

# Annual Environmental Report 2013/14

## Zeroing in on waste



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# Introduction

The re3 partnership was initially established in 1999, with Bracknell Forest, Reading and Wokingham Borough Councils agreeing to work together to develop waste management facilities for the three boroughs.

After securing a 25 year PFI (Private Finance Initiative) contract, FCC Environment (formerly Waste Recycling Group (WRG) joined the partnership and the company re3 Ltd was set up to deliver the contract on behalf of the councils.

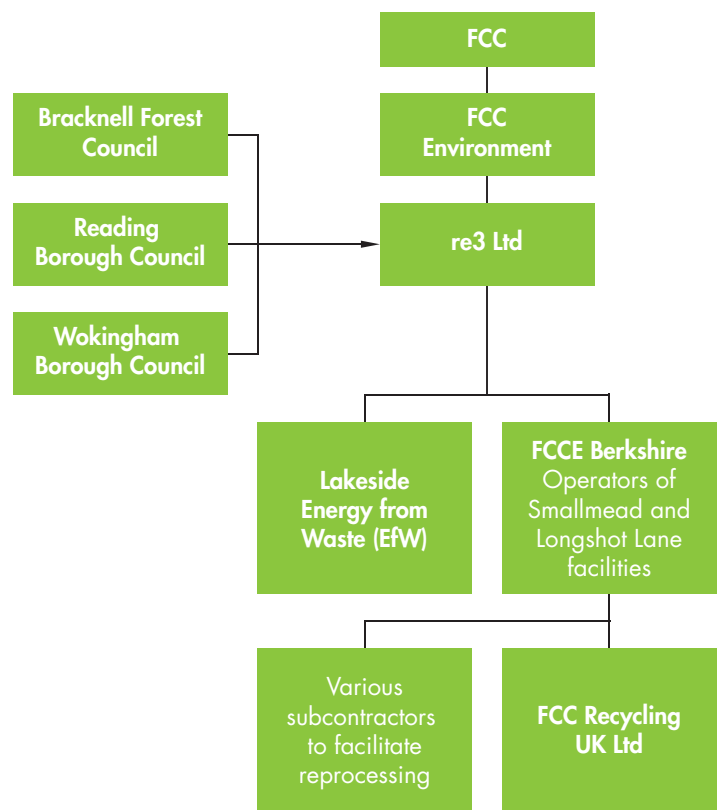
The individual councils, as unitary authorities, continue to be responsible for both the collection and disposal of waste. However the contract stipulates how waste is to be treated in accordance with National Legislation and regulations which govern recycling, recovery and diversion targets.

Councils must provide waste collection facilities including Household Waste Recycling Centres (HWRCs) and bring bank recycling facilities. Through the re3 partnership, both the provision of these facilities, and the disposal of the waste collected, are contracted to re3 Ltd. re3 Ltd in turn employs FCCE Berkshire (part of the FCC Environment group) to operate the waste management facilities.

This Annual Environmental Report describes the re3 partnership's activities for its seventh year in operation – April 2013 to March 2014 and shows how the partnership is working to reduce its environmental impact. During this period, re3 Ltd has continued to work with the councils to provide better recycling facilities and improve the level of service provided to residents living in the three boroughs. This report outlines how the partnership is working to reduce its environmental impact.



Figure 1: Organisational chart for the re3 partnership



# Performance monitoring

## Contract requirements

re3 Ltd self monitors to ensure that the standards of service it provides are maintained. Failure to maintain the contracted level of service can lead to financial deductions or other penalties.

If there are consistent failures to achieve the standard, re3 Ltd must alter operational procedures to rectify the service.

The operation of the waste management facilities is monitored on a daily, weekly and monthly basis. This includes recording tonnages of materials taken for recycling using the weighbridge system, monitoring health and safety onsite, and reporting monthly recycling figures to the council partnership.

re3 Ltd monitors these relevant services in accordance with the performance standard detailed in the contract; these are shown in the table below. Each indicator is monitored monthly and a report detailing performance in line with the contract is issued to the partnership councils. This report serves as an indicator of the overall contract performance.

### Weekly checks

Weekly Key Performance Indicator (KPI) checks and daily site housekeeping checklists cover environmental aspects such as windblown refuse, skip repair and drains. This year the KPI's have shown some delays in turn around times on site, some occasions where banks on site have exceeded their capacity and missing or damaged onsite signage.

### Monthly reports

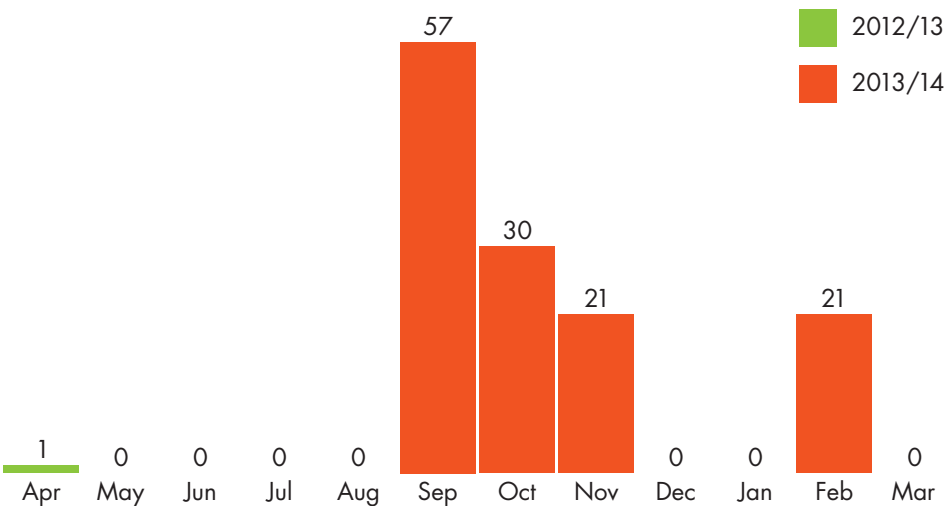
Monthly monitoring reports summarise performance of the contract and allows re3 to review and investigate ways to improve the service.

Bring bank penalties occur when a bank has not been collected in line with the agreed schedule. One working day is allowed to rectify the issue. Failure to do so results in penalties being raised daily and continue to be applied until rectified. Service issues regarding the collection of the newspaper and magazine banks meant penalties were applied and as such, saw an increase against the previous contract year (2012/2013).

