Annual Environmental Report 2017/18

www.re3.org.uk



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INTRODUCTION: A YEAR OF POSITIVE CHANGE

NEW SIGNAGE, FURTHER REDUCTION OF WASTE SENT TO LANDFILL, EXCELLENT CUSTOMER SATISFACTION RESULTS AND UPGRADES TO THE MATERIALS RECYCLING FACILITY ALLOWING FOR MORE PLASTICS TO BE RECYCLED.

74,806

tonnes sent to Lakeside Energy from Waste

4,519

Street Sweeping tonnage collected

178,275

total tonnes of contractual waste managed

140,211

re3 website visitors

INTRODUCTION: A YEAR OF POSITIVE CHANGE

re3 is the waste management partnership between Bracknell Forest, Reading and Wokingham Borough Councils and FCC Environment. The partnership's aims are to process waste using cost-effective, efficient and environmentally friendly methods, to drive up recycling rates and reduce the amount of waste sent to landfill.

The theme for the twelfth re3 Annual Environmental Report (AER), is the continuation of the recycling journey as we deliver 88% landfill diversion, an upgrade to our Materials Recycling Facility (MRF) allowing re3 residents to recycle a broader range of plastics, 98% and 97% customer satisfaction rating from our re3 residents and a complete overview of our 'site signage'.

Included in the report are updates on how your feedback led to a full review of our site signage at both Recycling Centres. We will also explain improvements that we have made to our waste processing, with initiatives such as 'Precycle' and 'bag splitting recycling scheme'. We will also share with you the impact that China has had on the recycling industry and why now more than ever that clean recycling material is important and contamination is more costly. All the changes have been developed in partnership with the re3 councils so that we continue to reduce the amount of waste sent to landfill, provide better value for money and support residents in further improving recycling.

25,658

tonnes of green waste recycled into compost

13,608

tonnes of waste sent to Greatmoor Energy from Waste

24,194

tonnes of Mixed Dry Recyclables processed in the MRF

6,836

tonnes of glass collected from 532 bring banks

NEW SITE SIGNAGE

FOLLOWING THE RESULTS OF THE LAST TWO ANNUAL CUSTOMER SATISFACTION SURVEYS, A COMMON THEME WAS EMERGING THAT FOCUSED AROUND SITE SIGNAGE.

As a result, a signage project plan was developed in conjunction with the council, and in the autumn of 2017 a large amount of work was completed to replace the signage at both Longshot Lane in Bracknell and Smallmead in Reading's Recycling Centre's.

This was completed to improve the experience for residents as well as the overall look of the sites. The new signage is displayed clearly and consistently to make the experience as easy as possible for the users of site and ensures that we display the same message throughout.

Due to the nature of the environment that the signage is situated in, it had become tired. Some of the signage was damaged and some details were out of date. The replacement signage has been placed throughout the facilities which gives them a fresh new look. This also shows clear instructions to aid residents to maximise their recycling. It is also in line with WRAP guidelines.

New exterior HWRC signage



NEW SITE SIGNAGE

With these now clearer signs in place, residents can see where to recycle their items without the need to ask site staff. The new schemes that were put in place last year, the reuse area and the bag splitting initiative, now have signs which match the rest of the facility. This has helped to integrate the areas and raise awareness to the residents who use the recycling centres. This will help us to maximise the items which can be recycled and not put in to the general waste.

New interior HWRC signage







PERFORMANCE MONITORING

CONTRACT REQUIREMENTS

re3 IS CONTINUALLY MONITORED TO ENSURE APPROVED SERVICE STANDARDS. FAILURE TO MAINTAIN THE CONTRACTED LEVEL OF SERVICE CAN LEAD TO PENALTY POINTS AND FINANCIAL DEDUCTIONS FOR THE CONTRACTOR. AS A RESULT, ANY CONSISTENT FAILURES TO ACHIEVE THE STANDARD ARE FULLY REVIEWED AND, IF REQUIRED, CHANGES MADE TO THE OPERATIONAL PROCEDURES.

With over 70 KPIs, 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 monitors these relevant services in accordance with the performance standard detailed in the contract – these are shown in the table below.

Ref	Performance Topic
SO1	Waste Management and Disposal
SO2	Waste Reception and Transfer
SO3	Civic Amenity and Bring Bank Sites
SO4	Markets for Recovered Products
SO5	Interface with the Public
SO6	Contingency Plans
SO7	Contract Commencement and Expiry Plans
SO8	Service Management
SO9	Health and Safety



PERFORMANCE MONITORING

This section shall detail the key procedures in place that ensure performance remains in line with the contract.

Weekly Checks

Weekly Key Performance Indicator (KPI) checks and daily site housekeeping checklists are used to monitor different key areas. These include visitor numbers, bring bank capacity and environmental aspects. This year's KPIs identified a few busy periods when bring banks exceeded their capacity, as well as recording when plant equipment was faulty resulting in prompt repairs. Site checklists also show that the Recycling Centre's are continuously well maintained.

Monthly Reports

Monthly monitoring reports summarise the operational performance of the contract and allow re3 to review and investigate ways to improve the service provided. The three main areas of focus this year have been:

SO2 – Waste Reception and Transfer
Vehicle turnaround times at the Transfer Stations.

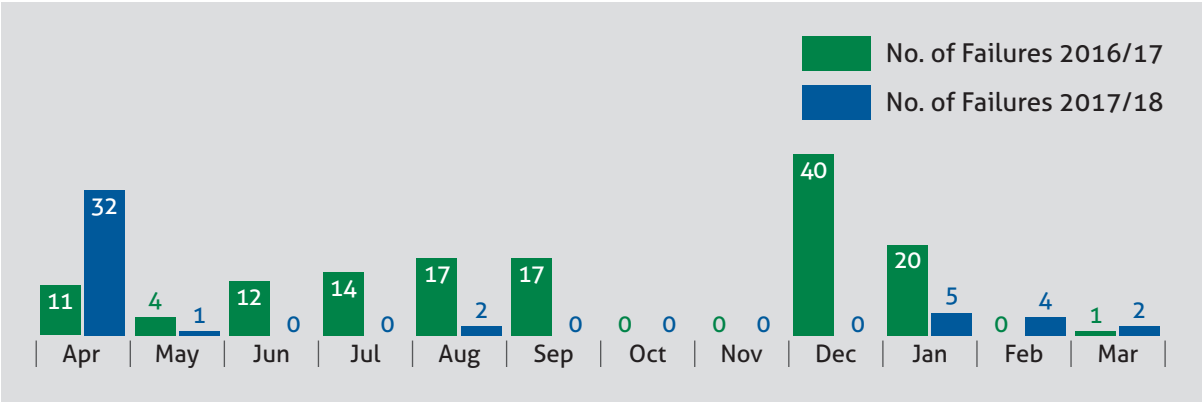
The contract allows for a maximum turnaround time of 20 minutes at the Transfer Station. If vehicles take longer than this, it may be classed as a performance failure. The table below shows the significant improvement made in this performance standard.

SO3 – Civic Amenity and Bring Bank Sites
Management of bring banks including glass.
Site appearance – maintaining site cleanliness.

For example, the contract only allows one working day to rectify any issues and failure to do so results in daily penalties being raised that continue to be applied until the issue is rectified.

Service issues regarding the collection of the glass banks under SO3 resulted in 45 penalties.

Figure 1
SO2 Year on Year Failures



PERFORMANCE MONITORING

ANNUAL ENVIRONMENTAL REPORT

SINCE 2006, re3 HAS PUBLISHED AN ANNUAL ENVIRONMENTAL REPORT (AER) WHICH DESCRIBES THE re3 PARTNERSHIP ACTIVITIES AND MANAGEMENT OF THE WASTE RECEIVED IN THE PREVIOUS CONTRACT YEAR. HISTORICAL AERS CAN BE FOUND AT WWW.RE3.ORG.UK

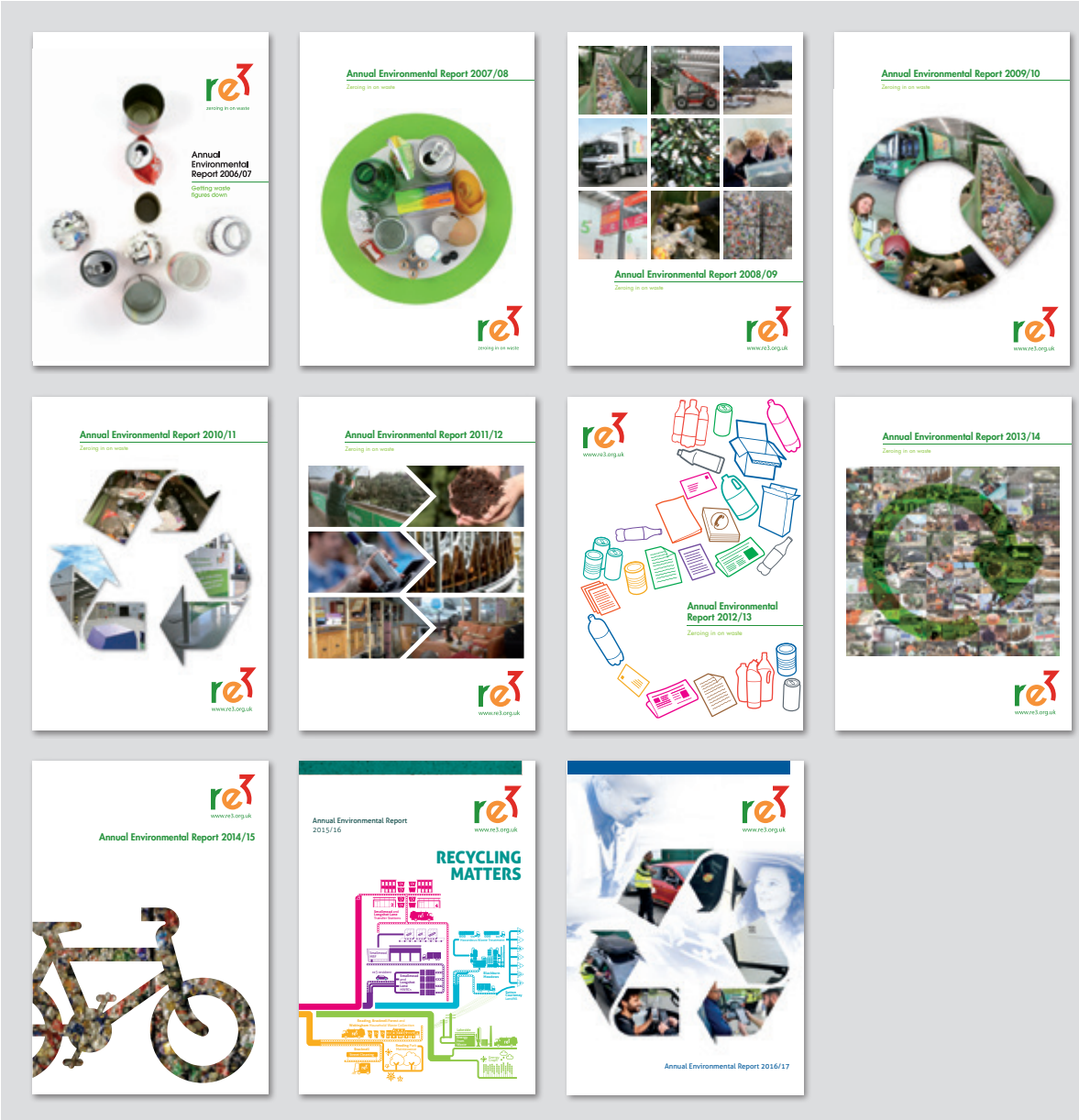


Figure 2
The Eleven Previous re3 Annual Environmental Reports

COMPLAINTS AND COMPLIMENTS

OUR CONTRACT REQUIRES US TO USE A STANDARDISED COMPLAINTS PROCEDURE TO MANAGE AND MONITOR COMPLAINTS FROM MEMBERS OF THE PUBLIC IN RELATION TO THE SERVICE WE PROVIDE.

