Submission to the Productivity Commission
INQUIRY INTO WASTE GENERATION AND RESOURCE EFFICIENCY

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Sector: Organic Waste

Summary

This submission acknowledges and supports the submission by 'Compost Australia'. It recognises that a wealth of research and information is available from both national and international sources and assumes such information will be supplied by others. This submission adds a Western Australian perspective.

Western Australian initiatives over the past 5 years are recorded and there is discussion about those that have worked and those that have not.

This submission provides a history of important developments in strategic thinking in WA. It will inform the Inquiry about policy initiatives. It relates these initiatives to the Compost Roadmap and other national programmes.

This WA perspective is offered to ensure that the Inquiry has every opportunity to capitalise on the good work done by many groups around the country and coordinate these into a comprehensive national initiative.

Many strategic reviews have been completed by different agencies around the country and the RO sector nationally through the 'Compost Industry Roadmap'.

The RO sector is poised to capitalise on the hard work of the past 5 years. These strategic initiatives need to be coordinated into a comprehensive, focussed national action plan. This has not been done yet. Management of the action plan needs to be coordinated by a well-resourced national implementation team – most likely through Compost Australia.

Responsibility for individual actions can be shared between States and the results shared by all. This is the most effective and efficient way to achieve results.

There is a risk that in, the absence of a clear national action plan, the rush to 'get busy' and the impatience of some agencies and other stakeholders, the RO sector will lose its strategic focus and return to the uncoordinated, reactive management that has characterised the sector in the past.

Formal arrangements and partnerships (eg MOU's) may be required between Compost Australia and State agencies to ensure collaboration and coordination of efforts.

Recommendations – Policy Framework

Sustainability

1. Develop a national sustainability strategy

2. Promote the importance of agriculture/horticulture in sustainable societies

3. Build 'Recycled Organics' into a sustainability strategy

Agricultural Production / Land Management

4. Adopt a national soil protection and enhancement policy that recognises the importance of soil organic matter and the role that RO products can play

5. Recognise that RO products can make a significant impact on the more efficient use of water resources in Australia

Waste Management

6. Impose landfill levies that represent the true cost of landfill and use the funds raised to develop markets for recycled products (State)

7. Provide support for RO sector associations and capacity building programmes within the sector (Federal and State)

8. Support the recycling of organic waste into RO products for land application above using these wastes for 'waste-to-energy' programmes

Minimum Standards

9. Develop minimum product standards, for recycled organic products applied to land, that protect public health, the environment and the security of productive land (including biosecurity)

10. Develop minimum processing standards that ensure the safety of recycled organic products

Recommendations – Market Development

Market Based Instruments

11. Implement targeted rebates that provide market 'pull' through the supply chain and close the recycling loop

12. Develop mechanisms to reward the RO sector with 'environmental credits', similar to carbon trading systems

'Fit-for-purpose' Product Quality,

13. Focus RO sector marketing efforts on meeting and exceeding the customers' needs rather than the existing approach of meeting the waste processors' or environmental regulators' needs

14. Support customer-focussed, market-driven initiatives such as 'Seal of Approval' environmental labelling systems

Government support

15. Ensure integrated, whole-of-government policy development (across all portfolios (agriculture, health, environment, waste, land use planning, etc)

16. Support Compost Australia as the national sector leadership group

17. Support formal relationships between Compost Australia and relevant Federal and State government agencies

18. Support capacity building in the RO sector

19. Encourage 'Green Procurement' policies by all governments

20. Ensure government activities do not interfere with or bias market development

Recycled Organics Sector Situation – A WA Perspective

Timeline

August 2002	National Recycled Organics Forum, Canberra
September 2002	WA State Sustainability Strategy – 'Hope for the Future'
August 2003	WMAA (WA Branch) presentation on WA situation
September 2004	Waste Management Board, 'Statement of Strategic Direction'
September 2004	Workshop on "Recycled Organics – The Future in WA"
July 2005	Waste Management Board, 'Business Plan 2005-2006'
August 2005	Recycled Organics (WA) – A Report Back to Stakeholders
November 2005	Report to the WMB by the Working Group on Standards for Organics (including Compost) Applied to Land
Mid 2004 to January 2006	Compost Supply Chain Roadmap – 'Translating Recycled Organics into Differentiated Products'
December 2005 to March 2006	WMB – Review of landfill levy and incentive schemes

The start of a national approach

In **August 2002** approximately 30 people from around Australia met in Canberra for a 2-day 'National Recycled Organics Forum'. Most of the attendees were commercial processors of organic wastes and the rest were from government agencies and consultants.

The workshop considered the past, present and future recycled organics (RO) industry in great detail. The workshop developed the "Compost Australia" draft strategic plan (1). Priorities and required actions were identified. The outcomes of that workshop remain valid to this day.

After the workshop it soon became obvious that "Compost Australia" (CA) did not have the resources to make progress with such a plan. After much research, lobbying and personal commitment by a handful of industry leaders CA enlisted the support of the Barton Group and, with funding from AusIndustry, commenced the national compost industry 'roadmap' project (2).

The results of the 'roadmap' project will be reported by others.

State Sustainability Strategy

The Western Australian government published the State Sustainability Strategy in **September 2002** (3). This document provides a framework into which waste management strategies fit and are integrated with a range of other initiatives to provide for sustainable societies.

Selected strategic actions are relevant to this Inquiry and include;

1. Ensure that the way we govern is driving the transition to a sustainable future
2. Play our part in solving the global challenges of sustainability
3. Value and protect our environment and ensure the sustainable management of natural resources
4. Plan and provide settlements that reduce the ecological foot print and enhance our quality of life
5. Support communities to fully participate in achieving a sustainable future &
6. Assist business to benefit from and contribute to sustainability

Specifically, the State Sustainability Strategy called for government to "Introduce measures, including detailed plans for each waste stream, to meet the targets of zero waste by 2020"

A whole-of-government approach has required all government departments to align and integrate policies and programmes with this over-arching strategy. The benefits of this have taken some time to materialise but are now becoming evident.

The RO Sector situation in WA, in 2003

The following quote from a paper (4) presented to the WMAA (WA Branch) meeting in **August 2003** is still valid today;

"The waste management industry in WA has recycled organic wastes for many years. A large and successful industry originally developed around the recycling of forest/timber wastes and biosolids and agricultural wastes have now also been successfully recycled.

During the past 8 to 10 years there has been a growing interest in (and obligation to) recycling a range of other waste streams, e.g. land clearing waste, community green waste and other organic waste streams diverted from landfill.

