



THE CHALLENGE OF TAKING FIBRE OUT OF THE DOMESTIC WASTE STREAM FOR A MAJOR URBAN CONURBATION -A CASE STUDY OF GREATER MANCHESTER

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The Contract

**Nine
Collection Authorities**

**2.6 million
population**



**1 million
households**

50% Detached/Semi
17% Flats
33% Terraced properties

**1.1 million tonnes p.a.
of municipal waste**



The Scale.....

Total Waste

- 1.1 Million tonnes Waste

Kerbside Collection of recyclables

- 100K tonnes paper/card
- 100K tonnes mixed recyclables
- 200K tonnes garden/food waste

Household Waste Recycling Centres

- 300K tonnes of arisings from 20 sites
- 68K tonnes dry recyclables
- 18K tonnes Garden waste
- 46K tonnes Rubble
- 70% diversion from landfill





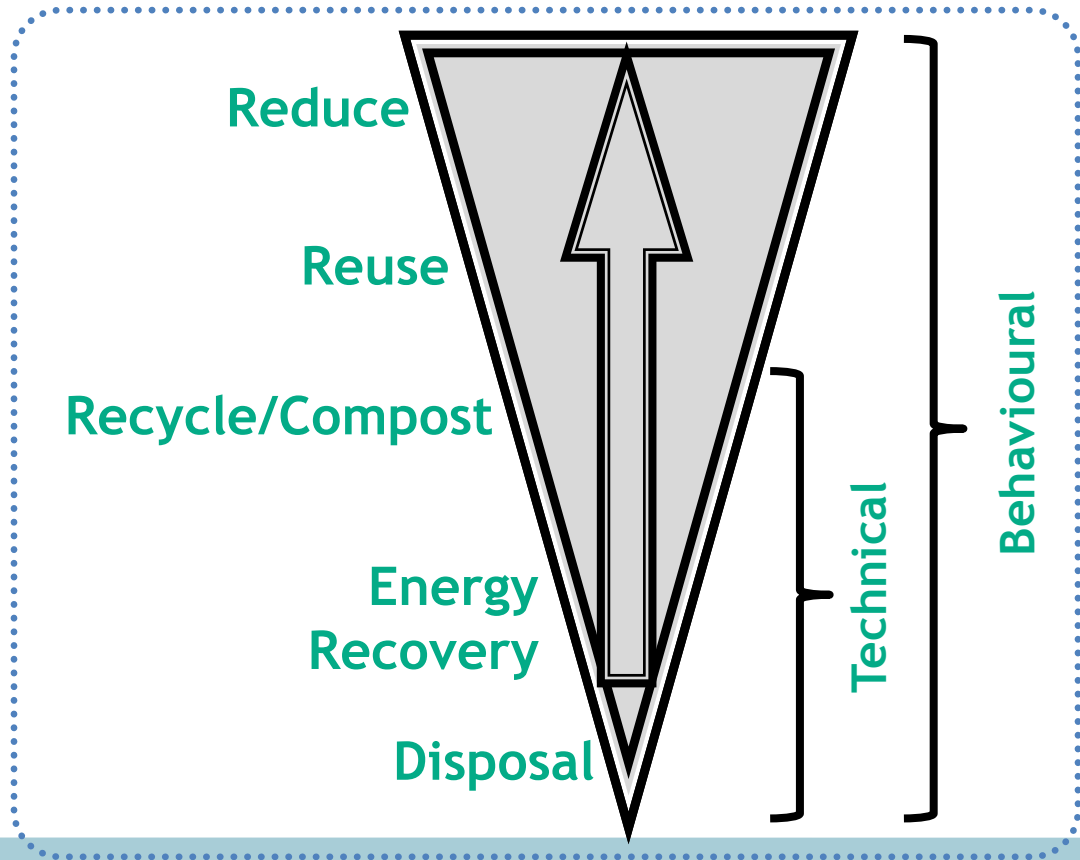
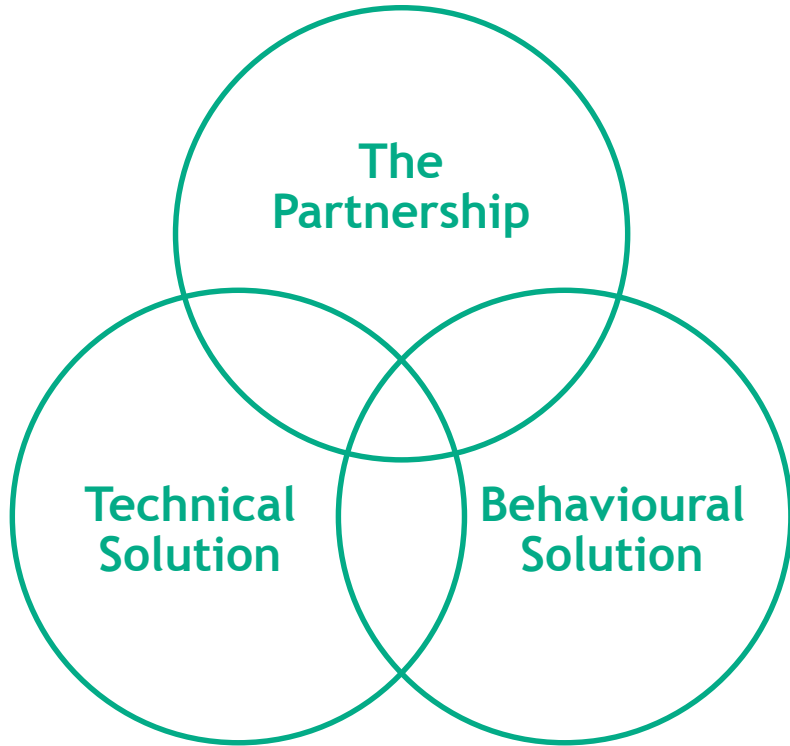
The Aims

