



Economic Prosperity, Environment & Highways Board
9 June 2016

Community Recycling Centres – Recycling Performance

Purpose of the report: Scrutiny of Services and Budgets and Performance Management

To update the Board on Recycling Performance at the Community Recycling Centres.

Introduction:

1. Surrey County Council provides 15 community recycling centres (CRCs) across the county which are operated by our PFI waste contractor, Suez Surrey. In 2015/16 these sites handled just over 140,000 tonnes of material delivered by Surrey residents. The vast majority of this material was either recycled, reused or sent for energy recovery
2. This report explains the types of materials collected at the sites, what happens to these materials and what work is currently being undertaken to increase the value of materials and reduce costs.

Recycling and Landfill diversion Performance

3. Materials collected at our CRCs are either sent for recycling, recovery, including energy recovery or to landfill. In cost and environmental terms landfill is the most costly and least desirable form of disposal and **Figure 1** below sets out the relative performance of each of our 15 community recycling centres.
4. In 2015/16 residents delivered 140,608 tonnes of material to our CRCs of which 90,507 tonnes were recycled 43,183 tonnes were sent for energy recovery and only 6,918 tonnes were sent to landfill. This equates to a recycling rate of 64% and a landfill diversion rate of 95%.
5. Performance at individual sites ranged from 61% to 68% recycling and 90% to 97% landfill diversion. A chart showing the relative performance of each site is set out below in Figure 1.

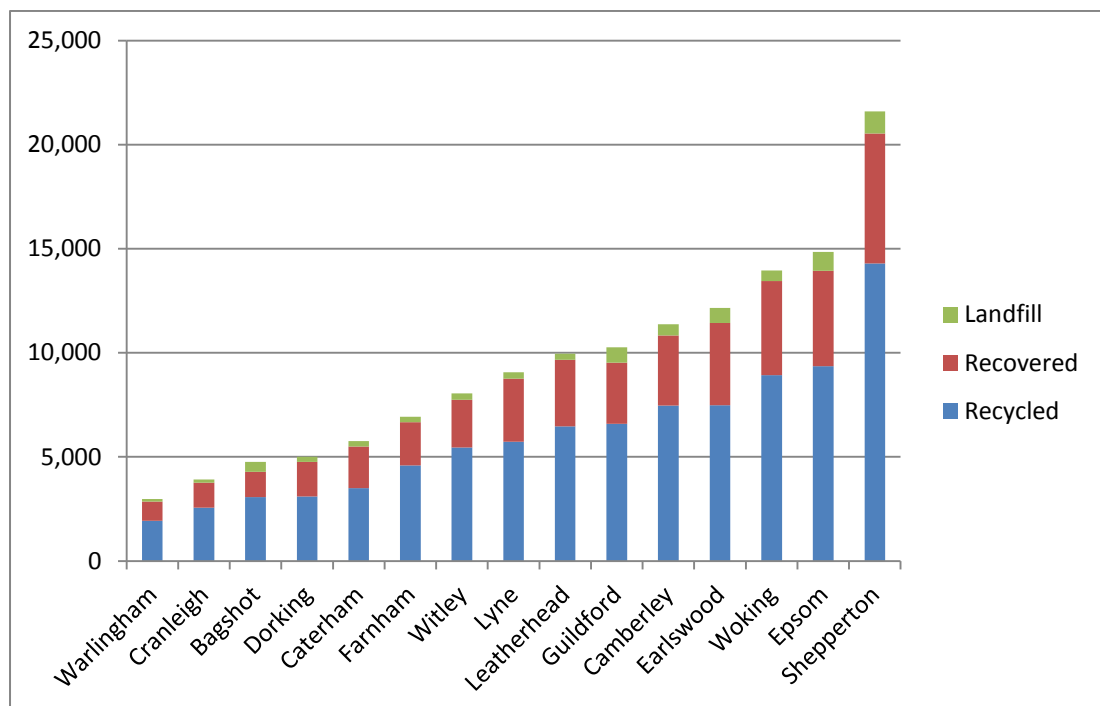


Figure 1 – Individual CRC performance for 2015/16 (tonnes)

- The council’s strategy at the CRCs is to ensure that the maximum value is obtained from the material that is brought to the sites by members of the public. Specific mechanisms within the contract between Surrey County council and Suez Surrey incentivise the contractor to recycle as much material as possible and to obtain the best prices for this material.

Material streams collected at the CRCs

- The ability to obtain maximum value from materials brought to our community recycling centres is wholly dependent on the types of materials collected and how they are presented at the site. In particular whether they are presented as a single material stream or mixed with other materials.
- At our CRCs we collect 35 different types of materials separately. **Figure 2** shows the relative tonnages of the main material types collected at our CRCs and the following paragraphs of this report describe on a material by material basis what is done with those materials.

