





















www.re3.org.uk

2022 / 2023

Annual Environmental Report

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Annual Environmental Report

2023 is the seventeenth Annual Environmental Report (AER) published by re3, highlighting the activities of the partnership and how the waste received has been managed throughout the previous contract year.

The front cover image showcases some local projects from our re3grow scheme which you can read more about later on in the report





About re3

The re3 partnership was established in 1999 by Bracknell Forest, Reading and Wokingham Borough Councils. The primary objective was to collaborate and develop sustainable waste management facilities that would benefit the three local authority areas.

To fulfil this goal, a 25-year Private Financial Initiative (PFI) contract was secured, and FCC Environment joined the partnership. FCC Environment is one of the UK's leading waste and resource management companies, which operates over 200 recycling, treatment, and disposal facilities across over 100 contracts and 60 local authorities. It handles and recycles 1.6 million tonnes of waste a year and generates 117MW of green energy from non-recyclable waste. The re3 contract accounts for 166,539 of household waste alongside 12,970 of local trade waste.

Whilst the individual councils, as unitary authorities, retain the responsibility for waste collection and disposal, the contract outlines specific guideline for waste treatment in compliance with national legislation and regulations on recycling and landfill diversion targets.

As part of their statutory obligations, the local authorities organise the collection and disposal of household waste, and if requested, industrial and commercial waste as well. The Councils must also provide waste collection facilities such as Household Waste Recycling Centres. In addition to this the re3 Councils also offer glass bring bank recycling facilities to the public.

The re3 partnership provides a variety of services at it is two locations, Longshot Lane in Bracknell and Smallmead on Island Road Reading. Residents benefit from the excellent Recycling Centres located at each of the sites. There is a Materials Recycling Facility (MRF) at the Smallmead site in Reading, where all recyclables collected from residents are sorted mechanically and manually into various waste streams. The recyclables are then baled (some material remains loose), before being hauled to companies, mostly in the UK for reprocessing. Both sites also have a waste transfer station, where recyclables and refuse are gathered and sorted before further processing or disposal.

This Annual Environmental Report serves as an excellent introduction to re3 and a review of highlights and achievements over the last year. It showcases how the waste received at both sites has been managed and treated, as well as any changes that have occurred within the contract during the last year.

94.50%

Average recovery rate across the partnership

8,407

Tonnes of glass collected for recycling from bring banks

166,539

Tonnes of contract waste

18,228

Tonnes of food waste recycled

90%

Average rating of sites from user satisfaction survey

66,977

Tonnes sent to Lakeside EfW for energy recovery

22,990

Green waste recycled as compost

3,440

Tonnes of street sweeping collected

General Managers Message

As we look back on the seventeenth year of the partnership, we can again reflect upon a fantastic performance in diverting 94.50% of waste from landfill!

This is the third consecutive year where the diversion rate has exceeded 90%, which clearly demonstrates the success of the partnership, and the continued hard work and efforts of all those involved.

As we come to grips with the increased cost of living and the pressures felt up and down the country for individuals as well as Local Authorities and businesses, we also face uncertainty in terms of the legislation governing the waste and recycling sector, and the potential impacts that new legislation may have on our frontline services already impacted by the current economic situation.

Throughout this continued uncertainty we have collectively delivered excellent services for the re3 residents, including building on the robotics innovation at our MRF, a public safety campaign, our community re3grow scheme, and further initiatives such as a second reuse pop up shop. We are looking forward to receiving clarity on the new legislation, so we can then look at how we further develop this high performing partnership to give the re3 residents the high levels of performance they have continued to receive and deserve.

Further information on the highlights and performance detailed above, and more, can be found within this report.

Rory Brien, General Manager

94.50%

Landfill diversion in 2022



Innovation

AI (Artificial Intelligence) Robot

Back in September 2021, re3 partnered with Recycleye, an intelligent waste management start up, to install the first retrofittable AI powered robot waste picking system in England.

Recycleye is a technology company bringing advanced learning, computer vision and robotics to the global waste management industry.

They use Recycleye Vision and Robotics solutions to increase plant performance, enable data-driven strategic decision making and deliver transparency, traceability and efficiency. Their goal is to deliver intelligent technology and research to reinvent the economics of recycling.

At re3 we partnered with Recycleye with the goal of improving the efficiency of our recycling process in our Material Recycling Facility (MRF).

When the project originally began, it was research and development, but the robot is now fully installed in our MRF and continually evolving.

All waste processed in the MRF is separated into streams. This is done using various mechanical processes and manually by our dedicated MRF picking team. The aim of our robot is to pick, sort and remove any contamination from our plastics streams, and for this to be as consistent and pure as possible.

Over the past year the robot has been in its optimisation stage. This means the robot and all data associated with it, has been consistently monitored and reviewed by the re3 Operations Team and Recycleye. All the data pertaining to the robot is available on the Recycleye KPI Dashboard. The available data includes: number of picks, failed picks, downtime and uptime, material picked and which side of the belt it was picked from. Not only does this dashboard help us ensure the robot is working with maximum efficiency and accuracy but it also allows us to better understand the amount, type, and value of the materials on the picking belt enabling to further enhance the MRF or processes to increase efficiency.



In the last contract year, the robot was optimised to achieve a maximum pick rate of 55 picks per minute. During that time the robot completed 4,078,024 successful picks.

AI technology is transforming the waste industry, and robotics will play a major role in the future of recycling, therefore, working with Recycleye to install the robot waste picking system has served as a fantastic opportunity to enable re3 to be at the forefront of AI technology and recycling.



Social Value

Social value measures the positive value and impact that businesses create for economies, communities and society and it can be used to help identify key areas through which businesses can create social value.

Social value is quickly becoming an extremely important topic within businesses, local councils, and new tendering processes. The central Government now explicitly evaluates social value when awarding most major contracts, and it has a weighting of 10% (if above the public procurement threshold).

At re3 we use Thrive to record and monitor our social value reporting. It helps identify, capture and report on all our social value impacts using a specific framework and list of metrics. The Thrive Social value model uses the "Impact Evaluation Standard (IES)". The IES is a standard set of rules which enables organisations to bring consistency and additional rigour to their reporting of social value. The IES is comprised of a collection of metrics, proxy values and guidance documents which follow guidance from HM Treasury and are fully auditable and traceable back to the Government Social Value Model PPN06/20. When recording social value from April 2022-March 2023, the IES consisted of 122 metrics, however every April, at the end of the financial year the metrics are reassessed. This means metrics can be discontinued, added, superseded, or combined to reflect the current economy. As of April 2023, there are now 130 metrics.

The metrics span across five main categories: Tackling Economic Inequality, Increase Supply Chain Resilience, Fighting Climate Change, COVID-19 Recovery and Wellbeing. At re3 we have created a "simplified guide" to help us record social value, and so all 122 metrics have been reviewed and subsequently the "key 25 metrics" which are most relevant to the contract have been chosen to focus on.

In order to calculate our social value, we must continuously upload data to the Thrive platform. This can be done on a monthly, quarterly, bi-annually or annual basis. Thrive then calculates the social value generated (a running total) for the contract. The platform allows for the generation of reports too, these can be generated business wide or down to an individual contract level. The reports break down all the social value generated through each metrics.

At re3 when recording social value, it has been done across the calendar year. In 2022 we recorded over £14 million pounds worth of social value, generated across the five categories, with still more to be generated through the additional claiming of staff training.

thrive

Reuse Pop-up Shop

Preparing materials for reuse in their original form is the second-best approach to waste management according to the waste hierarchy.

This is why it plays such a critical role within the waste industry, as we aim to minimise our environmental impacts and strive towards net zero.

Reuse is crucial for the waste industry for several reasons. Firstly, it reduces the amount of waste in circulation, being sent to landfill, and Energy from Waste, and therefore mitigates the negative environmental impacts associated with waste disposal. In addition, it reduces the demand for new resources; minimising extraction and manufacturing processes, and the associated pollution.

Lastly, it aids in creating a circular economy which is going to be key in our fight against climate change. By reusing products and materials, we can keep them in the economic system, preventing them from becoming waste prematurely, supporting a more sustainable and regenerative approach to production and consumption.