Any written complaint from a member of public is acknowledged within 3 working days, with a full written response provided within 10 working days. This requirement has been upheld throughout 2017/18.

Between April 2017 and March 2018, re3 Ltd received a total of 31 complaints, both verbal and written. 21 of these were written complaints from members of the public.

64% of these complaints related to our site staff, who through their customer facing roles, are the first point of contact for the public. These were all fully investigated through CCTV, interviews and bodycam footage by the management team. Any complaint of this nature will prompt a toolbox talk to be held with all site staff. This ensures that all staff are reminded of procedures and reduces the risk of reoccurrence.

In addition to the complaints, we also received a total of 24 compliments. 15 of these were written and 9 were received over the phone. Of these 24 compliments, 16 related to Smallmead and 7 to Longshot Lane. All complaints received a response within 10 working days

Figure 3
Summary of Written Complaints by Type

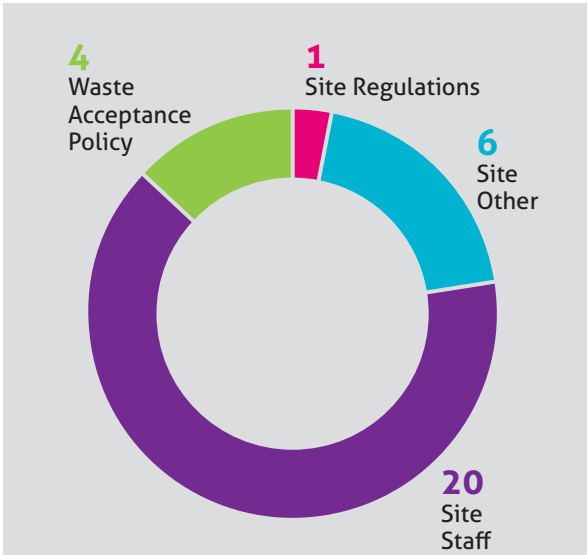
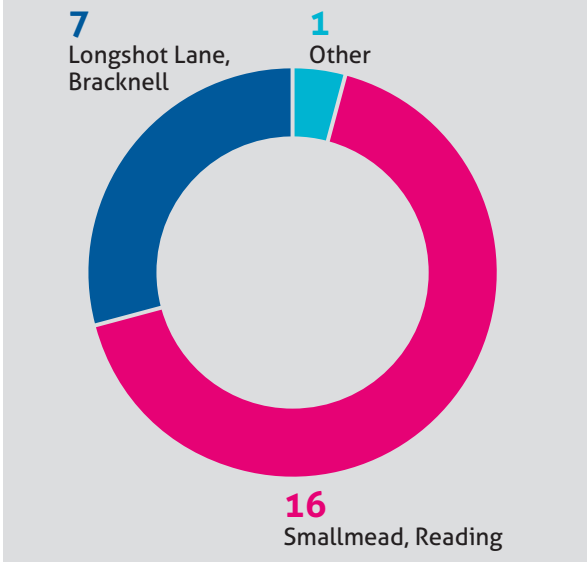


Figure 4
Summary of Written Compliments by Site





PROCESS EFFECTIVENESS

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.

Environmental Monitoring

The Waste Management facility at Smallmead in Reading is constructed over a closed landfill site. An external computerised system monitors a positive pressure methane control system that is in place to prevent the build-up of landfill gas under the building.

The site teams and relevant enforcement authorities monitor environmental matters at both Smallmead and Longshot. re3 Recycling's Environmental Management System requires many environmental aspects to be reviewed on a regular basis and our sites to be audited annually. We support these requirements with quarterly inspections to ensure monitoring is carried out on an ongoing basis.

Fuel Consumption

As 100% of the waste collected by the re3 partnership is transported by road, vehicles are bulk loaded which aims to minimise the number of journeys made. In order to further reduce our impact on the environment, we are reducing unnecessary journeys where possible; maximising load densities, reprocessing at locations that are close to the sites and maximising fuel efficiency. These actions, as well as a decrease in the amount of waste brought to our sites this year, have led to a decrease in fuel consumption.

Energy Consumption

As part of our Environmental Management System, re3 monitors each of the Recycling Centre's separately.

Over the reporting period, Smallmead Recycling Centre in Reading (which includes the office, HWRC, Transfer Station and MRF) consumed a monthly average of 185,642kWh.

Energy usage by the MRF is closely monitored. Some examples of these methods are listed below:

- Soft start motors have been installed into the machinery to ensure 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, provide heating to the building
- During the summer months all base lights in the building are turned off, saving up to 0.4 kW per lamp per hour

Longshot Lane Recycling Centre in Bracknell consumed a monthly average of 139,610kWh over the same period.

re3 continues to be committed to reducing energy consumption at its Smallmead and Longshot Lane sites. FCCE Berkshire is accredited with ISO 50001, an energy management accreditation that will help support further energy improvements in the future.

PROCESS EFFECTIVENESS

Spot Market Audits

As a partnership, re3 undertakes audits on the companies used to reprocess recyclables from Smallmead and Longshot Lane. These audits ensure the companies are compliant with waste licensing, have sufficient waste storage 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 sent, both domestic and abroad.

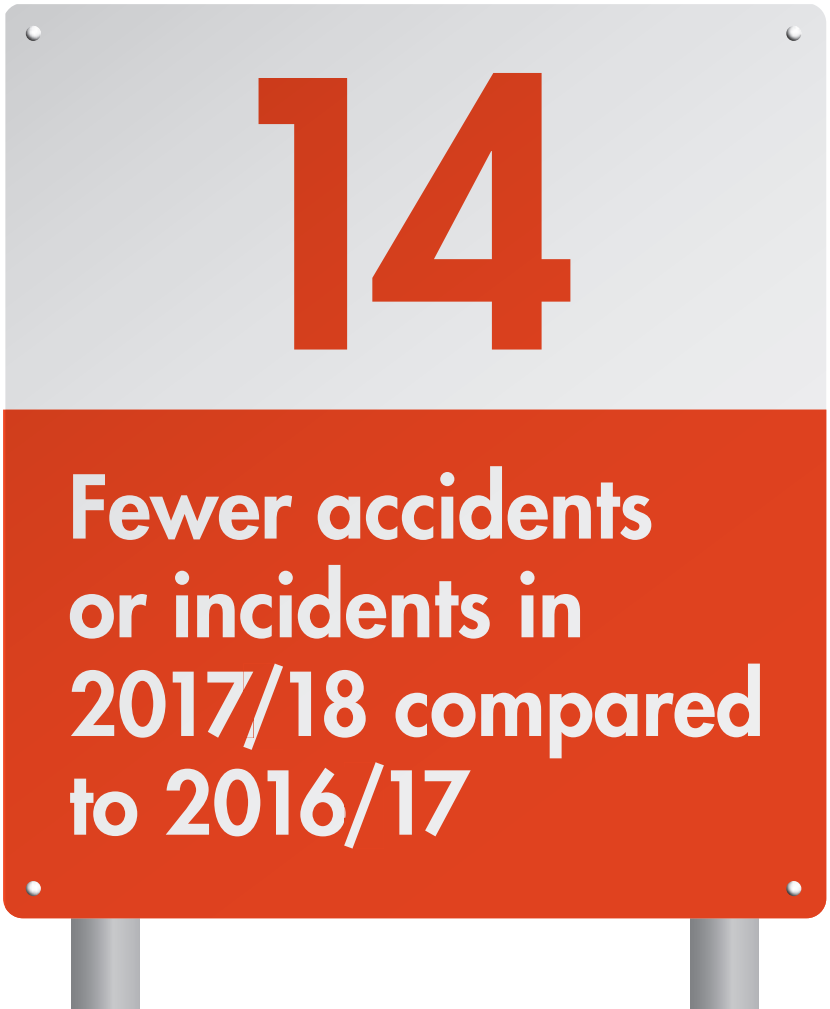
re3 have recently changed the process used to audit non-exporting UK companies. This includes a change in format of the audit itself, as well as changes made to our contractual requirement to complete these audits. We are now required to complete desktop audits annually, with a site visit every three years. With over 50 companies in need of auditing, these changes are crucial to ensuring the audit process remains streamlined but efficient and that compliance is monitored on a regular, ongoing basis.

Health and Safety

Overall, re3 have recorded a total of 116 accidents/incidents and 579 near misses across the partnership. This demonstrates a decrease in the number of accidents / incidents, which are down by 14 compared to last year. Also, no reportable employee incidents (RIDDORs) were recorded.

The re3 'Because' You're on Board Initiative Has Really Made a Difference

The 'Because' health and safety initiative has been a profound tool in improving staff engagement by collating and sharing information regarding health and safety issues and trends. This has been implemented effectively by use of monthly staff meetings supported by the use of a 'Because' communication board at each site. These visual aids help structure meetings and communication as well as highlighting areas of improvement which can realistically be tackled by both staff and the site management team.



PROCESS EFFECTIVENESS

The re3 Because Boards are both a health and safety, and engagement, initiative. The Because Boards aim to develop staff understanding, interest and focus on the industry. One of the benefits of this initiative is that it encourages staff to work towards the 2020 government target of a 50% re-use and recycling rate.

As part of the initiative, a safety charter was established and this captured an agreed way of working. Following this, the management team committed to conduct monthly site walk arounds at the HWRC's and the MRF. The walk arounds encouraged staff to provide feedback which is captured in the site observation reports. This is shared with staff at the monthly Because meeting.

