

Recycling in Flats 2018 Summary Report

Dacorum Borough Council (DBC) has provided recycling services since 2006. In November 2014, Dacorum launched the "Recycle for Dacorum" program, which introduced separate weekly food waste recycling collections, designated green bins exclusively for garden waste (removing food waste), and supplied households with blue-lidded bins for co-mingled recycling, replacing the previous source-separated system.

The initial rollout excluded approximately 3,000 of the 12,000 flats due to the complex nature of varying locations and bin access areas, leaving these flats without home recycling services.

Since introducing co-mingled recycling in 2014, DBC has received complaints and queries from flat-dwellers, particularly as awareness of environmental issues has increased, prompting residents to express frustration over the limited recycling options available to them.

In 2017, a six-month audit was conducted on the remaining 3,000 flats to determine necessary equipment and address access challenges for each block.

DBC collaborated with Euro Bins to develop a blue-lidded 1100L bin with a gravity lock lid featuring a small aperture. This design prevents residents from disposing of full plastic bags without first emptying them, reducing bulky waste contamination.

Following the audit, flats were provided with tailored recycling options, including sacks, individual bins, or communal containers, based on their needs.

All informational materials, including new stickers for the bins, were created in-house, using WRAP's icons and guidelines to ensure consistency with national messaging. Each property received a letter and recycling leaflet explaining the service.

The rollout occurred in five stages, with areas grouped together and introduced monthly, allowing time to address collection issues and resident inquiries before moving to the next area.

On average, the new recycling rollout has added an additional 8.5 tonnes of recycling collected each week.

Contents

lats Recycling Background	3
in Audits	3
Flats Recycling Spreadsheet	3
Figure Summery	4
Bin Capacity	4
Bin Capacity Table	5
Recycling Frames	5
Individual Flats	5
Recycling Container Design	5
ommunications Materials	6
A5 Recycling Leaflet	6
Introductory Letter	7
Recycling Sticker	7
Refuse Bin Sticker	7
osts	8
oll Out	8
Deliveries	8
oll Out Dates	8
Collections	8
onnage	9
essons Learned	9

Flats Recycling Background

Before 2005, all properties used refuse sacks for waste disposal. In 2005, a pilot program introduced wheeled bins to 1,000 properties in Kings Langley and Bennetts End. Participants received a grey bin for refuse, a green bin for garden, cardboard, and food waste, a basket for glass, and a tub for plastic, cans, and paper. Collections for the wheeled bins occurred bi-weekly, while recycling baskets and tubs were collected weekly.

The success of the pilot led to the first wheeled bin rollout in 2006, starting in Kings Langley. Four collection rounds were introduced annually, with the project finishing in 2008. During this rollout, 1,000 frames were also allocated to eligible blocks of flats. Each frame was designed to hold five bins, including three 140L grey bins for colour-separated glass, one 240L bin for plastic and cans, and one 240L bin for paper, each marked with stickers indicating acceptable materials. Frame placement depended on space availability rather than the number of flats in each block.

In November 2014, Waste Services transitioned to a co-mingled recycling collection system, impacting over 53,000 properties. This switch included removing cardboard from garden waste and introducing a separate weekly food waste collection. The transition was split into two phases: Phase 1 covered individual houses and was completed in November 2014. During this phase, bins were updated with new stickers and replaced with standard 240L blue-lidded bins with aperture lids, some of which have since been upgraded to 360L bins without apertures.

Phase 2, which targeted flats without space for frames and high street properties, covered 3,000 flats - approximately a quarter of Dacorum's total. This phase began with an audit of these flats in 2017 and concluded in March 2019.

Bin Audits

Bin audits for 3,000 flats without recycling facilities were conducted over three months in late 2017, led by the Recycling Adviser. The audit required minimal equipment, including:

- Tablet or Laptop
- Camera
- Tape measure
- Pen/pencil
- Notepad

Flats Recycling Spreadsheet

A comprehensive flats recycling spreadsheet was created, combining information from the bin audit visits, flats data provided by the GIS/Address Management Officer, and a list of flats without recycling facilities identified by waste supervisors. GIS data included essential background information for systems like Civica (reporting system) and Bartec (in-cab system). This ensured that if the recycling round needed to be integrated into Bartec, all relevant data would be readily accessible.

