

# CASE STUDY: GLASGOW CITY COUNCIL

Installation of RotG facilities is supported by Glasgow Council's waste strategy and the facilities are helping the council to increase recycling rates across the city. This case study describes the RotG within Glasgow including an overview of the scheme, the rationale, planning stages and container details.

## Location

**Glasgow City Council** (GCC) is the largest council in Scotland with almost 600,000 residents<sup>1</sup>. Glasgow city attracted over two million visitors in 2010 with 24% of visitors from overseas<sup>2</sup>. Recycling on the Go (RotG) in Glasgow is currently focused on the city centre, which has an annual footfall of around seventeen million. With new funding, the council is expanding the facilities within the city centre, as well as extending facilities into the city's major parks, which between them attract nine million visitors per annum.

## Rationale

GCC produced a waste strategy in 2009, which included an intention to provide more recycling away from home containers within the city. In addition, the Council is leading the Clean Glasgow campaign with a goal to make Glasgow and every neighbourhood within it a cleaner, safer place. This is built on a partnership with communities and a shared responsibility for the environment, whether at home, school or work. Providing additional containers for recycling within the city centre and parks will help to compliment the aims of Clean Glasgow.

1 National Records of Scotland (Feb 2012) Glasgow City Council Area – Demographic Factsheet

2 Visit Scotland (2011) Scotland Visitor Survey 2011



## Scheme overview

GCC launched RotG in April 2008 in the city centre. The main aim is to tackle 'away from home' waste and to increase recycling rates through facilitating recycling within the city centre. Initially, fourteen Rescape containers were installed at sites throughout the city centre. In 2010, twenty split-bin containers were added, sited within George Square and the surrounding streets.

In 2012, with funding from Zero Waste Scotland, Glasgow will expand the RotG facilities in the city centre and will add facilities within parks. An additional one hundred RotG containers will be installed in the city centre. Eighty RotG containers will also be installed in six of Glasgow's parks: Glasgow Botanic Gardens, Glasgow Green, Bellahouston Park, Kelvingrove Park, Queens Park and Pollok Park. By increasing the number of recycling containers in some of the busiest footfall areas within the city the council is aiming to increase the public awareness of RotG and provide additional opportunities to recycle.

## Planning

The materials that are collected for recycling match those collected in the council's kerbside service. As a result, a high number of potential users will already be familiar with the materials that can be accepted.

An audit of the city centre and parks was completed to identify locations for the new containers. The aim is to maintain the density of litter and RotG containers while greatly increasing the capacity for recycling versus litter collection.

The new containers were selected by the Waste and Recycling team in consultation with the Neighbourhood Services section. The containers have been selected to be durable in public areas experiencing high levels of footfall. Contamination has been high in the installed split-bin containers, therefore, a different style of recycling container has been chosen for the new sites.

Collection arrangements and aesthetics were the main considerations in determining the look and capacity of the new containers. Due to their large size, the Rescape containers could not be located in highly visible locations at the request of the Planning department. With this in mind, the style of the new containers has been chosen to be no larger than the existing litter bins, to enable them to be placed in high visibility locations. A mini-refuse vehicle will be used for collection because the new containers will be located in pedestrianised zones and other areas with limited accessibility. The containers are small enough to avoid any manual handling issues when the metal liners are emptied manually by operatives into the collection vehicle.

### Glasgow City Council existing external containers

The RotG external containers currently used in Glasgow are shown in Figure 1 and Figure 2; Table 1 gives technical details.



**Figure 1** City centre Rescape - existing on-street RotG containers.



**Figure 2** City centre split-bin – existing on-street RotG containers.

**Table 1** Details of existing Glasgow external on-street RotG containers

	City centre (Rescape)	City centre (split-bins)
Number of containers	14	20
Type of container	Metal housing with wheeled bin	Double Derby Slimline
Container capacity (litres)	1280	2 x 80
Make of container	Taylor's	Broxap
Cost per container	Supplied by sponsorship partners	£500
Waste streams segregated	Paper, cans, plastic bottles	Paper, cans, plastic bottles, litter
Special features	Brushes on apertures	Metal liner, split bin

## Glasgow City Council planned external containers

Details of the planned additional external containers are given in Figure 3 and Table 2.



**Figure 3** Glasgow City Council planned additional external on-street RotG containers.

**Table 2** Details of additional Glasgow City Council external on-street RotG containers

Number of containers	180
Type of container	Galvanised steel, Wybone peat
Container capacity (litres)	120
Make of container	Wybone
Cost per container	£250
Waste streams segregated	Paper, cans, plastic, card
Special features	Metal liner, aperture to accept co-mingled material, anti-graffiti paint

## Signage

All the current containers and planned containers are blue in colour. This is similar to the colour of the containers used for the kerbside collection of co-mingled dry recycle from domestic premises. This will enable the households to identify the recycling containers with existing recycling collections and to distinguish between the RotG containers and the traditional black litter bins. Signage is also used on all containers to highlight which materials are accepted. All signage on the new containers will follow 'Recycle for Scotland' guidelines and will also incorporate the 'Recycle for Glasgow' logo.

