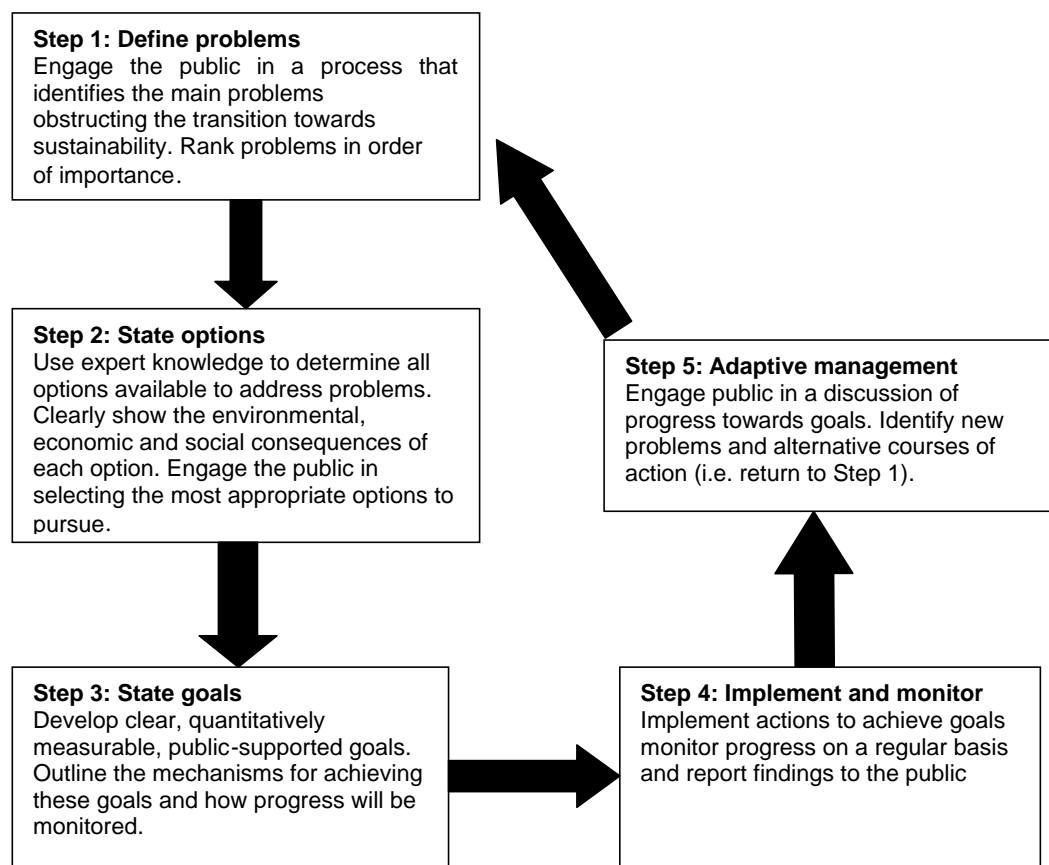


Sustainability definitions

The sustainability definition adopted by the WA Government is inadequate and meaningless. First, it is pointless to state that the desired aim is to simultaneously achieve environmental, economic and social goals without stating clearly what those goals are. Second, society has already achieved numerous environmental, economic and social goals independently, but our progress is clearly not sustainable. What the definition lacks is a recognition of the interactions that can occur between the pursuit of these goals and a clear acknowledgement that there will be trade-offs in achieving the goals for all three components.

There are many succinct definitions of sustainability. All of them are inadequate in some way. The goal here should not be to try to capture the complexity of sustainability in a single “catch-phrase”. It should be to recognise current problems, present society with options for future change (expressing explicitly the environmental, economic and social consequences of each option), develop public-supported goals and the mechanisms for achieving them, monitor success in achieving those goals, and take an adaptive management approach to modify the process at each stage when required (Fig. 1).

Figure 1: The process of sustainability.



Resource consumption and human population growth

Australia's population size and future growth has been a topic of national interest for a number of years. Comments on this issue have been provided by scientists, demographers, business leaders and politicians (e.g., Tim Flannery, Steve Vizard, Malcolm Fraser). The failure to include the size of WA's population in the consultation paper as a factor that undeniable affects progress towards sustainability is inexcusable. The paper correctly focuses on the need to reduce our consumption levels, but presents no discussion of the avenues to achieve this or the trade-offs that will be required. It is mandatory that the Sustainability Policy Unit (SPU) explains to the public exactly how societies' standards of living can be maintained while reducing our total consumption with a growing population. There is a danger in focusing only on per capita consumption levels because a decline in per capita consumption may be offset by an increase in population size to the point where total consumption does not change or even increases.

The paper quite rightly invokes the concept of the precautionary principle, but doesn't apply this in relation to population size. It would be prudent to recognise that, at the very least, the detrimental impacts of future population growth are unknown and require further study. This being the case, a precautionary approach should be taken whereby current growth is limited as much as possible until the consequences of future growth are adequately recognised. The same could be said for future economic growth -but good luck getting any government to address this issue.

To balance the argument, there should be some cost-benefit analyses of a growing vs stable-declining population. Many countries in Europe currently have stable or slightly declining populations and how they handle the economic, social and environmental consequences of this should provide some guidance to assist WA in its transition to sustainability.

Economic system

The key issue here is that the current economic system has contributed substantially to the degradation of the environment. In particular, the true costs of environmental damage are not reflected in current economic indicators. GDP as a measure of economic wellbeing is inadequate. A number of new measures have been suggested. One of these is the genuine progress indicator (GPI), which takes into account the costs of environmental and social problems to overall wellbeing (see The Australia Institute web site for an introduction to this method: <http://www.tai.org.au/>). If the WA Government is serious about considering the juxtaposition between environmental, social and economic wellbeing it should implement this (or a similar) measure as a first step.

