

Improving Recycling in Belfast (Inner City) Apartments

Marcus Campbell - Project Officer
Belfast City Council
Waste Management Service





Introducing optimum recycling to 300 apartment blocks in Belfast 'inner' city

- Setting the scene
- Groundwork and research
- Tailoring the solutions
- Key success factors and issues
- The results
- Where are we now?
- Q & R

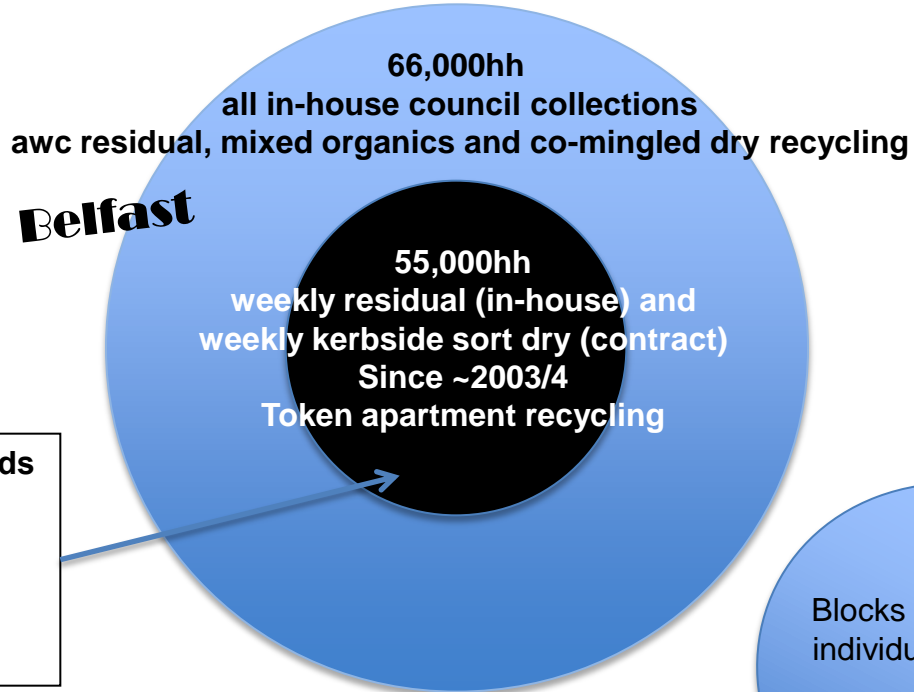
Just covering
some key points.
The detail is in
the report!



Setting the scene



Belfast



2013 – ‘Inner city’ kerbside sort contract ends
Move to:

- Fortnightly residual and new contract for:
- Weekly kerbside sort dry (2 boxes)
- Weekly food (23l caddy)
- Including *focus on apartments*

Blocks of 1-12 apts -> individual recycling kit

300 Blocks of 13+ apts -> communal kit

	Households	Apts	%
Inner city	55,000	17,277	31%
Outer city	66,000	11,070	17%
Overall	121,000	28,347	23%



