

Empowering Communities to Compost

Breaking Barriers: How Community
Drop-Offs Make Composting Accessible

with



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EST

Why we need to separate our food scraps...

25% of our waste tonnage
50% of the gas emissions

26m tons per year from residential
Equivalent to 19m cars driven for a year



Only 12% of US Households currently have access to a food waste service

- 8m - curbside
- 5m - drop-off
- 3m - combination
- 114m - none



What are the obstacles to achieving universal provision?

- **Cost** – particularly where landfill fees are low
- **Practicality** – downtown and multifamily neighborhoods
- **Availability** of composting or AD capacity nearby



We need a collection infrastructure that delivers:

- Good quantities of clean feedstock
- Minimal start-up costs but scalable
- An accessible facility for every community



SAVE  MORE
THAN FOOD
MAKE A DIFFERENCE

FOOD WASTE DROP-OFF PROGRAM

Best Practices for Central Ohio Communities



Recommendations:

- Costs for servicing drop off stations much lower than curb side collection
- Drop off stations serve as regular educational and awareness touchpoints
- Drop off stations can also be a gateway towards a curb side collection
- Utilize best practice standards from other communities



Recommendations:

- Name your program intentionally: is it compost yet?
- Select convenient locations, e.g. alongside existing infrastructure
- Registration makes drop off sites more intentional, reduces contamination
- Providing residents with compliant compostable liners can help
- Consider opportunities for Business Sponsorships



FROM COMPOST TO **COMMUNITY POWER**



The mission at Compost Power is to build out sustainable community compost sites across NYC with an emphasis on underserved and marginalized communities, providing all residents with access to waste equity, sustainable education, and job training. Compost Power is laser focused on making compost cool by eliminating the negative stigmas associated with community composting.





Food scrap drop off in an urban environment (New York City Housing Authority)

Challenges:

- **300-500 families per week**
- **High level of contamination**
- **Toters can tip over and require lock and chain**
- **Toters don't increase curb appeal**



Benefits of installing MetroSTOR Bin:

- Keypad enabled/app enabled
- Rodent proof
- Affixed to the ground
- Residents with access feel special
- Increased participation by 20%
- Sexy
- Reduced contamination by 60%
- 65 gallon Toter can hold up to 350lbs of food waste
- Easy to empty and clean

Before



After



Updates:

- **Contamination reduced by 85 percent**
- **New York City Housing Authority is planning to install more smart bins thanks to our demonstration.**
- **The bin is actually Rodent proof**
- **Reduced labor cost**
- **Ease of mind**

Curbside

- Higher diversion rate - convenient
- Little control over contamination
- Very high cost to set up and run
- Challenges for multifamily and downtown



Drop-off

- Low cost to set up and run, easily scaled
- Ability to control contamination
- Works well in communal applications
- Lower diversion rate, but will be very clean



Town of Manchester CT

- Accessible, Educational, Inspiring communities
- Residents register to access, reducing contamination
- Free 24/7 access, very cost-effective
- Diverting over 1 ton per month from 4 units with minimal contamination

<https://metrostor.us/food-waste-drop-off-programs-a-metrostor-discussion/>



How do we change behavior?

Knowledge

- Leaflets, posters
- stickers on caddies and bins

Motivation

- What's in it for me?
- Make it fun

Ease

- Make it easy
- Provide caddies, liners
- Accessible deposit-points



ReLondon

500 Public Authority Apartments

Ease

- Co-located trash/recycling and food scraps outside each building
- Provided caddies, liners

Knowledge

- Disruptive communications – doorstepping, floor vinyls

Motivation

- Eliminate pests and odor

Outcome

- Organics in trash reduced by 45%
- Collected 2-3lbs/household/week

<https://relondon.gov.uk/wp-content/uploads/2022/09/ReLondon-Report-Making-recycling-work-for-people-in-flats-2.0.pdf>





RECYCLE YOUR FOOD

KEEP [AREA] FRESH

WE WANT YOUR SLOPPY SECONDS

KEEP COOL AS A CUCUMBER AND RECYCLE

ZESTY AS A LEMON THANKS FOR RECYCLING

For more information call: 01234 567 891
or visit: councilwebsite.co.uk

[Insert council logo]

