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sustainable development

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The Secretary
House of Representatives Standing Committee on Environment and Heritage
PO Box 6021
Parliament House
CANBERRA ACT 2601

Dear Sir

INQUIRY INTO A SUSTAINABILITY CHARTER

Thank you for the opportunity to comment on the discussion paper released on development of a national Sustainability Charter. Comment is provided below on parts of its content.

About Szencorp

Employing about 65 people in Australia and 20 overseas, the Szencorp group of companies comprises Energy Conservation Systems, Carbon Partners, Water Conservation Systems and Jaemax Developments. Utilising its knowledge of the commercial property sector and its in-house expertise in renewable energy, technology commercialisation and energy and water efficiency, Szencorp has also recently completed refurbishment of its new headquarters at 40 Albert Road in South Melbourne, currently rated as Australia's greenest office building. Szencorp's practical experience with commercialisation and installation of new and innovative technologies for sustainability in the commercial building sector is unmatched in the industry.

The Sustainability Charter – some semantics

Szencorp agrees that a Sustainability Charter must be aspirational and also contain concrete measures by which to monitor progress. However, the statement that "sustainability is a journey and not a destination" requires some further analysis. Szencorp believes that sustainability is in fact a destination, defined as a set of economic, environmental and social system conditions which can be continued indefinitely. The "journey", i.e. movement towards these system conditions, can therefore be characterised as sustainable development.

Any targets set for sustainability under a Sustainability Charter must therefore be informed and grounded by this "systems" precondition. These future conditions for sustainability have not been observed and will only be partially knowable, and therefore must be informed by the best available science. For instance, Szencorp supports the setting of aspirational targets for climate change based on reducing greenhouse gas emissions to 60% below 1990 levels by 2050, in line with the scientific consensus of the Intergovernmental Panel on Climate Change (IPCC).

The right focus for a Sustainability Charter - distinguishing between "how" and "what"

The setting of targets is also made problematic by the fact that there are many different contributors and combinations of factors which will comprise a sustainable Australia, from the social, cultural and political to the economic and operational. It is realistic to assume that only a small fraction of these interrelationships may be covered by the setting of specific targets for environmental outcomes such as water use or greenhouse gas emissions.

In the case of an underpinning and fundamental Sustainability Charter, it may be better to focus on the setting of principles for action and decision making which facilitate those outcomes. This is similar to the approach taken by Western Australia in its State Sustainability Strategy, which provides an appropriate blueprint. It also answers some of the questions raised by the Discussion Paper about how State of the Environment Reporting and a Sustainability Charter can complement, rather than duplicate, each other – the Charter and its reporting requirements are focused on "how" we achieve results, while State of the Environment reporting covers (the environmental part of) "what" has been achieved.

A Framework for the Development of "Action Principles"

In an effort to make these observations more relevant and applicable to the Committee's work, comment follows on parameters for the creation of a rigorous framework for developing "action principles" appropriate to the scope of a national Sustainability Charter.

At a fundamental level, problems of unsustainability can be described as problems of "disconnect" – where actions do not take into account all of their consequences, leading to unintended side effects which ultimately outweigh the benefits intended from the initial action. The reason for this is that the side effects are "disconnected" from the action, in one of four ways -

Across issues - where an action yielding benefits of a particular kind give rise to even bigger problems of a different kind. e.g. personal mobility becoming more accessible yields benefits; this will lead to problems of increased congestion and global warming IF this is achieved through fossil-fuel-dependent vehicles. This type of "disconnect" can be reduced through better incorporation of all the issues into planning and execution, which is what sustainability demands despite it complicating matters extensively.

Between places – where an action yielding benefits locally has impacts felt elsewhere. e.g. discharge of waste water and materials to a waterway which is relied on downstream for drinking water. This type of "disconnect" can be reduced through mapping and addressing the impacts spatially.

Across time – where an action yielding benefits in the short term has longer term, often cumulative (or irreversible) impacts. e.g. clear-felling of native vegetation. This type of "disconnect" can be reduced through incorporation of life cycle impacts / impacts over the long term.

Between people – where an action yielding benefits for some people creates negative impacts for others.

That there are benefits from the initial action is not for debate – the point being made is that there is a need to address the unintended side effects too – on what, where, on whom and for how long. "Action Principles" to embed sustainability into decision making and action can therefore be thought about in terms of these types of "disconnect" which cause sustainability problems – that is, the principles must encourage the user to:

- **Assess and address impact across issues (i.e. address the disconnect between action and consequence by <u>issue</u>)**
- **Assess and address impact spatially (i.e. address the disconnect between action and consequence by <u>place</u>)**
- **Assess and address impact over the long term (i.e. address the disconnect between action and consequence by <u>time</u>)**

Using this taxonomy and linking it to the major systems of social organisation through which "unsustainability" is being played out, e.g. production and consumption, settlement, culture and governance, provides a way of organising the action principles and ensuring their coverage is complete.