Figure 2: Contract performance monitoring standards

Ref	Performance topic
SO 1	Waste management and disposal
SO 2	Waste reception and transfer
SO 3	Civic amenity and Bring Bank sites
SO 4	Markets for recovered products
SO 5	Interface with the public
SO 6	Contingency plans
SO 7	Contract commencement and expiry plans
SO 8	Service management
SO 9	Health and safety

Figure 3: Graph to show Bring Bank penalties



## Annual Environmental Report

re3 Ltd is committed to reducing its impact on the environment and uses its ISO140001 certified Environmental Management System to continuously look for ways to improve the impact of its waste operations upon the environment. Since 2006, re3 Ltd has published an Annual Environmental Report (AER) which details how the partnership has managed the waste received in the previous contract year. Historical AER's can be found on our website [www.re3.org.uk](http://www.re3.org.uk) and by typing Annual Environment Report in the search bar.



# Complaints

The HWRC sites received over 800,000 visitors in the last contract year.

Our September 2013 survey indicates that the number of weekly visitors to each site has changed from those counted in the previous year. The number of visitors to Smallmead was approx 7,962, whilst the number of recorded visitors at Longshot Lane was approx 7,612.

Between April 2013 and March 2014, re3 Ltd received 20 written complaints from members of the public and these are shown in figure 4. This figure is up on the previous contract year by approx 17% and is the first time complaints have risen since 2009.

30% of complaints received were with regards to site regulations and included feedback from residents who queried the installation of a waste management barrier system at Longshot Lane. Other complaints received related to safety on site and site opening hours. The CCTV webcam installed at Longshot Lane has proven to be a popular tool for residents who wish to gauge how busy Longshot Lane HWRC is before making their journey and received an average of 1260 view per month.

The complaints procedure set out in the contract dictates that any written complaint or protest from a member of public is acknowledged within 3 working days and a full written response is provided within 10 working days of receipt of complaint. This requirement has been upheld throughout this reporting period.

Figure 4: Complaints

Complaints by type	Total year	Percentage
Site staff	10	50%
Site regulations	6	30%
Access queues	1	5%
Site safety	1	5%
Site opening hours	1	5%
Site other	1	5%
Total	20	100%



Over

800,000

visits were made to our HWRC's in 2013/14



## Monitoring

The operations of the Waste Management Facilities are monitored on a daily, weekly and monthly basis. This includes monitoring energy and fuel consumption, health and safety on site, Bring Banks, environmental matters and undertaking spot market audits.

### Energy consumption

As part of an Environmental Management System re3 Ltd monitors each of the Waste Management Parks separately.

Over the reporting period Smallmead Waste Management Park (which includes the office, HWRC, Transfer Station and MRF) consumed a monthly average of 107,910.9kWh which represents a 12.3% increase against the last contract year. The operation of a twilight shift within the MRF is a contributing factor for this increase.

Energy usage by the MRF is closely monitored and there are a number of methods in place to minimise energy usage such as:

- Soft start motors have been installed into the machinery which ensure that minimum energy is required during the machine start up

- Heat to air units are used to draw heat out of the air and through a heat pump to provide heating to the building
- During summer months base lights in the building are turned off which saves up to 0.4 kW per lamp per hour

Longshot Lane Waste Management Park consumed a monthly average of 14806.8kWh over the same period and this average usage is down 10.25% compared to the previous year.

As part of re3's ongoing commitment to reducing energy consumption, motion sensor lights were installed in all communal areas (with the exception of meeting rooms) of the office building at Smallmead. The same lighting system is to be installed at Longshot Lane in quarter 3 of 2014.

Figure 5 and 6 below shows how the energy used at each site for the contract year 2013/14 compared to the previous year.

Figure 5: Smallmead energy consumption by year (kWh)

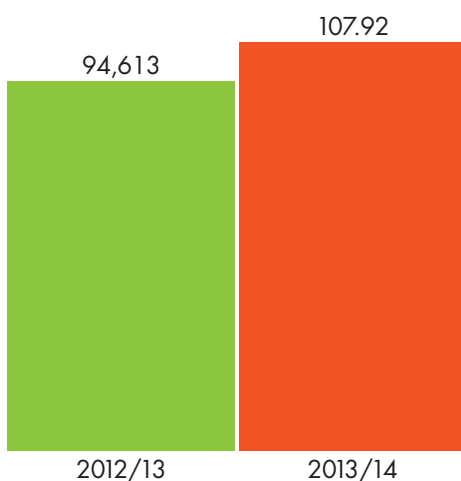
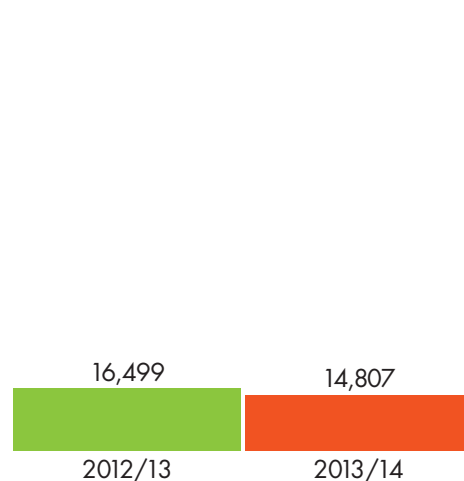


Figure 6: Longshot Lane energy consumption by year (kWh)



### Fuel consumption

100% of the waste collected for recycling, composting, energy recovery and landfill by the re3 partnership is transported by road. Vehicles are bulk loaded which aims to minimise the number of journeys made. It remains at present, impractical to use rail or water to transport wastes. In order to positively impact our environment we are reducing unnecessary journeys where possible, maximising load densities, reprocessing at locations that are close to the sites and maximising fuel efficiency. Fuel consumption is monitored closely at both sites and the total amounts used in the contract year were unchanged compared to 2012/13.

### Carbon emissions

As well as re3's obligation to monitoring fuel consumption and the location of our reprocessing sites, the partnership is committed to reducing carbon emissions. In 2012/13 the total amount of Emissions (kg CO<sub>2</sub>e) produced was 1,749,114kg. In 2013/14 the total amount of emissions (kgCO<sub>2</sub>e) produced was 1,781,243kg. This is a slight increase on the previous year.

### Monitoring of Bring Banks

Bring Banks are monitored and reconditioned or replaced where necessary to ensure materials are not contaminated. Clear public signage also helps prevent contamination of material streams which can affect its recycling. During the previous contract year, re3 Ltd replaced a total of 16 banks across the three partnership boroughs.

### Spot Market Audits

re3 Ltd undertakes audits on the companies used to reprocess recyclables from Smallmead and Longshot Lane. These audits ensure that the companies are compliant with waste licensing, have sufficient waste storage and processing facilities and disclose any enforcement notices, prosecutions or warnings in the last five years. The audits also allow re3 to monitor where the end market of each material is.