There has been substantial private investment in this growing industry. The waste streams total in excess of a million tonnes per year and this recycling supports many hundreds of jobs, generating economic activity worth millions of dollars annually.

Community pressure, government policy and environmental imperatives all support these developments. In recent years, local government has become a player in this industry with investments in green waste recycling and composting of the municipal waste stream.

Traditionally, the landscape supplies and amenity horticulture markets absorbed the majority of these recycled organics (RO). During the past 5 years, several private companies have expanded into the agricultural and horticultural markets. This required large investments in marketing product to a traditional and conservative market.

Intuitively, one would conclude that WA's sandy soils present an ideal prospect for recycling organic wastes. Improvements in soil organic matter result in better crop production and environmental benefits, and our climate creates a need to 'top-up' soil organic matter levels on a regular basis. However, in practice, this has necessitated the development of quality products based on professionally managed composting processes, as well as a huge effort in educating the market to understand the benefits of compost. Compost is at one end of the RO spectrum and the true compost market is small at present, mainly because the market doesn't understand what compost is!

Achieving full potential for the compost industry in WA will require a quantum shift in thinking, and action, from all levels of government and significant sectors of the waste management industry. "

Strategic Approaches needed

This 'quantum shift in thinking' was aided by the publication (5,6) in **September 2004** of the Waste Management Board's (WMB) "Statement of Strategic Direction for Waste Management in WA" as two documents identifying "Visions and Priorities" and "2004-2005 priorities".

These documents clearly identified organic waste as a 'Primary Focus Area" requiring immediate action. The WMB also identified the importance of;

- 'Improvements to markets for recyclables'
- 'Green procurement initiatives'
- 'Partnerships with business and industry to strengthen our joint efforts'
- 'National waste initiatives developed through the national Waste Working Group'
- 'Data and information'
- 'Develop policies… related to focus areas' and
- 'develop our strategies based on those policies'

These points reinforce the importance of organic wastes, the need for collaborative effort nationally and the lack of information and policies to support the recycling of organic wastes.

In the meantime the WMB supported the Resource Recovery Rebate Scheme (RRRS) that provides funds to local governments on the basis of tonnes of material (typically green waste / garden organics) diverted from landfill. This is a classic

example of policy driving diversion but the absence of policy post-diversion. Councils continued to accept tenders on the basis of price and these RRRS funds were not invested in activities aimed at 'closing the recycling loop'.

This is a potential failing of any scheme which provides a rebate to waste generators rather then users of RO products at the end of the supply chain.

Furthermore, the RRRS was only available to local government and not to private industry, further distorting and inhibiting market development for RO products.

Market Focus Required

The WMB has now accepted the folly of the RRRS scheme and it will be abandoned in July 2006. Its replacement is the subject of public workshops and submissions (until 3rd March) and the WMB is seriously considering the implementation of rebates for end-users of RO products. This will lead to the efficient and effective use of funds to create market 'pull' through the supply chain rather than the historical 'push' approach.

Government has been supportive of initiatives to re-direct municipal solid waste (MSW) from landfill into RO products but is unsure about the potential markets for MSW-based RO products. The following quote from 2003 (4) describes the dilemma faced by regulators and the industry;

"Let's take a look at '***Understanding the Market'***.

Industry commonly assumes that the market for RO is farming and land rehabilitation, but this market is already well serviced by RO from primary industry and water treatment. Consider the waste streams from the following industries - pig, chicken, sheep, beef, milk, cheese, beer, timber (including plantation timber and state forests), biosolids and greenwaste from local government and land clearing. These waste streams add up to over a million tonnes per year.

Industries already exist to recycle these organics - they employ hundreds of people and turn over millions of dollars annually. Compare this to the potential compost production from municipal waste. I would estimate this eventually at only 250,000 tonnes per annum for the whole of Perth (45,000 t/year in the near future from the plant at Canning Vale).

If state and local government policies and actions continue to subsidise the recycling of municipal waste then some fundamental questions need to be addressed:

Market Growth and Product Quality

We must achieve market growth; otherwise recycling municipal waste will simply displace successful existing recycling operations and create a different waste management problem (i.e. the wastes currently recycled by primary industry and the water corporation).

The proposed market for composts based on municipal wastes is mainly horticulture. The difference between compost and unprocessed, or minimally processed, RO is poorly understood both in agriculture and in the waste management industry. (For more information refer to author.) The consequences to agriculture of using inappropriate RO materials could be catastrophic.

The following quotes illustrate these points:

"Agriculture and horticulture in Western Australia are multi-billion dollar industries providing much-needed food, fibre and forestry products as well as amenity, employment and export income. Agriculture recognises the need to manage its most valuable asset, the land, in a sustainable way. Compost is an important tool in sustainable soil fertility programmes.

Agriculture WA forecasts that Western Australia's agricultural sector has the potential to grow from an estimated $4.5 billion (97/98) to more than $8 billion within ten years. Natural growth will account for half of this increase. The difference will require innovative and market focused development. Whilst all sectors are likely to grow, greater relative increases will come from horticulture, cereals, pulses and oilseeds and new industries. ("Focus on the Future", AgWA, 1998)……..

…..The horticultural industries are predicting nearly a five-fold growth of export income from $180M in 96/97 to $880M in 2008/09. It would be foolish to compromise the social and economic benefits that such growth can deliver to Western Australia simply to serve the needs of waste producers. The factors driving this growth will be 'clean & green' food from unpolluted soils farmed using ecologically sustainable practices. The emerging composting industry must take note of the opportunities and needs of the farming industry it serves."

Excerpt from paper presented by A Gulliver at National Carrot Conference, Perth, Sep 2000

"The need to improve the management of soil has coincided with community and government desire to manage society's waste streams in a more environmentally responsible manner. Federal and state governments have set ambitious targets for the reduction of organic wastes in landfill. The composting of these waste streams and recycling on land is an obvious solution that will receive an enormous amount of attention in the next few years. A large number of resources will be directed to solve the problem and we can expect quick results. The risks, to agriculture, are that our most valuable asset, the land, is effectively used as an aboveground landfill and that well meaning but ill-informed waste recyclers might produce sub-standard compost that is not suitable for sustainable farming applications.