Examples of the kinds of possible action principles developed under this approach and that a Sustainability Charter might consider are:

<u>Over-arching principle</u>: *Value and price natural resources according to their social value*

- Create property rights for natural resources
- Improve knowledge of environmental impacts of consumptive behaviour

Over-arching principle: *Direct land to its highest value use (including environmental and/or social use)*

- Match land use to suitability

Over-arching principle: *Assess and value the life cycle impacts of products and services*

- Improve natural resource productivity (i.e. do more with less)
- Consider impacts exported to other locations
- Aim to create closed loop systems
- Apply biomimicry techniques where possible

Over-arching principle: *Extract natural resources at rates slower than the environment can renew them*

- Consider sustainable yield
- Adopt a hierarchy to manage life cycle impacts
- Shift to less toxic and persistent substances over time

Over-arching principle: *Optimise return from ecosystem services in cities and towns through good design principles*

- Plan for minimum resource intensity in new buildings, urban form and layout, infrastructure and urban design
- Maximise opportunities to reduce consumption pressure on external resources (e.g. solar hot water, rainwater harvesting, passive solar design)
- design public and open space to meet a variety of needs (interaction with nature, health and wellbeing, liveability)

Over-arching principle: *Increase connectedness both in and between places*

- Design urban space to encourage interaction with community and the environment
- Consider urban metabolism when planning
- Improve information linking urban resource needs to regional impacts

Over-arching principle: *Create shared ownership through engagement and partnerships*

- Link activities of common interest and objectives across public sector organisations

Over-arching principle: *Build sustainability into ordinary routines of government*

- Actively seek multiple benefits from policies and programs
- Build cross-issue impacts into policy and program design (e.g. energy considerations when looking at water)
- Report against all issues important in defining success
- Systematically recognise local difference in policy approach

Over-arching principle: *Assess and report on environmental implications early in decision making*

- Consider appropriate policy mixes
- Understand and implement good policy practice
- Target prevention rather than restoration

Using criteria such as these, a Sustainability Commission would therefore be in a position to judge whether actions and initiatives had taken account of these principles for action in determination of whether a certain activity was furthering efforts to become sustainable.

Sustainability in the Built Environment

Szencorp's business expertise relates specifically to the built environment and more detailed comments are offered on this part of the discussion paper. In particular, Szencorp has unique experience with measuring and rating performance of sustainable buildings, as owner and operator of 40 Albert Road, Australia's only six-star Green Star refurbished building with the first commitment to achieve the highest level of ongoing energy performance on a whole of building basis.

The built environment and, specifically, buildings, are a significant contributor to overall achievement of sustainability in Australia. A high proportion of water, energy and materials use flows through and is determined according to the performance (or non performance) of Australia's building stock. In relation to the discussion paper's question of how we should rate the sustainability of existing building infrastructure and incorporate this into a Sustainability Charter, Szencorp accordingly believes that rating it according to its actual performance is the clearly preferable approach.

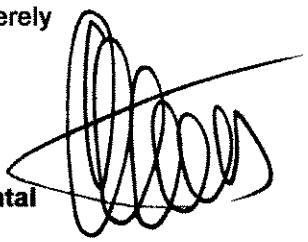
In relation to tools developed to measure sustainability performance in commercial buildings (both new and refurbished), there is currently no single industry standard by which this performance can be measured across all aspects of environmental impact. The closest approximation to an industry standard for measuring sustainability performance is the National Australian Built Environment Rating Scheme (NABERS). NABERS is a national, Government-administered suite of performance ratings for building that is being developed in modules with initial modules relating to greenhouse performance and water. The first of these modules to be released, the Australian Building Greenhouse Rating (ABGR) scheme, has been widely adopted by commercial building owners with over 29% of office performance rated nationally (rising to as much as 43% of office space rated in NSW). These tools use actual performance data to determine building sustainability outcomes. This compares to the Green Star rating tool developed by the Green Building Council of Australia, which is often claimed to approximate a national standard but has very low penetration rates (with only

thirteen buildings rated nationally at the time of writing), and is very expensive for building owners to obtain.

It should also be noted that the Green Star suite of tools do not currently measure building performance. Rather, they are focused on design intent of a commercial building, pointing to how a building ought to perform given its design rather than how it actually does perform. Measurement of actual outcomes does not currently take place in any form under the determination of Green Star ratings. Therefore, while Green Star tools have proved useful in the design phase of building projects, given the Sustainability Charter's strong emphasis on outcomes and monitoring of progress towards sustainability Szencorp accordingly believes that current Green Star rating tools do not have sufficient focus on actual performance achieved to perform the measurement functions required. Szencorp believes that NABERS is the appropriate benchmarking tool for consideration of performance outcomes in the built environment.

I trust that these comments are useful to the Committee in its deliberations and once again thank you for the opportunity to provide this submission.

Yours sincerely



Peter Szental
Chairman