Draft WA Sustainability Strategy

Comments from Brisbane City Council, February 2003
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General Comments
The document provides an excellent introduction to sustainability concepts and should help build constructive dialogue within the interested community. It may be useful to consider developing a simpler document for the general public, with clear quantifiable outcomes, timeframes and ultimately, budgets. Such a document would help build bipartisan grassroots support for the difficult and disruptive changes which will surely be required to achieve a sustainable economic and social system.

We note the quantified targets in the draft document and suggest they be subject to ongoing review to ensure that they don't result in perverse outcomes eg. 'zero waste' can drive incineration and dubious re-use. We strongly recommend that the emphasis be placed on ensuring the economic signals influencing behaviour of individuals and industry take precedence over ad hoc strategies to achieve arbitrary targets.

'What sustainability means' and sustainability principles (Page 24 – 28)
The conceptual discussion, definition and principles are comprehensive. However, for practical application to policy and development assessment, the definition and principles need to give clear guidance for deciding between competing claims to sustainability, and should precede the setting of meaningful indicators.

Hard political choices about policy and development cannot be resolved in practice without agreement about what is and isn't sustainable in principle. This is our experience at the local government level dealing with immediate issues such as waste disposal. Simply integrating economic, social and environmental issues into decision making is a necessary but not significant condition to deliver sustainability.

Some examples of 'sustainability' dilemmas:
- Is mariculture (marine fish feedlots) sustainable? Will the help or compromise future generations meet their needs? What if this mariculture adds pressure to wild fish stocks and the marine food chain? What if the chemicals used in mariculture cause human cancer and eyesight defects?
- Should we burn waste to recover energy? What if it creates employment and avoids landfill leachate but also releases carcinogens? What if waste-to-energy gives waste a higher economic value and encourages its generation, and hence the faster extraction of virgin resources with associated collateral damage and faster resource depletion?

We suggest defining 'sustainability' as a relative concept which only makes sense in relation to a defined system ie. the sustainability of an action can only be determined by its effect on the integrity and persistence of a defined system. It can thus be seen as lying on a continuum between permanent loss and permanent preservation of a given set of social, environmental and economic values within a defined system. The values and system can be determined by a democratic and information-rich process.

This definition helps enable policy choices to be assessed according to weighted criteria and tested systematically for their sustainability impact on a particular system (eg. regional

community, catchment). This incorporates the precautionary principle of risk weighted assessment of proposals. It also leads locally toward the selection of critical indicators rather than the current approach of political selection, generating hundreds of indicators which all link to sustainability but end up giving us no idea of whether we are approaching sustainability. For example if we reduce vulnerable species by 10% over five years but achieve this by diverting resources away from medical research, hence impacting human health, are we more, or less sustainable?

The following table suggests an approach to setting up a continuum without defining the system to which it is applied nor the numeric weighting.

Tests of sustainability in policy options

	More sustainable	**Less sustainable**
Adverse impacts on biosphere, human health	Less	More
Biopositivity – biodiversity / ecosystem stability	Increases / stabilises / complexifies[5] biodiversity	Decreases / destabilises / simplifies biodiversity
Resource intensity / efficiency (resource use per $ GP, or unit of production)	Less	More
Energy / material throughput	Slower extends depletion curve for high and low grade reserve	Faster
Energy / material cycle	Shorter cycle[3], more recycled	Longer cycle[3], less recycled
Resource use	Less	More
Design life / durability	Longer / more durable	Shorter / less durable
Price	Reflects all known costs / benefits	Distorted (by subsidies, under-regulation, cost externalisation)
Resources price progressivity	Progressive and inverse to known reserves[2]	Flat or regressive
Fiscal signal to production / consumption – prices, taxes and charges	Rationally influences behaviour, rewards reduce impact, conservation, efficiency, designing out waste and toxicity; taxes pollution, congestion	Cushions actions from consequences, rewards waste, hides real costs in general taxation
Subsidy	Less. (transparent / cash not kind)	More. Hidden as underpriced water, fuel, etc.
Market[1] information about product and services, and relevant costs	More and better quality, more accessible, more timely, labels stating the efficiency, running cost, design life, origin and toxicity, real time costs	Less, lower quality, less accessible, delayed usage and cost information (eg. Quarterly energy bills)
Market[1] competition	Fair and open market access[4]	Barriers to market entry
Scale of operation	Smaller/ localised	Larger/isolated from community
Diversity in society, social, engineering processes	Increases, decentralised systems, circular flows	Diminishes, centralised systems, linear flows
Equity inter and intra generational	Increases	Decreases
Planning Framework	Long term	Short term
Materials flow	Distinct streams (easily recoverable)	Co-mingled
Basis of product use	Lease/share/hire/service	Personal ownership
Decision Making	Democratic, devolved	Centralised