Farmers need to be aware that waste recycling to agriculture should be driven by the needs of farmers and not by the needs of waste generators. …/

…/ The benefits of compost in farming systems on Western Australian soils are indisputable. The economics of compost use in a wide range of horticultural crops has been demonstrated. … … Compost quality will be a key determinant of the success of these developments. A customer focussed, market oriented approach is necessary if we are to fulfil the promise of effective organic resource recovery at the same time as helping agriculture achieve its vision for a sustainable future."

Excerpt from paper presented by A Gulliver at International Compost Conference, Melbourne, Nov 2000

Market Disruption or Market Growth?

If state and local government actions undermine the existing market, then they will be accused of dumping product and disrupting markets. This could raise concerns about anti-competitive behaviour and government's role in the market. The irony is that a relatively small amount of product placed on the market by government could disrupt and devalue a market producing over 20 times more product than the volume produced by government.

A more sensible and strategic approach would be to use a combination of government and industry resources to grow the overall market. This would create ongoing and enhanced demand for the increasing amount of organics we must recycle in the future.

To achieve this, we need an industry association with a strategic plan and funds to implement necessary actions. Another irony is that we are already well on the way to achieving this, but government was unwilling (via the Waste Management Fund) to support this partnership approach when asked for a relatively small amount of money to match industry contributions."

The points made above are self-evident. However the WMB still resolved to provide a grant of $800,000 specifically for the market development of MSW-based RO products from the Canning Vale plant mentioned in the above quote. This WMB funded project is due to finish before June 2006.

Having committed substantial capital funds to divert and compost MSW, one can understand the driving need for the Councils involved to ensure that they developed ongoing demand and outlets for their RO products.

In the absence of a strategic marketing plan for the whole RO sector one can also understand why the WMB supported this local government project – there was too much at stake and it could not be allowed to fail.

This is not a criticism of the specific project or its proponents. This project has created a heightened awareness of compost in the agricultural sector. The 'free' compost and subsidised freight (a significant project budget item) resulted in much interest and subsequent demand.

But it is an example of 'action before policy'. Since 2004 government and industry in the RO sector have developed much clearer strategies and we expect much better targeting of scarce financial resources in the future.

In the meantime the RO sector must ensure that it harvests as much information from this project and utilises this in national marketing plans for everyone's benefit.

Strategic Approaches Employed

A more strategic approach in WA has been fostered following a sector-wide workshop preceding the WA 'Waste & Recycle Conference' in **September 2004.**

Around 80 people participated in this one day workshop on the RO sector in Western Australia. A working group developed the workshop outcomes into a workable and focussed strategic plan for the future of the RO sector in WA. The strategic plan will guide the RO sector through the next 3-5 years.

This initiative engendered support and participation from a wide range of stakeholders and several important initiatives were realised during the 12 months before the working group reported back to stakeholders at the same conference in **August 2005** (8).

One outcome of this initiative was the formation of Recycled Organics (WA) or ROWA. ROWA is a special interest group within the Waste Management Association of Australia (WA branch) and has broad stakeholder representation throughout the RO sector. Membership of ROWA is open to industry, government and the community. Its non-partisan approach provides important and vital linkages that integrate the varied and different needs of its stakeholders.

The activities of ROWA include;

- Participation in policy development
- Addressing the need for quality standards that protect public and environmental (resource) health
- Providing a forum for stakeholder concerns
- Developing markets for RO products
- Relating to other sectors in the waste industry
- Communicating widely amongst stakeholders (including State and Local government, waste management industry, processors, R&D providers, consultants and community)
- Contributing to practical implementation of the State Sustainability Strategy

The group defined the functions, objectives and strategies of ROWA as follows;

Function: A body that represents, promotes and supports the RO sector in WA

Objective: Sustainable growth and development of the RO sector in WA

Strategies:

- Develop a strong **organisation**
- Maximise **market development**
- Develop clear **quality standards**
- Develop and promote **policy**

WA now has a widely accepted, realistic and achievable strategic plan for the future of the RO sector. A formal group (ROWA) has been established to represent the RO sector and progress has already been made on many of the actions detailed in the supporting action plan, adopted in **August 2005** (9).

In **July 2005** the WMB published a business plan (7). The following is taken from that plan;

Organic Products

Current and continuing

The Board has had an initial focus on setting minimum standards for all organics, including compost from waste, applied to land. The Board also continued providing support for the compost market development project being undertaken by the Southern Metropolitan Regional Council and the national compost road map project being coordinated by the Waste Management Association of Australia.

In contrast to the kerbside recyclables industry, the organics industry is markedly less mature. Sustainable markets for compost and mulched product are not well developed. The industry is not delivering sustainable market-driven outcomes on the scale needed to support growth in organics recovery.

2005-06

The Board will investigate organic waste products in WA, with a particular emphasis on Domestic Food and Garden Waste, and Commercial Food Waste with a view to determining key issues and implementing action to increase the recovery of the resources from organic products. The investigation will specifically include investigating the separation of organics at source and the option of banning the disposal of organics in landfills and associated issues including market development.

Organic waste makes up the largest component of the domestic waste stream by weight. It is also one of the more environmentally damaging components in the domestic waste stream once it is landfilled. Further, there are excellent opportunities for beneficial recycling and re-use, as well as potential for waste avoidance projects targeting these materials.

Food waste makes up approximately a third of the overall commercial waste stream disposed to landfill. Certain types of businesses such as supermarkets, food retailers, cafes/restaurants, hotels, etc generate the food waste. In some businesses, such as fruit and vegetable wholesalers, food waste can make up a significant proportion of the waste stream by weight. There would appear to be excellent opportunities for separation of food waste by certain types of businesses for re-processing for beneficial re-use.

The points made above are self explanatory. The WMB business plan also mentions the importance of;

- Capacity building
- Minimum standards for RO products applied to land

- Seal-of-approval environmental labelling
- Green procurement policies and
- Incentives and rewards to encourage market development

The WMB has made extraordinary efforts to rigorously apply good strategic thinking to future initiatives. It has also recognised the need to cooperate nationally and share resources, efforts and knowledge – particularly in its support of the 'Compost Roadmap'.

It is most important that the Productivity Commission Inquiry acknowledges the strategic approaches taken by many bodies nationally and finds a way to ensure that efforts are coordinated, potential synergies are exploited and the RO sector delivers ongoing benefits to the Australian community.

Actions in a Strategic Context (or Not)

In **November 2005** the WMB received a report (10) related to the minimum standards for recycled organic materials applied to land. The report contains 13 key findings and 29 recommendations.

There are too many recommendations to make comment here except to say that the working group adopted a broad and strategic approach. The report considered all recycled organic materials applied to land.