Waste supervisors contributed data on approximately 4,500 properties without recycling facilities, gathered during Phase 2 of the Recycle for Dacorum program. This information was cross-referenced with GIS data to form the foundation of the "Flats Surveying Audit."

Figure Summary

The audit identified a total of 2,996 properties without recycling facilities, spread across 663 blocks of flats.

- Flats in blocks 2033
- Flats above shops 618
- Flats above garages 43
- Flats above pubs 10
- Houses on high streets 163
- Maisonettes 69
- Other 60

Total - 2996

Included in these numbers are high streets and local community shopping areas with flats above shops.

- High Streets 650
- Local shopping areas 157

Bin Capacity

Houses typically receive 240L bins for refuse and recycling, collected fortnightly on alternating weeks. By reviewing bin capacity guidelines from other councils and WRAP recommendations, it was decided to aim for 180L of recycling capacity to be provided for each flat for fortnightly collections.

Due to space constraints in some blocks, a minimum tolerance of 120L was established. Properties receiving the lower capacity were closely monitored by the flats recycling crew to assess adequacy. If the allocation proved insufficient, management agents were contacted to improve bin store capacity. For example, at Tattershall Drive in Woodhall Farm, upgrades to the bin store were requested. Previously, this site was prone to high levels of fly-tipping and resident complaints, both of which have significantly decreased since the improvements.





Before After

Bin Capacity Table

Number of Properties	Number of Containers Refuse	Number of Containers
		Recycling
Houses	1 x 240L	1 x 240L
1-6	1 x 1100L	1 x 1100L
7-12	2 x 1100L	2 x 1100L
13-18	3 x 1100L	3 x 1100L
19-24	4 x 1100L	4 x 1100L

Recycling Frames

Historically, recycling frames were used in our recycling service. During this project, we removed and re-sited several frames. However, in some locations, recycling frames remain the best option. Use of recycling frames has been limited to blocks with 10 or fewer properties. We found that having a large number of recycling frames in one area led to increased fly-tipping and reduced engagement with the recycling service.





Frame removals required at least three crew members and involved using a shovel to lift the frame's base and remove the slabs, which were then transported with a sack barrow to the vehicle. As part of the manual handling requirements, any vehicle used for frame removals needed to have a functioning tail lift. All crew members involved in frame handling were retrained in manual handling and frame removal procedures before the first deliveries commenced.

Individual Flats

Individual flats, flats above shops and high streets were all individually assessed and offered either:

- 60L clear recycling sacks
- 240L recycling bin
- 1100L Euro bin to share between properties if space was available

Initially, properties provided with recycling sacks received one roll of 26 clear sacks. Residents can place as many recycling sacks as needed at collection points and can request additional sacks at any time, unlike refuse sacks, which are capped.

Recycling Container Design

To minimise contamination, we purchased containers that had a reverse lid with an aperture and push lock.

The aperture, measuring 19cm in height by 74cm in width on the 1100L and 1280L bins, prevents larger items and full carrier bags from entering, this has reduced contamination. An aperture was used on all containers (770L, 1100L, and 1280L).



The reverse lid was chosen to protect the graphics on the bin's front during collection. This feature was not available for 770L recycling bins so these received a standard lid. Each bin also includes a push lock, which restricts access to the main bin compartment, further reducing contamination. This lock automatically engages upon closure and requires a hex key, chosen to prevent unauthorised access, as residents typically do not have this key.

The containers were fitted with blue lids for consistency, and in-house designed stickers were applied. The "Recycle for Dacorum" branding was updated to "Dacorum Recycles," aligning with WRAP's national messaging, alongside the URL www.dacorum.gov.uk/recycling.

Communications Materials

The communication materials were designed to engage residents with the new recycling service and provide clear guidelines on acceptable items for recycling. According to WRAP guidance, contamination rates are typically higher in flats than in households, so the materials aimed to simplify recycling instructions and highlight the environmental benefits of participation. All materials were produced in-house to minimise project costs.