Overall, reuse plays a vital role in reducing waste generation, conserving resources, minimising pollution, and fostering a more resilient waste management system which is why at re3 it is something we are extremely passionate about and dedicated to.

To promote reuse we held our second pop up reuse shop in October 2022. Unlike our previous event, this was a one-day event held at our Longshot Lane Recycling Centre in Bracknell.

Prior to the event items were collected at our Smallmead recycling centre and Longshot Lane recycling centre. There was a wide range of items collected, including antique furniture, children's bikes, household appliances, bric-a-brac, sports equipment and much more! Any electrical items on sale such as lamps, hoovers, TVs, had been PAT and functioned tested to ensure they were safe and in working order.

The event was a great success with hundreds of visitors coming to site to view the pre-loved items at bargain prices. In total we sold 209 items, which equates to almost 2 tonnes, preventing a large amount of items from becoming part of waste streams. We will continue to plan more reuse events, as both events we have held have been extremely successful and well received by the public.

Let's start a Reuse Revolution

235.43

Tonnes of reuse diverted in the contract year (excluding textiles)





Trade Waste Scheme

The Trade Waste Scheme began in November 2019 and gives local SME's the chance to dispose of non-recyclable material for a fee and some recyclable material is accepted for free at our recycling centres.



To join the scheme, a waste carrier license is required. The scheme can accommodate local businesses (businesses address within the Bracknell Forest, Reading or Wokingham area).

So far, businesses benefitting from the scheme include: plumbers, carpenters, painters and decorators.

Once accepted to the scheme, users must ensure they follow all site rules and retain the waste transfer note they are given at site.

Compost

To minimise our environmental impact and to promote a circular economy, residents can purchase re3 compost at both of our recycling centres.

This compost is produced from the green waste deposited at our recycling centres and at the kerbside by residents. Once the green waste has been deposited it is taken to an FCC Compost Pad at Sutton Courtenay, Oxfordshire where it undergoes processes and treatment to turn it into compost.

At Sutton Courtenay the green waste undergoes a lengthy process. It begins by being sanitised to remove any weeds, seeds, and pathogens. This lasts 7 days and temperatures must be maintained at 65-80˚C. The next stage is a 12-week process, with 3 stages: screening, shredding and maturing and during this the compost is sorted into windrows. The compost is high quality, peat-free and is BSI PAS 100 certified which ensures the compost has gone through the correct quality control procedures and is safe to use in gardens.

In this contract year, we have sold 9626 bags of compost to residents, which was produced from their green waste, and therefore promotes a circular economy and minimises the amount of waste in circulation.





re3paint

At re3 we try to ensure that most paint brought in by residents, has the chance to be reused, and so we introduced the re3paint scheme.

This scheme allows residents to bring in their partially used paint, which is then placed in a container and as residents leave site, they can stop and take-home paint free of charge, helping us reduce the amount sent to landfill. All paint must be signed out to keep track of the amount of paint being reused, but the amount residents can take is unlimited. This scheme offers residents a free solution to any projects, home improvements, garden work and helps us reduce our environmental impact. It is estimated that up to 65% of all paint brought for disposal could be reused instead.

Between April 2022-March 2023, at Smallmead Recycling Centre 1,204 containers (5.78 tonnes) of paint were taken for reuse and at Bracknell Recycling Centre 150 containers of paint (1.24 tonnes) were taken for reuse by the residents and community groups.

re3paint Community Paint Reuse

65%

It is estimated that 65% of discarded paint is still in usable condition. To prevent this waste, re3 has launched re3paint – a Community Paint Reuse initiative



Total amount recycled

7.02 Tonnes of paint

1,354 containers



re3cyclopedia App

In 2018 the re3cyclopedia app was launched to help residents recycle better by providing relevant recycling advice and reducing confusion.

It aims to make recycling as simple as possible and does this by enabling residents to search and scan items to ascertain if they can or cannot be recycled. The app advises on whether residents can recycle items at the kerbside, recycling banks or at the recycling centre. Residents can also search for the nearest textile and bottle banks and provides access to the recycling centre booking system and the council waste collection services.

re3cyclopedia

Bracknell Forest Council | Reading Borough Council Working better with you | WOKINGHAM BOROUGH COUNCIL



Performance Monitoring

Contract Requirements

The contractor and client both continuously monitor the contracts performance using 70 Key Performance Indicators (KPIs). In the event the contractor's performance fails to meet the specified standards, they may face penalties and financial consequences. KPIs that consistently receive penalties and fall short of the required benchmarks, may undergo a formal review, potentially leading to adjustments in operational procedures, to address the situation.

Several aspects are assessed through KPIs, including waste management, waste disposal and transfer, the functionality of bring banks, adherence to health and safety practices, and the efficiency of turnaround times for council vehicles when depositing materials at the facility.



Daily and Weekly Checks

Regular inspections, conducted on a daily and weekly basis, are implemented to verify the contractor's adherence to essential contractual requirements and the proper maintenance of recycling centres. These checks encompass various factors including visitor counts, capacity of the collection points, and environmental considerations such as preventing windblown litter. These checks also enable the contractor to exhibit adherence to the environmental permits associated with the facilities.

Monthly Reports

By generating and examining a monthly KPI report, as well as 18 annual reports, re3 can swiftly and effectively identify areas that require improvement. This allows for prompt rectification of issues, ultimately enhancing both service quality and operational performance.





Complaints

The re3 partnership employs a standardised structure for documenting grievances. All written complaints received from the general public are promptly acknowledged within 3 business days, followed by a comprehensive written response within 10 business days. This framework allows us to enhance our service by dedicating time to thoroughly assess each complaint, explore preventative measures to avoid similar situations in the future and to implement necessary improvements.

Between April 2022-March 2023, re3 received 47 complaints. This is a significant improvement on last year's figure of a reduction of over 50%, showcasing how we have listened to previous complaints and implemented what is necessary to ensure the issues are not repeated.

Compliments

Through examining the compliments received from residents, we can customise our services to align with their preferences and requirements. Additionally, these compliments serve as a source of motivation and pride for our staff members, as they reflect their hard work and success in delivering excellent customer service. In the past contract year, we have received 28 direct compliments, however, in our user satisfaction survey we received over 1,000 compliments in total.

User Satisfaction Survey

We conduct an Annual User Satisfaction Survey to allow residents from all three councils, the chance to convey their opinions regarding the recycling centres. It gives residents the opportunity to let us know what works well on site and what they believe could be improved on their visits to the recycling centres.

The survey consists of a mixture of questions pertaining to site cleanliness, the booking system, site staff, meet & greet, queuing, site safety and potential improvements. We also ask residents which age range they fall under and which council area they live in, to give us an insight into the demographics of those using the sites. The previous two surveys used the recycling centre booking system, whereby residents have been emailed a link to an online survey which could be completed at their own convenience following their visit to the recycling centre. In total we had 2866 surveys completed, 1,529 by Longshot Lane visitors and 1,337 by Smallmead visitors.

Overall, the survey results were positive, with Longshot Lane improving its overall satisfaction rating from 88% to 89%, Smallmead received a satisfaction rating of 90% and both sites seeing an improvement in "Customer Care, Safety Posters and Advice and Meet and Greet Team/ Entrance Staff" ratings. Longshot Lane received 550 positive comments and 330 recommendations, while the Smallmead site received 540 positive comments and 310 recommendations.

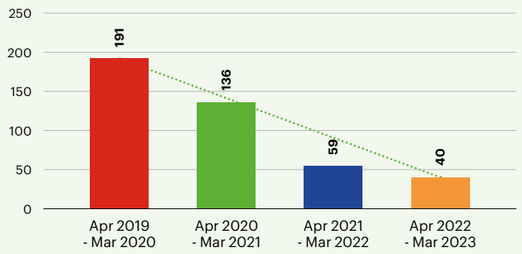
Health and Safety

Health and safety remain a top priority at re3, as is evident from our accident and near miss data. In this contract year, a total of 40 health and safety accidents and incidents occurred, involving staff, site users and the public. Additionally, there were 173 recorded near misses. Compared to the previous year, there has been a decrease in accidents by 32% (60 accidents reported April 2021-March 2022) and a significant decrease of 54% in near misses (376 near misses reported April 2021-March 2022). Looking back over the past four years, we have seen a continuous decrease in accidents and incidents on site, which is testament to the importance placed on health and safety at re3.