Guiding principles were developed that included;

- Sustainability
- Ensuring public support and confidence
- Protection and enhancement of WA soils as a productive resource
- Maximising resource recovery and re-use
- Performance-based outcomes and risk management
- Integration of other government and industry initiatives.

In **December 2005** the WMB released two documents as part of the public consultation stage of a review of landfill levies and how the funds raised can be used to best effect (11, 12). Public submissions close on 3rd March with announcements expected before the end of **March 2006**.

Actions are also proceeding in other States including;

- In NSW the AWT DORF Working Group (AWT Derived Organic Rich Fraction) was established by Compost NSW and the NSW AWT Working Group as a consultation forum with the NSW DEC to review and make recommendations on contamination guidelines for organic material derived from AWT processes.

- In South Australia a working group is to develop a code of practice that will be adopted by all councils that provide a kerbside green organics collection service. To this end the working group made a presentation to the LGA Waste Committee in July 2005. The Committee endorsed the need for a code of practice and, along with Zero Waste, has provided funds for its development.

- In Victoria, Compost Victoria and Sustainability Victoria are working to develop quality standards and a 'seal of approval' quality label.

Whilst these actions are supported and appear to fit into an overall strategic plan – the RO sector has no widely agreed national action plan (i.e. detailed actions that fit within a strategic framework).

Without strong leadership and clear direction there is a risk that worthy efforts within the sector will be wasted because of uncoordinated duplication of effort and/or lack of strategic focus by active well-meaning independent groups.

The sector is energised by recent collaborative efforts, and ready for (and starting to take) action. There is a unique opportunity to harness this energy, exploit synergies and drive the RO sector forward.

More formal agreements (eg MOU's) between Compost Australia and State agencies may be required to ensure collaboration and coordination of efforts.

References

1) Compost Australia – Draft Strategic Plan, *August 2002*

2) Compost Supply Chain Roadmap – 'Translating Recycled Organics into Differentiated Products', *January 2006* (www.compostroadmap.com.au)

3) Focus on the Future – The Western Australian State Sustainability Strategy, *September 2002*

4) Recycled Organics in WA - The Case for a Compost Industry Association in Western Australia, presented to WMAA (WA Branch) meeting, *August 2003*

5) Statement of Strategic Direction for Waste Management in Western Australia – Vision & Priorities, WMB, *September 2004*

6) Statement of Strategic Direction for Waste Management in Western Australia – 2004-2005 Priorities, WMB, *September 2004*

7) 2005-2006 Business Plan, WMB, *July 2005*

8) The Recycled Organics Sector in WA – A Report Back To Stakeholders, Recycled Organics (WA), WA Waste & Recycle Conference, *August 2005*

9) Recycled Organics (WA) – Action Plan, *August 2005*

10) Report to the Waste Management Board by the Working Group on Standards for Organics (including Compost) Applied to Land, *November 2005* (available at http://zerowastewa.com.au/whoswho/committees)

11) Waste Management Board – A Discussion Paper on the Landfill Levy and the Programs it Funds, *December 2005* (http://zerowastewa.com.au)

12) Waste Management Board – A Discussion Paper on Re-investing Landfill Levy Funds in Zero Waste Incentive Schemes, *December 2005* (http://zerowastewa.com.au)

Reference numbers 4, 8 and 9 are supplied with this submission because they may not be readily available to the Commission. All other references will have been supplied by others or are relatively easy to locate.

Recycled Organics in WA

The Case for a Compost Industry Association in Western Australia

Andrew Gulliver, Custom Composts, August 2003

Background

The waste management industry in WA has recycled organic wastes for many years. A large and successful industry originally developed around the recycling of forest/timber wastes and biosolids and agricultural wastes have now also been successfully recycled.

During the past 8 to 10 years there has been a growing interest in (and obligation to) recycling a range of other waste streams, e.g. land clearing waste, community green waste and other organic waste streams diverted from landfill.

There has been substantial private investment in this growing industry. The waste streams total in excess of a million tonnes per year and this recycling supports many hundreds of jobs, generating economic activity worth millions of dollars annually.

Community pressure, government policy and environmental imperatives all support these developments. In recent years, local government has become a player in this industry with investments in green waste recycling and composting of the municipal waste stream.

Traditionally, the landscape supplies and amenity horticulture markets absorbed the majority of these recycled organics (RO). During the past 5 years, several private companies have expanded into the agricultural and horticultural markets. This required large investments in marketing product to a traditional and conservative market.

Intuitively, one would conclude that WA's sandy soils present an ideal prospect for recycling organic wastes. Improvements in soil organic matter result in better crop production and environmental benefits, and our climate creates a need to 'top-up' soil organic matter levels on a regular basis. However, in practice, this has necessitated the development of quality products based on professionally managed composting processes, as well as a huge effort in educating the market to understand the benefits of compost. Compost is at one end of the RO spectrum and the true compost market is small at present, mainly because the market doesn't understand what compost is !

Achieving full potential for the compost industry in WA will require a quantum shift in thinking, and action, from all levels of government and significant sectors of the waste management industry.

Become Market Driven

The historical approach to waste management has been a 'wheels to landfill' business – that is, freight businesses transporting waste to holes in the ground. Progressive companies have developed the 'wheels and engineering' approach. This involves investment in separation and waste processing technologies. However, the focus on engineering has ignored the most important aspect of industry development – a market for the processed products.

If we are to change this paradigm, we must become market driven and recover organic resources to produce products that suit a market need. We must break away from the 'fee for waste disposal service' mentality and focus on the needs of the customer for the RO and/or composted products.

Therefore, the most important, and possibly the only area of strategic importance to the developing RO and compost industry is marketing. How do we develop the markets ? How do we create an environment where such an industry, and the market it serves, can grow and prosper ? What resources do we allocate to industry development ? This concept requires a quantum shift in thinking on the part of many government officials and corporate executives.

Take Industry Action

All stakeholders have a strategic interest in ensuring that the market for RO and compost products continues to grow and prosper. There is a compelling case for industry and government to work together to ensure this happens. One logical solution is that industry leaders must step forward and develop an industry association that is able to work with government and the community to create the right environment for the necessary market development. We need an industry that adds value to the resource recovery chain, an industry that offers tangible benefits to the markets and customers it supplies.

If industry does nothing, then we will deserve what we get. The RO and compost industry will become cost driven and operate at the level of the lowest common denominator. Our customers will not be well serviced and the products may not meet the customers' needs. In such a situation, there is a significant risk of market collapse.