### Environmental

The Waste Management facility at Smallmead is constructed over a closed landfill site. There is a positive pressure methane control system in place at the site which is monitored continually by an external computerised system. The control system is in place to prevent the build up of landfill gas under the building.

Longshot Lane also has positive pressure methane controls. The site team and the relevant enforcement authorities monitor environmental matters at both Smallmead and Longshot Lane. There is a quarterly inspection in place to ensure monitoring is reviewed. Our Environmental Management System requires that many environmental aspects are reviewed on a regular basis and audited annually.

There were no reportable public or employee incidents (RIDDOR) at either Smallmead or Longshot Lane in the last contract year.






# Waste: Where does it come from?

## Waste collection

Each council operates an opt-in kerbside recycling service. The councils have individual systems with slightly different collection methods but the materials they collect for recycling are the same.

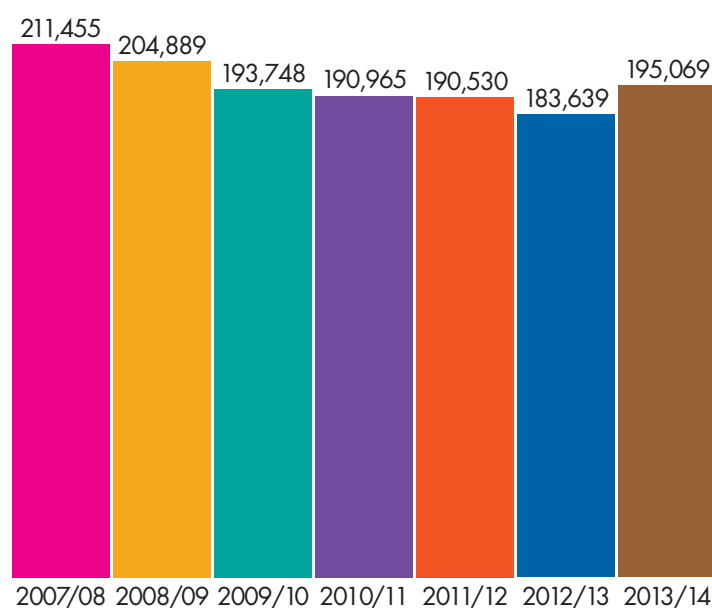
Figure 7: Collection methods used by each council during 2013/14

	Council	Recyclate	Refuse	Green waste
	Bracknell Forest	140L or 240L blue wheeled bin for plastic bottles, cans, paper, cardboard and aerosols	140L or 240L wheeled green bin – alternate week collection with recyclables	140L or 240L wheeled brown bin – £32 one off cost to purchase the bin. Annual collection charges are £26 p/a for 140L bins and £30 p/a for 240L bins. Brown biodegradable sacks are available at a cost of 50p per sack
	Reading	240L red wheeled bin for plastic bottles, cans, paper, cardboard and aerosols	240L wheeled bin – alternate weekly collection with recyclables	Wheeled bin available at a one-off cost of £32.90; 90L sack available for £10
	Wokingham	Weekly collection of 55L black boxes for plastic bottles, cans, paper, cardboard and aerosols	Weekly collection of blue bags issued on the basis of 80 bags per property per annum	Annual collection charge (for fortnightly collection) for 240L bins is £60 p/a, payable each April or 75L compostable sacks at a cost of £1.00 per sack

Each of the partnership councils collects Mixed Dry Recyclables in one container or bin, making it easier for residents to recycle. The mixed kerbside recyclate is separated once it reaches the Materials Recycling Facility (MRF) at the Smallmead facility.

Refuse collected at the kerbside is taken to the local re3 transfer station at either Smallmead, Reading or Longshot Lane, Bracknell where it is bulk loaded and transported to one of two end destinations – either the Lakeside Energy from Waste facility in Colnbrook, Berkshire or to the licensed landfill site at Sutton Courtenay, Oxfordshire.

Figure 8: Total Amount of Contract Waste (Tonnes)



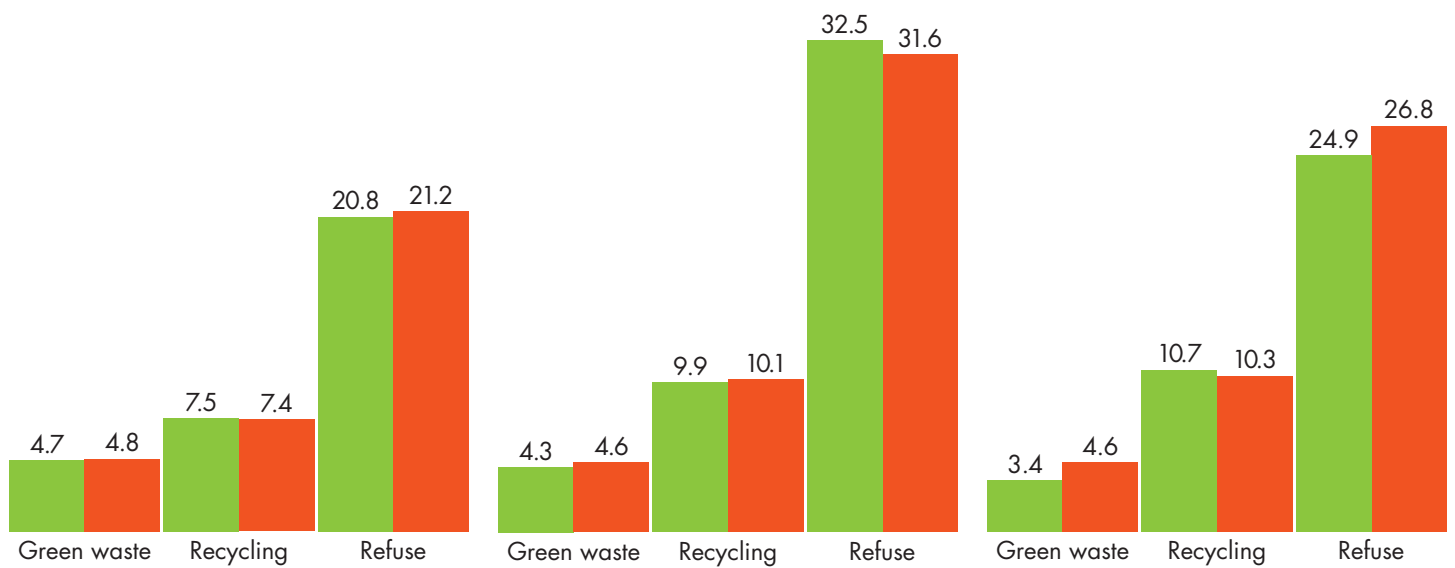
Figures 9, 10 and 11 show thousands of tonnes of green waste, recycle and residual waste collected from each council area from the kerbside.

