



Whether approaching Crieff from Madderty in the east, or from the west along South Comrie Road, the Tower Hotel, East High Street, dominates the skyline. Over the past year, under the new ownership of Gilbert Edgar, recycling rates have “Rocketed” to similar heights.



Immediately on taking over the hotel last October Gilbert, aided by partner Fiona Clark (Community Waste Advisor with Perth & Kinross Council), they targeted wastes for separate collection and recycling:

- glass bottles, cardboard & paper (uplifted by Perth & Kinross Council)
- cans (Can-Able free uplift)
- organic kitchen waste and garden waste (composted)
- vegetable oil (private collection) and
- plastic milk bottles (Recycling Centre)

Within 3 months the hotel was able to replace the 1,100 litre Eurobin collected twice weekly with a 360 litre bin collected once a week. This reduced annual waste disposal costs by £897.

Some 3.6m³ of such materials, comprising 1,920l glass, 400l cardboard, 140l paper, 480l cans, 300l organic kitchen waste, 40l vegetable oil and 240l plastic milk bottles are now recycled monthly. An approximate weight for all of this is in excess of 600kg per month.

Under previous ownership, vegetable waste was composted along with weeds, grass and bush trimmings in three New Zealand boxes at the base of the garden. The resulting compost, maturing after 12 to 18 months was, historically, dug into the vegetable plot at the beginning of each year. Now, aiming yet higher with their recycling efforts, Fiona and Gilbert have in conjunction with Scottish Organic Services, installed a Rocket® (an enclosed in-vessel composter) to accelerate, and sanitise, this composting process.



Vegetable residuals from food preparation in the kitchen are carefully separated and collected in small (6 litre) kitchen caddies lined with *BioBags* (100% biodegradable liners made from corn starch)

that are removed at the end of each shift and placed in the Rocket® along with an equal volume of garden wastes. A small quantity of enzymatic “Rocket Fuel” from GOC Technologies is then sprayed onto the food residuals to ensure optimal microbial performance.

The Rocket® operates at in excess of 60°C; heat is maintained by careful monitoring of feeds, temperature



variation and moisture content and by automatically controlled frequent turning of the composting mass inside the vessel.

Using less than 4 units electricity/day, the Rocket® turns out composted material in around 14 days.



Waste Minimisation Case Study Tower Hotel November 2006



The *BioBags*, themselves being organic, are also broken down to complementary compost products. The “compost” derived from the Rocket® is screened at 25mm, the oversize being returned for further composting and the finer fraction stored for maturation for a further two months before use.

Since installation at the beginning of July the Rocket® has composted some 700 litres (weighing approximately 400kg) of vegetable kitchen residues; including garden wastes, a total of 5.3m³ weighing 1.4 tonnes has been processed (food wastes therefore constitute 13% by volume and 30% by weight).

Analysis shows that the end-product contains 1.5% Nitrogen, 0.5% Phosphate (P) and 1% Potash (K). The first product of this accelerated composting is, in just two months, ready for autumn application to the Tower Hotel grounds.



Continuing their theme of enhancing the environment of the beer garden, the Tower team intend to use the mature compost in natural fertilisation of the flower and shrub borders and on the fruit, herb and vegetable plot at the east end of the garden.

The benefit to this end of the Crieff East High Street is that the reduced number of bins awaiting uplift by the council now contains very little in the way of rotting matter (potentially odour-generating material) and thus smells have been eliminated.

Case study supplied by Doug Boyle, Scottish Organic Services



Quick Tip: For the hospitality and food sectors, food waste can comprise a large proportion of the waste stream. Composting is a great way of dealing with this waste and giving you a valuable product to use!

Jenny Grant, of The Composting Association: Scotland, which promotes sustainable management of biodegradable resources, has advice for businesses that are interested in composting food waste.

She said, “If you are looking to compost food waste (no meat) then you need to do it in an enclosed vessel. This can help speed up the composting process and give you a more consistent end product.”

“There are various in-vessel systems available depending on your needs. You might need to mix the food waste with some garden waste to give a balanced input. Finished compost is great for adding to your garden or vegetable patch as it returns nutrients and organic matter to the soil.”

Jenny added, “If you really want to hit the bottom line composting should be complimented by a comprehensive recycling programme for dry recyclates!”

For more information please go to www.compost.org.uk and for information on regulations affecting composters go to www.sepa.org.uk

Perth & Kinross Council do not endorse any products mentioned in this case study.