



Is URS the future for refuse collection?

Andy Mudd, Head of APSE Solutions



What's wrong with how we do it now?

- Collection from every property
- Millions of bin lifts
- Lifting multiple different bins, boxes or bags for each property
- Using vehicles that do about 3 or 4 miles to the gallon and most unlikely to be electrified anytime soon
- Damaging the health of those who carry out the work



URS: a better alternative?

- Available now – mature provider market
- Reducing bin lifts 20 fold
- Reducing cost to the taxpayer and to the environment
- Resolving, over night, issues associated with individual household collection
- Reducing the need for cleansing
- Eliminating manual handling



Huge cost savings

According to Performance Networks data, the current average cost per household of refuse collection is about £70 a year

The cost per household of URS could be around £30 a year

Over just 10,000 properties that would **save nearly half a million ££ a year**



Helping with climate change



- Refuse collection vehicles are big carbon users
 - According to Performance Networks, **the average amount of fuel used by refuse collection vehicles per 1000 population is 2000 litres per annum**. This equates to approximately 4,960 litres per annum per 1000 properties or 12,500 litres for the average vehicle coverage of 2,500 properties.
 - Installing URS has the potential to reduce this by at least half, if not more, indicating a **minimum saving of 31.9 tonnes** of CO₂e emissions from a development of that size.



Boosting Recycling

URS encourages recycling and, using **clever technology**, can even be linked to reward schemes

URS allows for **any configuration of dry recycling schemes** with **source segregation**

Sealed, underground containers preserve the **quality and value of recyclable material**

URS can be adapted for reverse vending to create local deposit return scheme sites



Reducing street litter and fighting back against pests

A large proportion of litter on the street escapes from street bins and refuse/recycling containers

What we see as refuse containers are restaurants to rats, seagulls and other unwanted guests

URS eliminates open and overflowing bins, **cutting the cost of street cleaning**, improving the environment and cutting off the food supply to pests.



A safer way to collect recycling and rubbish

Refuse collection is hard work which can leave refuse collectors with bad backs and other muscular skeletal conditions

URS cuts out most of the manual handling making the job **a lot safer**



Improving the street scape



Now



The future

What does it look like?



- Fully underground
 - Crane emptied, bottom opening containers
 - Hydraulic lift wheeled bins
- Semi underground
 - Often with a container above ground and a big bag below
- Above ground 'underground'
 - Complementary units where not feasible to install underground



Uses: New Developments



- Designed in to the development
- Savings for developers and collectors
- Does away with unsightly bins stores and wheely bins
- Greater convenience
- Huge reduction in carbon footprint



A whole new district of Cambridge is under construction. Underground bins are an integral aspect of its sustainable, modern design. In the end 450 URS will avoid 9000 wheely bins and associated loss of space and utility.

The case for new developments



- Simplest of all
 - Lower cost
 - More convenient
 - Cleaner air
 - Safer streets
 - Highly popular
 - Future proofed

Uses: Retro-fitting



All too typical on collection day?



As part of a regeneration effort



Tidying up the streetscape



The case for retro-fitting

- Ends the problem of where to store multiple bins
- Cleans up back alleys
- Reduces demand for cleansing
- Eliminates bin stores
- Cuts collection costs
- Reduces vehicular movements
- Cuts capital costs

Uses: Commercial waste



Historic Lisbon



Even more historic Edinburgh



The case for commercial waste

- Reduces marginal cost to
 - Ensure affordability for small businesses
 - Ensure viability for council providers
- Increases viability of source segregation
 - Compliance with regulatory requirements
 - Flexibility to respond to changing policy
- Facilitates pay as you throw
- Removes ugly wheeled bins from the streetscape
- Avoids piles of sacks

Uses: Sea fronts and open spaces



BEFORE



AFTER



BEFORE

The case for open spaces and sea fronts



- Huge reduction in litter bins
 - Far fewer collections
- Reduced demand for cleansing
 - Cleaner streets
 - Lower cost
- Cuts off the food supply for seagulls and other wildlife



Where can it be used

- New developments
- Pre-procured
 - Direct call offs
 - Mini-competitions
- One stop shop
 - All information in one place
- Advice, information

APSE Solutions consultancy support



- Strategic planning
 - Climate change
 - Cost reduction
- Feasibility studies
 - Locations
 - Requirements
- Business cases
 - Costs and benefits
- Planning documentation
 - SPGs
 - Instructions to developers



Contact details

Andy Mudd, Head of APSE Solutions

Email: amudd@apse.org.uk



GB 11409



GB 11132



GB 14074

www.apse.org.uk