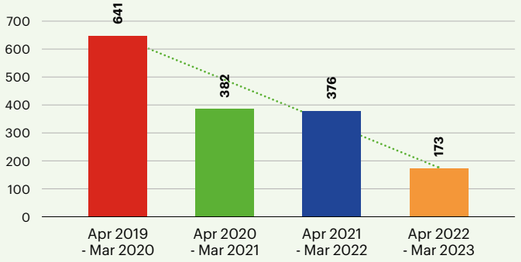
Regular and comprehensive health and safety training is provided to all staff as well as continuous monitoring of all health and safety practices on site. Our "Because" behavioural safety training programme remains highly effective in minimising the occurrence of near misses and accidents, this can be seen in the continuous decline in the number of reported accidents and near misses over the past four years. The programme helps achieve this by fostering a positive health and safety culture which we continuously build upon. "Because" meetings take place once a month and offer staff the opportunity to discuss and evaluate any near misses and accidents from that month, allowing for the identification of preventative measures to be implemented. These meetings offer an inclusive platform for all staff members to actively contribute their own ideas and initiatives towards enhancing health and safety on site. This encourages a collaborative approach, empowering employees to share their valuable insights and suggestions that could further improve the overall health and safety on site.

Public knowledge and adherence to safety guidelines when visiting recycling centres is essential for personal safety, environmental protection, accident prevention, promoting recycling awareness, and ensuring compliance with all regulations. By understanding how to handle waste and recyclable materials safely, individuals can contribute to a safer, cleaner and more sustainable future. In January 2023, FCC launched a trial health and safety campaign called "Stay Safe on Our Site", in partnership with re3. The aim of the campaign is to increase public safety through educating the public on how to navigate sites, how to handle waste with care and how to prevent accidents. To increase public engagement with the campaign, posters were placed around site and cards were given to the public by site staff.

Number of Accidents



Number of Near Misses



Environmental Safety

At re3 we consider it our duty to do the best for our environment across everything we do which is why we monitor and record any environmental incidents which have occurred. Across the last contract year there were 7 environmental incidents, some relating to oil & chemical spills. We provide comprehensive training to all employees regarding environmental safety protocols and emergency response procedures, to raise awareness with staff about the importance of protecting the environment and to encourage them to report potential incidents promptly. The effects of the training have been seen as the number of environmental incidents has dropped from 12 to 7 from the previous contract year. Any incidents are recorded on EcoOnline which is a robust monitoring system which allows us to track our environmental performance (and health and safety), and it helps identify any problematic areas or potential risks.

Fires

Within the waste industry fires are common occurrence, with over 300 happening every year at recycling sites across the UK. At re3 over the past contract year, there have been 15 fires which is an increase on the previous contract year, when 7 fires occurred. There were several causes of the fires at re3, including batteries and smouldering green waste. To prevent fires, ensure the health and safety of all those on site and to minimise our environmental impact, we take numerous steps to minimise the risk of fire. This includes the implementation of effective waste management practices, including proper storage, segregation, and disposal procedures. There are regular inspections and maintenance of equipment, and fire prevention and suppression system. Furthermore, we hold regular staff training to educate employees about fire safety and enable them to respond promptly and appropriately in case of emergencies.

In October 2022 FCC launched a "Zombie Batteries Campaign" to promote the correct disposal of batteries, due to the risk they pose to the waste industry when incorrectly disposed of. The campaign aimed to educate the public on how to correctly dispose of batteries and encourage people to "Take Charge" of recycling them, which involves removing any batteries from broken devices and then depositing them in battery recycling services found on our sites or at local supermarkets.









94.40%

The average recovery rate across the partnership

Waste:
Where does it come from?

Recycling Waste Collection Performance

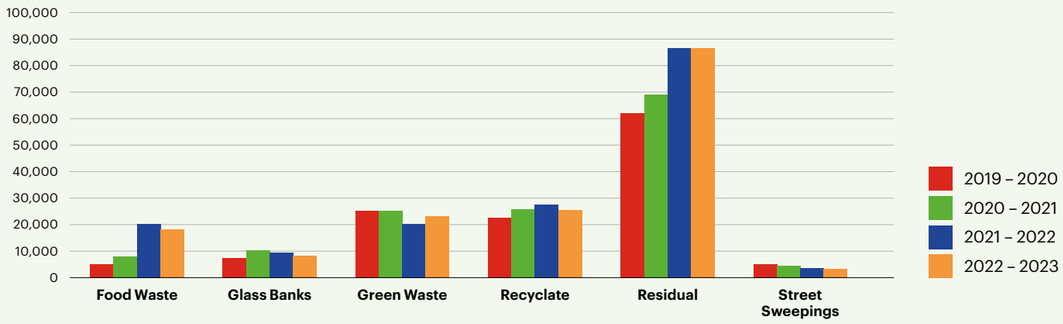
From April 2022-March 2023, the total contract waste amounted to 166,539 tonnes, which is a 5.80% decrease on the previous year's 176,830 tonnes. This decrease in contract waste is likely a result of numerous factors. One contributing factor may be the return of employees to offices following on from COVID-19. In the April 2021-March 2022 contract year, COVID-19 was still very prevalent and influencing day to day living, with a lot of employers across the country advising employees to work from home. Now though, most offices have opened, therefore individual's household waste amounts have decreased.

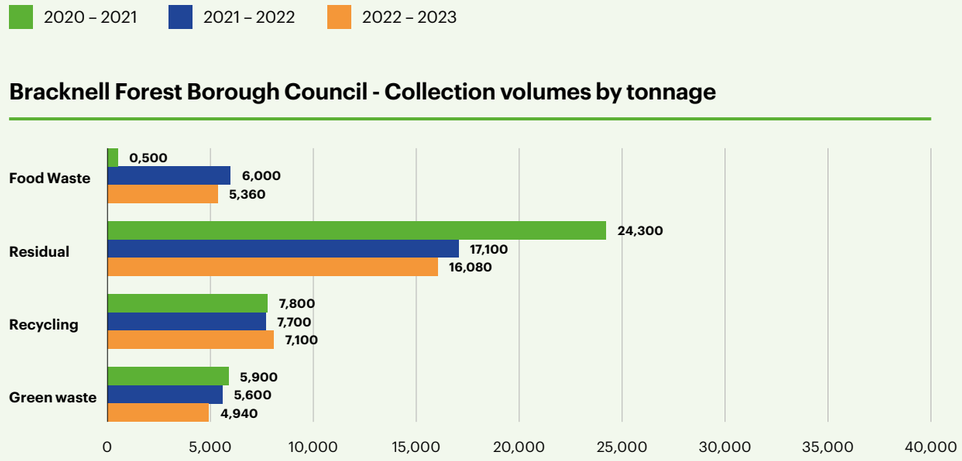
The cost-of-living crisis is also likely to be playing a part in the reduction of waste as people are limiting their spend and wasting less, therefore less waste is being created.