The steps required to change the current economic system to one that adequately addresses environmental and social issues are too complex to discuss in this submission. There is a growing literature on "Ecological Economics" that comprehensively outlines options for change (see for example: Costanza et al. 1997. *An introduction to Ecological Economics*. St Lucie Press, Florida). Moreover, there is now an International Society for Ecological Economics and it would be prudent for the SPU to approach this society for advice on how to change the economic system.

One way of valuing the environment in an economic sense is to take full account of the services that ecosystems provide to humans. This is a growing area of international research (see for example: Daily. 1997. *Nature's Services: Societal Dependence on Natural Ecosystems*. Island Press, Washington). CSIRO is currently undertaking ground-breaking research in this area in eastern Australia (see <http://www.cse.csiro.au/research/Program5/ecoservices/>) and it would be useful for WA to follow the lead here.

Biodiversity

The consultation paper does not adequately address the issue of WA's declining biodiversity. I assume this issue will be dealt with more fully in the proposed State Biodiversity Conservation Strategy, which I look forward to commenting on. Decisions must be made on the importance of biodiversity to humans (see Ecosystem Services above) and the moral and ethical obligations we have for biodiversity protection. The most important point here is that biodiversity loss can be clearly linked to the activities of humans and our overall numbers. Therefore, biodiversity conservation can only occur if we modify our behaviour and reduce our population size. Changes in biodiversity should certainly be used as one of the indicators of our success in achieving sustainability.

Social equity

The issues raised in the report about intra and intergenerational equity have long been touted by various government and non-government organisations. The first issue that the WA government must address is bridging the gap between the rich and poor at the local level. I have few ideas about how to proceed in this area. It would appear that the current capitalist system driven by consumerism and competition will always result in such a gap. The system may need to be modified from one of competitive pursuit of individual wealth to a greater recognition of social responsibility. For example, it is baffling that an increasingly large number of employees are working well over 40 hours a week while many people remain unemployed. Is this a result of employees trying to maximise their individual wealth or employers trying to minimise costs by limiting number of staff? If it is the former then job-sharing may be a useful option to help disperse the "wealth". If the latter, then government incentives for employers to take on new staff would seem appropriate. This is a simple example of a very complex problem.

On a global level, re-distribution of wealth may be achieved if rich countries like Australia limited their population size and resource consumption. The flip side of this is that under current circumstances this would reduce the size of our economy, which may limit the amount of aid we can give to developing countries. While our economic performance is linked to increasing the through-put in the economy (i.e., either consuming more products or adding more consumers) we are trapped in a never-ending upward spiral that is one of the primary barriers to true sustainability. A fundamental change in our economic system is required to break this nexus (see references above).

Democratic system

The danger with the sustainability strategy is that it will be abandoned by future governments. A great deal of effort should be put into obtaining multi-partisan support for the strategy and developing mechanisms that do not allow its proposals to be undermined without public approval.

On a broader note, I believe our current democratic system does not allow for sufficient participation by the public and this is a potential barrier to sustainability (see for example Prugh et al. 2000. *The local politics of global sustainability*. Island Press, Washington D.C.). This current strategy has the potential to offer a greater participatory role for the public of WA (see below), which would increase the likelihood of any proposals being accepted by the broader community.

Strategy progression

My views on how this strategy should proceed are summarised in Figure 1. The consultation paper is a useful first step. However, it doesn't state any clear, quantitative goals or set out options for achieving these goals. I believe step two in the process is to publish a new report that includes all of the submissions (in full) with a summary of the results. From these submissions, I imagine we could garner what at least some people think are the main problems facing us and rank these accordingly. It is open if further public consultation is required to determine other problems.

The next step is to clearly outline the various options available to overcoming the problems and, most importantly, explain the trade-offs that exist for each option. Once the public has decided which options to pursue, quantitative, measurable goals can be stated and implemented, and the outcomes monitored. Most importantly, indicators of success should be clearly formulated and carefully monitored to provide feedback about the level of success obtained in achieving each goal. An adaptive management approach can then be taken to revising any aspect of the process when required to improve outcomes.

Potential ideas

The report states that a sustainable society is a long-term goal and the road there will be a long one. This caveat is a convenient excuse for governments to make minimal progress towards sustainability by offering vague assertions about the time-frame for success. How long is long? The strategy should state specific outcomes that need to be achieved during the transition towards sustainability, and it should provide specific dates for these outcomes. I believe much can be done now. I offer 10 suggestions below, which is a small sample of what we could be doing today.

1. Have a well-balanced, truly representative summit on the issues of population growth and resource consumption in WA.
2. Implement a new measure of well-being to replace GDP.
3. Commit to the greenhouse gas reduction targets set by the Kyoto protocol despite the Federal Government position on this issue.
4. Place a tax on the use of non-renewable resources to more accurately reflect their environmental and social costs.
5. Provide financial and other incentives to get people to use non-car transport. For example, Stanford University pays its students \$40 a quarter if they ride a bike to campus rather than drive a car.
6. Improve public transport and increase the network of bike paths.
7. Implement "car-free days" in the CBD. For example, some cities in South America (e.g., Bogota) have had car-free days for the last few years. Better yet, ban cars from the CBD entirely.
8. Provide financial incentives for people who use renewable energy. The "green energy" initiative offered by Western Power is a good start, but it is still more expensive to the consumer than obtaining power from non-renewable resources. Why doesn't the government make up this short-fall via the tax system or some other measure?
9. Have stricter environmental controls on housing developments.
10. Identify knowledge gaps that restrict the transition to sustainability and provide funding to encourage research in these areas