

Housing 21

Green Johanna provided by Great Green Systems

Introduction

Housing 21 is a provider of care, health and housing for older people based in West Sussex. The composter was selected on the basis that it was a local solution for diverting food waste, had a low cost of installation, low maintenance, vermin proof and easy to use. An initial trial was developed by resident social engagement practitioner Anthea Rossouw, the success of which led to the community project "Waste is Mine, it's Yours". A total of 33 Green Johanna units were installed at 8 flat sites across East Sussex, with training & mentoring support provided to residents, and the monitoring of diversion of waste from landfill.

Nature and quantity of waste treated on site

- The initial trial project was carried out in a 26 flat complex using 3 composting units
- All cooked and non-cooked food waste plus any green waste produced by participating residents gardens was composted
- Between 130-250 grams food waste per day was produced by each participating resident
- Waste to landfill was reduced by over 60%, diverting 280 kg of food waste in 12 months
- Across the whole project at the 8 sites, 1 tonne of food waste was diverted over 3 months

Key features

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- Size: 90cm base, lid is 52cm wide and its overall height is 95cm*
- Spatial requirements: one square meter per Green Johanna*
- Weight: 10 kilos*
- Capacity: Treats approximately 300kg per year*
- Energy: No electricity input needed*
- Housing: No housing or covering*
- Maintenance: None on-going*
- Output: Produces compost between 6 and 12 months*

"The project saves significant amounts of food waste from landfill and it is a good resident project to work on together as a community" – Anthea Rossouw

Green Johanna



Lessons Learnt

- The project sought to change behaviour in how residents manage their waste. This is encouraged through green champions at each site, mentoring, newsletters and a contact point if support or assistance in composting is required.
- Waste on site is approached in a mutually inclusive and accountable approach with residents and is enhanced by practical information on best practice recycling methods, provided directly to residents.

How food is separated for treatment

- Residents put their food waste into a kitchen caddy and deposit it in the composter each day

How the on-site treatment system is managed

- Ideal mix is 1 part garden waste and 2 parts kitchen waste to balance carbon and nitrogen levels
- Sometimes necessary to add material such as shredded paper, egg boxes and crushed eggshells to produce a nutrient rich compost and if the food waste is too wet
- The uppermost layer of the compost are mixed to aerate and to ensure even distribution every time new material is added
- Very occasionally it is necessary to aerate the compost deeper down to ensure all the material is acted upon by the micro-organisms and broken down
- For the initial trial at Housing 21, a resident training and skills workshop lasting 2.5 hours was developed and provided by the Project Manager, funded by ESCC, Housing 21 and a gardening company
- The training empowered the residents with the skills and knowledge on how to compost and which waste types to avoid. Monitoring and support was also provided for the following 3 months. No health and safety difficulties have been reported during the trials
- The compost is ready after six months to twelve months
- An optional winter jacket can be purchased for when the ambient temperature falls below 5° C for long periods

Use of outputs from treatment

- The compost produced is used by residents on their gardens, avoiding the purchase of compost

Costs

- The "Waste is Mine, it's Yours" project was developed and delivered by Anthea in partnership with the University of Brighton and the housing associations Housing 21 and Amicus Horizon
- It was financially supported by East Sussex County Council (ESCC) and the European Regional Development Fund Interreg IVA (Channel) Programme. The project is now part of the Defra Reward & Recognition Scheme and a report will be published once all projects in the scheme are complete
- For the Housing 21 project capital and start-up costs were £105 per composting unit (3 units in total), £4 per kitchen caddy per resident plus training, administration and travel of £15 per flat. Overall, the cost per flat was £22
- Waste disposal costs fell from £36.50 to £23.10 per month
- There are no on-going maintenance costs
- Can be left in the same place after installation for at least 10 years and can be replaced if needs be with another one after that in the same location