

Submission to Inquiry into a Sustainability Charter - Dr Chloë Mason

House of Representative, Standing Committee on Environment & Heritage
June 2006

CONTENTS

Focus of the Submission.....	2
Part 1 - From 'Background' to 'Ecological Footprint'	2
Part 2 - Response to Questions for Consideration.....	4
General: Questions for consideration.....	4
The built environment	5
Water: Questions for consideration.....	6
Energy	7
Transport	7
Initial comment:.....	7
Questions for consideration: How do we judge the efficiency of transport systems?.....	8
Q. What transport infrastructure measures will reduce private transport needs?.....	9
What are some next steps toward sustainable transport systems for the Committee and the Government?	9
Contact.....	9

Focus of the Submission

This Submission is made by me as an individual whose work has principally been in the area of sustainable transport and integrated planning. I hold an appointment as a Visiting Fellow at the Institute for Sustainable Futures, University of Technology Sydney where a number of my papers are on the website: www.isf.uts.edu.au/publications/mason

This Submission responds directly to the questions for consideration in the Committee's Discussion Paper inquiring into a Sustainability Charter (and an Australian Sustainability Commission).

<http://www.aph.gov.au/house/committee/environ/charter/discussionpaper.pdf>

Writing about a Charter in isolation from an enabling body, resources and legislation is necessarily rather abstract. With the benefit of hindsight, it would have been better to enquire into a charter for a commission, with a budget and powers to convene inter-sectoral activities.

I would be happy to elaborate on any part of these observations and suggestions.

Part 1 - From 'Background' to 'Ecological Footprint'

I applaud the publication of the Committee's report on Sustainable Cities and the continuing pursuit of its recommendations, particularly the development of leadership by Federal Government.

Passing reference is made to establishing an Australian Sustainability Commission along the lines of the NCC model. Presumably the Charter would inform if not govern the activities of an Australian Sustainability Commission.

The Discussion Paper envisages the importance of setting reviewable targets and reporting on the environment. In my view, experience has shown that such activity within Environment/Sustainability portfolios has been confined - rather like governments dealing with health services (treating illness mainly) rather than dealing with the 'social determinants of health' (housing, transport, employment/income security etc).

CSIRO was involved in the 1998 series of publications on Environmental Indicators for national state of the environment reporting. The Discussion Paper refers to CSIRO's concerns about reporting frameworks and their proposals for improving SOE reporting etc. However, much reporting does not have a strong conceptual base e.g. NSW that uses environmental media and many NSW local Councils have resorted to the inclusion of a human settlements chapter. Much environmental reporting does not pose analytical questions for determining the next steps, e.g. 'What would have to happen to enable/encourage the people and organisations/trip generators in this place to increase the level of cycling?' This failure is despite the regulatory imperative in

NSW for council SOE reports to make recommendations and to feed into the Council 'management plan' (effective budget plan). See the work for the Lower Hunter & Central Coast Councils (LHCCREMS) in NSW by Alan Woodward, Chloe Mason & Gabrielle Kuiper.

Some indicators do not make much sense when information is aggregated across inappropriate spatial scales, e.g. for cycling where the level for journey-to-work, for example, varies by more than a factor of 6 across the Sydney metropolitan areas.

Useful frameworks are available through Environmental Management Systems ("EMS"), for which a decision has to be made about the entity/place being managed, for a system is designed. In relation to cleaner production (an aspect of materials management from a sustainability perspective), a 1996 report for the Federal EPA has a number of useful things to say for the current Inquiry. It considered indicators, EMSs and the value of integrating sustainability across organisational responsibilities. It made a useful distinction between:

- *indicators of environmental quality - using baselines of environmental media measurements, it is possible to monitor the conditions of the media and whether human activities are increasing or decreasing impacts; and*
- *indicators of environmental sustainability - showing effects of human activities on environmental resources and materials*
- *indicators of environmental human health.*

It emphasised the value of EMSs as being:

"a systematic way of introducing environmental considerations, controls and accountability into the management of a Council or business. A Council [needs] to create systems, identify resources and allocate responsibilities. These are basic elements of an EMS, along with