## Capital expenditure

The capital expenditure, in addition to the container costs, consists of communication materials and container installation costs. The main communication costs associated with the introduction of the new containers will be for street furniture advertising e.g. bus shelters, banners for park railings and decals for the event containers. The containers will be fixed on a concrete plinth, which makes them secure and less likely to be knocked over - however, installation in this way does involve some cost.

## Collection and storage arrangements

The existing split-bin RotG containers are emptied once a day to minimise the chance of material overflowing from the containers. The existing Rescape containers have a much greater capacity and are only emptied once a week. The new RotG containers will be emptied once a day. Monitoring sheets will be completed, modelled on those that have been used for the Rescape containers. The monitoring data will be reviewed and collection frequency changed if required. In particular, the number of visitors to the parks increases during the spring and summer months and collection frequency will be regularly reviewed. The material from the containers will be transferred to a mini-refuse collection vehicle using a crew of a driver and two operatives. The council has recently installed a vehicle tracking system onto the fleet of refuse collection vehicles and this may be used on the collection vehicle emptying the RotG containers to optimise the collection route.

Glasgow City Council has its own MRF. The commingled dry recyclate collected from the RotG containers is taken to this facility for separation, with other recyclate collected via the household collection schemes and public collection point service. Material collected from the new RotG containers in the parks may first be transferred to a central point in the park/local cleansing depot for onward transportation to the MRF. Residuals from the council MRF are taken to a private sector MRF for processing to minimise the waste sent to landfill and maximise the recyclate recovered.

The Glasgow council litter bins and RotG containers are cleaned using a power wash.

## Monitoring and communication

Weekly monitoring sheets are completed for the Rescape containers by the collection crew to identify fill levels. All the new containers will be monitored in a similar way but information will also be recorded on the number of containers emptied and the presence of contamination.

Glasgow participates in the Local Environmental Audit and Management Systems (LEAMS) performance indicator for street cleanliness. The introduction of the RotG containers within the city centre will contribute to the monitoring regime for this indicator. Similarly, Glasgow Community Safety Services (GCSS) uses an intelligent

mapping system called Glasgow Local Environmental Audit and Monitoring System (GLEAMS) which, through neighbourhood improvement volunteers, collates data on environmental quality for an area, including litter. The introduction of the RotG containers will assist GCSS in recording information within the areas they are located.

In order to promote the new containers being installed, the council intends to undertake the following communication campaign:

- Education and awareness staff: the Community Action Team (CAT) will promote the new services during visits to schools, community council meetings and events. Zero Waste Volunteers will also promote the service at events.
- Internet and social media: the council website RotG page will be updated with relevant information. Twitter will be utilised to post messages and link to the website.
- Press coverage: a press release linking with the Clean Glasgow campaign and an article in the council magazine.
- Advertisements: adverts will be placed in the adshel advertising system within city centre, a press release, railings in parks and any 'style mile' promotions.
- Campaigns: the council will promote the containers during Recycle Week 2012 and via any Clean Glasgow campaigns.

The monitoring and communication activity will be used to assess behavior change. At events/visits attended by the CAT, members of the public will be asked if they are aware of the RotG containers and if this has motivated them to use the facilities.

## Performance and contamination

An average of 290kg of recyclate is collected from each of the existing Glasgow Recycles containers per month<sup>1</sup>. There is currently no performance data for the split-bin containers. The weight is estimated based on the fill level recorded in the monitoring sheets and using a weight/volume conversion factor.

<sup>1</sup> Average taken over 12 months in 2011.

Contamination is an issue in the split-bins and as a result recycling is not being maximised. It is thought that the distinction between recycling and residual litter bin is not understood by all users.

The recyclate collected from the new containers will be closely monitored as outlined above. The tonnage will be recorded on spreadsheets and reported as part of the council's quarterly submission to SEPA by means of the Waste Data Flow system.

The co-mingled recyclate collected is sent to the same end markets as the material collected within the current household collection systems.

## Lessons learned

The implementation of RotG in Glasgow has been assisted by senior management commitment as well as a stated commitment in the Waste Strategy. The planning of new RotG facilities should be a collaborative process involving the council departments responsible for waste, recycling, street cleaning and planning. This joined-up approach will help to identify the most suitable locations for the containers and ensure that the containers selected are fit for purpose.

The council is moving to stand-alone dedicated RotG containers to minimise the amount of contamination. These will be positioned between and within site of the litter bins (co-located). It is anticipated that this arrangement will reduce the potential for contamination. The introduction of monitoring sheets for all the containers, together with a dedicated crew, will greatly improve the information available on container use and reduce contamination. The information will be used to take targeted steps to address any issues identified.

Appropriate risk assessment and training ensures operatives have the required skills to manage the collection of recyclables from the containers. Prior to collecting from any containers, all operatives receive training to ensure they are familiar with all the style of containers and the methods used to empty them. Operatives are also made aware that they should report any vandalism/malfunction, or any other potential hazards associated with the container to their supervisor.

## Acknowledgements

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**For further information about  
Recycle on the Go please visit:  
[www.wrapcymru.org.uk/RotG](http://www.wrapcymru.org.uk/RotG)**

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