Those responsible for strategic decisions relating to waste management cannot afford to take such risks and alternative, more reliable, waste disposal options will be found. For example, the 'energy-from-waste' lobbyists are already well organised. They have developed a code of practice and are presenting themselves as a real alternative for organic waste processing. Furthermore, if government cannot be convinced that the RO and compost industries present viable options, then significant government decisions will be made that will not favour this industry.

Additionally, the government needs a professional, well-organised RO and compost industry to achieve its stated policy objectives relating to waste management and sustainability.

The RO and compost industry is a dynamic and progressive industry with incredible potential – but so far we have failed to communicate this !

The RO and compost industry in WA has great potential to help the community achieve waste recycling and sustainability targets. It needs to present itself as a professional and progressive industry through a well-organised, dynamic industry association. We look forward to a period of rapid growth and achievement directed by a practical, achievable industry plan, led by a respected industry association.

Industry Development Strategies

If we accept that the key strategy is to become market driven and customer focused, then some of the tactics in an industry action plan could be to :

- Understand the market
- Understand the customer
- Develop products that suit the customer's needs
- Develop quality systems and standards
- Educate the market.

Most successful compost businesses are already doing all of these. The question is, what can we do as an industry to accelerate the change in mindset and encourage a dynamic, progressive and profitable industry ?

Let's take a look at 'Understanding the Market'. Industry commonly assumes that the market for RO is farming and land rehabilitation, but this market is already well serviced by RO from primary industry and water treatment. Consider the waste streams from the following industries - pig, chicken, sheep, beef, milk, cheese, beer, timber (including plantation timber and state forests), biosolids and greenwaste from local government and land clearing. These waste streams add up to over a million tonnes per year.

Industries already exist to recycle these organics - they employ hundreds of people and turn over millions of dollars annually. Compare this to the potential compost production from municipal waste. I would estimate this eventually at only 250,000 tonnes per annum for the whole of Perth (45,000 t/year in the near future from the plant at Canning Vale).

If state and local government policies and actions continue to subsidise the recycling of municipal waste then some fundamental questions need to be addressed:

Market Growth and Product Quality

We must achieve market growth; otherwise recycling municipal waste will simply displace successful existing recycling operations and create a different waste management problem (i.e. the wastes currently recycled by primary industry and the water corporation).

The proposed market for composts based on municipal wastes is mainly horticulture. The difference between compost and unprocessed, or minimally processed, RO is poorly understood both in agriculture and in the waste management industry. (For more information refer to author.) The consequences to agriculture of using inappropriate RO materials could be catastrophic.

The following quotes illustrate these points :

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> *Excerpt from paper presented by A Gulliver at National Carrot Conference, Perth, Sep 2000*

> "The need to improve the management of soil has coincided with community and government desire to manage society's waste streams in a more environmentally responsible manner. Federal and state governments have set ambitious targets for the reduction of organic wastes in landfill. The composting of these waste streams and recycling on land is an obvious solution that will receive an enormous amount of attention in the next few years. A large number of resources will be directed to solve the problem and we can expect quick results. The risks, to agriculture, are that our most valuable asset, the land, is effectively used as an aboveground landfill and that well meaning but ill-informed waste recyclers might produce sub-standard compost that is not suitable for sustainable farming applications.
>
> Farmers need to be aware that waste recycling to agriculture should be driven by the needs of farmers and not by the needs of waste generators. …/
>
> …/ The benefits of compost in farming systems on Western Australian soils are indisputable. The economics of compost use in a wide range of horticultural crops has been demonstrated. … … Compost quality will be a key determinant of the success of these developments. A customer focussed, market oriented approach is necessary if we are to fulfil the promise of effective organic resource recovery at the same time as helping agriculture achieve its vision for a sustainable future."
>
> *Excerpt from paper presented by A Gulliver at International Compost Conference, Melbourne, Nov 2000*

Market Disruption or Market Growth ?

If state and local government actions undermine the existing market, then they will be accused of dumping product and disrupting markets. This could raise concerns about anti-competitive behaviour and government's role in the market. The irony is that a relatively small amount of product placed on the market by government could disrupt and devalue a market producing over 20 times more product than the volume produced by government.

A more sensible and strategic approach would be to use a combination of government and industry resources to grow the overall market. This would create ongoing and enhanced demand for the increasing amount of organics we must recycle in the future.

To achieve this, we need an industry association with a strategic plan and funds to implement necessary actions. Another irony is that we are already well on the way to achieving this, but government was unwilling (via the Waste Management Fund) to support this partnership approach when asked for a relatively small amount of money to match industry contributions.

The final tactic of "market education" is an issue of strategic importance for all stakeholders. This should be a key function of any industry association.

What's Happening in Our Industry Now ?

Affiliations

A few years ago, some leading industry members started to talk about a compost industry association (colloquially known as the CIA). This group raised funds and coordinated activities, whilst funding proposals were developed for more ambitious industry development. These initiatives were developed in partnership between commercial composters, local government representatives, Dept of Agriculture and the Australian Fertiliser Services Association (AFSA). Some commercial composters joined AFSA because of the strategic opportunities available through working with AFSA. Eventually this group was formalised as the Compost Sub-Committee of AFSA. A submission to the Waste Management Fund to progress these industry development initiatives was rejected.

AFSA is funded and run by commercial operators and is a more obvious "home" for the compost industry. It provides a link to a vast geographical network of freight and spreading operators who are active in the agricultural markets. Literally millions of tonnes of recycled organic materials are spread around Australia each year. The most obvious market in the near future will be agriculture and land rehabilitation, and AFSA's network provides a ready link to many of these markets. Efficient freight and spreading services are vital for the successful growth of the RO/compost industry.

State vs. National Compost Associations

The regulations, market and political environment are different in different states. Industry in each state needs good access to local decision makers because we need to influence decisions if we are to become the 'doers' and not the 'done to'. We need a local industry association to provide a voice for industry and a communication channel to government.

However, 'waste', 'recycling' and 'environment' are becoming big-ticket items at Federal Government level and so we also need a national approach to government on our industry's behalf.

Over 30 members of the industry, from all around Australia, met in Canberra in August 2002 for a 2-day workshop to develop a National Strategic Plan for the RO industry. It has taken some time for the industry to generate momentum, but this is now happening.

Compost Australia is driven by industry members and has already made considerable progress in discussions with Federal government. It seems likely that the compost industry will be able to attract significant amounts of the Federal environment dollar.