A5 Recycling Leaflet

A double-sided A5 leaflet was created to provide a quick reference guide. Using WRAP icons, the flyer clearly illustrated items that could and couldn't go in the recycling bin, aligning the visuals with those on the recycling bins and frame stickers for consistency. The front offered a quick recycling guide, while the back provided information on bulky waste disposal and contact numbers, addressing fly-tipping issues in communal bin areas.

The flyer was printed on 300gm card made from recycled materials.



Introductory Letter

Residents received two letters: the first, sent about a month before the recycling program was introduced, informed them about the new service and the upcoming changes. The second, acting as a reminder letter and leaflet, was delivered the week that the bins were installed. All letters were sent out second class.

Four versions of the letter were prepared for different recycling setups:

- Euro Bins (770L, 1100L, 1280L)
- Frames (240L, 360L)
- Individual bins (140L, 240L)
- Sacks

Properties with individual bins and sacks had an additional letter which was hand delivered. This letter included information on collection days and collection frequency.

Recycling Sticker

The recycling bin sticker was designed using WRAP library icons to maintain a consistent message within the borough and on a national level. Icons with text were chosen to keep instructions straightforward and visually engaging. The completed design was sent to Storm, who applied it to the bins before delivery. The stickers, measuring H: 240mm x W: 780mm, have proven durable, with minimal wear over a year due to the protective reverse lid.



Refuse Bin Sticker

The refuse bin sticker, designed in-house with WRAP icons, complements the recycling sticker in style. Also installed by Storm, this sticker provides clear refuse guidelines and maintains design consistency across bins. The refuse sticker dimensions are H: 240mm x W: 780mm.



Costs

Euro bins - £98,483.70

Wheeled bins - £11,164

Sacks - £2,386.80

Literature - £1,415.50

Staffing - £110,000

Total - £223,450

Roll Out

The roll-out of the recycling program was divided into five sections, which we called 'blocks'. Each block consisted of approximately 350 properties. We waited a month before starting deliveries for the next block. This allowed sufficient time to address any issues that arose, give the collection crew time to familiarise themselves with the route, and respond to resident inquiries. The roll-out began in October 2018 and was completed by February 2019.

Deliveries

The delivery vehicles for this project were sourced from the council's existing fleet, eliminating the need to hire any additional vehicles. Two vehicles were used: a 7.5-tonne cage vehicle, and a 3.5-tonne box van. The larger 7.5 tonne vehicle was responsible for transporting containers and frames, while the smaller 3.5 tonne vehicle transported wheeled bins, sacks, and letters. Each vehicle had a two-person crew.

Roll Out Dates

Block one

• October 2018

Block two

November 2018

Block three

December 2018

Block four

• February 2019

Block five

March 2019

Collections

Flats recycling is collected on a fortnightly basis by a two-person crew, consisting of a driver and a loader. Initially, flats recycling was collected using a 26-tonne vehicle, but due to access issues in parts of Tring and Berkhamsted, this was later reduced to an 18-tonne vehicle for better manoeuvrability.

When the flats recycling round first began, one of the delivery crew members accompanied the collection team to show them the locations of all the bins to ensure that none were missed. However, as the delivery process progressed, the flats loader was integrated into the collection crew, eliminating the need for additional support during the first week of collections. This adjustment

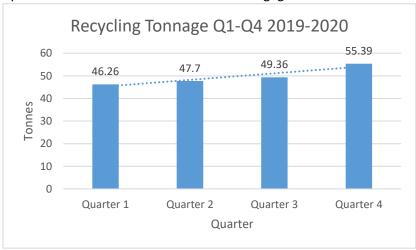
became a valuable lesson, which was later applied to the food waste recycling roll-out and should be considered for any future roll-outs.

The collection crew was initially given two round sheets: one basic round sheet listing the flats due for recycling collection and any relevant codes, and a more detailed round sheet that includes the specific locations of the bins. We have since updated this so that all information is stored in our incab system Bartec.

Tonnage

Tonnage data has been tracked since the final delivery of bins in March 2019. In the first year post delivery, 257 tonnes of recycling was collected from the 3,000 flats included in the project.

The following chart presents the annual tonnage data for flats recycling, demonstrating a clear upward trend as residents became more engaged with the service.