These observation cards are accumulated with near miss reports and staff comments to highlight issues in need of addressing. Information is displayed on the Because Communication Boards which are placed in the designated site tea rooms for staff viewing. Crucially, they also form part of the site monthly team meetings.

The Because health and safety initiative started at a senior level within FCC (re3's contractor); who then realised it could improve statistics and staff engagement. There has been a large improvement in communication between staff and higher management; where staff now feel empowered to voice their opinions, concerns and positive feedback. At first, the Because meetings were more consistently the management talking to/at the staff. Over time, staff have become more comfortable and trusting in voicing their opinion as they can see by observation that their opinions are being listened to. This is because of the section 'You said... We did', where the supervisor will list and action items raised in the meetings.

'Because' initiative meeting



WASTE: WHERE DOES IT COME FROM?

WASTE COLLECTION

EACH COUNCIL OPERATES A RECYCLING SERVICE. THE COUNCILS HAVE INDIVIDUAL SYSTEMS WITH SLIGHTLY DIFFERENT COLLECTION METHODS, BUT THE MATERIALS THEY COLLECT FOR RECYCLING ARE THE SAME.

Figure 5
Collection Methods Used by Each Council During 2017/18

Council	Recyclate	Refuse	Green waste
Bracknell Forest	140L or 240L blue wheeled bin for plastic bottles, pots, tubs and trays, tins and cans, paper, cardboard, foil, aerosols and tetrapak	140L or 240L wheeled green bin – alternate week collection with recyclables	140L or 240L wheeled brown bin Brown biodegradable sacks
Reading	240L red wheeled bin for plastic bottles, pots, tubs and trays, tins and cans, paper, cardboard, foil, aerosols and tetrapak	240L wheeled bin – alternate weekly collection with recyclables	240L green wheeled bin 90L sacks
Wokingham	Weekly collection of 55L black boxes for plastic bottles, pots, tubs and trays, tins and cans, paper, cardboard, foil, aerosols and tetrapak	Weekly collection of blue bags issued on the basis of 80 bags per property per annum	240L brown wheeled bin 75L compostable sacks

Street sweeping treatment plant



re3 Street Sweepings

Since October 2015, re3 Recycling has sent street sweepings to two recycling facilities. Prior to this, street sweepings were bulked up and sent to landfill. This change is beneficial to the partnership as it avoids sending material to landfill, opting instead to recycle, as well as significantly reducing haulage and disposal costs.

Street sweepings are collected from the three partnership councils and delivered to either Longshot Lane or Smallmead. The street sweepings are then bulked up and from Longshot sent to a Grundons treatment facility located in Oxfordshire, and from Smallmead sent to an Invixon treatment facility in Cambridgeshire.

In this contract year, approximately 4,519 tonnes of street sweepings has been processed via this treatment solution. 81% of this waste has avoided being sent to landfill.

Figure 6
Street Sweeping
Tonnage 2017/18

Facility	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Smallmead	251	259	206	225	204	215	401	380	243	314	258	252
Longshot Lane	95	146	94	114	127	91	82	152	66	114	111	119
Total	345	405	300	339	331	306	483	532	309	428	370	372

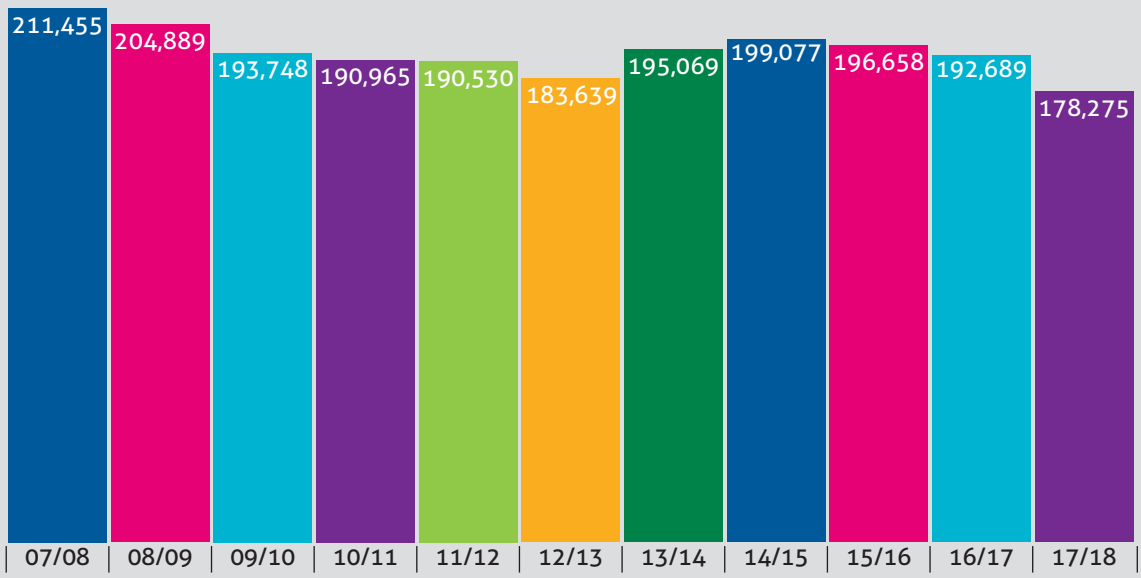
Recycling Collection Performance

The total amount of contract waste in 2017/18 was 178,275 tonnes, a notable decrease from the previous year and reflects a full year of the HWRC new Waste Acceptance Policy changes. The average recovery rate across the partnership area was 88% the highest performance since the contract started.

Last year was the first full contract year since the introduction of the councils new Waste Acceptance Policy (WAP) and as a result we have seen a dramatic downturn in contract volumes and especially waste streams such as hard-core and soils. The key changes in the WAP that have led to this reduction in tonnages are as follows: the introduction of residents permits for re3 partnership Councils only, the introduction of a Commercial Type Vehicle Permit scheme to deter traders using the site, and charges for non-household waste items such as hard-core, soils, plasterboard and asbestos.

In common with nationwide recycling trends, last year the overall contract recycling tonnages remained static. However, the recycling rates have slightly decreased.

Figure 7
Total Amount of
Contract Waste
(Tonnes)



WASTE: WHERE DOES IT COME FROM?

Figures 8, 9 and 10 show thousands of tonnes of green waste, recyclate and residual waste collected from each council area from the kerbside.

re3 continues to focus on communicating key recycling messages to residents through www.re3.org.uk and through social media. Find us on Twitter @re3recycing, Facebook at Re3 Recycling, Instagram and YouTube; both at re3recycling.

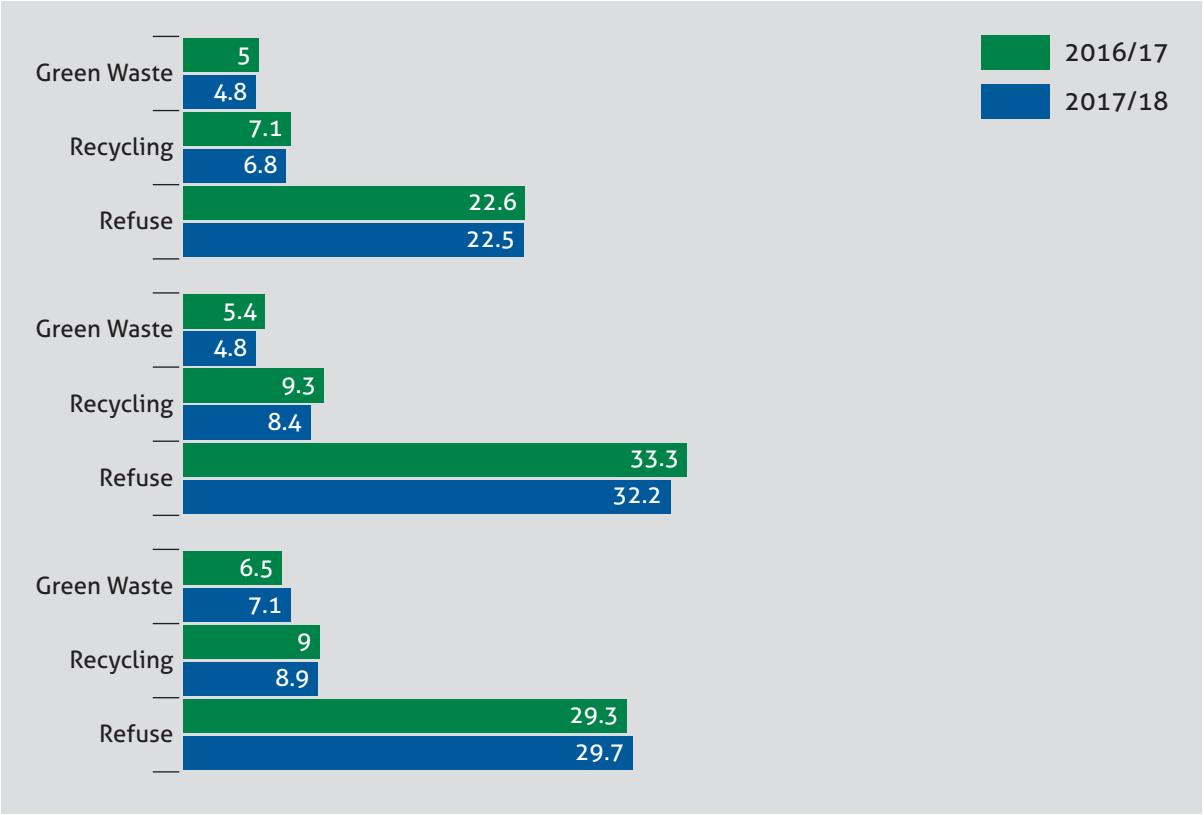


Figure 8
Waste Collected from Kerbside in Bracknell Forest (Thousands of Tonnes)

Figure 9
Waste Collected from Kerbside in Reading (Thousands of Tonnes)

Figure 10
Waste Collected from Kerbside in Wokingham (Thousands of Tonnes)

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY

THE MATERIALS RECYCLING FACILITY (MRF) IS SITUATED AT THE SMALLMEAD SITE IN READING.