Examples of activities at a national level include:

- Discussion with the Barton Group and EA about Federal initiatives
- The launching of the 'ROU Library' at the University of New South Wales
- Development of National Competency Standards for Accredited Training Programs.

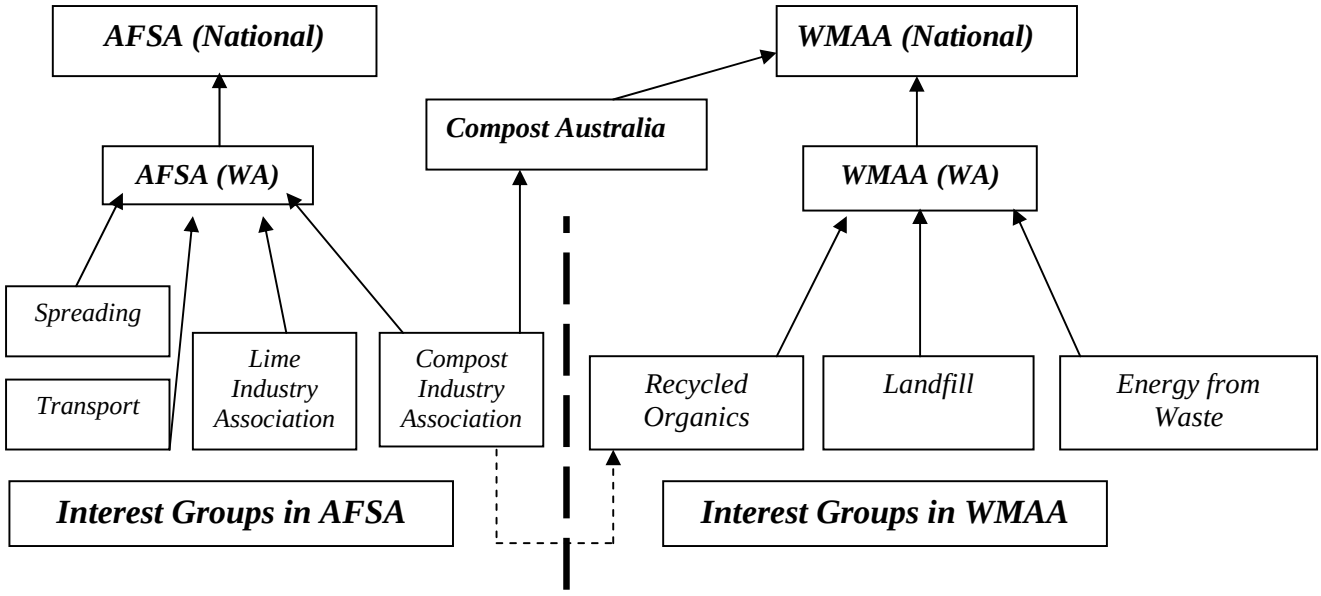
It is appropriate that WA industry contributes to, and takes advantage of, these national initiatives. (For more information contact the author.) We need to be organised at a state level in a way that both benefits from and supports these national initiatives.

The Way Ahead

How do we meet all these needs ? What is a good organisational structure ?

This has been a tough question. I believe we should establish a relationship between AFSA and WMAA that maintains the links and really starts to use the networks. This is a two-way street, where AFSA and WMAA members can all benefit. All we need is some great communication ! Communication is one of the things we're all bad at and this is one of the reasons why we need industry support services!

A likely structure is shown below:



What does this mean for the compost industry?

- Compost industry continues as a sub-committee of AFSA (known as the CIA)
- The CIA develops a strategic plan, in collaboration with Compost Australia, to drive RO and compost industry development in WA
- We retain our independence (and the ability to lobby and push our own case) by remaining as an industry driven group under AFSA
- We actively support the work of Compost Australia at a national level
- We find ways of funding the secretarial support provided by AFSA
- We help form a recycled organics interest group under WMAA (WA) that provides a forum for all stakeholders in the RO industry (regulators, consultants, agencies)

- We ensure that the RO group under WMAA is successful, because it provides us with a great forum for interacting and networking with government and service industries
- We ensure that there is good communication between AFSA and WMAA support staff and that communication flows both ways and throughout the networks.

How much will it cost to run? Will industry support these initiatives?

I estimate it will cost about $7000 per year to provide basic secretarial support. Some of this may come from WMAA (WA) or the Waste Management Fund. Most will probably have to come from industry. We have about 20 industry members, of whom we might expect 10 to make a contribution – this could mean having to raise $500 to $700 per year from each member.

Without basic secretarial support this initiative will not progress. The industry leaders involved simply do not have the time available to provide these services on a voluntary basis – they are all extremely busy in their rapidly growing businesses !

The few leading industry members involved so far have contributed several thousand dollars each to fund the progress to date. The challenge will be firstly, to convince the rest of industry to contribute and, secondly, to put together an attractive package that encourages support and participation from government and even more industry members.

I recently outlined some of these challenges in an email sent to 40 members of the RO and compost industry in WA. Within 24 hours I had half a dozen replies supporting my sentiments and promising financial support. A similar presentation to the WMAA also met with positive support. Whilst these initiatives have been required for some time, it would seem that the time is right to pursue these proposals now.

The RO and compost industry in WA has great potential to help the community achieve waste recycling and sustainability targets. The industry needs to present itself as a professional and progressive group through a well-organised, dynamic industry association. We can then look forward to a period of rapid growth and achievement directed by a practical, achievable industry plan implemented by a respected industry association.

The Recycled Organics Sector in WA

– A Report Back to Stakeholders

Andrew Gulliver

Presented on behalf of Recycled Organics (WA), a special interest group of the Waste Management Association of Australia (WA Branch)

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Abstract

At the 2004 Waste and Recycle conference, around 80 people participated in a one day workshop on the Recycled Organics (RO) sector in Western Australia (WA). A working group was nominated and has since developed the workshop outcomes into a workable and focussed strategic plan for the future of the RO sector in WA.

This initiative has engendered support and participation from a wide range of stakeholders and several important initiatives have been realised in the past 12 months. This paper is the report of the working group.

The Australian Federal government is currently funding a national compost industry 'Roadmap' project. Local activities have been integrated with this national initiative.

One outcome of the WA workshop was the formation of Recycled Organics (WA) or ROWA. ROWA is a special interest group within the Waste Management Association of Australia (WA branch) and has broad stakeholder representation throughout the RO sector. Membership of ROWA is open to industry, government and the community. Its non-partisan approach provides important and vital linkages that integrate the varied and different needs of its stakeholders.