1. Across the whole economy, to all buyer and sellers
2. Can include a base components as free or nominal charge for equity
3. Refers to geographic distance, not time eg. Local recycling is more sustainable.
4. Subject to ‘fair ‘ competition on the basis of higher efficiency not lower environmental and worker pay/safety standards.

These tests are arbitary and offered by way of example. The table or similar approach can be used as a test of significant developments and competing policy proposals to deliver a relative sustainability with little need for expensive and ephemeral interventions such as education campaigns ('save water', by green'etc).

Price signal

The prerequisite for the market to deliver sustainability is an accurate price signal incorporating of all known costs and benefits. It is difficult to imagine how anything like sustainability can be achieved if the cost of the less sustainable consumption option is cheaper than the more sustainable one. Furthermore, sustainable technologies and behaviours are strongly driven of products and services favour more sustainable consumer choices.

In other words, if sustainability isn't built the market at the consumer level, all other process and institutional arrangements to deliver sustainability are swimming against a strong current. Primary drivers of the price sinal are discussed below.

Enforcement

Failure to enforce strong regulation means the real of production of activities are not internalised into the price of consumption. On page 112 of the Strategy the statement is made that the problem of over consumption cannot be addressed by stopping resource development. However, failure to internalise the social, environmental and economic costs of resource development due to weak regulation drives over consumption, inefficient consumption and associated impacts.

Subsidy

Subsidy hinders economic efficiency and imposes environmental, social and economic costs (above the actual subsidy cost) as a normal side effect. The (mainly federal) subsidy to mining and forestry exceeds $20 billion pa. and undermines the $100 million spent by local government to recycling, since virgin resource based products appear cheaper than their recycled competitors. Without such a subsidy, recycling would expand without government support.

The $100,000 annual subsidy to each heavy vehicle in unpaid road damage also favours unsustainability. Government can address overconsumption and inefficient consumption by removing such subsidies. A cash subsidy is less inefficient than a hidden subsidy eg. underpriced use of assets or resources, cheap water.

Product Labelling

Although environmental labelling has mixed success, good information at the time of purchase can mitigate market failure and unsustainable impacts. The better the information consumers have, the more rational their consumption choices can be, using their own evaluation of risks and impacts eg. Whether they are buying wild or farmed fish, GM or non-GM food.

Extended producer responsibility, disposal taxes.

Underpriced waste disposal is another subsidy driving unsustainable ecological, social and economic costs associated with resource extraction and product design and manufacture. Governments can influence consumption patters, resource extraction and product design/manufacture by extending producer responsibility and charging for waste according to intractability – such a policy would have long ago solved the alarming problem of nuclear

waste disposal and probably have massively accelerated development of clean renewable energy.

Market entry barriers
Entrenched interests in such areas as energy generation have been remarkably successful at raising the barriers to market entry by more sustainable alternatives eg. By forcing residents to connect to the grid even if already self sufficient in energy, and by paying nominal buy back rates to decentralised energy generators feeding excess power back to the grid. Other examples are laws which force connection to centralised sewage treatment and which discourage or ban use of grey water or stormwater.

Sustainable alternatives
The price signal for 'essential' activities eg. commuting, can only drive sustainability if a practical sustainable alternative is available. If road congestion charging is introduced, people must have other accessibility options. It is politically dangerous to drive up the price of car use or waste disposal without first ensuring the preferable alternatives are in place. We suggest that sustainability strategy explicitly incorporate a policy of setting a timeframe for the introduction of new pricing measures to allow alternative technologies and services to anticipate the new market conditions, and those directly impacted to develop alternative arrangements.

Science and economics
Costs and benefits of particular policy and development alternatives can only be internalised where they are known. A key objective of sustainability strategy is the assurance that adequate legal and financial provision is made for scientific and economic assessment independent of both government facilitation agencies and private proponents.