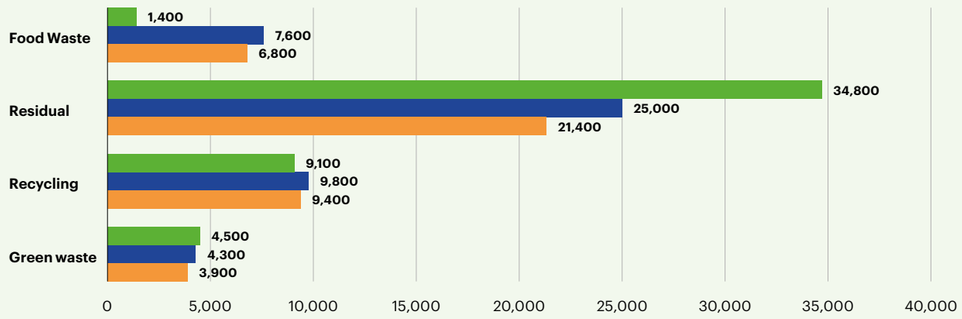
Recovery Rate

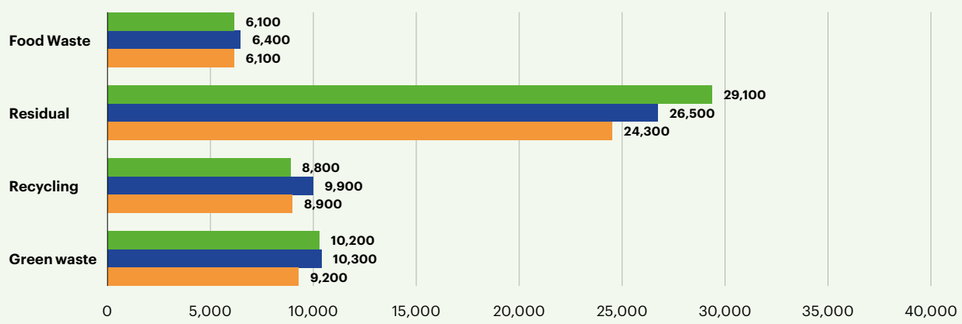
This year we had another excellent recovery rate of 94.50% which is one of the highest rates since the contract began. The recovery rate measures the total amount of waste sent for recycling, energy from waste, beneficial use, reuse and composting and is testament to our investment into minimising our environmental impact through diverting waste from landfill. The full implementation of rigid plastics recycling scheme played an important role in this figure as this waste would have previously been sent to landfill.

Waste tonnage over the years









Food Waste

Food waste is collected weekly from the kerbside from each of the three council areas and brought to our Bracknell and Reading transfer stations. This year, our food collection tonnage is lower than the previous year, by 9%. Between April 2021–March 2022, we saw 20,014 tonnes of food waste collected from the kerbside. However, this year we saw a decrease as 18,228 tonnes were collected. The drop in food waste is likely to be the result of the end of COVID-19 restrictions and the rising cost of living. Less people are working from home and with the rising cost of food, people are unwilling to buy in excess and so less waste is generated. By establishing a food waste collection and enabling the public to collect their food waste separately, they are able to see the volume of discarded food, helping them to adjust their habits such as buying less, improving their food storage or cooking with leftovers resulting in minimal food waste.

At re3, our food waste is processed by Severn Trent Green Power, who operate an anaerobic digestion facility in Oxfordshire. During the process, anaerobic microorganisms break down the biodegradable components of the food waste, forming methane (biogas) and digestate (a compost-like output). The methane is captured and used to produce electricity. With food waste received from re3 alone, between April 2022-March 2023, Severn Trent Green Power, have produced 2,877,440 m3 and subsequently generated 7,079 MWh of equivalent energy.

This is the equivalent of 70,785,024 kettles being boiled, 23,595 fridge freezers being powered for a year or powering 1,675 homes for a year. In addition to the electricity generated, 25,178 tonnes of digestate fertiliser was produced, with the carbon benefit of digestate vs chemical fertiliser reaching 558 tonnes.

Overall, from April 2022-March 2023, we have saved 3819 tonnes of carbon from being emitted into the atmosphere through processing our food waste via Severn Trent Green Power and using anaerobic digestion, rather than sending it to an energy from waste facility. By not sending the waste to landfill and processing it via anaerobic digestion, we have saved 14,710 tonnes of carbon from being emitted into the atmosphere.

18,228

Tonnes of food waste collected from the kerbside

14,710

Tonnes of carbon saved from being emitted

SEVERN TRENT Green Power

Street Sweepings

Street sweepings are collected in all three council areas and the waste is deposited in both of our transfer stations. The total street sweeping tonnage is down on the previous year by 8%. From April 2022-March 2023, 3,440 tonnes of street sweeping waste were collected. Street sweepings are processed by two different companies and plants, these being Invixon and Grundons.

The street sweepings that are processed by Invixon are processed by a combined screening and washing plant built by CDE, with wastewater treatment provided by Parnaby Cyclones. The road sweepings material consists of a mixture of many waste types: silt, grit, litter, and debris and at times a high concentration of organics/leaf fall. The plant will recover the material into separate fractions with varying recovery rates: Sand grades, gravel, oversize and litter, organics, silt/sludge and metals and filters.

3,440

Tonnes of street sweepings collected and processed by Invixon and Grundons





8,407

In this contract year we have collected 8,407 tonnes of glass over 19,023 collections from our bottle banks



Glass Collections

There is no kerbside glass collection in any of three council areas, therefore the provision of bottle banks and their collections is a crucial part of the services re3 deliver.

In total we have 137 bottle bank locations and 574 separate bottle banks. Bracknell Forest has 169 bottle banks across 42 locations, Reading Borough has 207 banks across 50 locations and in Wokingham Borough there are 198 bottle banks across 45 locations.

In the past, we collected the glass separately; clear, brown and green. However, in recent years we have collected it mixed together, all from the same bottle banks. Collecting the glass mixed, makes recycling much easier for residents. This new system also allows re3 to rationalise containers and optimise collection schedules, which can help to reduce costs, overflows and its carbon footprint. By mixing the collection of glass, the likelihood of certain banks overflowing is lower, and it requires fewer trips for all the banks to be emptied, so no unnecessary journeys are made.

We have also increased the efficiency of our bottle bank collections by calculating quicker, more efficient collection routes for our drivers, ensuring our fuel consumption and emissions are low. Each of the glass banks has a sticker with a QR code that leads to the re3 website and the glass information page. This page is available in multiple languages, helping to reach ethnic audiences with the recycling information.

At re3 we manage our bottle bank collections using MOBA, a cloud software package. MOBA enables us to generate bottle bank collection routes with maximum efficiency, minimising the distance, therefore reducing our environmental impact. It also enables us to track the bottle bank collections, record weights of the banks and their location, as well as any incidents. Therefore, by monitoring the bottle bank collections through MOBA, we can continuously review the collections, identifying any issues quickly, and optimise the routes used maintaining an efficient and reliable bottle bank collection service.

In this contract year we have collected 8,407 tonnes of glass over 19,023 collections from our bottle banks which is an 11% decrease on the previous year's collection.

Precycle

Precycle Group is a recycling organisation that specialises in repurposing various materials in the waste stream. Their objective is to gather discarded items and connect them with new owners who can derive value from them, promoting a circular economy and moving material up the waste hierarchy which is key should we want to limit our environmental impact. At re3, our primary focus for Precycle involves the collection of books, bric-à-brac, textiles, bicycles, DVDs, and CDs.

We have a designated reuse area at both sites where visitors can drop off items they want to be reused. If books are dropped off, we use a system called "Sell it Back". We use an app to determine the demand of a book by scanning its barcode, if a book is in high demand, then we will package it up. Once we have enough books in high demand, Precycle will come and collect them, where they will be sold or distributed to those who require them, such as schools and charities.

Precycle's reach extends beyond the UK as they help various countries as far as South Asia, including Iraq and Pakistan by donating bric-à-brac, crockery and cooking equipment.

Sue Ryder

Sue Ryder is a British palliative, neurological and bereavement support charity who we have partnered and worked with since 2011. At both of our recycling centres we have a dedicated area where residents wishing to donate items to the charity, can drop them off. Donated items can include, furniture, vinyl records, sports equipment, bikes, children's toys, house decorations and much more. All items are inspected prior to being donated to ensure they are in good condition. Sue Ryder will then collect the items, and take them to their charity shops, where they are sold to raise money for the charity.

Sue Ryder palliative, neurological and bereavement support

> Thanks to the support of re3, Sue Ryder has made over £8,500 on the items that we have been able to sell through our Shinfield and Sandhurst charity shops. The money raised will go on to provide our expert and compassionate palliative and bereavement services. We are incredibly grateful to the team at re3 for supporting us for another year, to ensure we can be there for people when they need us the most."

Jane Bullen
Sue Ryder Manager



Rigid Plastics

At re3 we try to ensure we recycle everything we can. That is why we have teamed up with Haulaway Ltd, to recycle our rigid plastics. They collect our rigid plastics waste and take it back to their recycling centre where initially any contamination is removed. The plastics then go through various stages of polymer type separation, before being segregated into polymer types and placed into bays ready to be baled. The bales are then collected by the offtakers who re-grade, wash, grind or pellet the polymer to a specification required by their end UK markets, thus insuring a circular UK solution to Bulky Mixed Plastics.

