

CASE STUDY: CITY OF LONDON

City of London has partnered with ReNew to introduce innovative Recycling on the Go (RotG) units which have an electronic LCD display screen on each side.



Key facts

- City of London (CofL) introduced 25 ReNew RotG units in early 2012, to be expanded up to 100 units in time for the Olympic Games.
- ReNew is responsible for the maintenance and cleaning of the units, while CofL carries out the collections.

Location

The City of London (CofL) provides local government and policing services for the financial and commercial heart of Britain, what is known as the 'Square Mile'. With a population of 9,185, an area of 315 hectares and 6,120 households, it is the smallest of the local authorities in the country. Around 320,000 people commute into this area everyday with around 90% using public transport.

Rationale

ReNew approached CofL with the request to install their newly-designed RotG pod units, including LCD screens on the sides. The units were funded by ReNew, with no cost to CofL.

CofL was previously reluctant to place bins on streets due to the terrorism threat. As the units are built, manufactured, installed and maintained by ReNew and are designed to be bomb-proof, CofL decided to sign up to a 21 year contract to deal with the issue of free newspapers and worker and commuter-related litter. The units are in line with the City's image.

ReNew manages both the maintenance and cleaning of the units through a dedicated resource, making sure they work properly. CofL is responsible for emptying the units.

Scheme overview

There are currently 25 ReNew sites across the CofL area with one container per site. There are two different types of unit: paper-only and mixed dry recyclables (paper, drinks cans and plastic bottles). Initially, paper was the only material to be collected. Following trials, CofL has opted for a mixture of sites throughout the City. Paper-only units are located outside of mainline and tube stations and mixed recyclables on thoroughfares and locations nearer to fast-food retailers and convenience stores.

The units are installed to be lockable to stop it being used by blocking the aperture. There is a red cover inside the unit below the aperture that can be moved to close the aperture. This will be used to close the unit if it is being contaminated, or if there is a special event in the area. For example, the units were locked during the Queen's Diamond Jubilee celebration weekend due to the possible threat of vandalism.

Planning

ReNew carried out modelling to identify the relevant sites for the pod units, all of which were in areas of high footfall areas. Initially, 250 sites were proposed and submitted to the Planning Department who reduced the number to 100. Some initial sites were removed from the list immediately as they were not suitable as the units would block access and causing obstructions on the public highway.

With the sites that the planning department did endorse, ReNew developed site-specific packages to satisfy planning requirements. The detailed report for sites included all the required planning information: size of the unit and space required, distances from post boxes, telephone boxes, etc. Planning approval requires that the street scene is not cluttered and CoL has a strategic street-scene plan that must be adhered to in any planning applications. Due to this planning and approvals requirement, it was a lengthy process to obtain approval for the 100 sites.

Each of the units requires a power source and internet connection. Therefore, for these services to be provided, the path underneath each site needed to be excavated.

Containers

Figure 1: CoL ReNew RotG unit with circular apertures



Table 1 Details of containers

Number of containers	25
Type of container	ReNew pods
Container capacity (litres)	120 litres
Make of container	ReNew
Cost per container	£30k
Waste streams segregated	Paper, drinks cans, plastic bottles Commingled
Special features	LCD display screen panel for advertisements / local information

Signage

WRAP iconography for mixed recycling and paper is used for the signage on the ReNew pod units with the Recycle Now swoosh and the material icons for paper, drinks cans, and plastic bottles. WRAP standard colours are also used for the apertures and signage to tie in with the national branding.

Capital expenditure

The capital expenditure is the container costs and installation costs, which ReNew covers. ReNew is also responsible for the upkeep, cleaning and maintenance of the units. This is undertaken as needed but can be up to a daily clean, and checks to ensure that the units are working properly. In addition, ReNew will carry out any on-site works if required.

Collection and storage arrangements

CofL is responsible for the collection of materials from the units as part of the current contract with Enterprise (the waste contractor). The units are emptied as a minimum on a daily basis on the night shift, with the more frequently used sites emptied an additional 2-3 times throughout the day. The units house a 120 litre wheeled bin that is emptied straight into the back of a dustcart.

All the material collected is taken to the Walbrook Wharf depot where it is bulked into shipping containers and sent onto Ideal Waste MRF in Swanley for reprocessing. The RotG material is mixed in with both household and commercial recycling when it is bulked.

Communication

When the ReNew pods were launched they attracted lots of media attention with press releases in the national press. ReNew took the lead on this, ensuring there was good coverage, especially in the London newspaper The Evening Standard. This was the main media outlet and the units did receive a lot of positive press coverage when launched.

With the advertising on the screens on the units there is the opportunity to insert local information and promote recycling. CofL has input into what goes on the screens. Therefore, if a particular campaign is running it can be added to the screens (the Recycle for London 'Nice Save' campaign, for example) or a more generic message about using the current services available.

Performance, contamination and monitoring

As there is not a dedicated crew collecting the RotG material, no tonnage figures are available. This will change when the scheme expands when there will be a dedicated crew, and tonnages will be recorded and monitored separately. The Enterprise collection crews monitor contamination.

Following analysis of the waste streams, it was decided that units with paper apertures will be placed outside mainline stations to capture morning and evening free papers. The units with apertures for commingled material will be used at other locations where workers may be passing at lunch and may have mixed recycling to dispose. This approach will continue to be monitored and developed as there is the option for apertures to be changed should the location require it.

Lessons learned

Each location has to be considered individually to determine emptying frequencies for the units and getting this right. Crew monitoring of fullness at each site can be used to determine emptying frequencies. It is advisable that fullness limits are monitored on a regular basis to determine appropriate emptying frequency for each location, as these may need to change.

The design of the recycling unit has to be fit for purpose and there were some problems with the apertures and the design of the internal unit initially. Due to the poor design, paper was getting stuck halfway down inside the unit, making them seem full and overflowing when the unit inside was practically empty. The inside of the units was designed with a metal frame with a bag looped over it that gave the appearance of fullness when the bin was actually only half-full, as the material was catching on the frame. This initial design was specified by the CofL but it soon became apparent that a different solution needed to be found. CofL and ReNew worked closely to overcome this problem, and eventually replaced the frames with a modified open wheeled bin.

Acknowledgements

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**For further information about
Recycle on the Go please visit:
www.wrapcymru.org.uk/rotgwales**

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