

Collection of pillows from hotels and universities for re-use

Veolia Environmental Services Ltd collected 64 tonnes of pillows from the refurbishment of 505 sites in 2012/13 for re-use and energy recovery.



Collection of pillows during hotel and university refurbishment: nationwide collection by a waste management company

This is an example of the collection of pillows during refurbishments of hotels and universities. Items are collected by a third party or Veolia's existing vehicle fleet using spare capacity on curtain-sided vehicles, bulked up and sold to a merchant for re-use abroad or for energy recovery.

Key facts

Organisation: Veolia Environmental Services
Type of business: Waste management company
Location: Nationwide
Type of non-textile: Post-consumer pillows from commercial sources
Type of collection: Collection from businesses and other organisation during their refurbishment
Tonnes collected per year (2012/13): 64 tonnes
Re-use rate (2012/13): >99%
Recovery rate (2012/13): <1% recovered, no waste to landfill
Number of employees: 12,000 in the UK

Introduction and background

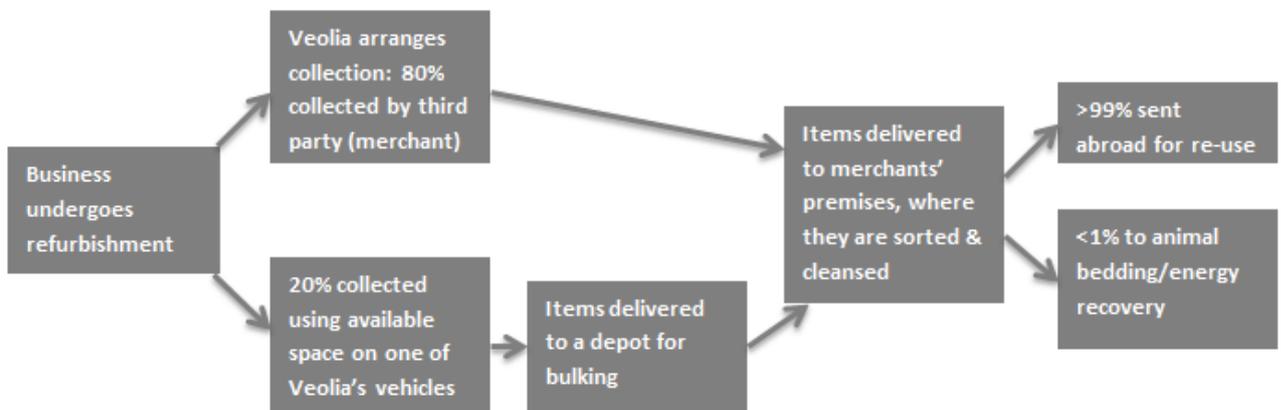
As part of the portfolio of services it provides, Veolia Environmental Services arranges collections of pillows from hotels and university accommodation during refurbishments for re-use. In 2012/13 it collected from 505 sites, totalling 48,000 rooms and weighing in at around 64 tonnes.

A pilot project with a third sector partner in 2011 aimed to divert items directly to local third sector organisations for local re-use. This was not successful for duvets because the collected items were not of a suitable quality for re-use. However a number of useful learnings (see Conclusions/key learning points section) came out from this pilot which have been incorporated in subsequent collections.

Description of the operation

When a refurbishment is identified Veolia requests that site staff and contractors sort items by quality if possible, collect the pillows in bin bags and keep them in a sheltered but accessible area to allow for collection. These instructions aim to ensure that the items do not become dirty or wet, maximising their re-use potential.

Veolia operates a number of curtain-sided vehicles all over the UK in a "milk round" arrangement, transferring a variety of materials to reprocessors. In order to drive environmental and commercial efficiency, depending on the location of the hotel or university site and the reprocessor, Veolia arranges the collection of pillows by a third party or uses the spare capacity on their own vehicles.



Items collected by Veolia are bulked at their depot and then transferred to a merchant (reprocessor) for sorting; items collected by a third party are taken directly to the reprocessor. Once sorted, material is transferred based on current market demand. Over 99% of pillows collected are sent for re-use abroad. The remaining <1% of pillows are shredded and sold for animal bedding if there is demand, or sent for energy recovery in the UK, helping to achieve Veolia's zero waste to landfill commitment.

Performance/outcomes

Number of collections/deliveries: Not applicable, co-collected with other materials/wastes

Non-clothing textiles collected (2012/13): 64 tonnes

Re-use rate (2012/13): >99%

Recovery (2012/13): <1%

Figure 1 Curtain-sided vehicle used for co-collection



Figure 2 Pillow collected from hotel



Innovation/good practice

Pillows are comparatively expensive materials to collect and transport due to their large volume and low value. The use of third party logistics and spare capacity on existing rounds helps to make the collection more efficient and cost effective.

Description of costs and revenues

This box provides a summary of the main costs and revenues (detail given where provided).

Costs:

Licensing/set up costs: Use of existing facilities and vehicle network.

Collection vehicles: A network of curtain-sided articulated lorries

Buildings: One warehouse and a weighbridge

Dedicated staff: 1 FTE to drive annual weight of collected materials

Fuel use: dependent on locations.

Delivery of all materials using own vehicles

Revenues:

Revenues for collection (Veolia collections)

Revenues from sale of materials (third party collections)

Conclusions/key learning points

The key learning points are preserving the quality of items to maximise re-use and using the most appropriate disposal route for the quality of the item.

Sourcing items from hotels/universities, which have a policy to replace all items after a certain time period, is likely to generate more items of re-usable quality than where items are replaced when necessary on an ad-hoc basis.

To preserve quality:

- sort at source to separate dirty/damaged items from intact items
- use a clean indoor storage area for used items;
- items should be contained e.g. in plastic bags during transport, especially if the vehicle is used for a variety of waste material
- further sorting by reprocessor to determine the best route for the material.

Good quality items can be sent for re-use which can be abroad or in the UK. Lower quality items can be shredded for animal bedding. There is fluctuating demand for bedding and it may need to be supplied in a steady stream to end users not in bulk. This requires the reprocessor to have adequate storage space for the shredded product. If there is no demand for animal bedding or the items are very low quality, they can be sent for energy from waste.

It is important to involve all parties from the start of the project to enable the highest possible diversion from landfill and that the project is beneficial to all.

The initial pilot demonstrated that there is potential to pair up hotels/universities with local charities, which would not only reduce the collector's own transport distances and costs but also pass these savings on to its clients. Providing there is a focus on preserving quality throughout the process, the charities would receive a large supply of good quality duvets for resale or use within their facilities.

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