■ April 2012 – March 2013  
■ April 2013 – March 2014

Figure 9: Bracknell Forest Council

Figure 10: Reading Borough Council

Figure 11: Wokingham Borough Council



# 195,069

tonnes, the total amount of contract waste in 2013/14

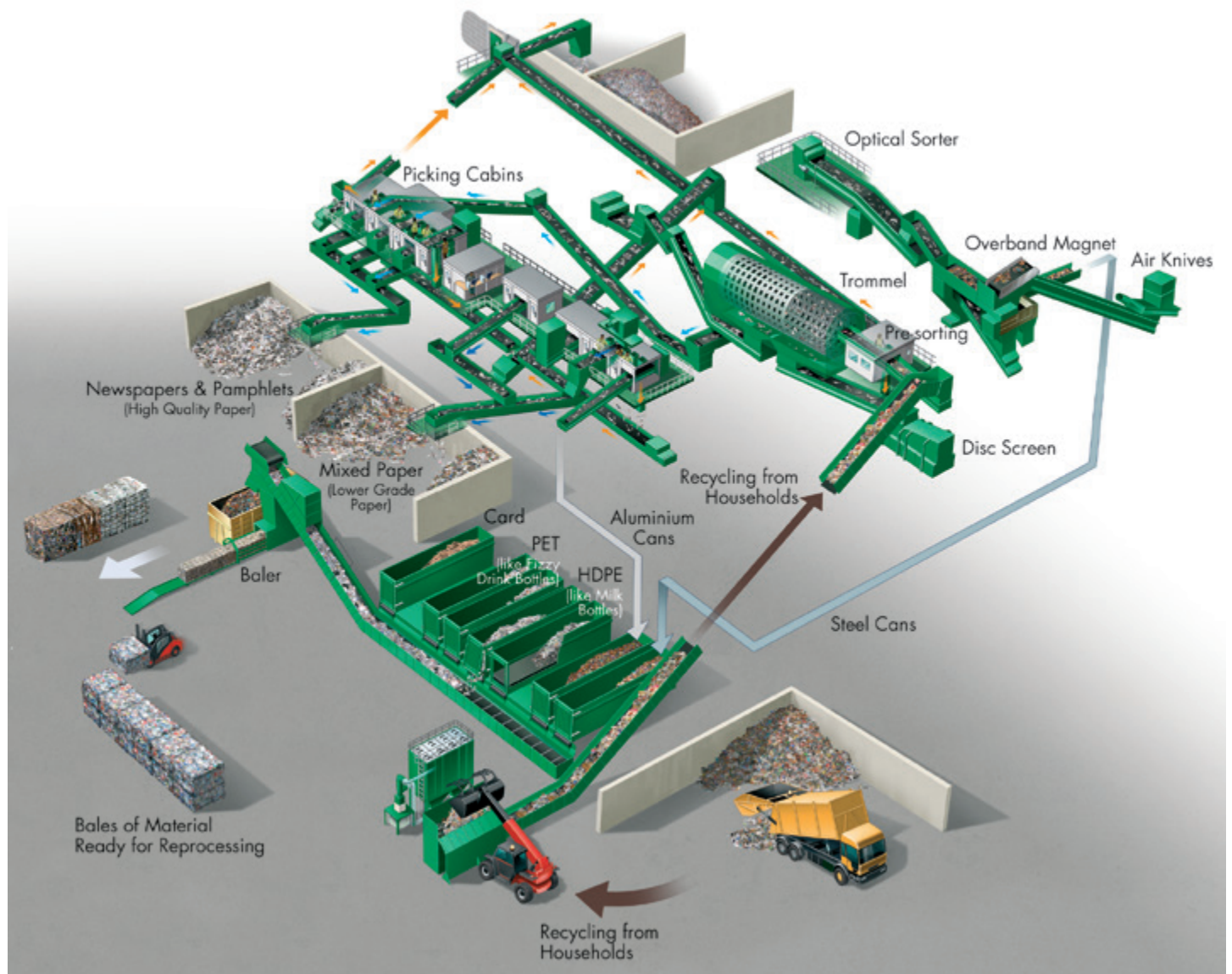
## Waste: How we deal with it

**The Materials Recycling Facility (MRF)** is situated at the Smallmead site. The MRF sorts and bales mixed dry recyclables (MDR) collected from the kerbside and has been designed to handle up to 58,000 tonnes of co-mingled dry recyclables each year.

The plant separates mixed recyclables (aluminium cans, cardboard, paper, plastic bottles and steel cans) which are then sent elsewhere for further reprocessing and recycled into new products.

The material that comes from households sometimes contains things that the plant cannot separate for recycling (called contamination). This material is not suitable for recycling in the MRF and has to be separated for energy recovery/landfill disposal.

The diagram below shows the parts of the facility responsible for separation.



The MRF uses a number of different methods and equipment to separate the mixed material delivered from residents. Some of these methods are:

- Pre-sorting allows waste that will damage the machine to be removed
- The trommel separates larger items from smaller ones
- The disc screen separates the very small items and breaks up glass which the MRF is not designed to handle
- Air knives remove paper
- Eddy currents separate aluminium cans
- An overband magnet sorts the steel cans
- Titech Polysort® units sort the plastic bottles from paper
- The MRF picking team pick off contaminants that should not be there (a negative pick) ensuring that the separated material is ready for reprocessing



## Transfer Stations

Both the Smallmead, Reading and Longshot Lane, Bracknell facilities operate a Transfer Station.

The Transfer Stations make it easier, safer and quicker for the councils and local traders to deposit and recycle their waste. They are a place where local waste collection vehicles and trades people disposing of commercial trade waste deposit their waste until such time as it is bulk loaded into a transport vehicle and sent for reprocessing or disposal.

Both Transfer Stations are equipped with two 50 tonne capacity weighbridges which measure the weight of vehicles on their way in and out of the Transfer Station. The weight of waste deposited is then accurately recorded. Vehicle turnaround times are minimised to ensure that the maximum number of vehicles can be accommodated.

### Smallmead

Designed to handle up to 200,000 tonnes of waste a year.

### Longshot Lane

The Longshot Lane Transfer Station can handle up to 100,000 tonnes of waste per year.



## Household Waste Recycling Centres

Both Smallmead and Longshot Lane HWRC's benefit from clear and modern signage to help residents dispose of their waste quickly and efficiently.