From April 2022–March 2023, we ensured 392.86 tonnes of rigid plastics were recycled and repurposed rather than being sent to landfill, contributing greatly towards our recovery rate.

392.86

Tonnes of rigid plastics that were recycled rather than being sent to landfill

Waste Upholstered Domestic Furniture (WUDS)

In September 2022, the Environment Agency (EA) issued new guidance on how soft furnishings – such as sofas and armchairs – containing Persistent Organic Pollutants (POPs) should be managed. There were concerns raised across the waste management sector in regard to the new guidance, including from Environmental Services Association (ESA) and the Local Authority Recycling Advisory Committee (LARAC).

The EA wrote to all local authorities to issue the new guidance following an investigation that found significant levels of POPs in soft furnishings. Effective from 1st January 2023, the new guidance stated that such products should not be landfilled, mixed with waste streams containing non-POPs, reused, or recycled. Essentially, it meant that all POPs-affected seating needed to be treated at energy from waste (EFW) facilities, following a strict set of rules.

FCC environment was able to provide a fully compliant solution at their Sutton Courtenay facility, this ensures that the waste is handled, processed, transported, and disposed of at EFW in line with Environment agency requirements.

Yes please	No Thanks
✔ Settees, Sofas	✖ Bags or bagged waste
✔ Armchairs	✖ Curtains
✔ Home Office Chairs	✖ Carpets
✔ Futons, Pouffes	✖ Mattresses
✔ Upholstered kitchen/dining chairs	✖ Chairs without upholstery
✔ Upholstered stools & footstools	✖ Electric recliners
✔ Beanbags	✖ Electric items
✔ Floor & sofa cushions	



Waste:
How we deal with it

Hopper	Waste is collected from the input bay and tipped into the hopper
Pre-Sorting	Non-recyclable items are removed from the belt
Trommel	A rotating drum segregates the large and small items
Disc Screen	Items which are too small to be processed are removed (including glass)
Air Knives	Air knives and sensor band sorting equipment removes 4 types of plastic, 2 types of fibre and paper
Eddy Current Separators	Electric current removes aluminium
Over Band Magnet	Sorts steel cans
Robot	Picks, segregates and removes any contamination from our plastics streams
MRF Picking Team	Any items which are not suitable for recycling are removed by our team

The MRF: (Materials Recycling Facility)

Each council operates a kerbside collection for recyclable material, which is taken to either Longshot Lane or Smallmead transfer station. It is then transferred to the Smallmead Materials Recycling Facility (MRF), which can process up to 60,000 tonnes per year.

During the mechanical process stage, the mixed dry recycling (MDR) is separated into categories: paper, newspapers and pams (pamphlets), cardboard, cans, clear plastic, mixed plastics (plastic tubs and trays), high density clear plastic, high density coloured plastic, aluminium (cans, trays and aerosols), steel (cans and aerosols).
All materials are baled (except newspapers and pams, paper and the occasional cardboard) and these are inspected before being collected and leaving site by the offtakers.
If there is any material in the MRF which cannot be recycled, it is either removed at Stage 1 Pre-sort, or is rejected as MRF residue and sent to the Energy from Waste plant.

We track the material entering and leaving our MRF by regularly sampling the material. Not only does this ensure that any waste we process is of high quality, but it also gives us a clear indication of the type and amount of waste being brought in by the three councils. When MDR waste arrives at site it is visually inspected to ensure it is suitable enough to undergo the mechanical processes in the MRF.

The MDR goes under an inspection process which consists of three controls: Quality, contamination and moisture. If the quality is poor and moisture is high, the load will be rejected as it will be unable to withstand the mechanical processes in the MRF and may damage the machinery.
If the MDR is of poor quality, offtakers will likely reject the loads, which result in financial penalties and a lower recovery rate. For every 125 tonnes of material that enters the MRF, we sample 60kg.

This contract year we saw 25,432 tonnes of reyclate waste being brought in by the three councils. Overall, the amount brought in is down slightly from the previous year's figure of 27,450 (7% decrease), which can be attributed to the rising cost of living, as people are less willing to spend money on unnecessary things or throw things away. The highest decrease is seen in newspapers and pamphlets waste stream, which may suggest a shift towards more online advertising and an increasing number of people accessing information online, rather than purchasing traditional newspapers.





Cardboard, Mixed Paper and News & Pams (Fibre)

This contract year we have processed 4000 tonnes of card, 9412 tonnes of mixed paper and 1409 tonnes of news and pams, totalling to 14,821 tonnes. These figures are down on the previous year, with card decreasing by 8%, mixed paper is down 4% and news and pams is significantly lower with a 39% decrease. Mixed paper and news and pams remain loose for collection; however, card may be bailed or may remain loose. We use various offtakers and ensure that all offtakers correctly transport, store, process and recycle the material so that it can be given a new lease of life. Many of the offtakers use these types of material to create sustainable case materials for packaging.

Plastics

The MRF segregates plastics into four categories: PET Clear (bottles and trays), HDPE Clear (milk bottles), HDPE Coloured (Jazz) (bleach bottles) and PTT (mixed pots, tubs and trays).). These are then bailed and collected by offtakers where they will be taken to their plants to be reprocessed into new items including food and non-food grade plastic packaging.

This year we processed 3254 tonnes of plastics within our MRF which is lower than the previous year. PTT plastics decreased by 19%, PET Clear decreased by 6%, HDPE Clear increased by 1% and, HDPE Jazz increased by 2%.





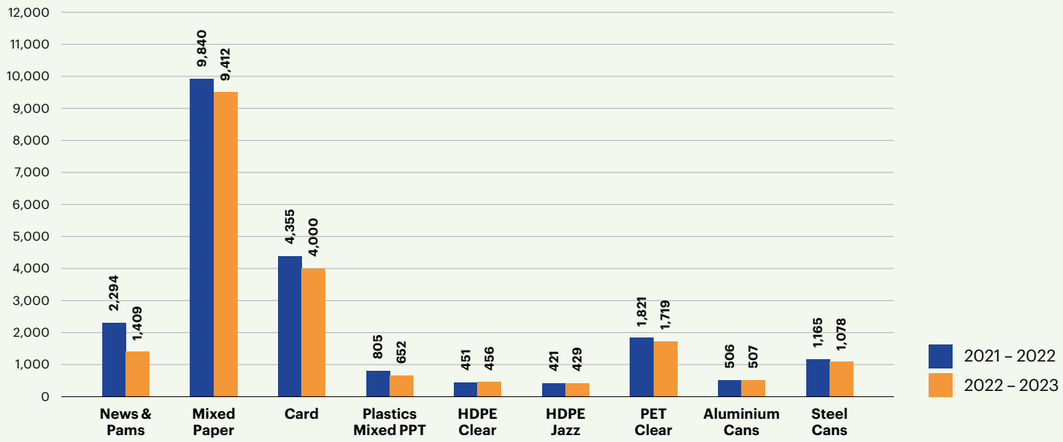
Aluminium and Steel Cans

We process both aluminium and steel cans, aerosols and trays within our MRF. Once processed they will be baled and stored until they are collected by our offtakers.

This year we processed 1,548 tonnes of steel and aluminium cans, with steel contributing more heavily toward this with 1078 tonnes while aluminium made up 507 tonnes. These figures mean that aluminium remained the same while steel dropped by 6%.

Various offtakers collect our aluminium and steel and some of them are industry leaders in processing and recycling of the material. Our aluminium cans are collected by Novelis and Morris Metals, AMG and Sims collect steel cans. Novelis are the leading buyer and recycler of used cans (globally) and alone they recycle over 82 million cans. They recycle the aluminium cans to make new can sheets and a can that is recycled can be back on the shop shelves in just sixty days.

Comparison of MRF recycling tonnes by type





Waste:
Storage and Transport

Transfer Stations

We have two transfer stations, one located at the Longshot Lane, Bracknell recycling centre and one at Smallmead, Reading recycling centre.