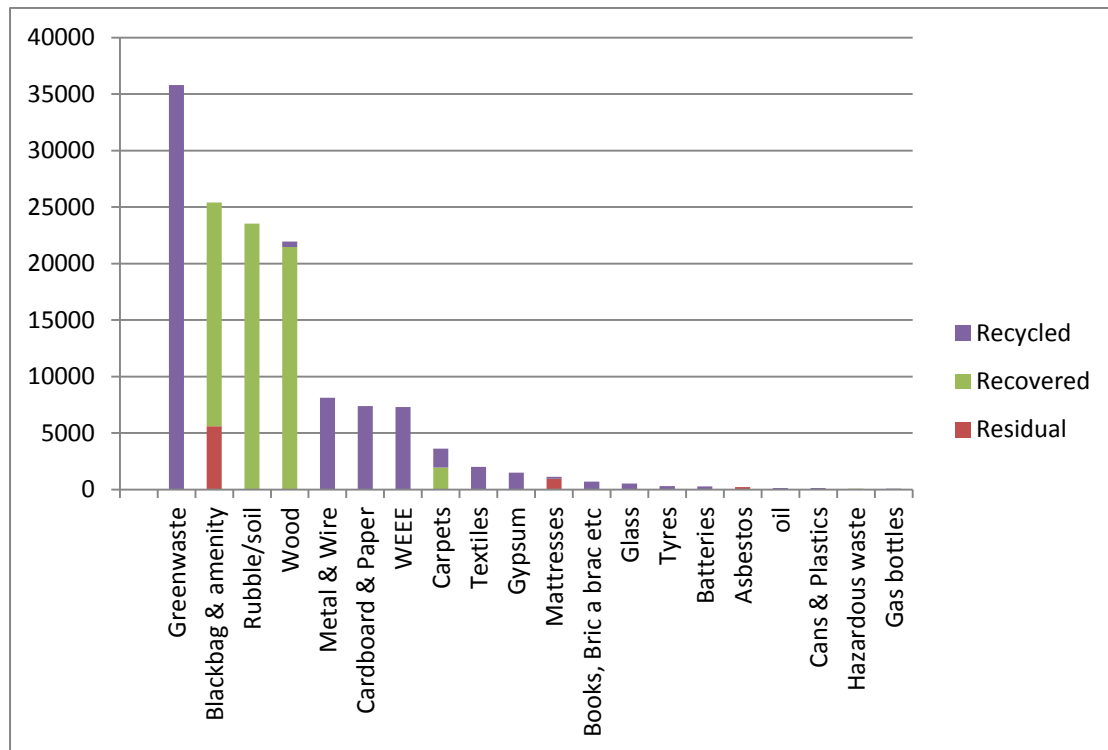


Figure 2- Composition of CRC Waste in 2015/16

Green Waste

9. At over 35,000 tonnes per year, this is the largest single waste stream collected at the community recycling centres. The quantities collected vary seasonally and are also dependant on weather as well as any changes to district and borough doorstep collections.
10. Most of our green waste is composted at sites in Surrey or Sussex and turned into fertilizer. Suez has recently been able to obtain some very competitive prices for composting green waste, using both tonnages from our CRCs and from district and borough kerbside collections.

Black Bag Waste

11. This material comprises mixed residual waste, films, plastics etc. It is of a size and type that is suitable for disposal at energy from waste plants or for processing into a refuse derived fuel.
12. For about the last 18 months or so, Suez staff have been intercepting material coming into the 'black bag' containers and extracting recycling from this waste. This activity is undertaken at all 15 sites and site staff are currently recovering around 300 tonnes per month of recyclable material that would otherwise have ended up in an energy from waste plant or landfill site. The financial benefit to Surrey County Council is substantial with a net -benefit to the council of over £500K per year.
13. The savings are made up from both the avoided disposal cost and the value of the extracted material. Some of the most valuable material is

textiles, which have a value of over £200 per tonne but if sent to energy recovery or landfill would result in a cost of over £100 per tonne.

14. Although the site staff are incentivised to extract as much recyclable material as possible, their primary duty is to assist members of the public and therefore only a proportion of the material brought into the site can be intercepted and material extracted. This is particularly so at weekends and other times when the sites are busy. As a consequence consideration is being given to an off- site sorting facility where containers of waste can be delivered and sorted.

Amenity Waste

15. This comprises bulky wastes, that are not suitable for incineration due to the sheer size or difficulty in shredding and which are not suitable for reuse. It mainly comprises items such as sofas, upholstered chairs, futons and mattresses. The only suitable outlet for this material is landfill.
16. Mattresses are a particular problem as they are very difficult to handle on a landfill site. As a result the cost of land filling mattresses is significantly more than other wastes.
17. Over the past couple of years, council officers working with Suez have trialled a number of different recycling options for mattresses. However none of these has proven to be cost effective even compared with the much higher landfill costs. We will however continue to search the market for suitable alternatives to landfill.

Rubble and Soil

18. Significant quantities of rubble and soil are collected at our CRCs and the amount of this type of material has risen over the past few years. The Council has no legal obligation to accept these types of materials and in line with many other authorities will be introducing charges to recover the cost of transporting and processing the material.
19. From 1 April 2016, rubble and soil is only being accepted at eight of our larger CRCs as a forerunner to introducing charging areas on the sites. The remaining seven sites are simply too small to accommodate a secure charging area.
20. Whilst the soil; and rubble collected at our community recycling centres is largely recycled into secondary aggregates, there is a significant cost involved in doing so. Given high transport costs, rubble and soil is processed at plants relatively local to Surrey.

