

## Low Impact statement

In this submission I wish to concentrate on the organic waste component of the DWMMP and comment on the Auckland council plan to collect and process the organic waste stream in Auckland City.

## Background

My name is Ben Bell, and I am the CEO of Low Impact limited.

The primary focus of Low Impact is currently organic waste. We offer what we believe to be the most efficient and effective way to process household food waste, and the majority of commercial food waste into the highest quality fertiliser possible. We manufacture and sell a unique compost product, "Hungry bin", which we launched into the NZ market in July 2011. We have experienced strong sales growth as the market has recognised the value of the product and have already established export sales in Europe.

At Low Impact we believe that the principles of sustainability should permeate everything we do. We strive to offer products and services that are not only accessible to everyday people, but that also have a positive environmental benefit. Within the company we are doing everything we can to ensure that we not only talk the talk, but that we're walking it too.

As the DWMMP outlines, in most Western cities food waste makes up almost half of the waste stream. As the waste assessment showed, Auckland is no exception. Food waste is expensive to collect, transport and dispose of. Even using a waste disposal unit requires a lot of water, and creates a burden on the sewerage system. When organic waste breaks down in a landfill, it generates methane, a powerful greenhouse gas. Once it is buried in a landfill, the nutrients contained in food scraps are lost to the environment, and cannot be reused.

We believe that one of the best solutions to reduce the environmental impact of food waste is to compost organic waste on-site using a high efficiency system. This not only reduces handling and transport costs, it prevents valuable nutrients from being lost to the environment.

We believe that on-site processing also increases the sense of environmental stewardship amongst the community, as the results are immediate and tangible to the user. The increasing awareness of the environmental cost of food waste, along with the desire to produce high quality fertiliser for food gardens have resulted in strong growth of worm farming and composting products over the past decade.

We think that the compost system we have developed called "Hungry bin" is one of the most efficient ways to compost, and definitely one of the easiest systems to use. Hungry bin is a high efficiency, continuous flow, worm compost system. It has many advantages over the existing products in the market. It is very fast, simple and easy to use. It requires very little skill to operate effectively. It produces the highest quality outputs possible. As the system is modular it is very easy to scale to meet the needs of individual customers. We have clients ranging from individual households to large corporates, who are all successfully using hungry bin to process organic waste. Some individual sites are processing up to 4 tons per year of food waste in the space required by a single carpark.

We believe that systems such as "hungry bin" should be considered as a central part of any solution offered to the citizens of Auckland, and that on-site processing should be regarded to offer the best environmental outcome wherever it is possible.



We also believe that with a little encouragement and some financial assistance, large proportions of Auckland residents can be encouraged to process organic waste on-site, dramatically reducing the volume of waste delivered to kerbside. This is even true for apartment dwellers as hungry bin works perfectly in restricted space environments.

Low Impact welcomes the opportunity to present a submission to the council in regard to the current proposal.

We also wish to signal our desire to participate in the design of a solution that will truly reflect the goal of Auckland being the most liveable city in the world.

### **Waste plan**

We support Auckland Councils plan to reduce and or mitigate the environmental effects of disposing of food waste, but feel that the current proposal does not offer the best long term outcomes for either the city and its residents or the environment.

We feel that while they are identified that in the current proposal, the following concepts have not been given sufficient priority:

- Changes in community perception and behaviour are vital to the success of whatever system the council decides to implement.
- Fostering and supporting changes in the way the community perceives the current waste stream, and the expectations of how it should be utilised is as important if not more important than providing an effective and feasible solution.
- Waste should be regarded as a valuable resource that should be utilised as effectively as possible.
- The processing of food waste to produce compost, and the local production of food are natural partners.

The environmental issue of waste and the utilisation of it is not an issue separate from the many other environmental issues facing Auckland city. It is part of a wider group of environmental issues that will need to be resolved in order to create the most liveable city in the world.

We think it is vital that any system implemented needs to be designed not only to incentivise the reduction of waste but to also accommodate the continuously reducing waste stream that will result from waste reduction resource recovery initiatives by council and central government.

We believe that any system implemented needs to be designed from the outset to encourage the highest sense of environmental stewardship and ownership by the community, in partnership with other complementary programs designed to address issues such as increasing the uptake of public transport or reducing water use for example.

We wish to impress that any solution offered needs to be designed to:

- Reduce the transport effort required to process waste as much as possible
- Reduce the possibility of the solution adding to Auckland's future congestion problems
- Reduce the risk increasing costs over time due to the rising cost of transport fuel
- Account for the increasing utility value of the food waste itself, which will prevent it from entering the waste stream.



Larger macro issues such as climate change, peak oil, population growth, food security and resource availability should all be considered within the decision framework to ensure the legacy of decisions made in the current timeframe do not encumber future generations.