Longshot Lane, Bracknell

The transfer station at Longshot Lane, Bracknell has a capacity of 100,000 tonnes. Bracknell Forest and Wokingham Borough Councils deposit their garden, MDR and food waste. The MDR is later transported over to Smallmead MRF where it is processed. Occasionally Longshot Lane transfer station is used as additional storage for MDR during busy periods.



Smallmead, Reading

Our Smallmead, Reading transfer station is significantly larger than our Longshot Lane transfer station and can hold up to 200,000 tonnes. There is a need for space as MDR from all three councils are either deposited directly or transported from Bracknell transfer station to enable processing at the Material Recycling Facility. In addition, this transfer station accepts waste which include street sweepings, food and municipal solid waste (MSW).



Collection of Waste

Green Waste

Each council collects green waste from the kerbside. It is brought to Longshot Lane and Smallmead for storage where it is combined with green waste from the recycling centres.

Green waste is transported to Sutton Courtenay Compost Pad.

Green waste undergoes the necessary composting process. Compost is brought to Longshot Lane and Smallmead to be sold to the public.

General Waste

Each council collects general waste from the kerbside and brings it to either Longshot Lane or Smallmead transfer station.

Lakeside EfW receives general waste. Renewable energy is produced using it.

Other FCC transfer stations can receive the general waste. It will either be transported to an FCC EfW to produce renewable energy or if not suitable it will be taken to FCC Sutton Courtneay landfill.

Food Waste

Each council separately collects food waste from the kerbside and brings it to either Bracknell or Reading transfer station.

The waste is transported to Severn Trent Green Power Anaerobic Digestion Facility in Oxfordshire for processing.

The digestion facility produces biogas (methane) and a compost like output. Biogas is used to create electricity and digestate can improve poor soil conditions.

Transport of Waste

MDR

Each council separately collects MDR from the kerbside and it is brought to Bracknell and Smallmead transfer station.

MDR is processed in the Smallmead MRF.

The processed material is either baled or remains loose to be collected by off-takers for reprocessing into new material.

Waste Upholstered Domestic Seating (WUDS)

WUDS material is brought to the recycling centres by the public. It is stored separately from other waste.

Material is transported to FCC Sutton Courtenay transfer station to be shredded. It is then transported back to Smallmead.

Shredded WUDS waste is mixed in with black bag waste before being sent to Lakeside EfW.

Rigid Plastics

Rigid plastics are brought to Bracknell and Reading recycling centres by the public and stored separately.

Rigid plastics are collected by an off-taker.

Offtakers reprocess them to be made into new material.

Waste:
What happens to it?

Energy from Waste: Lakeside

An energy from waste (EfW) plant is a waste management facility that combusts wastes to produce electricity. Most EfW'S burn municipal solid waste, but some burn industrial waste or hazardous waste. By burning waste, water inside the plant is heated, the water will turn into steam which then drives a turbine to produce electricity. Energy from waste enables us to divert more waste from landfill, minimising our environmental impact, but it also produces a form of renewable energy which can be used to heat homes and businesses.



At re3 we send some of our waste to the local EfW, Lakeside, Colnbrook. Lakeside Energy from Waste (EfW) is a joint venture project between two of the UK's leading recycling and waste management companies; Grundon Waste and Viridor. Using advanced technology, this plant processes over 450,000 tonnes of residual waste per year, generating 306GWh of power – enough to provide electricity to 86,267 homes. In the last year we sent 60,525 tonnes of waste to Lakeside EfW, an 8% increase on the previous year.

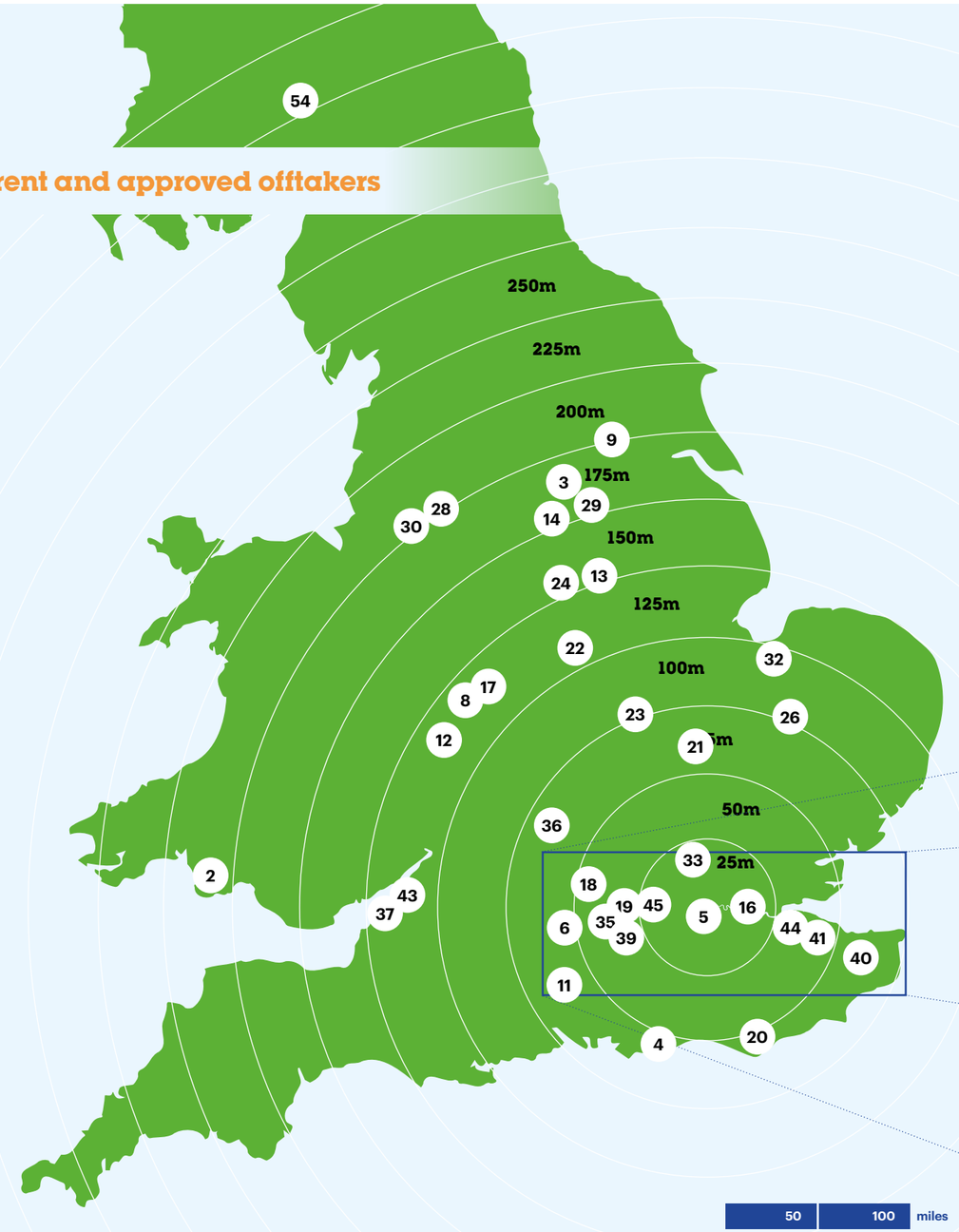


We send a variety of waste to Lakeside including non-hazardous commercial and industrial dry wastes, anything that cannot be processed in our MRF, any other non-hazardous waste that is combustible, however, the majority of waste we send is municipal solid waste (MSW) which is waste from household kerbside collections.

EfW's are rigorously monitored by the Environment Agency to ensure they are fully compliant and having a minimal environmental impact. EfW's provide us with a solution to sending waste to landfill and play an important role in our recovery rate.