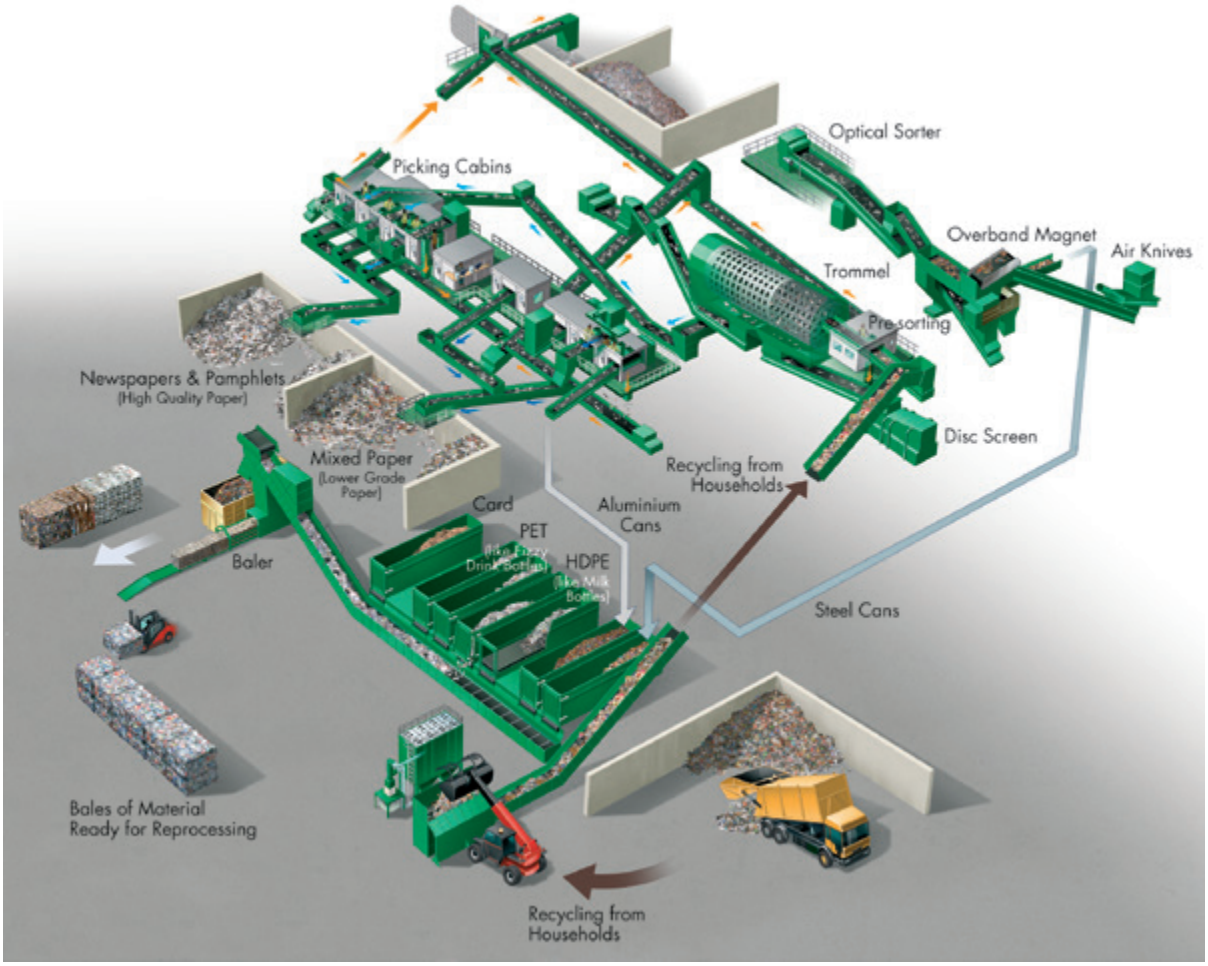


Figure 11
Parts of the MRF Responsible for Separation Before Significant Changes Were Made This Year

The MRF sorts and bales mixed dry recyclables (MDR) collected from the kerbside and has been designed to handle up to 50,000 tonnes of co-mingled dry recyclables each year, based on two shifts.

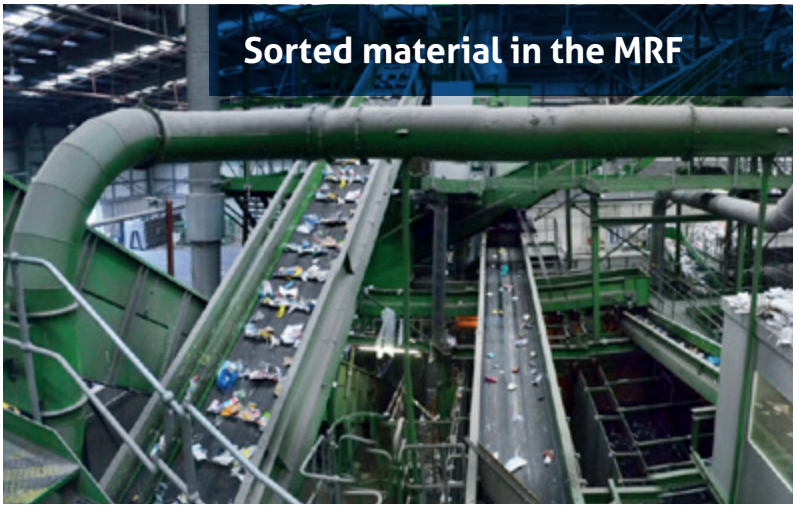
This year re3 made significant changes to the MRF following a Contract Notice of Change (CNoC), which instigated a trial. This trial started in February 2017 to establish the possibility of the re3 MRF accepting a broader range of plastics for recycling.

The trial of the volume impact on the MRF lasted four months. Engineering options were assessed that would be needed to support any change. The plastics repressors were also tested, so that we could establish sustainable outlets for the new recycling waste streams. Once the trial was completed, a financial proposal was produced in July. Approval for investment was confirmed in September and engineering work took place from December through to January 2018.

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY

The engineering works took place outside of the normal operating hours of the MRF so that any impact on processing the recycling material over the festive period was minimised. Changes were made to the plastics lines and the option of baling mixed paper was introduced. This has allowed re3 to accept new materials from kerbside collections across the three boroughs. These include plastic pots, tubs and trays, tetrapak and foil, in addition to the materials already collected. (Aluminium cans, cardboard, paper, plastic bottles and steel cans.)

The plant then separates these mixed recyclables which are then sent to factories for reprocessing and recycled into many new and different products.



Sorted material in the MRF

Whilst it is too early to see the result in terms of figures, there has been a positive reaction amongst residents via social media and over the phones. The initial announcement has reached 55,000 people and was viewed by 24,000 people. This was also sent out in the post to every resident in the borough, approximately 182,000 households.

The MRF received 24,194 tonnes of waste for reprocessing in 2017/18. The material that comes from households sometimes contains things which cannot be separated for recycling (this is referred to as contamination). This material is not suitable for recycling in the MRF and has to be further separated for energy recovery/landfill disposal and in some cases alternative recycling processors. Contamination impacts material value, recycling performance and adds additional cost to disposal and staff labour.

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 which will damage the machine to be removed
- The trommel – a large rotating drum – separates larger items from smaller ones
- The disc screen separates very small items and breaks up glass which the MRF is not designed to handle
- Air knives work alongside sensor-based sorting equipment and removes paper and four different types of valuable plastics
- An Eddy currents separator removes valuable aluminium cans
- An overband magnet sorts the steel cans
- The MRF picking team pick off contaminants that should not be there (a negative pick) ensuring that the separated material is ready for reprocessing

Currently the re3 MRF has some spare processing capacity and recently the partnership has supported FCCE Berkshire in proactively identifying recycling that could fill this spare capacity. The financial benefit of any such arrangement would provide the partnership with valuable income that could go to supporting frontline council services. However, the recent changes in material quality demands, that have resulted in the need to rerun re3 mixed paper through the MRF twice, has greatly reduced any spare capacity in the short term.

MRF Code of Conduct

The re3 MRF adheres to the WRAP (Waste and Resources Action Programme) MRF Code of Conduct. This is a standardised approach for measuring all collected recycling materials delivered for processing at all UK MRFs.

In October 2014, regulations regarding how Mixed Dry Recyclable Material (MDR) collected at the kerbside changed. All Material Recycling Facilities (MRF) processing more than 1,000 tonnes of MDR, must sample and test the composition of both their input (waste received) and output (waste which has been sorted) streams.

The idea of sampling is twofold – firstly, we are required to provide consistent and robust data about the materials coming to site with a view to contributing to the improvement in quality of recyclate material nationally. The second is because recyclate material deemed high quality helps improve confidence and participation in recycling, making the recyclate market more resilient and ensuring the material produced after it has been sorted is suitable for reprocessing both in the UK and abroad.

In line with the new regulations, FCCE Berkshire samples at least 60kgs of waste for every 160 tonnes delivered from each of the councils – Bracknell Forest, Reading and Wokingham Borough Councils.

Loads which are to be sampled are separated from the main waste stream, placed in a sorting cabin and then split into different waste types – aluminium cans, steel cans, plastic bottles, paper, card and non-recyclable materials (contaminants).

Following the introduction of the MRF code of conduct, we also arranged for an independent company (MEL Ltd) to audit our process in line with the WRAP criteria. They confirmed we had in place a fully compliant operation, providing a service in line with and beyond the WRAP guidelines.

The tables below show the results of the sampling conducted for the full contract year by the partnership.

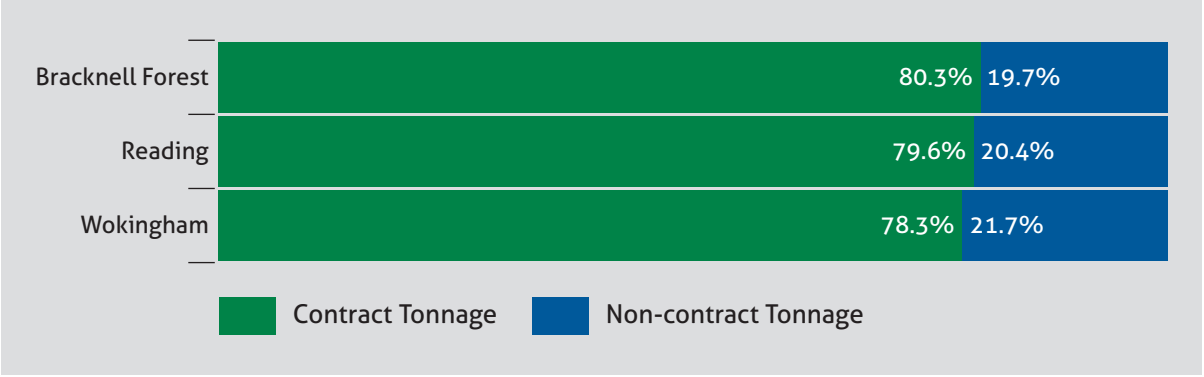


Figure 12
Sampling Results for the Contract Year 2017/18

Transfer Stations

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

Smallmead, Reading

The Smallmead Transfer Station in Reading can handle up to 200,000 tonnes of waste per year. It is used to bulk up the mixed dry recycling (MDR) delivered by the collection teams (Reading and Wokingham) operating in this area of the partnership.





