Submission to Sustainable Policy Unit
State Sustainability Strategy

Summary

Underpinning the concept of a sustainable society, is the assumption that essential services and infrastructure will be provided as a means of ensuring that current standards of living are sustained, and ultimately, improved.

Since 1992 Australia has developed and implemented a variety of strategies aimed at furthering the principles of sustainable development, and promoting the long-term sustainability of our society. However, there has been a lack of guidance in relation to the integration of the principles of sustainable development in the waste industry. Given the pervasiveness of the waste crisis, support for the development of sustainable waste management solutions is critical to the achievement of the fundamental objective of sustainable development.

The Need for "Sustainable Infrastructure"

Most societies are looking to further improve their quality of life. Australia is no exception. However, in doing so we understand that the factors driving improvement and development are multifaceted, rather than being purely economic. In other words, we accept the principles of Ecologically Sustainable Development (ESD).

The challenge therefore is to pursue development that is consistent with the principles of ESD. From a business perspective, it will be those businesses that are able to effectively embrace the principles of sustainable development, at a micro level, that will be successful in the longer term. On a more general level, the long-term sustainability of our society, and our quality of life, will be heavily influenced by the quality of infrastructure and essential services that are provided to sustain our existence. Such services and infrastructure will, necessarily, need to be consistent with the principles of sustainable development.

Of all the essential services provided in modern societies, waste management services are among the most critical. However, traditional waste management services and infrastructure are not consistent with the principles of sustainable development. More specifically, traditional waste disposal practices, and in particular landfilling, are no longer acceptable as the primary waste disposal solution due to the environmentally deleterious impacts of such activities.

Waste management needs to become a sustainable activity – in both economic and environmental terms. However, this can only be achieved by acknowledging the 'true cost of landfilling' and establishing appropriate waste 'beneficiating' infrastructure which recovers and recycles valuable resources from the waste stream (and decrease the quantity of waste directed to landfill).

The Nature and Extent of the Waste Crisis

The waste crisis is symptomatic of the fact that we are a consumer-based society, and whilst we continue to generate increasing amounts of waste, we have not yet adopted sustainable practices to manage this waste. Traditional waste disposal methods, such as landfilling, are environmentally unsustainable in that they contribute to further resource depletion (i.e. by burying valuable resources) and are responsible for the generation of significant quantities of Greenhouse Gas emissions and toxic leachate, which contaminates groundwater.

In recognition of these emerging problems, attempts have been made in recent years to implement measures to avoid these adverse environmental impacts. For instance, measures to improve the sustainability of landfilling have included the imposition of more stringent landfill specifications, e.g. a requirement that landfills be designed to have a 200 year lifespan. Notwithstanding these measures are an improvement, they can only be considered as another means of leaving the real issues for resolution by future generations. Clearly, waste management solutions that address these issues need to be developed in a way that avoids the intergenerational equity problem.

A reason for the continued practice of landfilling appears to be because it is considered to be the most efficient and cost effective way of dealing with waste. However, the waste disposal rates are 'cheap' only if the environmental, health and resource security (including intergenerational equity) issues are disregarded. Furthermore, the environmental problems related to past landfilling practices are continuously emerging. These 'inevitable' and expensive problems require significant expenditure, which has not been accounted for in current 'costing' models. For instance, the remediation program conducted in relation to the Sydney Olympic Site (to treat and relocate landfilled waste) cost $137 million and will require ongoing environmental management expenditure.

Essentially, if the 'full cost' of landfill is not accounted for, then landfill will continue to be an 'inexpensive' and convenient waste disposal option. The danger in this is that by viewing landfilling in the most simple of economic terms, the environmental costs and liabilities, both presently and for future generations, will continue to grow for as long as we continue to landfill. If this occurs, the principles of sustainable development will be seriously undermined!

The magnitude of the problem, and the need for an acceptable solution is realised when one considers that currently over 250kg of household Municipal Solid Waste (MSW) is generated per person every year in Australia. As with many successful businesses established in Australia, there is also a significant opportunity to export a solution to the Asia Pacific Region – particularly in the case of waste management. In the Asia Pacific Region in excess of 250 million tonnes of MSW is generated from households each year.

In recognition of the problem, in recent years there has been considerable investment in the development of waste treatment technologies and infrastructure that appropriately manage that part of the waste stream responsible for the greatest environmental impact. As these technologies have emerged, countries around the world have adopted them as part of more significant actions to manage waste and reduce GHG emissions. Table 1 provides some interesting examples of measures adopted overseas.