Setting the scene

**Typical scenes
before the project**

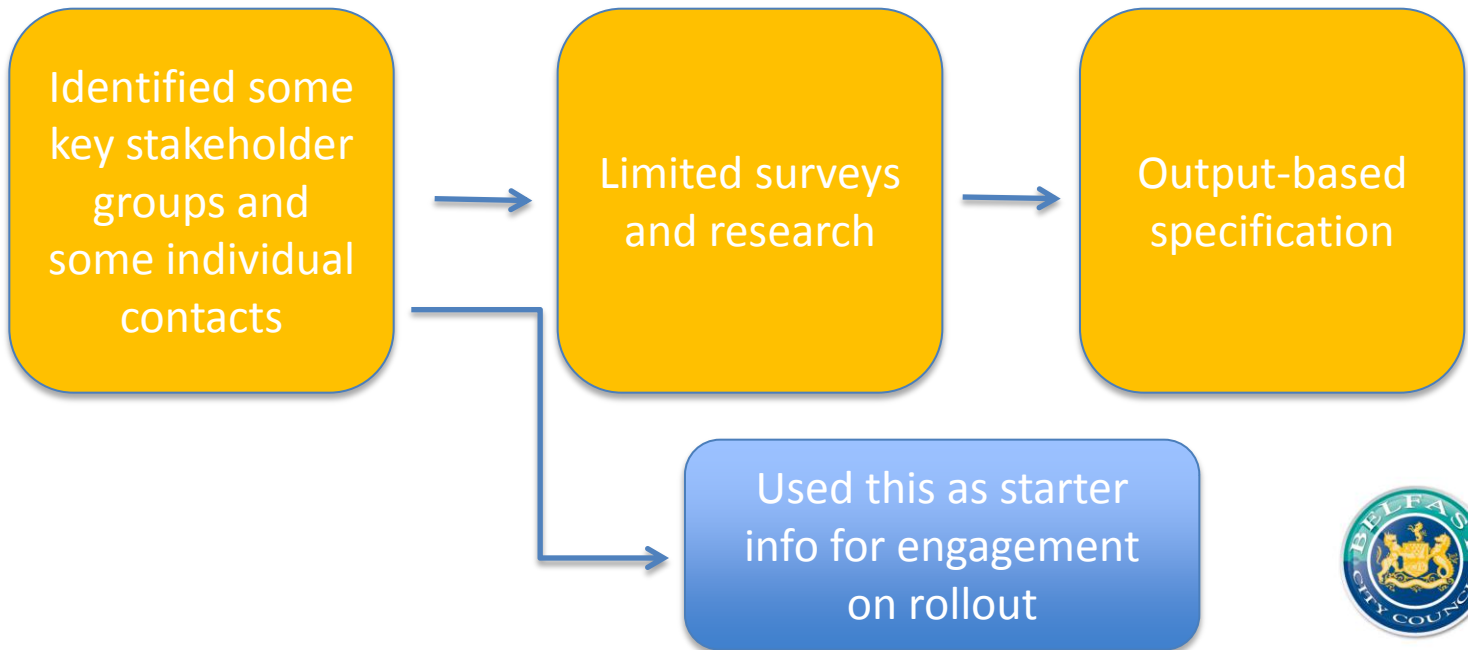


Groundwork and research

Plan

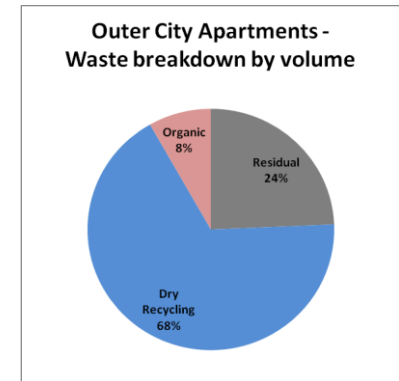
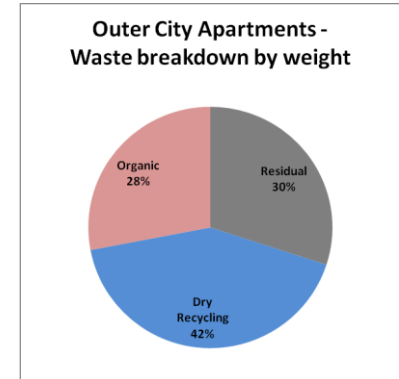
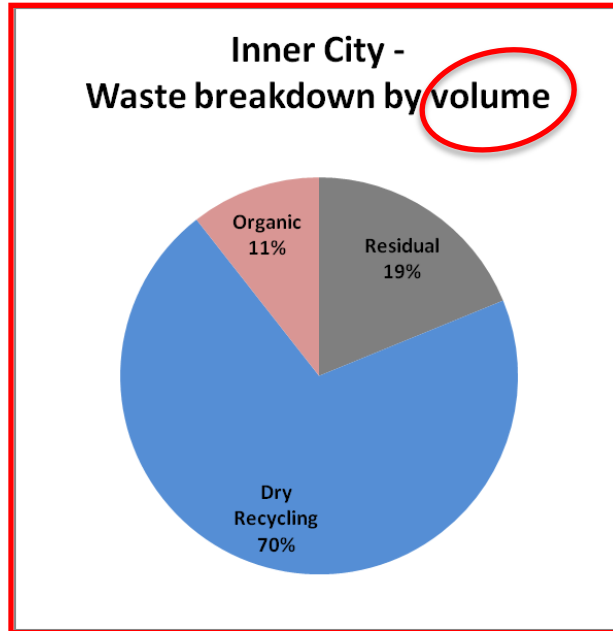
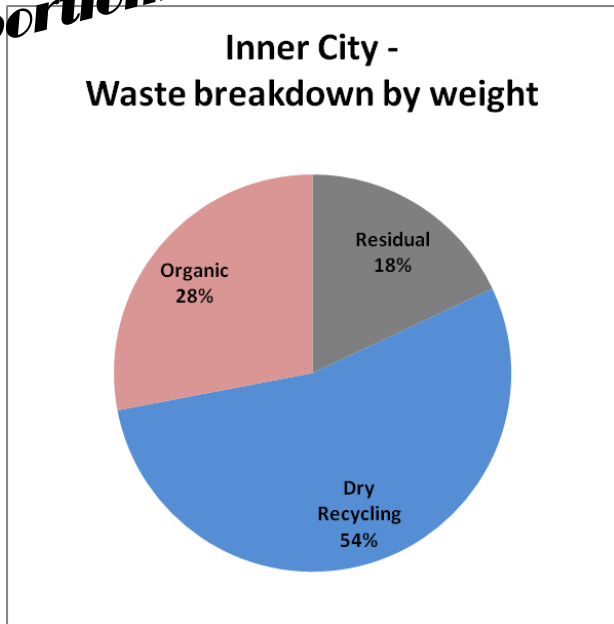


Actual



Groundwork and research

Waste apportionment



Based on:

Material bulk densities: WRAP 2010 (Project code: ROT039)
 Summary Composition of Kerbside Collected Waste (in NI); EHS, Feb 2008.

More information at:

<http://www.belfastcity.gov.uk/buildingcontrol-environment/buildingcontrol/wasteguidelines.aspx>

Limited data on this..



Groundwork and research

**Early engagement
with managing
parties**

Housing
Associations



Overseen by central Federation.

Responsible for a large number of sites.

Council presented at a Federation meeting to make contact and get buy-in.

- Apportionment, costs, etc. ✓

Letters to Chief Executives.

Sites generally newer.

Generally very co-operative.

Northern
Ireland
Housing
Executive



Centrally managed.

Initially assumed to be major stakeholder but actually only responsible for relatively small number of sites.

Sites were generally older.

Engagement on a case by case basis during rollout.

Letter to Chief Executive.

Generally very co-operative but constrained by legacy issues (lack of space!).

Private
managing
agents



No single point of contact.

Responsible for a large number of sites.

Engagement on a case by case basis during rollout.

Response was mixed, depending on individual attitude.



Tailoring the solutions



- 10-box stand/ 6-box stand used as standard (can vary in size)
- + 240l blue bin (for plastics & cartons – lightweight materials)
- + 140l brown bin (for food)
- + 23l caddy for stock of liners (replenished at collection)



Tailoring the solutions



The kit



3-tier stand – no lids, so internal use only.
Various sizes – made to order..



Tailoring the solutions



Anecdotal - flaps and aperture size seem to be problematic for communal use.

The Kit

Banks of wheelie-boxes.

Provides mobile solution but otherwise less successful than box-stands.



Tailoring the solutions

Kit for individual apartments



Tailoring the solutions

Collections

Twice-weekly collections for some sites..