Longshot Lane, Bracknell

The Longshot Lane Transfer Station in Bracknell can handle up to 100,000 tonnes of waste per year. It is also used to bulk up the mixed dry recycling (MDR) delivered by the collection teams (Bracknell Forest and Wokingham) operating in this area of the partnership. Once the MDR is delivered to Longshot Lane it is then bulked up and delivered to the Smallmead MRF (saving significant time and operating costs for the collection teams).

The Transfer Stations make it easier, safer, and quicker for the councils along with local traders to deposit and recycle their waste. They are key facilities that allow local waste collection vehicles and tradespeople to dispose of commercial trade waste, depositing 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, as well as other key data, is accurately recorded and continuously monitored.

Transport

Each of the partnership councils continues to collect Mixed Dry Recyclables in one container or bin, making it easier for residents to recycle. Once mixed kerbside recyclate reaches our Materials Recycling Facility at Smallmead, it is treated separately.

All refuse collected at the kerbside is taken to the local re3 Transfer Station at either Smallmead or Longshot Lane, 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.

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY

Household Waste Recycling Centres

The HWRC sites recorded just over 805,721 visits across both HWRCs in 2017/18, with an average of 1,109 visits at Smallmead per day and 1,207 visits at Longshot per day. This is a decrease of 114,133 on the previous contract year. One of the key aspects of reduced visitors relates to the introduction of the commercial type vehicle waste permits deterring traders.

Both Smallmead and Longshot Lane HWRCs accept a large variety of materials for recycling. This includes glass bottles and jars, textiles, engine oil, garden waste, scrap metal, electronic items, plastics such as pots, tubs and trays, and foil.

805,721
visits

User Satisfaction Survey

The Annual User Satisfaction Survey which took place in September 2017 questioned users on their thoughts about the Smallmead and Longshot Lane HWRC and staff. Both sites have made vast improvements across most areas, with the overall site satisfaction scoring 'very' or 'fairly' good. Smallmead scored 98%, 16% up from the previous year and Longshot had a 2% increase, raising their overall score to 97%.

The introduction of the Meet and Greet Team in 2016 at both sites has brought an abundance of positive benefits, which included reduced queueing times, easier access and increased availability of other staff to help and interact with our visitors. This is reflected in positive feedback from residents, including praise for staff's helpfulness and the changes allowing staff to have more time to support residents in their recycling.

All results from these surveys are valuable in highlighting areas of improvement and actions to support the findings are developed in line with the results and partnership. For example, following feedback from the customer satisfaction surveys, the signage at our sites have been replaced in 2017.

Figure 13
Smallmead User Satisfaction Results

Site users	2016	2017
Said staff had been helpful during their visit	96%	76%
Rated the site as good or very good for cleanliness	88%	94%
Rated overall the centre as good or very good	82%	98%

Figure 14
Longshot Lane User Satisfaction Results

Site users	2016	2017
Said staff had been helpful during their visit	95%	91%
Rated the site as good or very good for cleanliness	96%	99%
Rated overall the centre as good or very good	95%	97%

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY

Bag Splitting Recovery and Recycling at Smallmead and Longshot

The partnership continues to follow DEFRA (Department for Environment Food and Rural Affairs) guidelines and focus on improving recovery and recycling rates. This focus, coupled with an analysis showing that black bin bags normally deposited as general waste contained an average of 33.80% of recyclable material, led to a black bag splitting trial in 2015/16. Both sites were able to establish significant improvements to their recycling rates, with up to seven tonnes of recycling being extracted from the black bag content in only a week.

Following this success and complimenting changes made to our Waste Acceptance Policy, re3 adopted the black bag splitting scheme as a permanent feature at both sites in September 2016.

When visiting an re3 recycling centre, residents are asked to separate and deposit their waste in the appropriate area to help ensure that as much as possible is sent on for recycling and reuse. However, any waste that is brought to the recycling centres in bin bags is also divided out to extract recyclable items. This is done in a designated area during quieter times of the day, meaning that site staff are still available to assist those residents who may require help or advice.

The scheme continues to yield positive results as the daily data collection shows that the partnership has processed 955 tonnes of bin bags between April 2017 and March 2018. Of this, approximately 40% has been recyclable content and 6% has been recoverable content.

Figure 15
Kg of Pre Sorted Bags

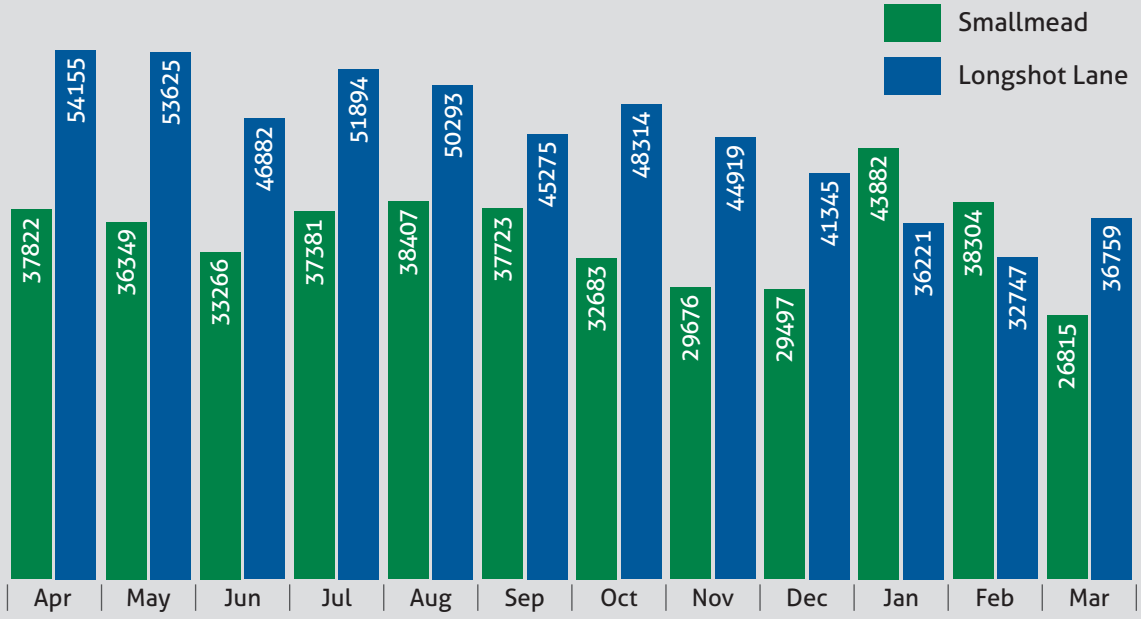
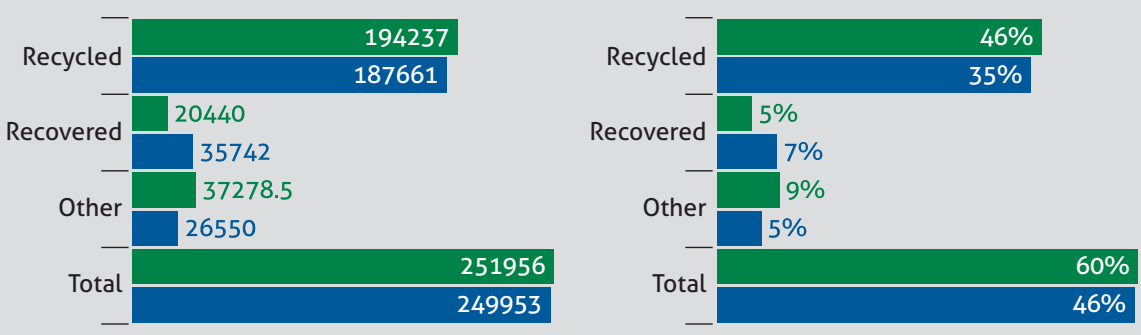


Figure 16
Kg of Waste Diverted from Landfill

Figure 17
Percentage of Waste Diverted from Landfill



40%

Of waste from bag splitting scheme was recycled in 2017/18



Bag splitting area at Smallmead

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY



Since commencing this scheme the Recycling centre staff have opened and processed 1443 tonnes of bin bags. Of this, approximately 37% has been recyclable or reusable content – items that can be reused or remanufactured into new products – and 5% has been recoverable content, which includes energy from waste.

So far, the bin bag splitting initiative has diverted 633 tonnes of waste away from landfill – comparable to the weight of over 50 double decker buses.

re3 donates all good quality items found in bin bags, as well as larger items like furniture and bikes, to Sue Ryder to help fundraise for local hospice care.

Bring Bank Facilities

re3 continues to work alongside the partnership councils to improve bring bank recycling sites. There are currently 532 glass recycling banks at 132 sites across Bracknell, Reading and Wokingham. In the 2017/2018 contract year, the banks were emptied 15,916 times and collected a total weight of 6,734 tonnes.

Bring Bank facilities across a variety of locations include recycling banks for glass bottles and jars. Residents are now encouraged to recycle their cardboard, newspaper, cartons and foil with their other household mixed dry recyclables via their kerbside collections.

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

As well as re3 branded signage, all glass banks are labelled with re3 contact details, making it easier for residents to reach re3 should they need to report any issues.

Since December 2016, every glass bank has also been labelled with a 'Keep your cap on' sticker, notifying residents that they can now recycle the aluminium bottle caps and jar lids with the glass.

Bring banks were emptied 15,916 times during 2017/18

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY



All service related feedback is reviewed daily and also recorded as part of the contract performance requirements; as a result the service continues to be delivered with minimal service related issues, as highlighted under the performance monitoring section of this report.

To find your nearest recycling facility go to www.recyclenow.com and enter your postcode. You can also find more information on www.re3.org.uk

Further monitoring involves the identification of when bring banks are in need of replacement or reconditioning. In 2017/18 a total of 19 bring banks were replaced across the partnership.

re3 has recently run a competition to name the new glass collection vehicles which will be arriving this year. The competition was run on Facebook and Twitter and 166 comments with names were submitted on Facebook. On Facebook, the post reached over 55,000 people, was viewed by 24,000 people and was shared over 400 times. On Twitter the post reached 10,000 people. The winning names were chosen by the public from a selection of four names. Kate Binslet was selected on Facebook and Jar Jar Clinks was selected on Twitter.

Lakeside Energy from Waste (EfW)

Energy from Waste is defined as 'The controlled combustion of refuse/refuse derived fuel in a specialised plant, specifically to generate power and/or heat from waste feedstock'.

During the previous contract year, the Lakeside Energy from Waste facility processed over 448,000 tonnes of residual waste. 74,806 tonnes of this was sent from re3.

