a State Government policy targeted to reduce the annual consumption of household energy and mains water usage for all new dwellings by 25% and 40% respectively. The measures are controlled at the planning stage of a building development application, thereby pre-empting any requirements of the national BCA. These reductions are benchmarked against a statistical evaluation of current household consumption levels. However to date the Department of Planning has been unable or unwilling to provide any verifiable basis for BASIX or to disclose to public scrutiny any of the basis of BASIX

We do not contest the role of governments to actively seek to conserve natural resources, however an issue of principle needs to be confronted regarding this scheme; that the measures give no recognition to social or economic impacts – thus contradicting the basic principle of sustainability.

Appendix 7 - Life Cycle Assessment

The Sustainable Cities report contains eight recommendations in chapter 7, 'Building design and management', including recommendation 19 (7.43)

"The committee recommends that the Australian Government, in consultation with the Housing Industry of Australia, CSIRO and other industry and scientific bodies, investigate the establishment of a 'sustainable building material' labelling system."

The issue of Life Cycle Assessment (LCA) is implicitly contained in the recommendation because it is a pre-requisite of any labelling system. Most LCA methodologies observe the protocols of the ISO 14040 *Life Cycle Assessment Series* of standards, in which two major components are the Life Cycle Inventory (LCI) and the Impact Assessment (LCIA). An LCI establishes a database of materials and products in terms of natural resources consumed and emissions/wastes generated during various phases of the product's life. In an LCIA, material emissions/wastes are grouped into a number of environmental impact categories (EIC) – eg. smog, radiation, acidification, ozone depletion, climate change, ecotoxicity, oil, mineral and gas depletion – as descriptors of human and ecological health and natural resources status.

Information generated from an LCA is vital to inform integrated policy decision-making when weighing human health and ecological protection against economic development strategies, and a number of European countries, the UK and USA have made great strides in recent years regarding the establishment of national LCIs and national EIC sets. The Building Research Establishment's *Green Guide to Specification* in the UK, described as a partnership between the BRE, government and industry, is one example of current state-of-the-art practical applications of LCA theory.

In stark contrast, Australia has no national framework for Life Cycle Assessment, no national LCI database which is publicly available, and no national set of EICs. This compares with the objective stated in Australia's 1998 *National Greenhouse Strategy* of;

"..governments, in consultation with industry, will develop a database and nationally accepted methodology for life cycle energy analysis." (National Greenhouse Strategy 4.17(1))

On the best information available, the major portion of LCA development work being undertaken in Australia including the inventory and software development, is being conducted by the Cooperative Research Centre for Construction Innovation (CRC-CI) with practical contributions by RMIT and theoretical work from Deakin University.

The current situation therefore raises issues on government leadership in the creation of a national LCA framework, and the corporate ownership of data.