Current and approved offtakers





1	A1
2	AMG
3	Berrymans
4	BCMY Ltd
5	Calor Gas
6	Computer Salvage
7	Countrystyle
8-9	Credential Environmental
10	DS Smith
11	Ecogen
12	Eco-Oil
13	Enva
14	FCC Blackburn Meadows
15	FCC Environment Sutton Courtenay Composting Facility
16	Flogas
17	G & B Batteries
18/19	Grundons
20	Haulaway LTD
21	Invixon
22-24	J & A Young
25	J Mould
26	Living Fuels Ltd
27	Lakeside
28	Mercury Recycling
29	Morris Metals
30	Novelis
31	Oakleaf
32	Palm Paper
33	Pearce Recycling
34	Precycle
35	Select Environmental
36	Severn Trent Green Power
37	Sims
38	Smurfit Kappa
39	Sue Ryder
40	Synergy
41	Sweep (Repic)
42-44	Viridor
45	W.N. Thomas & Sons LTD
46	UPM (1) - UK
47	UPM (2) - Germany *
48	UPM (3) - Asia *
49	VG Recycling (1) Netherlands *
50	VG Recycling (2) - Vietnam *
51	VG Recycling (3) United Kingdom
52	WPT - Netherlands *
53	Ekman - Germany *
54	Newport Paper (1) - United Kingdom
55	Newport Recycling (2) Netherlands *

* Not shown on map

Offtaker Information

No.	Company	Market	Recovered from	Postcode	End Market Locations
1	**A1**	Batteries: Car/, Metal (Scrap Ferrous), Metal: Non-ferrous, Wire Copper, Metal/Wire	HWRC/MRF	RG41 4SP	UK
2	**AMG**	Steel Cans	HWRC	SA15 2HD	UK
3	**Berrymans**	Glass	Bring Banks/HWRC	WF9 3NR	UK
4	**BCMY Ltd**	Ink Cartridges	HWRC	BN17 7QU	UK
5	**Calor Gas**	Gas Canisters	HWRC	SW18 1EG	UK
6	**Computer Salvage**	WEEE (Small)	HWRC	RG14 5EY	UK
7	**Countrystyle**	Plasterboard, Wood	HWRC	ME9 8SR	UK
8	**Credential Environmental**	Tyres	HWRC	WS10 7BG	UK
9	**Credential Environmental**	Tyres	HWRC	YO8 6DH	UK
10	**DS Smith**	Mixed Paper	MRF	ME10 2TD	UK
11	**Ecogen**	Card (Loose)	MRF	SO21 2RP	UK
12	**Eco-Oil**	Oil	HWRC	DY13 9BZ	UK
13	**Enva**	Oil	HWRC	NG22 8UA	UK
14	**FCC Blackburn Meadows**	Paint/Chemicals	HWRC	S9 1HF	UK
15	**FCC Environment Sutton Courtenay Composting Facility**	Green Waste	HWRC	OX14 4PW	UK
16	**Flogas**	Gas Canisters	HWRC	RM13 8UH	UK
17	**G & B Batteries**	Batteries: Household	HWRC	WS10 8JR	UK
18	**Grundons**	Street Sweeping, Clinical Waste	TS	OX10 6LX	UK
19	**Grundons**	Street Sweeping, Clinical Waste	TS	RG10 9XY	UK
20	**Haulaway LTD**	Rigid Plastics	HWRC	BN26 6QY	UK
21	**Invixon**	Street Sweeping	TS	PE19 5UH	UK
22	**J & A Young**	Plastics	MRF	LE11 5ST	UK
23	**J & A Young**	Plastics	MRF	NN18 9EY	UK
24	**J & A Young**	Plastics	MRF	DE55 2DT	UK
25	**J Mould**	Soil	HWRC	RG30 3XN	UK
26	**Living Fuels Ltd**	Cooking Oils	HWRC	IP26 4JQ	UK
27	**Lakeside**	MRF Rejects	MRF	SL3 0FE	UK
28	**Mercury Recycling**	Fluorescent Tubes	HWRC	M17 1HW	UK
29	**Morris Metals**	Steel Cans	MRF	DN11 0PS	UK
30	**Novellis**	Aluminium Cans	MRF/HWRC	WA4 1NP	UK
31	**Oakleaf**	MRF Rejects	MRF	TW19 6AF	UK
32	**Palm Paper**	News & Pams	MRF	PE34 3AL	UK
33	**Pearce Recycling**	Mixed Paper	MRF	AL4 0JY	UK
34	**Precycle**	Bric-a-Brac, Textiles/Shoes, Books/ Media, Bicycles, WEEE (Small), Tvs/ PCs	Bring Banks/HWRC	RG30 1EA	UK
35	**Select Environmental**	Asbestos	TS	RG2 0QX	UK
36	**Severn Trent Green Power**	Food Waste	TS	OX7 4EB	UK
37	**Sims**	WEEE (Large)	HWRC	BS11 9BT	UK
38	**Smurfit Kappa**	Mixed Paper	MRF	ME6 5AX	UK
39	**Sue Ryder**	Bric-a-Brac, Bicycles	HWRC	GU47 9DU	UK
40	**Synergy**	Gas Canisters	HWRC	CT4 7BA	UK
41	**Sweep (Repic)**	Fridges/Freezers, TVs/PCs	HWRC	ME10 2QB	UK
42	**Viridor**	Plastics	MRF	ME2 4NF	UK
43	**Viridor**	Plastics	MRF	BS11 0YU	UK
44	**Viridor**	Plastics	MRF	ME2 4NF	UK
45	**W.N. Thomas & Sons LTD**	Metal: Non-ferrous, Wire Copper, Metal/Wire	HWRC/MRF	SL1 3QR	UK
46	**UPM**	Mixed Paper, News & Pams	MRF	UK	UK
47	**UPM**	Mixed Paper, News & Pams	MRF	Germany	Germany
48	**UPM**	Mixed Paper, News & Pams	MRF	Asia	Asia
49	**VG Recycling**	Mixed Paper, Card (Baled), Card (Loose)	MRF	Netherlands	Netherlands
50	**VG Recycling**	Mixed Paper, Card (Baled), Card (Loose)	MRF	Vietnam	Vietnam
51	**VG Recycling**	Mixed Paper, Card (Baled), Card (Loose)	MRF	UK	UK
52	**WPT**	Mixed Paper, Card (Loose)	MRF	Netherlands	Netherlands
53	**Ekman**	Mixed Paper, Card (Baled)	MRF	Germany	Germany
54	**Newport Paper**	Mixed Paper, Card (Baled), Card (Loose), Plastics - Plastics stay in the UK	MRF / HWRC (Paper & Card)	UK (Plastics)	UK (Plastics)
55	**Newport Paper**	Mixed Paper, Card (Baled), Card (Loose), Plastics - Plastics stay in the UK	MRF / HWRC (Paper & Card)	Netherlands	Netherlands

Public Engagement

Community re3grow Compost Scheme

To promote recycling and community activities within the re3 area, we allocated 5,000 regrow compost bags to the re3 Community re3grow Scheme. This scheme offers local groups and organisations the opportunity to receive free re3grow compost bags to support their green projects.

The initiative and collaborative spirit demonstrated by the involved organisations and schools have been impressive. These include nourishing local community allotments, growing fruits and vegetables for local food banks, enhancing sensory gardens at local schools, assisting less fortunate individuals in growing their own food, providing social and therapeutic horticulture sessions, and simply improving general well-being by creating more inviting outdoor spaces.

In the first year of the project, over 1,600 bags of compost were provided, allowing for the use of 64,000 litres of compost, benefiting local communities and promoting recycling.

Since 2018, re3grow compost has been a successful staple in our circular economy initiatives. It is made from recycled garden waste and conforms to BSI PAS 100 and the Compost Quality Protocol. Before being bagged, it undergoes a 12-week composting process using open windrows, during which the garden waste is screened, shredded, and matured. One of the stages involves sanitisation, where a high temperature between 65–80˚C is maintained for a minimum of 7 consecutive days to eliminate weeds, seeds, and pathogens.



Other Campaigns

During the last contract year, we engaged in several public engagement campaigns.

One of the most important campaigns was an awareness campaign focused on battery recycling. Throughout the campaign, we encouraged residents to dispose of batteries separately at designated collection points and to avoid placing them in home recycling or residual bins. The campaign highlighted the issue of hidden batteries, which can be found in toys, greeting cards, toothbrushes, chargers, and vapes. We explained the dangers of improper battery disposal, emphasising that pierced or crushed batteries can self-combust or cause sparks when they come into contact with other metals and materials. Such incidents can lead to fires in waste trucks or facilities, posing a risk to workers' safety and causing significant damage. The campaign messages were distributed through press releases, social media, newsletters, and posters displayed at recycling centres.