Wood

21. Waste Wood collected at our Community Recycling Centres, is predominantly low grade material such as chip board, MDF, painted or coated material contaminated with metal, glass and plastics. It cannot be recycled and is only suitable for disposal at energy recovery incineration

plants that meet the requirements of the EU Waste Incineration Directive (WID).

22. There are no WID compliant plants in Surrey and very few in the South East England. Waste from Surrey's CRCs is taken to a processing plant at Ridham Dock in Kent where it is shredded, graded and exported as a fuel to WID compliant biomass plants in Scotland and Holland. A small amount of metal is recovered and recycled.
23. Whilst biomass energy from waste is cheaper than conventional energy from waste, there is still a significant cost to transporting and processing this material.

Metal & Wire

24. The types of scrap metal collected vary enormously. Most of the scrap metal that is collected is fairly low grade often being attached to other materials such as plastics and rubber. Where possible Suez separate higher grades of non ferrous metals such as alloy wheels and copper wire in order to increase the value of the material.
25. Whilst the income from this material is welcome, prices for scrap metal are currently very volatile having dropped from over £100 per tonne at the beginning of 2015 to about £30 per tonne by the end of the year.

Cardboard and Paper

26. This majority of this type of material collected at our CRCs comprises packaging card. Once transport costs are taken into account there may be a small value attributable to this material although like most commodity prices, the value of paper and card is has fallen in recent years.

Waste Electrical and Electronic Equipment (WEEE)

27. The material collected under this comprised the following:

- Domestic appliances	1651 Tonnes
- Fluorescent tubes	20 Tonnes
- Fridges & Freezers	816 Tonnes
- Small WEEE	3934 Tonnes
- TV's and VDUs	899 Tonnes

28. This material is subject to a producer responsibility scheme and is collected and processed at no cost to the council.

Carpets

29. For most of 2015/16 Carpets were sent to a plant in Lincolnshire where they were partly recycled and partly processed into a fuel for use in an energy from waste plant. However the processor imposed a significant price rise part way through 2015/16, which meant the cost of processing,

exceeded the cost of landfill. As a result Suez was instructed to cease sending material to this facility and instead send the material to landfill.

30. We continue to collect our carpets separately in the hope that an alternative outlet can be found. However there are very few companies in the UK capable of processing carpets and the high cost of transport means that distance to a processing facility is a significant factor.
31. Suez is currently investigating an option to incorporate shredded carpet into a refuse derived fuel.

Textiles

32. Textiles remain a valuable material at our CRCs although during 2015/16 the value halved from about £500 per tonne to £250 per tonne due to instability in traditional export markets for good quality reusable textiles such as Ukraine and Africa.
33. Textiles are removed from the site and graded into material suitable for reuse and material suitable for recycling into items such as industrial cloths. Items such as duvets and pillows are not suitable for reuse or recycling and will end up being sent to landfill or energy from waste plants in the general waste.

Gypsum

34. Gypsum and plasterboard is prohibited from landfill and must be kept separate from other wastes such as rubble and soil. The material collected at our CRCs is sent to a specialist processor in Kent for recycling into new products. There is a significant cost involved in transporting and processing this material.
35. As with rubble and soil, the council is not obliged to accept gypsum and plasterboard at its CRCs free of charge. From 1 April 20-16, this material is only being accepted at eight of our larger CRCs and charging to recover the costs of handling this material will be introduced later this year.

Mattresses

36. In 2015/16 the council and Suez undertook a trial to recycle mattresses, however despite trying various different methods; it was not possible to achieve a cost of transport and reprocessing below the cost of landfill. As described above we continue to work with Suez to investigate alternative methods to recycle or recover mattresses to avoid them being land filled

Other Materials

37. The other materials collected at our CRCs are described in the table below:

Material	2015/16 Tonnage	Destination
Mixed Glass	551 T	Recycling
Bric a Brac	428 T	Reuse
Tyres	301 T	Recycling
Car Batteries	252 T	Recycling
Asbestos	237 T	Special Landfill
Books & CDs	202 T	Reuse
Oil	154 T	Recycled
Hazardous Waste	98 T	Specialist treatment
Gas Bottles	95 T	Reuse & recycling
Toys	68 T	Reuse
Portable Batteries	39 T	Recycled
Mixed Cans	21 T	Recycled
Reuse Shop	18 T	Reuse
Mixed Plastics	12 T	Recycled
Mobile phones/Spectacles/ Print cartridges	4 T	Recycled
Rigid Plastics	3 T	Recycled
Tetrapak	2 T	Recycled

Conclusions:

38. This report sets out the current arrangements for recycling at our community recycling centres.

Recommendations:

The Board are asked to comment on the report.

Next steps:

To identify any future actions.

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Sources/background papers: None

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