Material 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

WASTE: HOW WE DEAL WITH IT AND CHANGES TO OUR MATERIALS RECYCLING FACILITY

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 total amount of waste sent to Lakeside EfW, approximately 80,000 tonnes will become non-hazardous bottom ash and 8,000 tonnes fly ash (with 100% of this being used as building material).

The flow diagram shown below demonstrates how the waste is combusted to produce heat and from that, 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 over 284,000 MW of electricity to the National Grid – enough to power 55,000 homes.

In addition to the waste sent to Lakeside we also managed to divert an additional 13,608 tonnes away from Landfill and into the FCCE operated Greatmoor EfW near Aylesbury.

The average recovery rate across the re3 partnership area for the 2017/18 period is 88%. The recovery rate is a contractual measure of the total amount of waste delivered to recycling, Energy from Waste, beneficial use and composting. This is a significant increase compared to the 82.30% in the previous reporting year (2016/17).

Figure 18
How Lakeside Energy from Waste Produces Electricity by Combusting Waste to Produce Heat

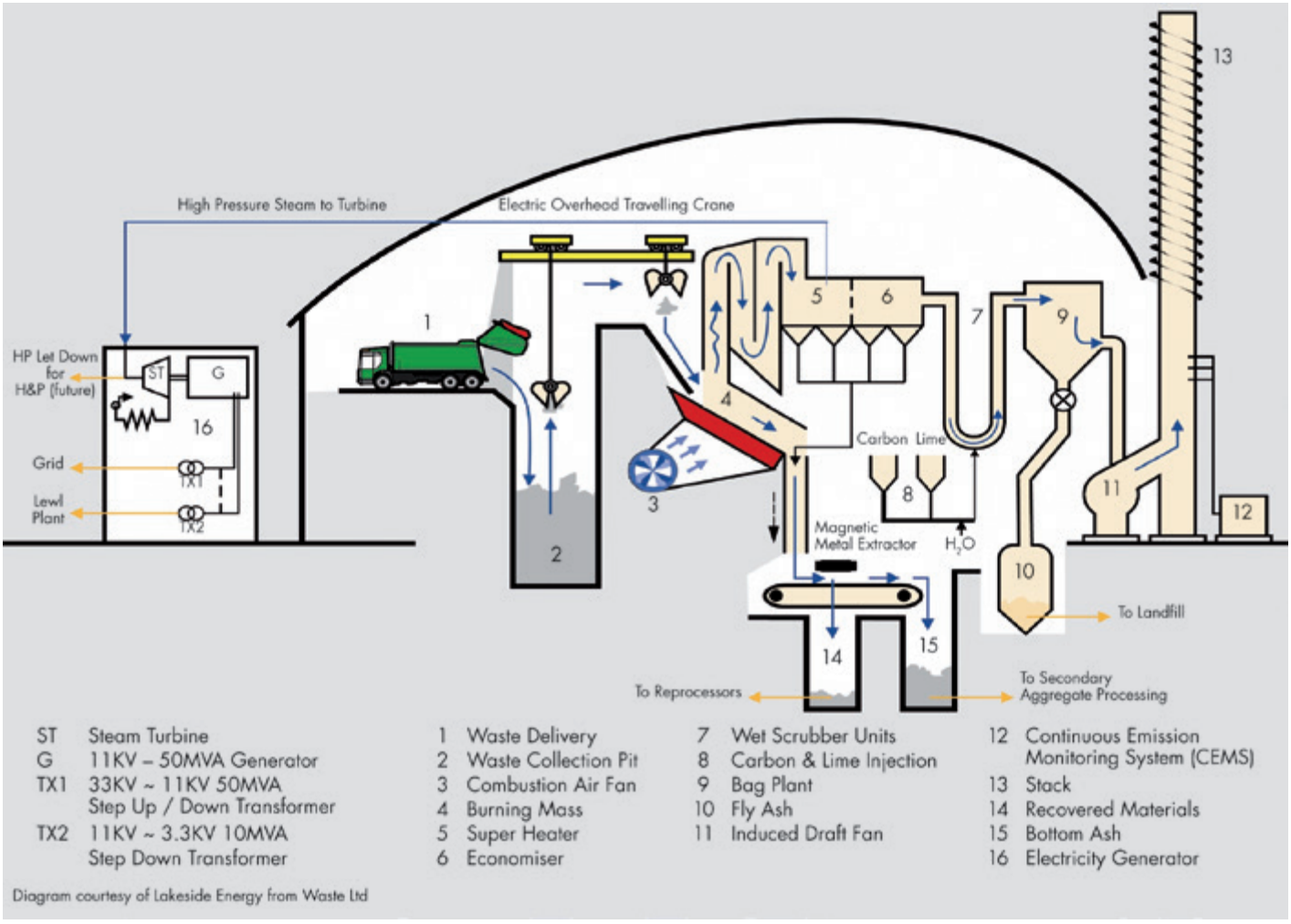


Diagram courtesy of Lakeside Energy from Waste Ltd

WASTE FLOW PROCESSING: WHAT HAPPENS TO IT?

EXPORTING RECYCLING COMMODITIES AND THE CHINA IMPACT

IN JUNE 2017, CHINA STARTED A REVIEW OF ITS IMPORT POLICY FOR RECYCLING MATERIAL. CHINA DEVELOPED A STRATEGY THAT WOULD LEAD TO A TARGET OF 100M TONNES OF RECYCLING TO BE COLLECTED FROM WITHIN CHINA OVER THE NEXT FIVE YEARS.

To facilitate this change, China announced in January 2018 that they would be banning the import of plastics and mixed papers. In addition to this, they also raised the bar in terms of acceptable contamination rates for cardboard; lowering it from 1.5% to 0.5%. This decision and the speed of its implementation has had a dramatic impact on the recycling industry in the UK, with current predictions estimating a further eighteen months of uncertainty.

At that time, China imported approximately 60% of the UK's recycling materials and 50% of Europe's. As a result, 2018 has become a very challenging year for establishing sustainable outlets for all fibre products. Essentially, a limited supply chain has resulted in a reduction in price, along with an increased demand for improved quality. In meeting the new market demands and mixed paper quality requirements, the re3 MRF has been required to rerun re3 residents' mixed paper through the MRF twice. This is in order to secure sustainable recycling outlets and meet the new quality demands that have moved from 15% down to 3% for non-target material.

The contamination level in recycling is now having a financial and sustainability impact with recycling offtakers.

We expect the quality requirements to further increase as China looks to ban more recycling waste streams.

It should be noted that in February 2016, following the collapse of a large UK paper manufacture, FCC reviewed our trading strategy to ensure we had the best value and sustainable outlets for our recycled material. As a result, re3 began exporting recycling material in response to the market changes. This included a major initiative to ensure best value for our commodities and to reduce our reliance on only a small number of factory options. This decision has generated additional income and also allowed the partnership to develop multiple offtaker outlets; reducing our reliance on just one or two manufacturers in what is a global trading market.

Figure 19
Export Summary Table

Material	Company	Destination	What Happens to it?
Baled Cardboard	ACN Europe and Cycle Link UK	China	Manufactured into recycled paper/cardboard
HDPE Clear Plastic	ACN Europe	China and Vietnam	Reprocessed and transformed into renewable resources
News and Pams (newspapers and pamphlets, including magazines)	Newport Paper	Italy	The majority is recycled into new news and pams
Mixed Paper	Peute Recycling	Netherlands	The majority is used to make recycled board

WASTE FLOW PROCESSING: WHAT HAPPENS TO IT?

As evident in the table, we maintain a focus on ensuring as much of our material as possible is reprocessed or recycled. This compliments ongoing initiatives and other changes made throughout re3. These initiatives and changes operate in order to ensure our contribution towards the UK's 2020 recycling targets are fulfilled, and the partnership continues to remain financially viable for all involved.

Reuse

Synergy

Synergy Recycling provide a nationwide service to the waste industry, collecting and managing the recycling of gas cylinders and canisters.

Once a visitor disposes of their gas cylinders or canisters at the Household Waste Recycling Centre (HWRC) they are collected by Synergy and are taken to their site in Canterbury to start the recycling process.

Gas cylinders that are still in working order are returned to the vendor (e.g. Shell, BP etc), where the company will then test, refill and re-sell the cylinders. The average life span of a gas cylinder is 20 – 30 years.

Gas canisters (soda stream, aerosol cans, etc) are safely taken apart, the gasses compliantly removed and valves recycled. The remaining metals are put through a scrap smelter and melted down. Companies can buy the materials produced by this process and turn them into new metal products, such as car or van panels and shipping containers.

Blackburn Meadows and Green Machine

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

In 2017/18, Blackburn Meadows removed 286.52 tonnes of unwanted paint with the following split between the re3 sites – 142.38 tonnes from Smallmead and 144.14 tonnes from Longshot Lane.

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

This leftover paint is a valuable resource that Community RePaint schemes across the UK are re-using to help community groups and families improve the appearance of places and the wellbeing of many people. The reuse of paint also benefits the environment, by keeping this material out of landfill and reducing carbon emissions.

Computer Salvage Specialists

Computer Salvage Specialists recycle a wide range of electronic hardware. In addition to this, they also seek to create awareness of development and promotion of alternative solutions to landfill. As a result of this work, 99% of the waste they receive is recovered, with less than 1% being sent to landfill.

Televisions and Visual Display Units are made up of approximately eight different elements. These must be separated manually, leaving no contaminations before the process can begin.

The products are separated into glass, metal and plastics which are then sent to a refiner who create raw materials ready for reuse – i.e. copper, steel and aluminium. These metals are then melted down into billets and ingots weighing around 10 – 15 tonnes. The billets and ingots are sold on to mills and, once they are refined, the raw materials can be reused in all sorts of manufacturing applications, everything from ship building to watch components.

At the end of 2016, our contract with Computer Salvage Specialists was modified, meaning they also collect small WEEE. This would include items such as TV monitors and other small domestic appliances.

WASTE FLOW PROCESSING: WHAT HAPPENS TO IT?