Additionally, we focused on the social inclusion aspect, particularly the accessibility of the booking form at the Recycling Centres. To improve accessibility and clarity for residents whose first language is not English, we enhanced the online booking system webform by integrating translation services for over 130 languages. We also advertised the new feature, as well as inclusive services such as Paint Reuse and the Reuse Area, in the local press, through targeted social media advertising campaigns, council magazines, and by sharing information with local ethnic community groups.



Overall residents rated Smallmead, Reading as good/very good

91%

Overall residents rated Longshot Lane, Bracknell as good/very good

88%

Website

From April 2022-March 2023 the re3 website was visited 290,718 times by 105,056 users, most likely looking to book a time slot to come and deposit their waste at either one of the recycling centres. The public can find a variety of information on our website including: recycling centre information and the services available, the booking system, re3 initiatives and information about the processing of waste and what happens to it. In March 2023, our community re3grow Compost Scheme was relaunched which is likely the reason for the spike in new visitors around this time.

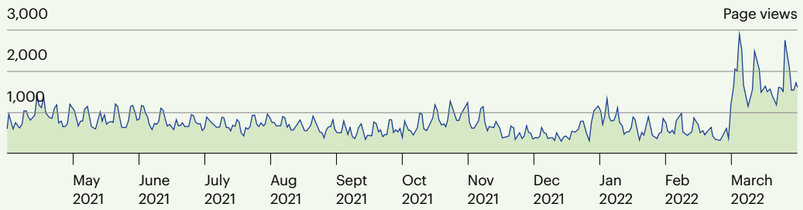
Page views
290,718

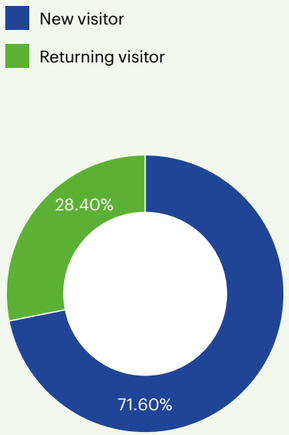
Users
105,056

Sessions
194,800

Avg. session duration
00:00:37

Bounce rate
64.07%







Energy and Environment

Energy Usage

When it comes to waste management, according to the waste hierarchy, the priority is prevention, followed by reuse, recycling or recovering (whenever possible). Disposal of waste can be found right at the bottom of the waste hierarchy as this has the greatest environmental impact. While we strive to follow the waste hierarchy whenever possible, there are times when certain items of waste cannot be reuse, recycled or recovered, necessitating its disposal in landfill and this is known as mixed municipal solid waste (MSW). The MSW will be compacted, spread and covered within the landfill and at re3, this waste will be transported to FCC Sutton Courtenay Landfill in Oxfordshire. Since the beginning of the re3 partnership the amount of waste sent to landfill has significantly dropped and we are always looking for ways to reuse, recycle or recover waste rather than sending it to landfill to ensure we have as minimal an environmental impact as possible.

Company Initiatives and Values

At re3, the site is operated and managed by FCC Environment who are fully accredited with ISO 50001, 45001, 14001 and 9001, demonstrating all of their commitments towards energy, health and safety, environmental, and quality management. To ensure we are meeting the statutory and regulatory requirements of all of these standards, we are regularly audited on them.

FCC Environment and re3 are committed to health and safety as evidenced by being awarded 5 stars from the British Safety Council and the Sword of Honour, of which re3 played an important role during the audit process.

At re3, we are committed to FCC values which cover four key areas: Environmental Commitment, People Focus, Forward Thinking and Doing the Right Thing. These values will be key to us at re3, in order for us to reach our goals.

FCCE were awarded 5 stars by the British Safety Council and a Sword of Honour for its commitment to health and safety



1.69m KWh

The Smallmead site used 1,692,109.8 KWh of energy with a monthly average of 141,009.15 KWh

158k KWh

Longshot Lane used a total of 158,569 KWh, with a monthly average of 13,214.08 KWh

Protecting and Maintaining Wellbeing

A substantial portion of our lives is dedicated to our professional endeavours. Therefore, at FCC Environment, we prioritise the welfare of our team members and constantly seek ways to enhance their well-being, encompassing both their physical and mental health

In 2022, FCC established a more structured approach to enhance and sustain our efforts in safeguarding and promoting the well-being of our employees.

In order to facilitate employees in obtaining information aimed at enhancing their overall well-being, we introduced a specialised website called Wellnet. This platform offers individuals a valuable resource to seek assistance, counsel, and direction on a wide array of well-being topics, ranging from dietary and nutritional advice to mental health and strategies for managing sleep.

Managers have access to a resource kit to aid them in assisting their peers, while employees can utilise FCC Environment's Employee Assistance Programme (known as WeCare), which offers round-the-clock access to general practitioners (GPs), bereavement counselling services, and relationship counselling.

At FCC our Wellbeing Strategy Steering Group have adopted a 5-pillar model. The 5 pillars are: Connect, Be Active, Take Notice, Learn and Give.

Environmental Commitment
Ensure what we do is environmentally and socially responsible

People Focus
Value, reward and motivate our team

Forward Thinking
Embrace change and prepare for the future

Doing the Right Thing
Secure our future by being better at what we do

In addition to this we also adhere to the FCC values and behaviours which include following four areas that are key for forward thinking regarding our future.

five ways to wellbeing

give | be active | take notice | connect | keep learning

wellbeing



FCC Environment

Glossary

Air Knives
Air Knives direct pressurized air onto the surface of objects, usually as they move along a conveyor belt. They will separate the waste depending on size and weight

Anaerobic Digestion (AD)
Anaerobic digestion is a sequence of processes by which microorganisms break down biodegradable material in the absence of oxygen. The process is used for industrial or domestic purposes to manage waste or to produce fuels.

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

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

BSI PAS 100
The British Standards Institution's 'Publicly Available Specification for Composted Materials' (PAS 100) sets a minimum compost quality baseline, upon which composters should build as appropriate to the product types and markets targeted.

Certifications
ISO 50001 - Energy Management
45001 - Occupational Health & Safety
14001 - Environmental Management
9001 - Quality Management

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 Facility.

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 Recycling Centres by householders and industrial and commercial waste disposed of via the transfer station.

Disc Screen
The disc screen consists of rotating discs for separating wastes through the clearance between the discs depending upon the size and the weight of the waste while the wastes move on the rotation discs.

Environment Agency
The Environment Agency is a non-departmental public body, established in 1995 and sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs, with responsibilities relating to the protection and enhancement of the environment in England

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.

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.

HWRC
Household Waste Recycling Centre

Kerbside Collection
Kerbside collection is a service provided to households, typically in urban and suburban areas, of collecting and disposing of household waste and recyclables.

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 repressors.

Mixed Dried Recycling
Dry Mixed Recycling is a broad term used to describe a range of different types of clean recycling waste that can easily be reused or reformed into other goods, products, or broken down into their core materials.

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

Municipal waste/ Municipal Solid Waste (MSW)
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.

Offtaker
The party who buys the product being produced by the project or who uses the services being sold by the project

Overband Magnet
Overband magnets are suspended over conveyors in the MRF to separate steel cans

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.

Reprocessing
Series of operations that transform industrial materials from a raw-material state into finished parts or products

Social Value
Social Value measures the positive value businesses create for the economy, communities, and society.

Trade Waste
Trade waste refers to any form of industrial waste or materials that are leftover when something is built, manufactured or service is provided

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.

Trommel
The trommel screen is used to separate materials by size. The rotating drum rolls larger pieces over to allow all fines to flow down and through the trommel screen plates.

Waste Hierarchy
The “waste hierarchy” ranks waste management options according to what is best for the environment. It gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill)

WEEE
Waste Electrical and Electronic Equipment

WUDS
Waste Upholstered Domestic Seating

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The information is provided by re3 Ltd, every care has been taken to ensure the accuracy and reliability of the contents.

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