They accept a large variety of materials for recycling which include glass bottles and jars, textiles, engine oil, garden waste, household items, scrap metal and electronic items. There are a number of other recycling facilities at our sites too.

Both sites deploy a height barrier which is set at 1.95m (6' 4") and was introduced to help us reduce trade waste being brought into the site at the local taxpayers expense. Trades people and those wishing to dispose of commercial waste should pay to do so and facilities for trade customers are available at both Smallmead, Reading and Longshot Lane, Bracknell.

Vehicles over this height have access to site between 2pm and 4pm, Monday to Saturday (with the exclusion of Sundays and Bank Holidays) and show personal identification and proof of waste origin (in the form of a council tax bill, major utilities bill or drivers license).



An annual user satisfaction survey which took place in September 2013 questioned users on their thoughts about the Smallmead HWRC and the staff. Some of the recorded HWRC user satisfaction results are shown below.

Longshot Lane HWRC is a popular local facility some of the recorded HWRC user satisfaction results are shown below.

Figure 12: Smallmead user satisfaction answers

Site users	2012	2013
Said the staff had been helpful during their visit	97%	99%
Rated the site as good or very good for cleanliness	97%	95%
Overall rating of the centre as good or very good	93%	97%

Figure 13: Longshot Lane user satisfaction answers

Site users	2012	2013
Said the staff had been helpful during their visit	100%	97%
Rated the site as good or very good for cleanliness	99%	97%
Overall rating of the centre as good or very good	95%	91%



Figure 14: Thousands of tonnes of waste sent from Smallmead HWRC for (i) beneficial use (ii) composting (iii) landfill (iv) recycling

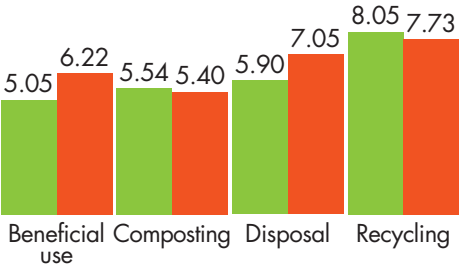
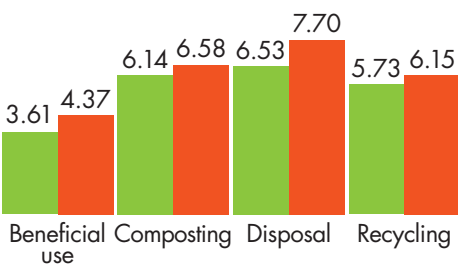


Figure 15: Thousands of tonnes of waste from Longshot Lane HWRC sent for (i) beneficial use (ii) composting (iii) landfill (iv) recycling



April 2012 – March 2013  
April 2013 – March 2014

## Bring Bank facilities

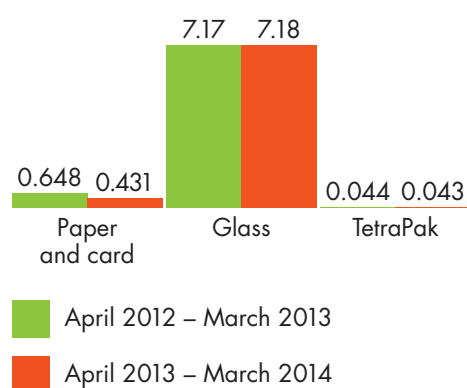
re3 Ltd continues to work alongside the partner councils to improve Bring Bank recycling sites. There are now 567 glass recycling banks at 139 sites across the three boroughs.

Bring Bank facilities across a variety of locations accommodate recycling banks for glass bottles and jars. The banks which collected card, newspapers and magazines were removed from Reading and Wokingham in quarters 2 and 3 of the contract year with residents encouraged to recycle their cardboard and newspaper with their other household mixed dry recyclables via their kerbside collections.

There remain 15 TetraPak (drinks cartons etc) locations across the re3 partnership as well as a selection of charity banks including textiles and shoes, books and CDs.

Signage which uses the same branding as that found at Smallmead and Longshot HWRCs is in place at a number of locations across the partnership to promote their use. As well as location signage, all glass banks are labelled with re3 contact details making it easier for residents and users to contact re3 should they need to report any issues.

Figure 16: Waste types collected through Bring Bank services – Thousands of tonnes of paper, card, glass and Tetra Pak cartons



Bracknell Forest Council Bring Banks



Reading Borough Council Bring Banks



Wokingham Borough Council Bring Banks

There are now more places than ever to recycle and to find your nearest recycling facility go to [www.recyclenow.com](http://www.recyclenow.com) and enter your postcode.

## Lakeside Energy from Waste (EfW)

During the previous contract year, the Lakeside Energy from Waste facility processed over 433,262 tonnes of residual waste.