Lessons Learned

At the start of the roll-out, an inconsistency in the collection and delivery crews led to delays, as objectives and paperwork had to be explained to different teams on a daily basis. After the first block was completed, we implemented a more consistent crew, with only occasional changes due to planned annual leave or sickness.

We quickly learned that the most efficient way to carry out the roll-out was for the two teams to work independently, unless frames needed to be removed or installed together. We found it more effective to load the vehicles in the morning to avoid time pressure later in the day. This approach eliminated the need to return to the depot to reload before the dustcarts returned in the evening, allowing the teams to maintain a steady pace.

A challenge during the flats recycling roll-out was that the 7.5 tonne vehicle could only carry a maximum of eight 1100L bins, which slowed down the process in areas outside of Hemel Hempstead due to the longer travel times involved. To mitigate this, we arranged for a number of containers to be delivered to a satellite site in Tring. Having containers at Tring was essential for the timely completion of this first block, which took 7 days. Each following block was completed in 5 days, thanks to the improved logistics.

1. Please can you describe the level of recycling that you were achieving at Dacorum in your flat blocks prior to a dedicated project to improve recycling in flat blocks, what they were following the project, and whether the improved levels have continued?

Dacorum Borough Council (DBC) has provided recycling services since 2006. In November 2014, Dacorum launched the Recycle for Dacorum programme, which introduced separate weekly food waste collections, designated green bins exclusively for garden waste (removing food waste), and supplied households with blue-lidded bins for co-mingled recycling, replacing the previous source-separated system.

The initial rollout excluded approximately 3,000 of the 12,000 flats due to the complexity of varying locations and bin access arrangements, meaning these flats did not initially receive recycling services.

We monitored recycling tonnage from these 3,000 flats for a year after the rollout. During this period, 198.71 tonnes of recycling were collected, with data showing an upward trend as residents became more engaged with the service.

Recycling rates:

2018/19 - 52.3%

2019/20 - 52.8%

2020/21 - 54.5%

We observed a sustained increase in the borough's overall recycling rate since recycling services were extended to these flats. It is also worth noting that food waste recycling was introduced to all flats in 2020. We did have a dip after the pandemic but recycling rates are increasing again now.

2. How many flat blocks, both Council stock and private, does your service cover? Is there a difference between private and Council stock recycling rates?

Total properties: 15,000

Blocks of flats: 1,842

We do not currently have a method of measuring recycling rates separately for Council and private stock, as both are serviced by the same collection vehicles.

3. What were the barriers to improving recycling in flat blocks, and how did you overcome them?

The main barriers to improving recycling in flat blocks were limited space for additional bins, inconsistent access to bin stores, and low resident engagement in communal settings.

Many bin stores were not originally designed to accommodate both refuse and recycling containers, and in some cases, accessibility was restricted by locked areas or poor layout. Where space was constrained, we used bins in frames, as this allowed us to use grassed areas outside of bin stores.

Another barrier was residents' awareness and participation, particularly in blocks with high turnover or a mix of private and social housing. To address this, we implemented a comprehensive communication plan, including targeted letters, clear signage on bins, and on-site engagement through Neighbourhood Action Days. These activities helped build understanding and encourage consistent recycling behaviour. We have also worked with our Housing team to include recycling leaflets in the welcome packs provided to new tenants moving into DBC properties.

Finally, contamination and misuse were concerns in some communal areas. We addressed this through the installation of bins with restricted apertures and gravity locks to prevent non-recyclable waste from being deposited. Most bin stores are locked, which helps to reduce fly-tipping and contamination from outside sources, but does not address fly-tipping associated with the high turnover of residents moving in and out of flats. We have introduced charges for both DBC and private managing agents; this approach is somewhat of a double-edged sword. While it helps to fund the clearance of fly-tipping, it can also cause resentment among residents, which in some cases may lead to further incidents of fly-tipping when they move out.

Overall, a combination of tailored infrastructure, consistent communication, and collaboration with housing partners helped to overcome these barriers and improve recycling performance across flat blocks.

4. Do you have issues with commercial businesses misusing communal bring bank sites in your area? If so, what have you done to try and remedy this?

Yes.

