

# Circular Economy 101: An introduction to sustainable resource & waste management

## Waste management case studies

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# Case studies

- Hotel refurbishment
- Shopping centre
- Construction – house builders

# Case study 1 – Hotel chain refurbishment

- Legislative complexities – is a sofa bed waste or not?
- Use of exempt facilities for sorting and segregation
- Detailed audit trails to demonstrate Duty of Care
- Significant reduction in costs
- Charity benefits

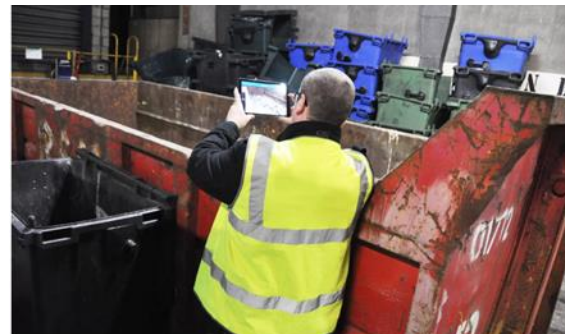


# Results

- 3200 redundant sofa beds
- 65% Reparable and resaleable
- £160,000 revenue stream for charity

# Case study 2 – Shopping centre

- Old Waste collection system did not encourage waste segregation
  - Poor “ownership” of waste
  - Complexity in chain of custody
- Identify quantities and key waste types
- Implement waste segregation
- Optimize containers and service
  - Initial processing for certain types – cardboard baler



# Results

- 100% diverted from landfill maintained
- 76% increase in recycling over a 13-month period
- Approximately £30k savings per annum

# Case study 3 – House builders:

- Starting point
  - Implement source segregation
  - Optimise container sizes
  - Use reporting tool to analyse waste data
- Update to a mature system
  - Implemented source segregation and reporting but performance was dropping
  - Implemented relaunch
  - education and information
  - Developed specific targets and automated monthly reports
  - Implemented through a series of toolbox talks and information



# Results

- New implementation
  - 8% reduction in waste tonnage per plot
  - 19% cost savings per plot
  - Cost savings reproduced across 11 sites
- Update and relaunch of a Mature system
  - 55% reduction in waste tonnage per plot attributable to the education campaign
  - Waste per plot dropped from 5.55 tones to 2.48 tonnes



# Conclusions

- Understand your waste streams in detail
  - Transport aspect is almost always trivial
- Realistic measurement is essential
  - Before
  - Set targets
  - After
- Segregation at source
  - More opportunity for reuse
  - Enhances measurement
  - Better recycling rates
  - Waste producer gains the benefits
- Educate staff
  - Enhance Buy-in with Incentives
- Think of waste as a product or resource