- *defining an environmental policy*
- *identifying environmental goals, objectives and targets*
- *developing plans for achieving the identified goals, objectives and targets*
- *monitoring progress*
- *reviewing the system at regular intervals to achieve continuous improvement*
- *involving interested people both within and outside the organisation.*

Ecologically sustainable development necessarily links environment with human health. The OECD, for example, in its guidelines on Environmentally Sustainable Transport explicitly refers to human health impacts of transport systems. It also recognises a major impact of sedentariness from private motorized transport, and the advantage of enabling more people to use more 'active transport' (walking, cycling and public transport) more often.

www.esteast.unep.ch

Recommendation 3 dealt with the tasks of a Sustainability Commission.

One of the harder yet essential elements of a Charter and functions of a Sustainability Commission is to find a way of not merely monitoring but influencing other portfolios and the budget process (particularly the last budget).

Other Reports. By reviewing activities needed for moving toward more Sustainable Cities, growth opportunities may be stimulated but preferably not confined jobs in the Environment sector, although these would ideally have a catalyst role for other sectors. For example, we need other sectors to become more environmentally responsive. For example, programs for cycling-proficiency training for adults and children could be offered by Councils that could hire accredited fitness trainers.

Part 2 - Response to Questions for Consideration

General: Questions for consideration

Q. Should a sustainability charter consist of "aspirational" statements, set targets (such as measurable water quality) or both?

Both.

Prior to either targets or policy statements, it is highly desirable to express a vision for how we might live in different types of places under a range of scenarios of consumption/impacts. Both the Western Australia & Victorian governments have produced such documents over the last decade or so, e.g. "Greenhouse Neighbourhood Project: the low energy suburb. Summary Report, 1993 Prepared for Vic Dept Planning & Development & Vic EPA by Loder & Bayly (now SKM), Sustainable Solutions Pty Ltd & PPK Consultants." That report used some research on neighbourhoods to show how neighbourhood type could reduce motor traffic by up to 40% as well as reducing greenhouse gas emissions from dwelling heating/cooling.

From recent experience in Australia, I would also suggest that any plan needs to be directed to the process of moving from where we are to a more sustainable way of proceeding rather than only to focus on outcomes. Often we don't know where we are in the sense of knowing the 'drivers' for our current unsustainable outcomes.

Q. What research will be needed to develop and support the Sustainability Charter?

To examine what are the processes (legal, institutional, economic, cultural), that produce unsustainable outcome in different sectors so that we can progressively reduce the perverse 'drivers'.

Useful knowledge would include how other jurisdictions have sought to achieve more sustainable ways of living and outcomes, and the difficulties that they have encountered and what they have done to overcome those difficulties. For example, see the EU's current proposals for a new Sustainable Development Strategy and the response by the social non-government organisations;

<http://www.euractiv.com/en/sustainability/social-ngos-criticise-eu-sustainable-development-catalogue/article-155934>

Similarly see the UK Liberal-Democrats Sustainable Communities Bill 2006.

Q. Can existing standards (such as the Water Efficiency Labelling and Standards (WELS) Scheme) be applied to the Sustainability Charter?

I'd expect they could.

Q. Can the charter be framed in such a way to ensure that it can be integrated into all level of government decision making?

Potentially yes; it depends in large part on governments becoming more committed to change over the long haul; in practice this is quite hard, as we've seen from the failure of the NSW Air Quality Management Plan for 25 years.

Q. Will there be a cost/gain to the economy by introducing the target(s)?

Both as the changes are complex and affect different stakeholders unevenly.

Q. Could a sustainability charter be incorporated into national State of the Environment reporting?

Yes.

Q. Is National Competition Policy a good template for consideration of incentive payments for sustainable outcomes?

Yes, any major policy driver, such as the budget, taxation law, and NCP are necessary for integrating environmental policy intentions and obligations..

But it is important not to fix on "incentive payments" as it could well be feasible, indeed more feasible to progressively withdraw some subsidies for unsustainable practices.