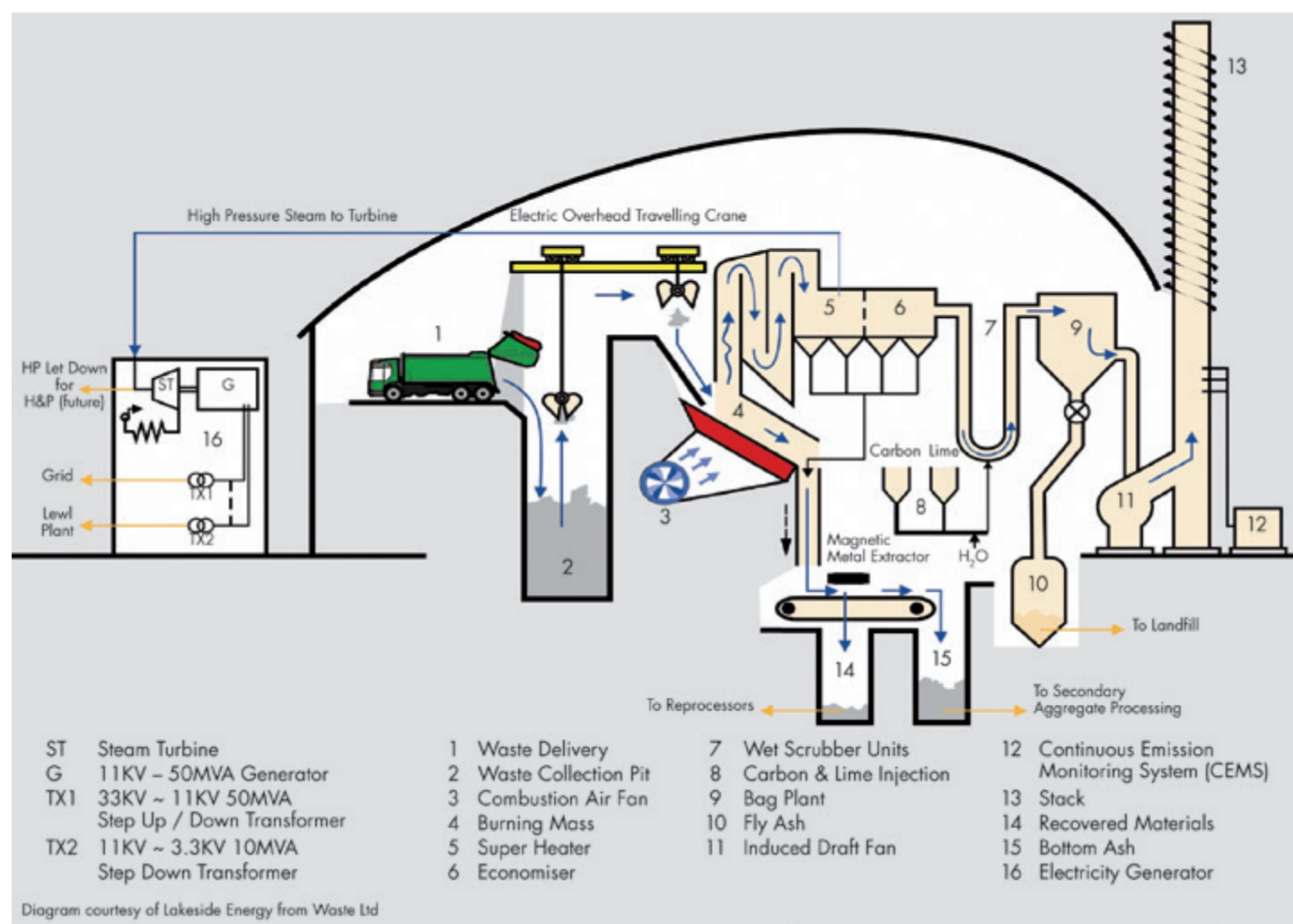
Materials Inputs for EfW include:

- Mixed household waste which will arrive in refuse collection vehicles (Municipal Solid Waste – MSW)
- Non-hazardous commercial and industrial dry wastes with similar characteristics to household waste
- Non recoverable wastes arising from Material Recycling Facilities
- Other non-hazardous non recoverable combustible waste

The EfW plant uses advanced moving grate technology and is equipped with atmospheric pollution control equipment that will ensure the plant conforms to the requirements of relevant legislation.

Lakeside EfW is regulated by the Environment Agency and emissions to air are strictly controlled. The by-products of the EfW process include bottom ash (which can be recycled for use in the aggregates industry). From the refuse waste re3 send to Lakeside EfW, approximately 20% will become non-hazardous bottom ash and 3% fly ash (with 55% of this 3% being used as building material)

The flow diagram shown below demonstrates how the waste is combusted to produce heat and from it electricity. Waste is seen as a source of renewable energy and the EfW facility generates enough electricity to power its own needs and also export 255,476mw of electricity to the National Grid – enough to power 50,000 homes.



# 433,262

tonnes of residual waste was processed at EfW



## Waste: What happens to it?

The average recovery rate across the re3 partnership area for the period 2013/14 is 79.2%. The recovery rate is a contractual measure of the total amount of waste delivered to recycling, Energy from Waste, beneficial use and composting.

The re3 partnership saw a slight drop in recovery rate to 79.2% for this contract year compared to 80.90% in the previous reporting year (2012/13). re3 will work to implement further improvements with the primary objective of increasing the recovery rate over the next twelve months, in line with contract targets.

### Green Machine

Green Machine is a Community Interest Company which runs Community Repaint (East Berkshire) and has been giving volunteer and employment opportunities to disabled and disadvantaged people through their recycling and green space management operations since 2009.

Community RePaint collects reusable, leftover paint and re-distributes it to individuals, families, communities and charities in need, improving the wellbeing of people and the appearance of places across the UK.

63.5 tonnes of paint was collected in the last contract year by Green Machine. The paint is redistributed to community groups, charities, voluntary organisations and people in social need.

### Blackburn Meadows

Blackburn Meadows provide a facility where solvent based paints are taken for either for reprocessing or disposal.

Between April 2013 and March 2014 Blackburn Meadows removed 204.9 tonnes of unwanted paint from Smallmead and 148.0 tonnes from Longshot Lane. These figures equate to approx 423,504 litres.





# 79.2%

the average recovery rate across the partnership area for 2013/14

### Sue Ryder

re3 has been working with Sue Ryder since 2011 and continues to help benefit thousands of people each year who are in need of care.

Every year, Sue Ryder provides over 4 million hours of end of life and long-term care in the UK to people living with a range of complex and life threatening conditions. At a local level, Sue Ryder Duchess of Kent House and Nettlebed Hospice provide end of life care to hundreds of people each year in and around Central and West Berkshire and South Oxfordshire.

Items of furniture bought to either Smallmead or Longshot Lane HRCW are initially inspected by site staff. Any items assessed and deemed to meet the minimum criteria set out by Sue Ryder are put to one side and then collected by the charity for sale in their shops. A total of £23,500 was raised in the previous contract year through this partnership and this money helps Sue Ryder continue to provide expert care that makes a real difference to the quality of people's lives.



### Beneficial use

Beneficial use describes the reuse of, often, inert materials. Examples of this are the reuse of hardcore as a construction aggregate and soil for landfill remediation and landscaping. Soil and hardcore deposited by householders is collected separately at both Smallmead and Longshot Lane HWRC's.

### Recycling

Recycling is defined as the act of processing used and unwanted materials to create a new product. The amount of each type of recyclable material is closely monitored, along with the point of origin to ensure accurate reporting of data. re3 Ltd reports tonnages to the council partnership on a monthly basis to aid monitoring of recycling rates.

### Composting

Open windrows are used to turn green waste into compost at Sutton Courtenay in Oxfordshire. The composting method allows us to achieve very high temperatures as a result of which means it only takes 10 – 12 weeks to turn green waste into 'compost' which can then be used to improve soil.

### Energy from Waste (EfW)

In accordance with the PFI contract, 70,000 tonnes of waste per annum were sent to Lakeside EfW for energy recovery. The Lakeside EfW generates a great deal of heat in the course of its process. This heat is then used to generate steam to power a turbine generator unit. The generator provides enough electrical power to run the plant and contribute to the National Grid.

### Sustainable landfill

Landfills are designed to control and manage municipal solid waste spread in layers, compacted to the smallest practical volume, and covered by inert material applied at the end of each operating day.