Sue Ryder

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

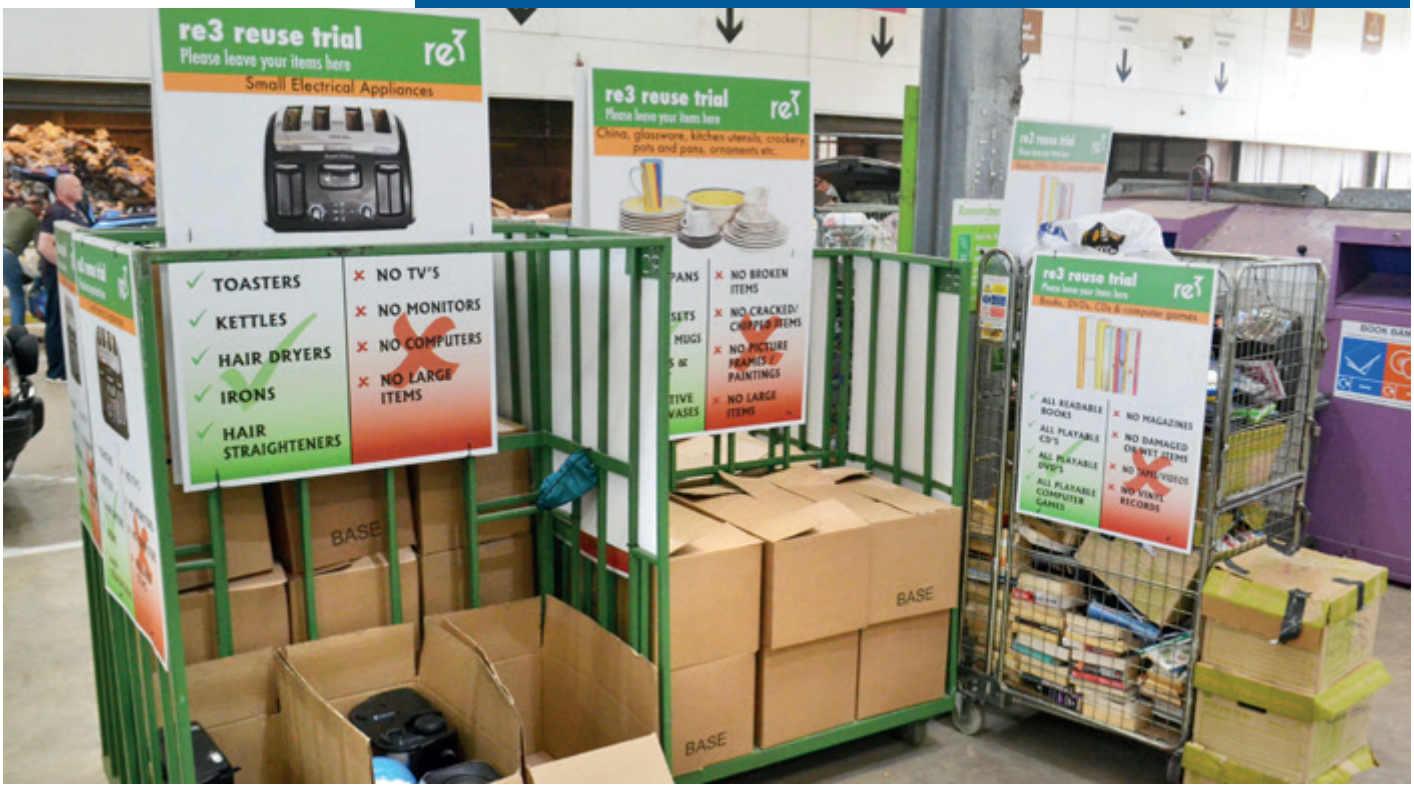
Every year, Sue Ryder provides over 4 million hours of end of life and long-term care in the UK to people living with a range of complex and life threatening conditions. At a local level, Sue Ryder's Duchess of Kent and Nettlebed Hospices provide end of life care to hundreds of people each year in and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

Household items or furniture bought to either Smallmead or Longshot Lane HWRC's 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 £11,739.00 was raised in the previous contract year through this partnership and this money helps Sue Ryder continue to provide incredible hospice and neurological care.

Precycle

Precycle are a local company based in Reading who specialise in giving waste a second chance. They operate with many of the UK charity organisations and have outlets through the world for a variety of reuse items. These items include: pots and pans, books, small electrical appliances, crockery, bikes, DVDs and CDs.
As a result, re3 established a trial in early 2017 at Smallmead HWRC to see if the re3 residents would be supportive of donating items that they would have traditionally thrown away; instead giving them to Precycle who could find a further home and use for them. Following the success of the Smallmead trial, in November we decided to roll out the Precycle at Longshot Lane HWRC. Furthermore, re3 residents reacted positively to the opportunity of giving items a second home.

Precycle Trial



WASTE FLOW PROCESSING: WHAT HAPPENS TO IT?

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 HWRCs.

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 reports tonnages to the council partnership on a monthly basis to aid monitoring of recycling rates.

Energy from Waste (EfW)

In accordance with the PFI contract, 70,000 tonnes of waste per annum is sent to Lakeside EfW for energy recovery. The Lakeside EfW generates a great deal of heat in the course of its processing. 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.



WASTE FLOW PROCESSING: WHAT HAPPENS TO IT?

re3grow Compost

re3 are always looking for new and improved ways to increase recycling and reuse rates. We are utilising our association with Sutton Courtenay Composting Facility to start up this new initiative and bring this compost product to our residents. The new compost has been sold to residents from May 2018. The end product has to adhere to the requirements of the Soil Association and the Association for Organics Recycling. Our re3grow Compost is made from 24% of local green waste that is brought to re3 recycling centres at Smallmead and Longshot Lane. This compost is certified to BSI PAS 100 10mm standard.

To create compost from green waste we use an open aerobic composting process. This is the most common method of composting garden waste. When the green waste is collected at site, it is bulked and then transferred to a local Composting Facility. This raw material is then inspected on delivery and is finely shredded to a suitable size (< 70mm), and this is then placed in windrows. Windrows are long rows of pilled organic matter and biodegradable waste. The piles are then monitored for various parameters including temperature, oxygen levels and moisture content. The windrows are constantly turned and moistened as necessary to speed up the decomposition process, which takes just 10-12 weeks.

After the 10-12 weeks, the compost is screened to <40mm to produce an agricultural grade compost which is used locally at farms in Berkshire and Oxfordshire. We also produce 10mm compost which is the grade used for household compost such as re3grow. Our household compost is ideal for use everywhere in the garden as a soil conditioner, mulch or a top turf dressing. Once bagged up in 40l bags it can be purchased at the Meet & Greet stations at the entrance to both sites. By buying the new compost; residents will be helping to close the recycling loop as our green waste is being returned to the soil. While it's important to recycle as much as possible, it's also crucial that we're able to make good use of what we do recycle and take part in the circular economy.





LOCATIONS OF REPROCESSORS

Figure 20
Reprocessors of re3 Waste and their Distances from Smallmead and Longshot Lane

No.	Company	Postcode	Miles from Smallmead	Miles from Longshot	Market	End Market
1	A1	RG41 4SP	7	10	Metal: Scrap Ferrous	UK processed
2	AMG Resources	LS25 1PA	215	213	Metal: Steel Cans	Aluminium – UK processed Steel – global market
3	BCMY	BN17 7QU	N/A	N/A	Ink Cartridges	UK processed
4	Berrymans	WF9 3NR	202	200	Glass	Mixed Glass – Mainly UK processed Raw cullet – Europe processed
5	Clearpoint	Amsterdam	374	364	Mixed Paper	Netherlands
6	Clearpoint	Germany	N/A	N/A	Steel Cans	Germany processed
7	Computer Salvage Specialists	RG14 5EY	22.6	31.2	TVs & Small WEEE	UK processed
8	Countrystyle	TN27 0RU	111	92.6	Plasterboard, Wood	UK processed
9	Cyclelink	China	4183	4183	Card: Baled	China
10	Cylinder Care	IG11 0EQ	83	81	Gas Canisters	UK processed
11	DS Smith	Kent	79	69	Loose Cardboard & Baled Cardboard	UK processed
12	DS Smith	Uxbridge	32	30	Mixed Paper	UK processed
13	FCC	Sutton Courtenay	24	41	Green Waste	UK processed
14	FCC Blackburn Meadows	S9 1HF	188	186	Paint	UK processed
15	G & P Batteries	WS10 8JR	127	125	Batteries: Household	Nickel batteries for cadmium refining exported to France. All others UK processed
16	GD Environmental	NP19 4PP	98.6	107	Tyres	UK processed
17	Green Machine	RG12 7AE	12.3	1.4	Paint	UK processed
18	Grundon	OX10 6LX	16.5	25.6	Street Sweepings	UK processed
19	Invixon	PE19 5UH	97	95	Street Sweepings	UK processed
20	J & A Young	NN18 9EY	109	107	Plastics	UK processed or exported to Europe

LOCATIONS OF REPROCESSORS

No.	Company	Postcode	Miles from Smallmead	Miles from Longshot	Market	End Market
21	J Mould	RG30 3XN	13.9	4.6	Hardcore, Soil	UK processed – within 25 mile radius of Reading
22	Living Fuels	IP26 4JQ	134	132	Cooking Oil	UK processed
23	Morris Metal	DN11 0PS	193	191	Cans Steel	UK processed
24	Newport Paper	TF10 7NB	134	147	Mixed Paper & Steel Cans	Mixed Paper – UK processed Steel Cans – Germany processed
25	Novellis	WA4 1AP	193	191	Cans Aluminium	UK processed (finished product to Germany)
26	Palm Paper	PE34 3AL	139	132	News & Pams	UK processed
27	Peute Recycling	Holland	374	364	Mixed Paper	Holland processed
28	Print Waste	HX4 9PY	222	220	Tetra Pak	UK processed
29	Precycle	Reading	3	13	Books & Media, Bric a Brac	UK & Worldwide
30	Recolite	CR0 0XZ	56	45	Fluorescent tubes	UK processed
31	Rhenus Recycling	Germany	594	576	HDPE Jazz	Germany processed
32	Select Environmental	RG2 0QX	1.1	11.8	Asbestos	UK processed
33	Seneca	NW10 0UX	45	43	MRF Rejects	Europe
34	Sims (Repic)	GU46 6ED	16	10	Fridges, freezers, large WEEE	25% UK processed Iron & Steel – 60%
35	Slicker	DY13 9BZ	109	117	Oil	UK processed
36	SmurfitKappa	NE6 5AX	79	69	Loose Cardboard, Baled Cardboard & Mixed Paper	UK processed
37	Sutton Courtenay Composting	OX14 4PW	22.6	42.9	Green Waste	UK processed
38	Synergy	CT4 7BA	104	95.7	Gas Canisters	UK processed
39	Takeback	IP24 1ZH	126	134	Ink Cartridges	UK processed
40	W.N. Thomas & Sons	SL1 3QR	22	19.4	Batteries: Car	UK processed

LOCATIONS OF REPROCESSORS

No.	Company	Postcode	Miles from Smallmead	Miles from Longshot	Market	End Market
41	W.N. Thomas & Sons	SL1 3QR	22	19.4	Metal: Iron, Non Ferrous, Scrap, Steel, Wire/copper	Exported to Spain and USA
42	Wilcox (JMP)	WV14 7NH	114	127	Bring Banks: Textiles, Shoes, Books & Media	Exported to East and West Africa, Poland, India, Pakistan. Some UK processing