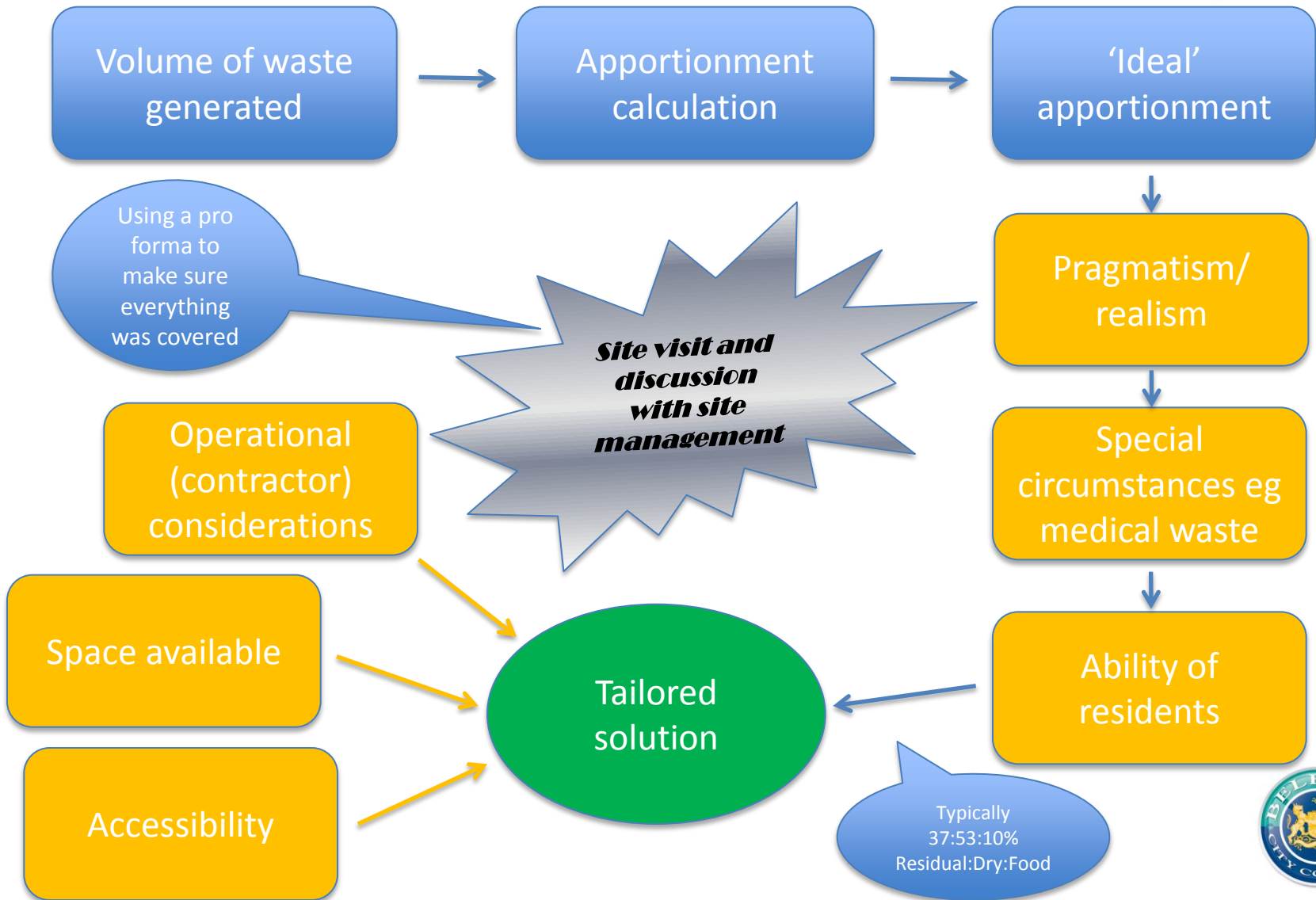
Dry recyclables are collected by the same stillage vehicle which collects from 'normal' households.

The 140l food waste bins are collected by a separate vehicle (2 days per week).



Tailoring the solutions

Ideally
19:70:11%
Residual:Dry:Food



Tailoring the solutions



Agreed at the site visit..

***Residents meetings
and / or door-knocking***



Tailoring the solutions



Range of bespoke leaflets developed as new solutions were introduced – Would one generic leaflet have been more manageable? Or more confusing for residents?