Q. How should payments be awarded under the Sustainability Charter?

I suggest considering how any payments could be offset by savings from unsustainable subsidies.

Q. Is it possible to measure cultural and social values in relation to a Sustainability Charter?

No doubt. However, I suggest that there is an over-emphasis on measurement at the expense of being clearer about purposes.

The built environment

Sweden

Cities, towns and other built-up areas must provide a good, healthy living environment and contribute to a good regional and global environment. Natural and cultural assets must be protected and developed. Buildings and amenities must be located and designed in accordance with sound environmental principles and in such a way as to promote sustainable management of land, water and other resources.

Western Australia

Encourage the widespread adoption of sustainable building and construction.

An initial comment:

The Swedish statement is superior and necessary for 3 reasons:

- 1) it recognizes that built environments occur in places*
- 2) that spatial relationships are essential*
- 3) by implication it suggests that human settlements/urban development must take into account land, water, and mobility and transport.*

The reduced focus on building & construction drops out the significance of place and spatial relationships.

Questions for consideration

Q. What objectives are applicable to the built environment?

Integrating land use and transport to reduce fossil fuel use in transport and enable more cost-effective public transport and cycling & walking infrastructure to be built.

How would these be measured?

Measurement is probably covered in the literature on transit-oriented development.

Q. How should we rate the sustainability of existing building infrastructure?

Include spatial proximity to public transport, and mixed use facilities.

Could a measurement of level of retro-fitting achieve this?

How would we measure levels of retro -fitting?

Yes, however, we need to manage the existing housing stock and consider how we shall deal with the areas within large Australian metropolises that have asbestos-sheet housing. This will require significant environmental management for urban renewal.

- Do we need to protect heritage buildings as part of the sustainability charter? *Yes, there's the Burra Charter, for example.*
- Can existing building standards, such as the 5 star rating system, be incorporated into the Sustainability Charter?

Yes, for an interim period or the review of NSW's BASIC, as there are more important things for a Sustainability Commission to be working on.

Water: Questions for consideration

Q. How should water quality be measured?

See ANZECC guidelines.

Q. Should targets be focused on reducing water consumption, increasing water re-use or both?

Demand management requires a package of measures. The variable part of the domestic water bill should be structured to provide a financial incentive to householders - in Sydney, it does not.

Q. How can we measure the health of water catchment areas?

The NSW Healthy Rivers Commission has done a lot of work on this issue - it'd be a pity to re-invent the wheel or aim for a level of precision that is unwarranted at the current level of investment in implementing protective measures for sustainability.

Energy

Western Australia

- Reduced reliance on fossil fuels and increased reliance on renewable forms of energy in Western Australian energy systems.
- Adoption of best practice energy management in the Western Australian community, including government.
- Greater awareness of the environmental, economic and social benefits of energy efficiency and renewable energy by all Western Australians.

Questions for considerations

Q. How should we measure the use of renewable energy?

Let's first measure the obstacles to switching to more sustainable energy sources. We already know that the use of renewable energy is absurdly low in Australia where we have so much sunshine!

How do the West Australians do it? What are the criticisms of those measures and suggested alternatives?

Q. How do we encourage an increase in renewable energy use?

Demand management requires a package of measures. The variable part of the domestic energy/water/gas bill should be structured to provide a financial incentive to householders - in Sydney, it does not.

Q. Can we measure the awareness of the environmental, economic and social benefits of energy efficiency and renewable energy?

Yes - but for what purposes?

Transport

Western Australia

- Maximise the opportunity to increase residential, employment, retail community and entertainment activity around key transport nodes and in major centres.
- Achieve a more sustainable balance between car use and other transport options through the promotion and provision of efficient and effective public transport and non-motorised personal transport alternatives.

Initial comment:

*To comment first on these Western Australian statements, it is entirely appropriate that the lead statement is about **transport integration with land use and access**. Therefore, it is more meaningful to keep the built environment together with transport - more so, than with the utilities of water, electricity and gas. This is one reason that some governments have used 'human settlements' as a topic in their state of the environment reports.*

Secondly, we certainly need to achieved a shift in mode share toward more sustainable, healthy forms of transport - as the British Medical Association says from health-damaging to health-promoting transport!