### **Outcomes.**

Low Impact, like the established waste industry has outlined in appendix b, believes that the council's proposal represents a rare opportunity to create a unique and special project with a very high benefit to the community and the environment.

We believe the priorities of the proposal as it stands are certainly aligned with the thinking, if not directly representing the strategic interests of the established solid waste industry. We believe the proposed solution has been optimised to cater to the needs of large single commercial contracts utilising existing infrastructure, rather than achieving the best environmental outcome possible. We also believe that in offering a solution designed for the lowest common denominator, an opportunity to focus on the highest value outcomes requiring the least possible spend has been missed.

Low Impact believes long-term environmental outcomes, and the highest level of community engagement should be prioritised in the design of any system and the according contracts that are awarded for the project. We should expect that any company making a tender for the contracts must be able to demonstrate a commitment to the best possible environmental outcomes, rather than the most efficient short term economic solution.

Companies submitting tenders and being awarded contracts should be able to demonstrate:

- A clear commitment to the reduction of the amount of waste entering the waste stream
- Ability to create and reinforce positive behaviour change within the target audience

We propose that the key objectives of organic waste management contract should be:

- Fostering positive behaviour change and increasing community involvement in devising solutions
- Reducing the volume of organic waste at kerbside
- Reducing the transport effort require to move waste to processing facilities
- Transport waste streams in the highest concentration as possible
- To incentivise the waste industry to continuously increase resource recovery rates and continuously improve the value of resources recovered from the waste stream.

### **Low Impact proposal**

Low Impact notes that any contract will not be implemented until such time as the existing waste contracts already in place expire. This time frame allows a perfect opportunity to engage with the wider community, business and stakeholders and embark on an innovative waste reduction project using existing services and products established in the market place.

The objective of this project would be to reduce the organic waste stream as much as possible prior to negotiating contracts that will involve substantial capital outlay and long-term financial commitments. This would also allow the Auckland council to reinforce the expectation in the community that the council's role will be to facilitate and foster positive



change, rather than simply a provider of core services.

Low Impact notes that the methodology and skill base, along with the appropriate technology for such a project is already in existence in the city, and the availability of established programs and products will simply need to be expanded and resourced appropriately to facilitate the program we propose.

### How could this proposal work?

A. Establish the framework in which the proposal will be considered.

1. Establishes a core value implementing environmental best practice wherever possible, and refer to the principles of environmental sustainability practice whenever considering new contracts.
2. Set the goal of assisting the community to devise appropriate products and services rather than simply providing a service.

B. Clearly communicate the goals of the project to the community

1. Reduce food waste volumes both pre and post consumption
2. Reduce the volume of organic waste entering the waste stream
3. Identify that the preferred option for council is on-site processing whenever possible
4. Communicate that if a kerbside bin is introduced the goal over time is to reduce the overall use of that system
5. Communicate that if a kerbside bin system is introduced it will eventually be provided on a user pays basis.

C. Implementation

1. Provide resources to expand the existing programs and resources currently to promote reduction of the waste stream, and facilitate more efficient resource use to a wider audience
2. Subsidise or install best practice waste management systems including worm farms or compost systems in all Council buildings, Libraries, Schools, Marae and Community Centres in the Auckland catchment.
3. Subsidise worm farms or compost systems to all Auckland residents that wish to use them to process food waste.
4. Create a network of local waste reduction advisers based in the community to assist the uptake and facilitation of waste minimisation practices
5. Create a financial structure that allows income created by waste diversion practices to be returned directly to the community in the form of income or rebates. This mechanism would also be particularly useful in assisting with some of the hard waste issues the DWMMP discusses.
6. Encourage and directly facilitate where possible the establishment of food production gardens wherever composting systems are in use to reinforce the closing of the resource loop.

### Outcomes

Low Impact believes that a project implemented along these lines will not only provide a better outcome for the city and environment than the current proposal, but will create many opportunities to create new employment, and the very lucrative opportunity to advise and implement the project in the many other cities around the world facing the same or similar issues as Auckland.



We believe that the technology we have developed is one of the world's most advanced, and will allow the council to overcome many of the fundamental barriers that have prevented large scale implementation of the kind of approach we envisage.

We welcome the opportunity to provide Auckland council with guidance on the design of a organic waste management methodology, and submit that should Low Impact be requested to submit a tender, our pricing and system will have many advantages over the others currently being considered.

### **Conclusion**

The current waste methodology and infrastructure in place in Auckland is out-dated, and drastically needs to be replaced to bring Auckland in line with current world best practice.

The current discussion represents a unique opportunity for the people of Auckland to implement an innovative waste reduction program that will have little parallel elsewhere in the world.

Implementing an original and innovative system, tailored to meet the needs of Auckland's future is exactly what we would expect from a visionary council that truly intends to create the most liveable city in the world.

We appreciate the opportunity to make a submission.

Kind regards,

Benjamin Bell C.E.O



Tuesday, 31 January 2012

