

Viva la Revolution ?



Paddy Knowles

Senior Consultant APSE Solutions

We've come a long way haven't we!



**Side loading
Corporation of London
horse- drawn cart
(1848 -1854)**



Or have we!



**Who Remembers
these days!**

1978 -79 Winter of Discontent

The Wheelie Bin Revolution!



- **Invented by a company based in Slough**
(Frank Rotherham Mouldings March 12th 1968)
- **Picked up by a H&S specialist as a way of reducing back injuries.**
- **Revolution began in earnest when vehicles with automatic lifts were introduced in the late eighties**

The Wheelie Bin Revolution?



**Bins on streets
24/7**



**Different
container
systems**



**Different
collection
frequencies**



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Food Waste



Food Caddy

Metal and Plastic Red Box



Glass and Cardboard Green Box



Paper, Small Appliances, Batteries, Textiles and Clothing Blue box



What's wrong with how we do it now?



- **Current approach is increasingly user unfriendly**
- **Multiple, confusing systems in place**
- **More expensive than need be**
- **Bad for the environment**
- **Not achieving what it needs to**
- **Dirty, difficult and often unhealthy for operatives**

Operational Issues



- **Cost of and storage of replacement bins & containers**
- **Cost of different vehicles**
- **Labour intensive** (source segregated Vs Co-mingled)
- **Vandalism of bins** (crime & arson)
- **Easily damaged / lost** (vehicles / crew)
- **Cleanliness** (perceived responsibility)
- **Assisted Collections**



Are there better collection methodologies



- **Escaping the limits of the current approach**
 - How many containers can we cope with?
 - How far will we put up with reductions in frequency of residual collection?
- **Inherently expensive**
 - Source segregation
 - Kerb side sorting
 - Co-mingling
- **And unpleasant (and sometimes unsafe) for those that have to do it**

Underground Bins can address these issues



- **Convenience of a bring site but on your doorstep.**
- **Gets away from multiple bins and rips up the collection calendar.**
- **Clean.**
- **Easy to understand and use.**
- **Emphasises emotional aspect of waste disposal rather than dirty/functional aspects.**
- **Greatly reduces vehicular conflict.**



And turns they are all over the place



- Holland
- Spain
- Germany
- France
- Belgium
- Portugal
- Australia
- And a whole load of other places around the world



Why isn't everyone doing it?



- **Its crazy!**
 - Well no its not
- **People wont walk 100 yards or so to get rid of their waste!**
 - If it means not having custody of up to 5 wheelie bins I think they will
 - Maximum walking distance 30metres
- **UK people are not the same as the Spanish!**
 - Just rubbish (pardon the pun)
- **Can't afford the capital costs!**
 - Its about 9k per unit but do the sums you're saving at least half the revenue cost
 - New build developments is the obvious starting point
- **Cant be digging up our streets!**
 - Paris
 - Antwerp
 - Lyon
 - Edinburgh
 - London
 - Peterborough

Potential Operational / Capital Efficiencies?



Operational efficiencies up to 70%

- ✓ In time to collect. (each underground bin = 20 wheeled bins)
- ✓ Staffing costs. (potentially single operative system)
- ✓ Potential reduction in the number of vehicles. (Rounds 40% to 50% bigger)
- ✓ Free staff up to cover for sickness and holidays reducing the reliance on agency staff.

Capital efficiencies.

- ✓ Underground bins are potentially cheaper to install than wheeled bins systems?
 - primarily through the removal of costs for bin compounds and associated structures and the increase in potential building space.

Cost comparison with wheeled bins for 86,000 households



Costs for wheeled bins

- Staff costs – £882,000
- Vehicle costs – 861,532
- Service cost – £1743,532

Cost for underground

- Staff costs - £294,000
- Vehicle costs - £215,383
- Service cost - £509,383

Service cost saving = 70%

Reduce new housing development costs



- Lower cost than installing up to date spec bin storage areas.
- Reduces the space needed for bin storage.
- Potentially allowing more houses to be built on a given piece of land.
- Can/should be incorporated into planning policy as part of creating better places to live.



New development capital savings



			Unit	1300 houses
Indicative capital costs for new development				
	Underground bin cost		9,000	2,592,000
	Wheeled bin store area plus bins		2,725	4,956,775
	Capital saving			2,364,775

And works in retrofitting situations



- Paris
- Lyon
- Antwerp
- Tower Hamlets
- Edinburgh
- Peterborough



Market Engagement Event: Underground Refuse Systems

A one day event at the Business Centre, City Chambers, Edinburgh
Tuesday 13 November 2018



Business Centre, City Chambers, 253 High Street, Edinburgh, EH1 1YT

Contact details



Paddy Knowles, Senior Consultant, APSE

Email: PKnowles@apse.org.uk

Interim requirements

**Roads & Highways, Building Maintenance, Bereavement Services,
Environmental, Parks & Open Spaces, Waste, Facilities & Leisure etc.**

Emma Taylor, Client Coordination Officer, APSE

Email: etaylor@apse.org.uk

Association for Public Service Excellence
2nd floor Washbrook House, Lancastrian Office Centre, Talbot Road,
Old Trafford, Manchester M32 0FP.
telephone: 0161 772 1810
fax: 0161 772 1811
web: www.apse.org.uk



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