The activities of ROWA include;

- Participation in policy development
- Addressing the need for quality standards that protect public and environmental (resource) health
- Providing a forum for stakeholder concerns
- Developing markets for RO products
- Relating to other sectors in the waste industry
- Communicating widely amongst stakeholders (including State and Local government, waste management industry, processors, R&D providers, consultants and community)
- Contributing to practical implementation of the State Sustainability Strategy

The strategic plan for the RO sector will guide the RO sector through the next 3-5 years. Detailed actions and time lines can be obtained by contacting ROWA through the Waste Management Association of Australia (www.wmaa.asn.au).

WA now has a widely accepted, realistic and achievable strategic plan for the future of the RO sector. A formal group (ROWA) has been established to represent the RO sector and progress has already been made on many of the actions detailed in the supporting action plan.

Introduction

The Organic Waste Stream

Organic wastes represent over half of the waste stream produced by our communities. The safe and efficient recycling of these wastes is of utmost importance. This is reflected in a range of Federal and State government policies and initiatives. A professional, progressive and dynamic Recycled Organics (RO) sector is vital. There is widespread interest by the community, industry and government in the success of the RO sector and the manner in which this is achieved.

Stakeholder Workshop

Recognising the need to engage stakeholders and give some direction to the RO sector in WA the WMAA organised a stakeholder workshop titled "Recycled Organics – The Future in WA". This workshop was held on Tuesday 21st September 2004 in conjunction with the annual 'Waste and Recycle' Conference in WA.

The workshop targeted producers and processors of organic waste and users or recycled organic (RO) products. Over 75 people participated in the full day workshop and represented a wide range of stakeholders including;

- Collection
- Transport
- Processing
- Disposal
- Community
- Local government councillors
- Local government officers
- State Government agencies
- Consultants
- Research
- Education

The workshop comprised many smaller workshops and review sessions. Eighty summary reports were produced from the day's work. These summary reports were categorised into six broad groups;

- Governance, coordination and regulation
- Market development
- Quality
- Policy
- Collection infrastructure
- Community consultation

A working group was nominated at the workshop and given responsibility for developing a strategic plan for the RO sector, based on the reports from the workshop. The WMAA funded the services of a facilitator for the group's initial meetings. The group aimed to report back to stakeholders at the subsequent conference.

Working Group

The working group held nine meetings during the year following the workshop. The group reviewed all summary reports and action sheets from the original workshop. The initial six groupings were condensed to four broad group headings for the sector to focus on;

- Organisation
- Market development
- Quality
- Policy

The strategic plan is organised under these four headings and strategies developed for each. The various actions from the original workshop have been categorised as a set of goals related to each strategy and then tasks (or actions) associated with each goal (see below).

The working group tried to keep all the input from the original workshop. This has made the document a little untidy but the group felt this was better than a 'tidy' document that lost some of the original input. All stakeholders who participated in the original workshop should recognise their contribution within the document

The table was used to assess the urgency and importance of each of these goals and tasks. From this analysis an action plan has been developed identifying which goals and tasks must be addressed in the short, mid and long term. This detailed action plan, complete with timelines, can be obtained via the WMAA (WA Branch).

Establishment of Recycled Organics WA (ROWA)

The working group recognised the need to establish a formalised body in order to effectively represent the sector. After exploring several options the working group establish ROWA as a special interest group under the WMAA (WA Branch). This allows access to the services and network of a national professional association. ROWA is similar to special interest groups in other WMAA State branches such as 'Compost Victoria', 'Compost NSW' and 'Organic Recyclers' in Queensland. Each of these groups is affiliated to and represented on Compost Australia. Compost Australia is a national division of the WMAA and is the peak body representing the RO sector in Australia.

The group defined the functions, objectives and strategies of ROWA as follows;

Function: A body that represents, promotes and supports the RO sector in WA

Objective: Sustainable growth and development of the RO sector in WA

Strategies:

- Develop a strong **organisation**
- Maximise **market development**
- Develop clear **quality standards**
- Develop and promote **policy**

Strategic Plan for the RO Sector in WA

Strategy 1: Develop a strong organisation

Goals and Tasks/Actions

1.1. Form a peak body to represent the RO sector to government, community, etc.

- Define roles & functions of ROWA
- Establish new permanent body allied to WMAA
- Establish code of conduct & ethics
- Provide single industry voice

1.2. Be recognised as peak body for RO sector

- Communicate information about ROWA and its role to stakeholders

1.3. Communicate effectively & widely

- Develop communication plan to support ROWA objectives
- Work with WMAA, Compost Australia, industry groups & govt. Network well.
- Consider generic strategic issues e.g. health & safety; industry training/skill development; diesel fuel rebate, advertising and legal services

Strategy 2: Maximise market development

Goals and Tasks/Actions

2.1. Develop strategic marketing plan for the RO sector

- Market analysis – understand the market
    - Customer analysis & market research
    - Supply side analysis – raw materials, process capacity, govt policy, etc.
- Develop marketing plan
    - Product information to promote
    - Sales – methodology & support (Tools)
    - Form of products, new products

2.2. Develop knowledge and educate the market

- Develop R&D plan
    - R&D – demonstrate product benefit to give user confidence
- Educate market
    - Quality, get user confidence
    - Extension activities –
      technology transfer, trade fairs, field days, annual conference
    - Promote 'Carbon based agriculture'

2.3. Secure Government, industry and other funding

- Investigate and secure funding options
- Implement marketing plan
- Implement R&D plan

Strategy 3: Develop clear quality standards

Goals and Tasks/Actions

3.1. Implement minimum standards to protect public & environmental (resource) health

- Define compost and terminology
- Define contamination/other requirements & incorporate in standards
- Ensure staged implementation via regulations / license conditions

3.2. Develop guidelines for composting

- Review and adopt industry best practice guidelines (WMAA, Feb 2004)

3.3. Promote continuous improvement

- Establish voluntary product 'Seal of Approval', or similar, that raises quality over and above minimum standards
- Disclosure of defined/agreed information
- Develop & adopt reliable quality measurements – including 'Maturity'
- Define product quality relative to use
- Reduce contaminants in the waste stream

3.4. Justify and promote industry self regulation

- Foster responsible application of RO products to land
- Develop the case for self regulation
- Put the case to government/community