London recycles

Fife Council

3 x high-rise blocks of 87 apartments

Ease

- food scraps deposit units outside each building
- Provided caddies, liners

Knowledge

- Disruptive communications – doorstepping, floor vinyls

Motivation

- Eliminate pests and odor

Outcome

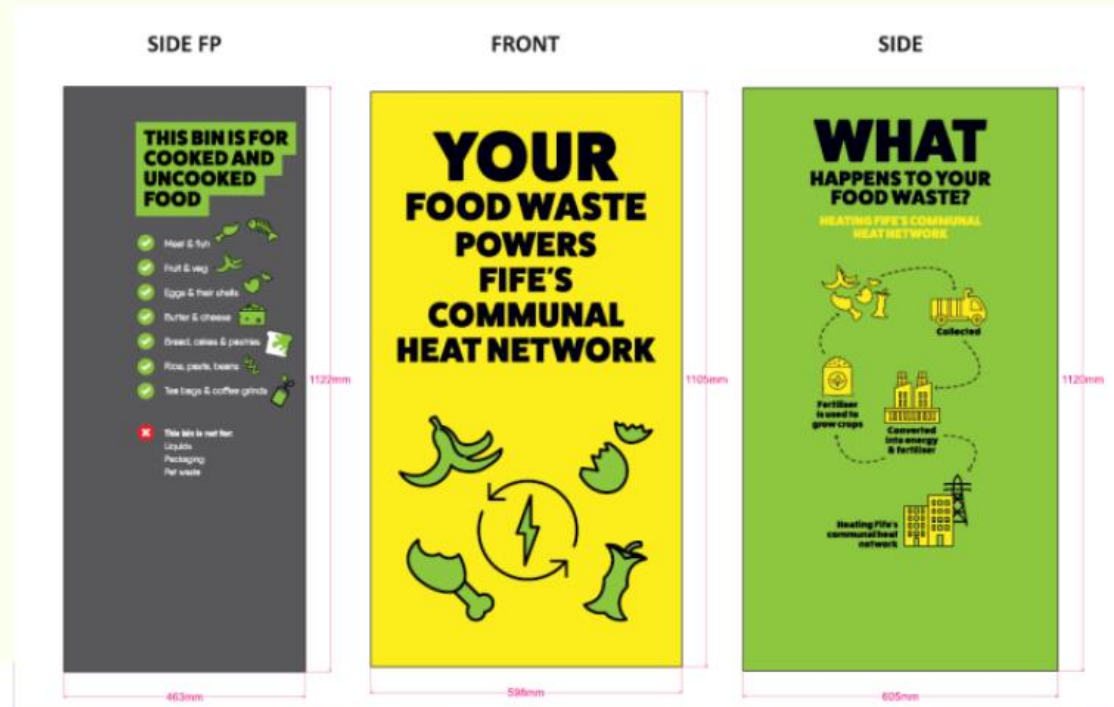
- Collected 100lbs organics per block per week

<https://metrostor.uk/webinar-engaging-high-rise-residents-in-a-food-waste-service/>



Bin vinyls

- Principles:
 - Salience
 - Prescriptive norms
 - Address 'Drop-in Ocean' belief
- Inspired by ReLondon, designed by MetroSTOR



Caddy sticker

Principle:

- Ease - Icons processed faster than words
- ReLondon designs added icons
- Designed by MetroSTOR

THIS BIN IS FOR COOKED AND UNCOOKED FOOD

- ✓ Meat & fish 
- ✓ Fruit & veg 
- ✓ Eggs & their shells 
- ✓ Butter & cheese 
- ✓ Bread, cakes & pastries 
- ✓ Rice, pasta, beans 
- ✓ Tea bags & coffee grinds 

- ✗ **This bin is not for:**
 - Liquids
 - Packaging
 - Pet waste

Feedback posters and articles

- Principles:
 - Feedback
 - Collective efficacy
 - Trusted & relatable messengers
- 1 tonne = 20 bags of coal!
- Inspired by the Waste it's yours its Mine project

BLOCK	02/10
1-86	47kg Total: 301kg
87-172	29kg Total: 279kg
173-258	58kg Total: 352kg

Thanks, Ravenscraig

The Waste Collection team at Fife Council would like to say a huge THANK YOU to all of you who have been using the food waste service since it was installed. This was a pilot project to assess how well this service could work in a high-rise block.

Many thanks to all the survey respondents, your responses were really insightful with 67% of the respondents using the food waste bin.

The 12-week pilot has now ended, and we can confirm that the service will continue at Ravenscraig. Plus the Waste Collection team have plans to roll it out across the rest of Fife.

Sandy Anderson, Service Manager- Waste Operations

"I would like to personally thank all of the Ravenscraig residents for taking part in this trial. A trial of this nature with food waste has never been exceeded what was expected. I now aim to roll food waste units out across Fife to every high-rise block and hope that all the residents embrace recycling have."

Benefits you have noticed

We have heard from local residents and caretakers about the benefits:

- "My general waste bin is cleaner and I need to go to the chute less"
- "With less food waste going down the chute, the chute and corridors will smell less"

Reasons for collecting food waste

- The food waste goes to a processing plant that generates energy and fertilizer.
- The energy goes to heat care and retirement homes, Carnegie leisure centre, a supermarket, local art gallery and 388 houses on the local heating network in Dunfermline.
- The fertilizer is sold to local farmers.

Every little bit has power!

We are pleased to announce that well over 1 tonne was deposited in 12 weeks. Which as a resident said "that is the same as 20 bags of coal".

- One banana skin can charge a mobile phone twice- 32 bananas will power a family home for One hour!
- 100 tonnes of food waste a day can generate enough energy to power 800-1400 homes each year.

WHAT HAPPENS TO YOUR FOOD WASTE?

Food waste is collected and taken to a processing plant where it is broken down into energy and fertilizer. The energy is used to power homes and businesses, and the fertilizer is used to grow crops.

YOUR FOOD WASTE POWERS FIFE'S COMMUNAL HEAT NETWORK

Your opportunity to participate

A green compost bin stands on a paved area. The bin is decorated with white icons of various food items like apples, carrots, and bones. A white sign on the front of the bin reads "SCAN REGISTER COMPOST" and includes instructions: "Scan the QR code to access the bin and begin composting." Below the instructions, it says "FOOD WASTE DROP OFF BATHERS" and features logos for "GW" and "Purdue". In the background, there is a brick building, a flagpole with an American flag, and a metal bench. The scene is outdoors with trees and a clear sky.

Every community can be
empowered to make a difference