Our Commercial Waste Officer has visited local businesses to encourage them to take up commercial recycling contracts, which has been made easier through the introduction of simplified recycling. Enforcement officers have also carried out visits to nearby businesses to check Duty of Care compliance.

We are currently reviewing all bring sites located near neighbourhood shops, as they have increasingly become fly-tipping hotspots and appear to be used more by businesses than residents. Since all residents have access to kerbside recycling, and we collect excess recycling placed in a sturdy container next to the bin, we believe these bring sites are no longer necessary. We are monitoring their usage and misuse

and have issued a resident survey to determine whether people wish for them to remain.

5. Do you have any capacity to stop third parties from fly-tipping rubbish or recycling into communal bin areas in flat blocks (e.g. key codes for residents)?

We issue fines to anyone caught fly-tipping in bin stores. Management agents are also fined if they fail to manage their areas appropriately (have taken management agents to court over this in the past)

6. Were there particular types of flats (e.g. high-rise, private housing) that you found more difficult to work with? Why?

Yes. High-rise blocks and some privately managed developments presented the greatest challenges.

In high-rise blocks, the main issues were limited storage space, restricted access, and a lack of suitable locations for large communal containers. Older buildings often have bin stores that were not designed to accommodate multiple waste streams, which made introducing recycling facilities more complex.

Privately managed developments also proved more challenging due to how often management agents change, keep on top of who managed each block was a challenge. Some management agents are incredibly hard to contact, which is frustrating when there is an issue.

In both cases, direct engagement, site visits, and collaboration with management teams were key to improving participation and ensuring the recycling service operated effectively.

7. Did you have many issues with contamination? If so, what did you do about this?

We have been relatively fortunate and have not experienced significant contamination issues. Each recycling bin includes an aperture and a gravity lock, which restricts access to the main bin compartment to prevent large items being deposited. The lock automatically engages upon closure and requires a hex key to open, which prevents unauthorised access, as residents do not typically have this key.

8. How did you engage the community before and during rollout? What approaches do you think worked best? Were there any physical or logistical changes needed (e.g. accessibility, bin storage)?

Residents received two letters: the first, sent approximately one month before the recycling service was introduced, provided information about the upcoming changes. The second was a reminder letter and leaflet delivered in the week that bins were installed. All letters were sent second class.

Four versions of the letter were produced to reflect different recycling set-ups:

Euro bins (770L, 1100L, 1280L)

Frames (240L, 360L)

Individual bins (140L, 240L)

Sacks

Properties with individual bins and sacks also received an additional hand-delivered letter containing information on collection days and frequency.

A double-sided A5 leaflet served as a quick reference guide. Using WRAP icons, it clearly illustrated what could and could not be recycled, with visuals consistent across bins, frame stickers, and communication materials. The reverse included information on bulky waste disposal and contact details to address fly-tipping concerns in communal bin areas.

The recycling bin stickers were also designed using WRAP library icons to maintain consistent messaging both locally and nationally. Text was included alongside icons to ensure clarity.

To encourage participation, refuse bins were positioned before the recycling bins, allowing residents who did not wish to recycle to continue using the refuse bin without obstructing others.

In areas experiencing high levels of fly-tipping or contamination, we held Neighbourhood Action Days, where our Environmental Projects Team, Enforcement, Housing Cleaning, and Clean, Safe and Green (CSG) teams worked together. The teams engaged with residents about recycling and fly-tipping while cleaning and maintaining the bin stores.

9. Did you have to adapt collections?

Collection arrangements were not changed, but bin design was adapted for elderly developments. Residents reported that the anti-contamination flaps on recycling bins were easier to use than lifting the full lid on refuse bins. As a result, we purchased Euro bins with slots to improve accessibility.

10. If you had to start again, what is the biggest lesson you have learned, or what would you change?

We are pleased with how the rollout progressed.

However, with additional budget, we would have addressed flats that had recycling but not enough, installed large signage above the bins to clearly indicate their purpose, which may have further improved engagement.

I would have also liked more time and budget to address the issues of sites with bin stores that aren't fit for purpose, we now have free standing bins outside bins stores which can attract fly-tipping or use from people who aren't residents.