Municipal waste not suitable for recycling or recovery is sent to the licensed FCCE landfill site at Sutton Courtenay, Oxfordshire.

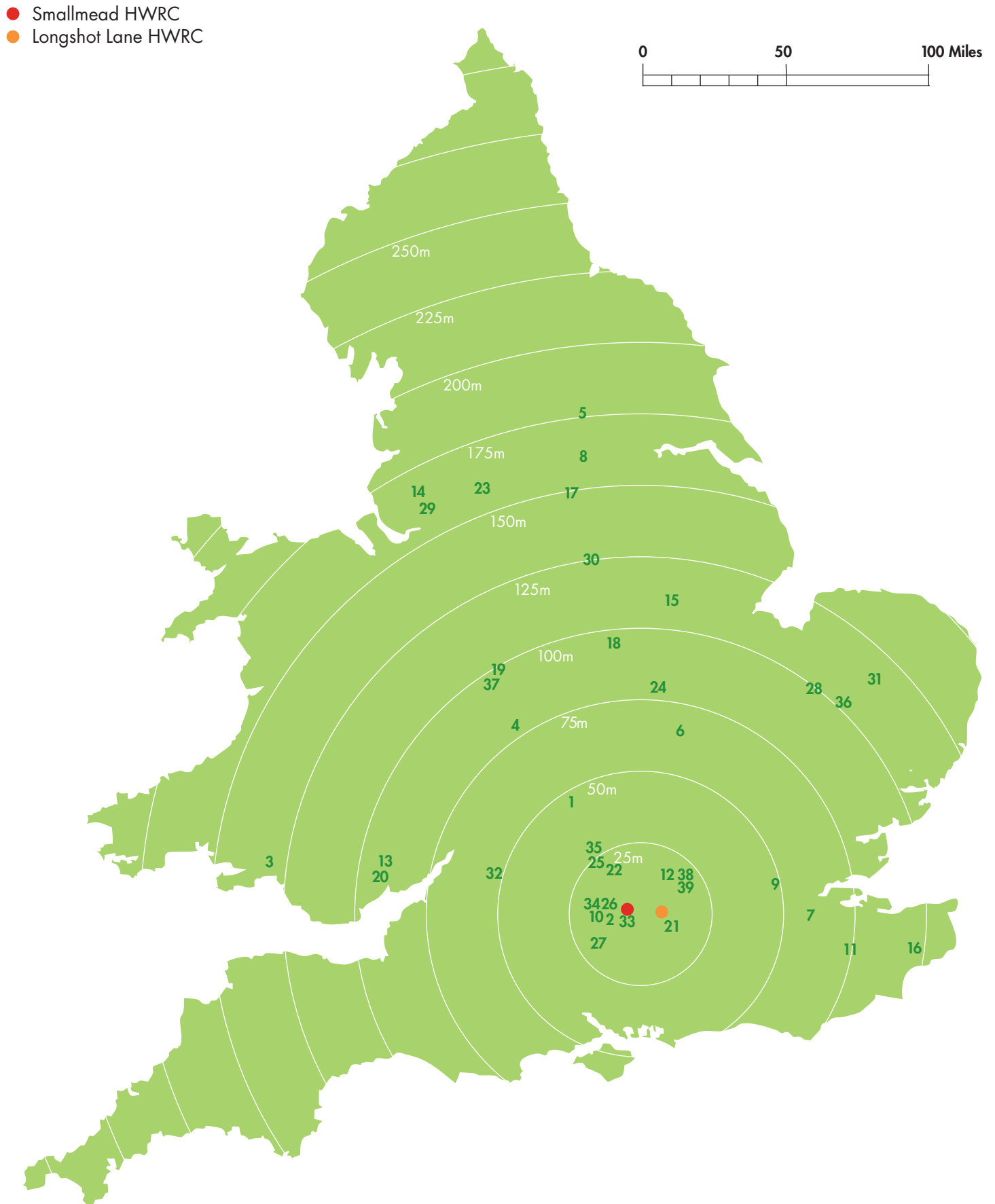
FCC Environment provides landfill services to re3. While landfill is the least preferred option for disposal of waste, the landfill practice to which FCCE subscribes incorporates sustainable elements.

# Locations of reprocessors

No.	Company	Post Code	Miles from Smallmead	Miles from Longshot	Market	End Market
1	Agrivert	OX7 4EB	55.4	63.6	Green waste	UK processed
2	Aldermaston Recycling	RG7 4PG	13.3	21.5	Plasterboard	UK processed
3	Aleris	SA5 4YG	149	157	Aluminium cans	UK processed
4	Alutrade	B98 7SE	108	106	Aluminium cans	UK Processed – finished product to Germany and USA
5	AMG Resources	LS25 1PA	215	213	Metal: steel cans	Aluminium – UK processed Steel – global market
6	Ancillary Components (Wykes)	NN10 9LU	92.4	90.4	Wood	UK processed
7	Aylesford Newsprint	ME20 7DL	82.7	64.2	Card and paper	UK processed
8	Berrymans	WF9 3NR	202	200	Glass	Mixed Glass – Mainly UK processed Raw cullet – Europe processed
9	Brooksight	IG11 0EQ	54.9	52.2	Gas canisters	UK processed
10	Computer Salvage Specialists	RG14 5EY	22.6	31.2	TVs	UK processed
11	Countrystyle	TN27 0RU	111	92.6	Plasterboard, wood	UK processed
12	DS Smith Recycling	SL6 0AF	21.5	11.4	Card and paper	UK processed and China
13	Eco Oil	NP19 0PL	97	105	Oil	UK processed
14	EMR	WA5 7NS	199	197	Fridges, freezers, large WEEE, metal	25% UK reprocessed Iron and steel – 60% exported to Europe and Far East
15	Environcom	NG31 7UH	143	141	WEEE small and large, fluorescent tubes, fridges and freezers, TVs and PCs	UK processed
16	Eurowaste	CT17 0RH	129	110	Gas canisters	UK processed
17	FCC Blackburn Meadows	S9 1HF	188	186	Paint	UK processed
18	Flogas	LE7 1PF	132	130	Gas canisters	UK processed
19	G & P Batteries	WS10 8JR	127	125	Batteries: household	Nickel batteries for cadmium refining exported to France. All others UK processed
20	GD Environmental	NP19 4PP	98.6	107	Tyres	UK processed
21	Green Machine	RG12 7AE	12.3	1.4	Paint	UK processed
22	Grundon	OX10 6LX	16.5	25.6	Asbestos	UK processed