In the transport area, the Committee could turn to the National Greenhouse Strategy for some established priorities that have received some attention from Federal-State working groups.

Questions for consideration: How do we judge the efficiency of transport systems?

Put simply, by looking at the least-cost ways of achieving certain transport objectives. In Australia, it is rare for a transport system (within a location) to be assessed, more usually it is a road project although appraisal methods in the US and Europe have changed over the last decade. Further, the scope of negative externalities has been narrowly drawn and the estimated value/costs have been underestimated.

It is important not to use a single indicator such as greenhouse gas emissions, nor to be seeking a single-best solution, for a sustainable outcome.

At the behest of the Council of Australian Governments (COAG), the 2002 Bureau of Transport & Regional Economics' (BTRE) report Greenhouse Policy Options for Transport responded to the "overarching measure" relating to transport from the National Greenhouse Strategy (1998) - namely, the examination of economic policy instruments relating to transport (both incentives and disincentives) as it is recognized that they have the potential to impact on other measures for efficient transport and sustainable urban planning and "to ensure that they are consistent with fiscal, economic and environmental policy, including greenhouse objectives." ¹

This BTRE report acknowledged that:

- it focuses predominantly on road transport for people rather than freight,*
- a number of measures in the transport sector could be adopted on efficiency grounds alone without the added benefit of reduced greenhouse and other environmental externalities (p. 131)*
- a number of co-ordinated policies for the same geographic area to support greenhouse-friendly transport can re-inforce each other and some measures are complementary.*
- Some greenhouse and environmental benefits may be gained if private urban transport were subject to more accurate price signals (e.g. the high fixed costs of registration and insurance with no variable costs for use of a motor vehicle contributes to high use and a high proportion of private motor trips being within a distance that is an easy walk or comfortable bicycle ride).*

The conclusions of the BTRE report reflect its focus on reducing greenhouse emissions from measures for the transport sector without including the corresponding human

¹ Strategy (1998), pp. 55-56.

health or place-based/sustainability benefits of reducing over-reliance on private motor vehicle transport.

In 2001 at the international walking conference held in Perth, Tolley & Boyd presented Walking - The Bottom Line, a paper examining the economic impacts of walking for which much greater evidence exists for the positive economic significance of cycling to towns and cities.

http://www.dpi.wa.gov.au/mediaFiles/walking_21centconf01keypaper_tolley.pdf

Little of this literature has amended its assumptions about the value of time since the development of knowledge in 'behavioural economics' by Kahnemann and others.

For the Inquiry into a Sustainability Charter (for Sustainable Cities), it would be invaluable to re-frame the question - how might a Sustainability Commission work to work toward a shift toward sustainable transport services (including footpath improvements, and proficiency training for on-road cycling) for more sustainable communities located in particular places governed by local Councils, and State and Territory Governments.

Q. What transport infrastructure measures will reduce private transport needs?

How do we measure these?

Reducing the amount of car parking infrastructure in new development and retrofitting existing car parking infrastructure at locations supplied with public transport has been shown to restrain the unnecessary use of private cars, e.g. Sydney Olympic venues and potentially Sydney Airport.

What are some next steps toward sustainable transport systems for the Committee and the Government?

The Federal Government could offer a second round of funding for Councils to undertake works proposed as part of a locality/regional plan for improved conditions for walking, cycling and access to public transport. Such a proposal could foreshadow an inquiry into the adoption of a broader basis for Federal funding of transport infrastructure and services than entertained in AUSLINK, such as the US legislation known as ISTE.

In addition, it could offer funding for locality/regional plans for increasing the level of cycling because sedentariness is a significant risk factor in each of the seven chronic medical conditions in Australia and it could also be a mechanism through which local Councils could reduce greenhouse gas emissions from transport in their Areas.

Contact me for information and/or discussion of these questions, please email or call me

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