We could/ should probably have done more in terms of posters in communal areas..

Yes , but all the kit was clearly labelled as well.



Tailoring the solution:

When it's not working..

Some sites just got individual kit..

- *Just. Not. Enough. Space.*
 - Some sites solved with 3-tier kit and a twice-weekly collection of recycling.
 - 17 sites remain with no workable solution – still receiving weekly residual collections, some with token recycling.
- Lack of co-operation – Continued negotiations and comms; eventually draw a line and only collect the allocated number of residual containers.



We carried out crude characterisation studies on site at 3 locations which were complaining..



Key success factors and issues

Good procedures and documentation



Fit-for-purpose documentation!



Disciplined updating and adherence!

Good communication of all pertinent information to all relevant parties!

Efficient procedures!



Key success factors and issues



**Dedicated
staff**



- Passionate
- Pragmatic
- Amenable
- Negotiators
- Capable
- Resourceful
- Operational

The contractor pointed out that the **Council carried much more weight** with managing parties and was heeded much better **than the contractor** would have been.



Key success factors and issues



The blue bin is the main source of unmanageable contamination.

Managing contamination was not fully thought through in the original contract and had to be tagged on afterwards..

Contamination

The lorry that deals with contamination is also used to collect bulky cardboard.



Key success factors and issues

The usual suspects

- Space.
- Layout
 - The team assumed that it was best for residual and recycling bins to be located together (to maximise capture while minimising contamination) and argued for this in negotiations (where space allowed)
 - Sometimes managing parties were more amenable to changing to this type of layout after implementation
- On-site and engaged care-taker – to manage waste separation and resident behaviour
- Transient or settled residents
 - Sense of responsibility/ ownership
 - Diluting understanding v retaining understanding

Obviously, much of this is outside the Council's control..

And much of the evidence is anecdotal



Key success factors and issues

Systemic issues

I'm just a carer – I don't have time to sort out all of Maureen's rubbish – and it's not in my job description!

My daughter always takes out my rubbish when she comes round, and I don't like asking her to do all that recycling stuff.

I've just moved into here; I don't know what I'm supposed to do with my rubbish.

What are we supposed to do??
We can't throw a resident out for not recycling!!

The results



>1 tonne of materials on one collection!



Typical presentation





Internal stands don't actually need lids - potential cost saving



Bin
Store

Some sites are a squeeze..



The results

The numbers..

Kit issued..

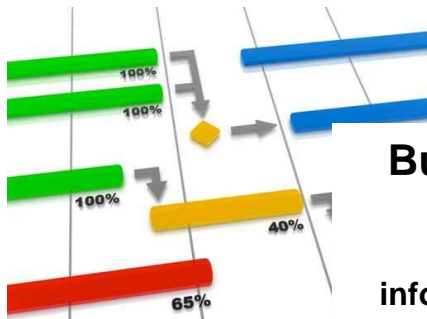
Waste type	Kit	No. units issued
Dry recycling	10-box stands (steel + aluminium)	286
	6-box stands (steel + aluminium)	70
	3-tier stands	38
	Wheelie boxes	334
	240l blue bins	459
Food	140l brown bins	431

Inner city overall performance (apts + houses)

Dry 3,100 tpa before -> 4,700 tpa after

Food 0 tpa -> 2,400 tpa

We don't have apartment tonnages, but this kit half-filled each week equates to >900 tpa (estimated)



Bulk of rollout completed over ~12 months
(about 6 months research & information-gathering prior to this)



Where are we now?



We have our foot in the door..

Established contacts and relationships

>280 / ~300 sites have a solution in place
(chipping away at the remainder)

But..

Frequent instances of unmanageable contamination (mainly blue bins)

Sites need ongoing maintenance and attention:

- Requests for re-assessment
- Adjusting layout and capacities
- Overcoming operational problems (missed collections etc.)
- Re-education, posters, etc.

And this is just the stuff we know about..

There are systemic issues which require more strategic engagement with a wider range of stakeholders

Limited resources now allocated/ available..





Q & R