No.	Company	Post Code	Miles from Smallmead	Miles from Longshot	Market	End Market
23	Hadfields	M43 7LB	209	207	Wood	UK processed
24	J & A Young	NN18 9EY	109	107	Plastics	UK processed or exported to Europe
25	J James	OX14 4PJ	22.6	42	Wood	UK processed
26	J Mould	RG30 3XN	13.9	4.6	Hardcore	UK processed – within 25 mile radius of Reading
27	Laverstoke Park	RG25 3DR	27.7	37.3	Green waste	UK processed
28	Living Fuels	IP26 4JQ	134	132	Cooking oil	UK processed
29	Novellis	WA4 1AP	193	191	Aluminium cans	UK processed – finished product to Germany
30	Recresco	NG17 8AP	160	158	TetraPak	UK processed
31	Recyclite	NR17 2QZ	149	147	Fluorescent tubes	UK processed
32	Saica Natur	SN16 9RU	56.7	64.9	Mixed paper	UK processed – finished product to China
33	Select Environmental	RG2 0QX	1.1	11.8	Asbestos	UK processed
34	Sims	RG14 2QR	18	30.5	WEEE small and large	UK processed
35	Sutton Courtenay Composting	OX14 4PW	22.6	42.9	Green waste	UK processed
36	Takeback	IP24 1ZH	126	134	Ink cartridges	UK processed
37	Wilcox (JMP)	WV14 7NH	114	127	Bring banks – textile/shoes	Exported to East and West Africa, Poland, India, Pakistan. Some UK processing
38	WN Thomas & Sons	SL1 3QR	22	19.4	Batteries: bar	UK processed
39	WN Thomas & Sons	SL1 3QR	22	19.4	Metal: iron, non ferrous, scrap, steel, wire/copper	Exported to Spain and USA

Figure 17: re3 reprocessor plant locations



# Glossary

## Average recovery rate

Is a contractual measure of the proportion of contract waste diverted to Energy from Waste, Recycling, Beneficial Use and Composting.

## Barrier System

In order to manage capacity within allocated byas at Longshot Lane, a yellow wheeled barrier system was installed. This system is a useful, practical and safe way of controlling waste from spilling over into the traffic areas of site and reduces the need for site staff to use plant machinery to compress waste within the bay.

## Beneficial use

Beneficial use describes the reuse of inert materials. Examples of this are the reuse of hardcore as construction aggregate and soil for landfill remediation and landscaping.

## Bring bank sites

An alternative name for the community recycling sites provided by the local authority/contractor for convenient public access to recycling services. These sites often consist of different recycling banks for different materials.

## Composting

The controlled biological decomposition and stabilisation of organic substrates resulting in a final product that has been sanitised stabilised and is high in humic substances.

## Contract Waste

Contract Waste is defined within the contract but broadly covers household waste collected by the councils or their agents, waste brought to and deposited of at the HWRC's by householders and industrial and commercial waste disposed of via the transfer station.

## Co-mingled materials

Recyclables, all mixed together, such as paper with plastic bottles and steel cans. Co-mingled materials require sorting after collection.

## Eddy Current

A tool used in a Materials Recycling Facility (MRF) to separate aluminium cans.

## Energy from Waste (EfW)

Energy from Waste is the application of sound proven combustion engineering principles to a variety of technologies which reduce and sanitise the residual municipal waste fraction, after recycling and composting has taken place, in order to recover energy.

## Environmental Management System (EMS)

EMS refers to the management of an organisation's environmental programs in a comprehensive, systematic, planned and documented manner. It includes the organisational structure, planning and resources for developing, implementing and maintaining policy for environmental protection.

## FCCE Environment

(Formerly Waste Recycling Group (WRG)) Parent company of re3 Ltd. Waste Recycling Group is one of the leading waste management services companies in the UK and the fourth partner of the re3 partnership.

## Fomento De Construcciones y Contratas (FCC)

Ultimate parent group of re3 Ltd. FCC is a leading international construction and services company with operations in Europe, South America and the United States.

## HWRC

A Household Waste Recycling Centre (HWRC) is a facility where members of the public can dispose of household waste and also often contain recycling points.

## Landfill site

Designed, controlled and managed disposal sites for municipal solid waste spread in layers, compacted to the smallest practical volume, and covered by inert material applied at the end of each operating day.

## Materials Recycling Facility (MRF)

A recovery operation that separates mixed materials into their individual streams before transferring them to reprocessors.

## Municipal waste

Municipal waste is that which comes under the control of the Local Waste Disposal Authority and includes household waste and other wastes collected by a Waste Collection Authority or its agents.

## Overband Magnet

A piece of equipment used in a Materials Recycling Facility to separate steel cans.

## Private Finance Initiative (PFI)

PFI is one of the main mechanisms through which local authorities (LAs) can procure assets in a value for money way in partnership with the private sector. It is a procurement methodology for asset-based services. Long term fixed price contracts are entered into with private sector contractors to deliver services to specified performance standards.

### **Picking Team**

Members of staff whose role is: to remove items of contamination from the mixed dry recyclables on the conveyors in the Materials Recycling Facility.

### **Recyclables/Recyclate**

Materials that still have useful physical or chemical properties after serving their original purpose and that can, therefore, be reused or remanufactured into new products.

### **Remediation**

This is the process by which and is made good after a particular use or activity. For example, when a landfill site is closed the land is used for other purposes such as new building developments.

### **Reportable Incidents (RIDDOR)**

A reportable incident or RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995) is the law that requires employers, and anyone else with responsibility for health and safety within a workplace, to report and keep records of work-related deaths, serious injuries, cases of diagnosed industrial disease and certain 'dangerous occurrences' (near miss accidents)

### **Spot Market Audits**

These are audits carried out on the companies that re3 use to ensure they are fully compliant with waste licensing and have sufficient waste storage and processing facilities and disclose any enforcement notices, prosecutions or warnings in the last five years.

### **Transfer Station**

The Transfer Stations are a place where local waste collection vehicles and trades people disposing of commercial trade waste deposit their waste. The Waste is held here prior to being bulk loaded into a transport vehicle and sent for reprocessing.

### **Turnaround Failures**

Turnaround Failures refer to Turnaround Failures which occur when, after weighing in, an Authorised Vehicle (vehicle depositing waste on behalf of the Council) is on site longer than 20 minutes before being weighed out. Reasons not accepted for taking longer than stated to deposit waste include site congestion, computer breakdowns and bulk loader blockages



re3 Ltd.  
Smallmead Waste Management Park  
Island Road  
Reading RG2 0RP

T 0800 988 3023  
E [re3admin@wrg.co.uk](mailto:re3admin@wrg.co.uk)  
[www.re3.org.uk](http://www.re3.org.uk)

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