Table 1: Current and Planned Future European Waste Actions

Country	Current and Future Planned Actions
Austria	Aim to ban landfilling of material with more than 5% organics by 2004
Belgium	Soon to ban direct landfilling of combustible MSW
Denmark	Banning the landfilling of combustible MSW
Germany	Restriction on landfilling of waste which has more that 5% organic carbon content by 2005
UK	Recycling target of 25% by 2000. Landfill tax of 7UKP/tonne introduced in 1996

Having regard to the International attention which has been given to managing the environmental impact associated with waste management, it is unlikely that Australia will be able to continue to pursue waste policies which effectively defer environmental problems to future generations. In our view it seems only fair and reasonable to expect that a new approach to waste management be adopted, either voluntarily or compulsorily. Australia should seize the opportunity to build on the achievements and experiences of other countries, and in doing so it will progress further towards sustainable development.

Western Australia clearly has a role to play in driving Australia's strategic planning, and implementation, of sustainable waste infrastructure.

Sustainable Waste Management – Focus and Priorities

The environmental impacts associated with current waste management practices cannot be ignored. If we are to achieve sustainable development, or indeed even maintain the status quo, we need to view waste management as resource management and progress towards "closed loop" resource use. That is, we need to develop systems of human consumption which mimic natural systems in order to achieve sustainable development.

The fact that the process of sustainable development is one of continual improvement means that it is not too late to embrace the change necessary to deliver sustainable waste management services and infrastructure. The importance of improving waste management practices as a means to achieve sustainable development is underpinned by the fact that waste management services are critically important to the efficient functioning of modern society. Thus, our ability to effect the necessary change to waste management services is, in our view, one of the very important challenges for Australia in its overall pursuit of sustainable development. In fact, countries the world over, developed and developing, face this challenge.

Sustainable waste management should be a priority given the magnitude of the waste problem, and the adverse effect that unsustainable waste management has on the environment, the economy and society. Attention should be focussed on providing support for the development and implementation of infrastructure (projects) which will assist in avoiding the environmentally deleterious impacts of traditional waste disposal methods, whilst at the same time providing

essential 'waste management' services and infrastructure. As indicated above, other developed countries have already done this.

To deliver these objectives, there needs to be greater encouragement for fuller integration of the three pillars of sustainable development – environmental protection, economic and social development - in the waste industry. Other important changes to be embraced by businesses aiming for consistency relate to the way projects are planned for and structured. For example, environmentally sensitive infrastructure projects will need to be structured to provide a return on investment over more appropriate (longer) time periods. This is because such projects will account for all social and environmental externalities, and as such, will more accurately depict the true (higher) costs of the project. In conducting this activity, the most important thing for businesses to keep in mind is that the measurement of project costs in narrow, short timeframe financial terms is no longer feasible, accurate or acceptable. By changing the focus, businesses will increasingly be able to practice Triple Bottom Line (TBL) accounting.

At present, a significant barrier to the implementation of TBL accounting is the lack of cooperation between governments and industry. There is a need for better management and accountability in domestic resource use decision-making, as well as a need for more accountability in the marketplace. This will enable the functioning of an efficient and competitive private sector. To that end, future waste management policy will be required to be transparent, and the real costs of waste management solutions will need to be explained, both environmentally, socially and economically.

Given the global nature of the problem, attention needs to be given to the problem at an international level. Australia can embrace the need for sustainable waste management, and effect positive change to deliver this end. Australia is also well positioned to assist Asia and the Pacific in implementing sustainable waste practices with a view to driving toward the goal of sustainable development. Just as we may learn from the developments in Europe, Australia can help its neighbouring developing countries to experience similar benefits.

There is a real opportunity for Western Australia to lead Australia in the uptake of sustainable waste management practices and infrastructure (projects). The benefits for the State in assuming a leading role in driving change will be measurable in social, environmental and economic terms. Accordingly, strategic planning for sustainable waste infrastructure ought to be considered a high priority in promoting Western Australia's sustainable development profile and long term competitiveness.

Conclusion

The growing body of (environmental) evidence indicates that current waste management practices cannot continue unchanged. This presents a significant opportunity for businesses and Government to re-assess the way in which things are done with a view to providing sustainable alternatives. In doing so, our quality of life will improve as we will necessarily alleviate the pressures on the natural environment in which we exist. The extent to which government and businesses work together and support developments that are consistent with the earth's natural systems or processes, will be reflected in the extent to which we really achieve sustainable development.