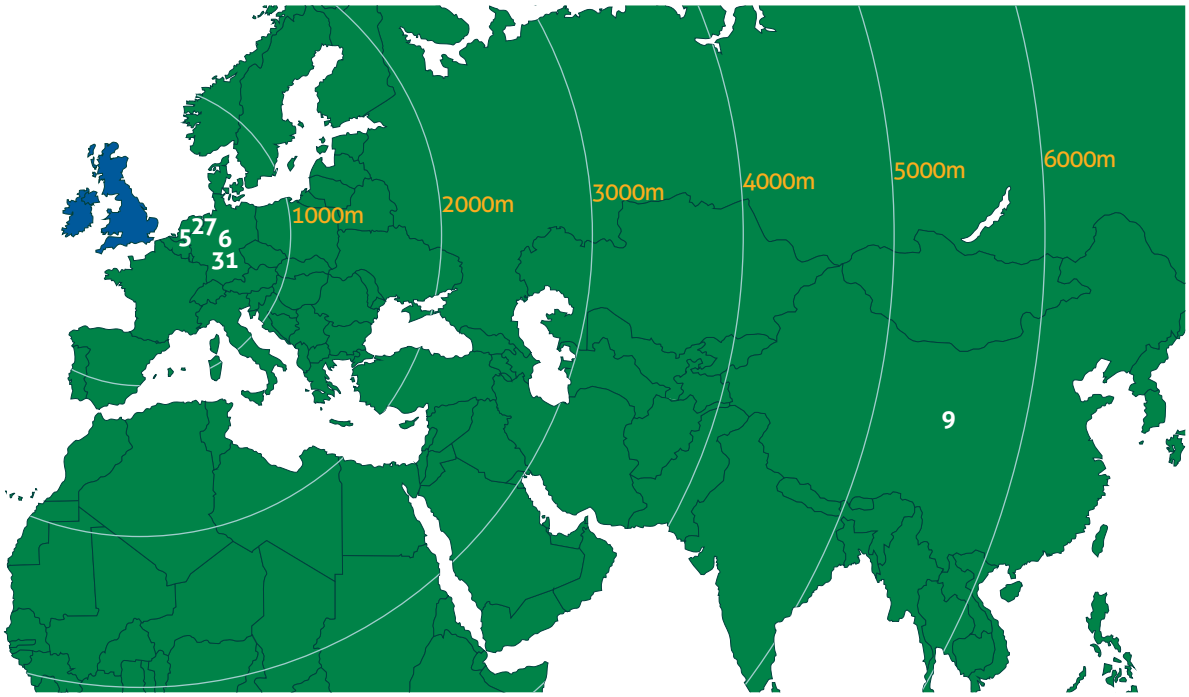
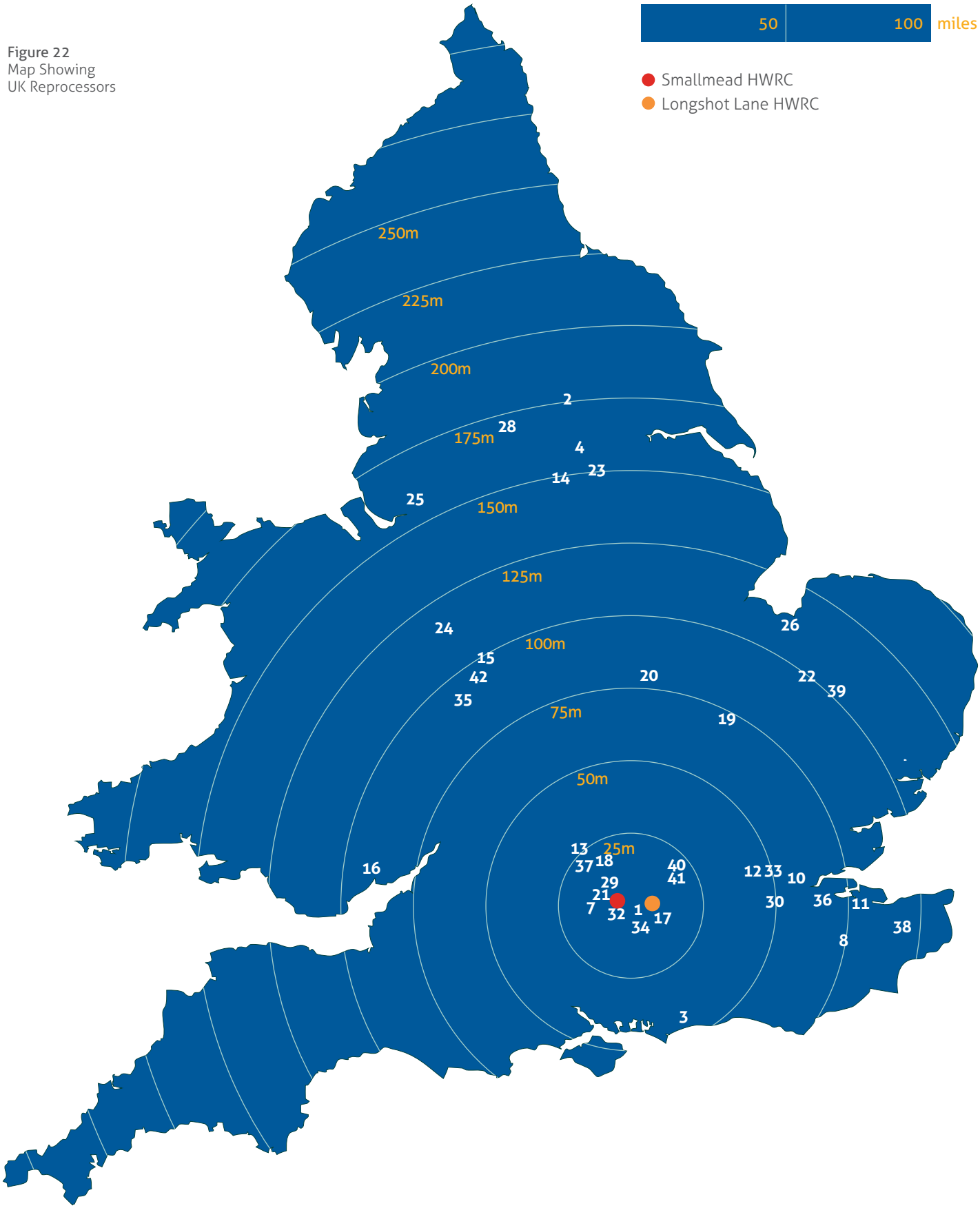


Figure 21
Map Showing Reprocessors Taking Part in Our Export Trial as of 1 April 2016

LOCATIONS OF REPROCESSORS

Figure 22
Map Showing
UK Reprocessors



ABOUT re3

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 LOCAL AUTHORITY AREAS.

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.

Charity Events

The re3 team have continued to complete fundraising events for charity throughout 2017/18.

In September, the re3 staff took part in a bake-off style competition at Smallmead. Several cakes were made and prizes were awarded for the best looking, best tasting and most unusual. After judging, the cakes were sold to site staff.

Christmas Jumper Day was held in December 2017, raising money for Save the Children.

The joint waste disposal board, FCC CEO and Contract General Manager



Awards

FCC Environment host an internal award scheme every quarter – The Above and Beyond the Call of Duty Awards. re3's Smallmead HWRC Team was nominated for their quick thinking and fast action in dealing with a fire on site that occurred in August 2017. The team were bestowed winning status in January 2018 and the award was presented by Paul Taylor – Chief Executive of FCC.

On Sunday 6 August at 10:47 am, smoke was spotted in the Smallmead Waste Transfer Station. Thanks to the quick thinking and reactions of the entire staff, the whole site was evacuated within four minutes.

The smoke rapidly turned into a fire and the sprinkler system was activated. The fire brigade arrived within a very short space of time and praised staff for their swift actions and assistance.

The Fire Service's Watch Manager commented: "I would like to congratulate your staff on their professionalism. All staff members, from the directing staff to the duty manager, assisted me in my decision making. The information given to me by the duty manager reduced the chance of further damage to the site."

Due to the actions of the Team and the new fire system, Smallmead suffered no casualties; no fire damage and the fire plan was executed impeccably.

In addition to this internal award scheme, re3 are confirmed finalists from five industry award entries. The first two finalist positions are from Let's Recycle; the first being the Awards for Excellence. re3 is also a finalist for Innovation in Design of a Waste Management Facility. These were on behalf of the re3 MRF, Bracknell Forest, Reading and Wokingham Borough Councils, and FCC Environment.

The remaining finalist positions for re3 are for the MRW Recycling Awards. One entry was for the 'Because' health and safety initiative. The other entry was for the Waste Reduction Initiative – Public Sector/Third Sector category, for Precycle/Sue Ryder. The final entry is for Partnership Excellence – Public/Private sector category, for the MRF changes.

All of our submissions have been confirmed as finalists and this is an achievement re3 recycling are proud of. We eagerly await the final results.

ABCD award winners



GLOSSARY

Average Recovery Rate
This is a contractual measure of the proportion of contract waste diverted to Energy from Waste, Recycling, Beneficial Use and Composting.

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.

Billets
A metal bar or block with a simple shape that requires further working.

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
A natural process to recycle organic material into a fertilizer used to improve soil.

Contamination
Contamination occurs when non-recyclable items are placed in a recycling bag or bin, making it more difficult to process at the Materials Recycling Facillity.

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 HWRCs 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.

DEFRA
Department for Environment, Food and Rural Affairs.

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.

FCC Environment
(Formerly Waste Recycling Group (WRG)) Parent company of re3 Ltd. FCC Environment 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.

Ingots
A metal casting that is shaped, typically in an oblong, for easy working or for recasting.

Smallmead HWRC



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 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.

Refuse Derived Fuel (RDF)
This is the term used for general waste that has had bulky waste materials removed and is then shredded into a specific fraction size with further recycling material removed. It is then bailed and wrapped ready for transport or export for use as a fuel at an energy recovery 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.

Refiner
Used to produce a purer form of something by removing the impurities from it.

Remediation
Reversing or stopping environmental damage. 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).

Smelter
To melt ore in order to get metal from it, or produce metal in this way.

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
Transfer Stations are a 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.

Waste Acceptance Policy (WAP)
This is the re3 Councils partnerships policy that dictates what wastes can be accepted at the HWRCs and how it will be received; this includes waste types, recommended limits on quantities and also the policy for vans and over heights.

WEEE
Waste Electrical and Electronic Equipment.

WRAP
WRAP (the Waste & Resources Action Programme) is a registered charity. It works with businesses, individuals and communities to achieve a circular economy through helping them reduce waste, develop sustainable products and use.

Bracknell Forest Council

Reading Borough Council
Working better with you

WOKINGHAM BOROUGH COUNCIL

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