Strategy 4: Develop and promote policy that supports the RO sector

Goals and Tasks/Actions

4.1. Establish use of RO products as a priority of government, including Department of Agriculture and Department of Environment

- Develop the case for the RO sector
    - Establish position of RO sector in the waste hierarchy
    - Benefits of using RO products to build OM in the soil
    - Preserve organic wastes as a resource for the RO sector
    - Ensure best use of OM resource
    - Relate this case to the WA State Sustainability Strategy
    - Develop economic arguments

- Promote recycling of organics
    - Education to all levels of Govt, community & schools
    - Develop links with Education Dept and Health Dept.
    - Develop support for recycling organics, inform government
    - Promote changes to legislation that support reuse of organics
    - Promote ability of RO sector to handle ALL organic wastes

- Foster solutions that address needs, including regional/small communities

4.2. Build RO sector considerations into future 'Planning' issues

- Build linkages to planning process (Department of Planning & Infrastructure)
- Ensure availability of production sites and security of tenure
- Promote importance of agriculture and horticulture in reuse of urban organic wastes, including reclaimed water – provide planning security!
- Ensure broad, whole-of-government approach

Conclusion

WA now has a widely accepted, realistic and achievable strategic plan for the future of the RO sector. A formal group (ROWA) has been established to represent the RO sector and progress has already been made on many of the actions detailed in the supporting action plan.

Acknowledgements

The working group would like to acknowledge the following for their contribution;

- The participants of the original workshop
- The WMAA and conference organisers for holding the original workshop
- Dan Kehoe who facilitated the workshop and several working group meetings
- State and Local government for contributions of their staff
- The individuals from the private sector who contributed their time voluntarily

Members of the working group were;

- Nahrel Dallywater, Dallywater Consulting
- Steven David, Organic Farming Systems
- Diane Dowdell, Department of Environment
- Harry Hofstede, Spartel Pty. Ltd.
- Steve Gibellini, Department of Agriculture
- Martin Gravett, Organic Resource Technologies
- Andrew Gulliver, Custom Composts
- Murray Ladhams, City of Cockburn
- Bob Paulin, Department of Agriculture
- Giles Perryman, Cardno BSD
- Geoff Richards, Richgro Garden Products
- Gordon Warren, Sita Environmental Solutions / Biowise

Recycled Organics WA - a special interest group of WMAA (WA Branch)

Action Plan – August 2005

Function: A body that represents, promotes and supports the RO sector in WA

Objective: Sustainable growth and development of the RO sector in WA

Strategies:

- Develop a strong **organisation**
- Maximise **market development**
- Develop clear **quality standards**
- Develop and promote **policy**

The strategies were developed from the stakeholder workshop in August 2004. The various actions from that workshop have been categorised as a set of **goals related to each strategy** and then **tasks (or actions) associated with each goal** (see table below).

The table can be used to assess the **urgency and importance** of each of these goals and tasks. From this analysis ROWA can work out which goals and tasks must be addressed in the **short, mid and long term**. This will provide a clear **action plan,** complete with **timelines**, for ROWA.

Draft Action Plan for Recycled Organics WA (ROWA)

Strategy	Goal	Task / Action
1)Develop a strong **organisation**	1.1) Form a peak body to represent the RO sector to government, community, etc.	• Define roles & functions of ROWA • Establish new permanent body allied to WMAA • Establish code of conduct & ethics • Provide single industry voice
	1.2) Be recognised as peak body for RO sector	• Communicate information about ROWA and its role to stakeholders
	1.3) Communicate effectively & widely	• Develop communication plan to support ROWA objectives • Work with WMAA, Compost Australia, industry groups & govt. Network well. • Consider generic strategic issues e.g. health & safety; industry training/skill development; diesel fuel rebate, advertising and legal services

Strategy	Goal	Task / Action

2)Maximise **market development**	2.1) Develop strategic marketing plan for the RO sector	• Market analysis – understand the market
		  o Customer analysis & market research
		  o Supply side analysis – raw materials, process capacity, govt policy, etc.
		• Develop marketing plan
		  o Product information to promote
		  o Sales – methodology & support (Tools)
		  o Form of products, new products

	2.2) Develop knowledge and educate the market	• Develop R&D plan
		  o R&D – demonstrate product benefit to give user confidence
		• Educate market
		  o Quality, get user confidence
		  o Extension activities - technology transfer, trade fairs, field days, annual conference
		  o Promote 'Carbon based agriculture'

	2.3) Secure Government, industry and other funding	• Investigate and secure funding options • Implement marketing plan • Implement R&D plan

Strategy	Goal	Task / Action
3)Develop clear **quality standards**	3.1) Implement minimum standards to protect public & environmental (resource) health	• Define compost and terminology • Define contamination/other requirements & incorporate in standards • Ensure staged implementation via regulations / license conditions
	3.2) Develop guidelines for composting	• Review and adopt industry best practice guidelines (WMAA, Feb 2004)
	3.3) Promote continuous improvement	• Improve processes, product & legislation • Establish voluntary product 'Seal of Approval', or similar, that raises quality over and above minimum standards • Disclosure of defined/agreed information • Develop & adopt reliable quality measurements – including 'Maturity' • Define product quality relative to use • Reduce contaminants in the waste stream
	3.4) Justify and promote industry self regulation	• Foster responsible application of RO products to land • Develop the case for self regulation • Put the case to government/community

Strategy	Goal	Task / Action

4) Develop and promote **policy** that supports the RO sector	4.1) Establish use of RO products as a priority of government, including Dept of Agriculture and Dept of Environment	• Develop the case for the RO sector
		  o Establish position of RO sector in the waste hierarchy
		  o Benefits of using RO products to build OM in the soil
		  o Preserve organic wastes as a resource for the RO sector
		  o Ensure best use of OM resource
		  o Relate this case to the WA State Sustainability Strategy
		  o Develop economic arguments
		• Promote recycling of organics
		  o Education to all levels of Govt, community & schools
		  o Develop links with Education Dept and Health Dept.
		  o Develop support for recycling organics, inform government
		  o Promote changes to legislation that support reuse of organics
		  o Promote ability of RO sector to handle ALL organic wastes
		• Foster solutions that address needs, including regional/small communities

	4.2) Build RO sector considerations into future 'Planning' issues	• Build linkages to planning process (DPI – Dept of Planning & Infrastructure • Ensure availability of production sites and security of tenure • Promote importance of agriculture and horticulture in reuse of urban organic wastes, including reclaimed water – provide planning security! • Ensure broad, whole-of-government approach