



## 10.0 Recovery

### 10.1 Objectives

To maximise the recovery of resources from the waste stream.

*Example : Composting of green waste and applied as growth nutrient to plants.*

### 10.2 Background

The main areas for recovery of resources are composting and converting landfill gas to energy. Organic waste forms the largest portion of the waste stream produced in the District (last waste stream survey in 1996 indicated 38% to be garden waste). Composting of green waste would reduce the waste stream volumes and the production of leachate.


Green waste is currently being accepted at both Paeroa and Waihi refuse transfer stations (RTS). This waste is shredded at the Waihi RTS and spread over the existing closed landfill area.

In the medium to long term, Council will have to decide if the current practice of accepting green waste is to be continued or contracted out to private operators.

Conversion of landfill gas to energy in the form of gas or electricity is a valuable resource that should be investigated at each landfill or closed refuse tip. The commercially viable minimum volume of gas produced would determine whether any feasibility study should be carried out.

The conversion of landfill gas to energy is not viable for the three recently closed (2000) refuse tips at Ngatea, Paeroa and Waihi as the volume of landfill gas produced is not sufficient. However, the proposed Tirohia landfill should be encouraged to harness this energy resource if commercially viable.

One area of resource recovery not fully explored is the conversion of sewage sludge to a biomass suitable for use as fertiliser. This would be a valuable resource if commercially viable and the most



effective approach would be to keep abreast of the developments in this area via participation in the relevant interest groups or local authority asset management working parties.

### **10.3 Issues**

- Lack of knowledge or information on the benefits of composting and how to carry it out.
- Utilisation of waste as a resource for fertiliser or energy conversion.
- Management of green waste once the Waihi refuse tip at Bulltown Road is properly closed and rehabilitated, and unable to accept green waste for shredding and disposal.
- Keeping up with latest developments in resource recovery.

### **10.4 Methods**

- Develop educational programmes for the home, schools, maraes and commercial composting in the community.
- Encourage the setting up of a working example / composting model within the community to assist understanding of composting.
- Encourage conversion of organic waste to biomass or biogas where commercially viable.
- Investigate the viability of contracting out the collection, composting and re-sale of green waste.
- Discuss the use of composting with the farming community.
- Keep informed of developments in the conversion of sewage sludge to biomass that can be used as fertiliser.

### **10.5 Performance Measures**

- 50% reduction in annual volumes of green waste deposited at refuse transfer stations in three years after implementation of the WMP.
- Community feedback via customer satisfaction survey.

### **10.6 Monitoring**

·Monthly reports of green waste volumes received at refuse transfer stations.