Municipal Waste
Management Strategy
Achieving 'zero waste'
Recycling 60% by 2025
Diverting 90% from landfill
by 2020



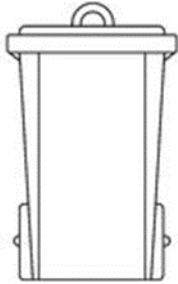


Achieving 'zero waste'



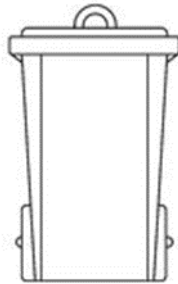


4 Bin System



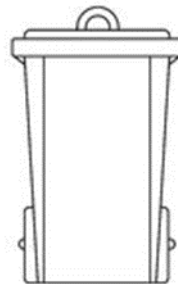
Mixed Recycling

Plastic bottles
Glass bottles & jars
Food and drink cans
Aerosols
Foil & foil trays



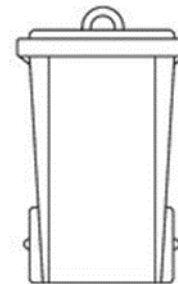
Paper & card

Newspapers
Magazines
Cardboard
Tetra Paks



Food & garden

All food waste
(Raw or cooked)
Garden waste



Non-recyclable

Plastic packaging
Polystyrene
Nappies
etc



Towards a Circular Economy

Current rates of resource depletion and waste generation are unsustainable

Need to de-couple economic growth from increasing resource consumption

Radically different business models required

Need to move to zero waste (circular) economy.



Textiles – routes of disposal

Residual Bin

All WCAs now implemented restricted residual capacity, this will encourage re-use / recycling routes for textiles

Household Waste Recycling Centre

Textile and shoe banks for re-use and recycling

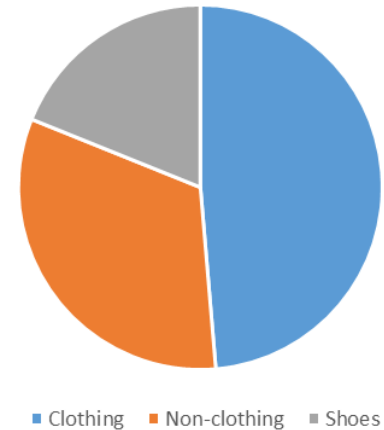
Charities - collection banks, door to door and charity shops

Easily accessible to difficult to track tonnage

Bulky Waste

Mixed materials - research shows 19% in textiles

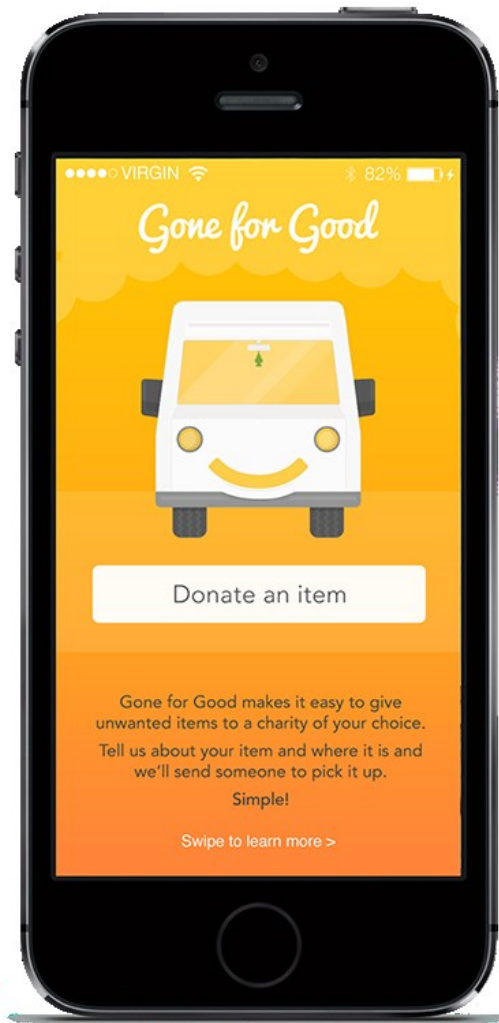
Textile Composition (Residual Waste) - 2011





Household Waste Recycling Centre Trials

- **Mattresses**
 - Requires mattresses to be kept dry
 - Result is large transportation costs for small tonnages
 - Outputs low recyclable tonnage
- **Carpets**
 - Requires separation of natural and synthetic fibres with no contamination



Partnerships

- Promotion across the GMWDA and district councils
- A national App promoting charity services for bulky and textile items
- The user picks the charity to donate to
- The App notifies them of the awaiting donation



Behaviour Change

Sewing Classes

Encourage upcycling and re-use of garments

Learn new skills to upcycle and mend



Fashion Show

Encourage sustainable fashion and upcycling of items

Promote donation of worn materials not suitable for re-use for recycling



Potential for future collaboration with Manchester fashion institute



Possibilities

Separate collections of textiles from homes

Change in vehicle design and procurement

Additional resources

Need for public participation (need knowledge and trust)

Impact of existing charities (a source of their funding)

Consistent Approach to the Householder

Options of re-use and recycling

Importance and impact

Collaboration (with Councils, charities and third party operators)



Questions