2nd edition

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Bywaters

recycling made easy

Healthcare Waste Management

Eliminating waste generation and maximising recycling opportunities in facilities & properties.

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Offering a range of waste management solutions to Healthcare sector

Bywaters is London's largest leading clinical waste service provider, with a long history of working with the NHS. We offer a clinical waste disposal service using secure containers to ensure that your medical waste is handled safely and sustainably.

If you work in healthcare, your organization likely generates clinical waste. Improper handling and disposal of this waste pose significant risks to human health and the environment.

We manage all types of clinical waste, including sharps (needles, syringes), infectious materials (blood, human tissue), chemicals, dressings, bandages, and PPE. We provide UN-approved containers and trained professionals for collection, minimizing risk to your staff and business.

Your clinical waste is transported to an Energy-from-Waste facility specializing in safe disposal. High-temperature incineration destroys any remaining pathogens and recovers energy to power London homes. Additionally, recyclable materials are sent to our 4,000-panel solar-powered Material Recovery Facility (MRF) for sorting and responsible recycling, supporting the circular economy.

Who are Bywaters?

Bywaters is London's leading sustainable waste management company. We send zero waste to landfill and work closely with our clients to increase their recycling rates and improve overall sustainability, reducing both costs and emissions at the same time. Whatever your waste management needs, we have the experience to help you enhance your sustainability.

Bywaters is more than a recycling company. Our vision is to lead the UK to a sustainable future, and everything we do is founded upon our commitment to improving the environment. Our team of sustainability executives work in partnership with our clients to have an instant impact, and we are always enhancing our own operations to reduce our own carbon footprint – whether that's by adding more electric vehicles to our fleet, or installing the 4,000 solar panels that power our facility in Bow.

Some of our customers:

NHS

THE FRANCIS CRICK INSTITUTE

uclh NHS

NHS
Barts Health
NHS Trust

Our services

Following the waste hierarchy, which prioritises Reduce, Reuse, Recycle, and Recover, we ensure all waste we process contributes to a sustainable future for both us and the planet.

REDUCE

Championing waste reduction, our sustainability executives empower you to make a real environmental impact. We prioritise reduction, the top of the waste hierarchy, to help you tackle overconsumption and excessive consumerism through engaging initiatives like waste audits, staff training, awareness days, and beach cleanups. These efforts support you in reducing and offsetting your carbon footprint, while also contributing to cost savings for your facility or property.

REUSE

By diverting reusable items from the waste stream, we give them a second life. We partner with various charities and businesses to find new homes for your unwanted items, preventing the extraction of virgin materials and reducing the carbon footprint associated with manufacturing new products. This helps sustain the environment for future generations, saves money, reduces the amount of waste needing to be recycled or sent to landfills, and allows products to be used to their fullest extent.

RECYCLE

At Bywaters, recycling is at the core of what we do. Our facilities sort hundreds of thousands of tonnes of waste for recycling annually. We offer comprehensive services for all recyclables, from various glass grades to hazardous and confidential materials. Committed to responsible waste management, we ensure no waste goes directly to landfills. Whether you need a complete solution or just want to recycle specific materials, Bywaters is your one-stop shop.

RECOVER

Bywaters have a zero waste direct to landfill policy. All non-recyclable waste collected by Bywaters' trucks is instead sent for recovery at Energy from Waste (EfW) facilities in London. Waste is incinerated at these facilities, and the resulting energy is used to generate electricity that helps power the UK's capital. This is the most sustainable way to handle both non-recyclable waste and a large percentage of clinical waste.

Total waste management

We offer comprehensive waste management and recycling solutions for all industries, from small businesses like kebab shops to large venues like the O2 Arena. Our services encompass handling waste from its initial generation to its final disposal.

Waste collection: This involves gathering waste from businesses, and industries.
Waste transportation: Once collected, the waste is transported to facilities for further processing.
Waste sorting and separation: At the facilities, waste is sorted into different categories such as paper, plastic, metal, glass
Waste recycling: Recyclable materials are processed and sent to other facilities to be converted into new products.
Waste disposal: Bywaters sends zero waste direct to landfill. Waste that cannot be recycled is sent for incineration.

A comprehensive guide for your clinical waste

Offensive Waste (Tiger Stripe Bags): This category encompasses non-infectious waste that may be unpleasant due to strong odours or contamination. Examples include hygiene products (sanitary towels, nappies), soiled bedding, and animal waste. Proper disposal in tiger stripe bags helps prevent nuisance and maintain a hygienic environment.

Infectious Waste (Mud Orange Bins): This critical category includes waste with a high potential for infection, such as contaminated sharps (needles, syringes), used dressings, microbiological cultures, and bodily fluids. Stringent protocols are essential for handling, segregation, packaging, and disposal of infectious waste to prevent the spread of pathogens like bacteria and viruses. Mud orange bins designated for this waste ensure safe handling and proper treatment for ultimate disposal.

Sharps HTI Waste (Yellow Puncture-Resistant Containers): Sharps waste, specifically "Healthcare-Related Tubing and Sharps," poses a significant risk due to their ability to puncture skin and potentially transmit infections. This category includes hypodermic needles, syringes, intravenous cannulae (IV catheters), and lancets. Yellow puncture-resistant containers are specifically designed to safely collect and dispose of these sharp objects, minimizing the risk of injury and infection to healthcare workers and waste handlers.

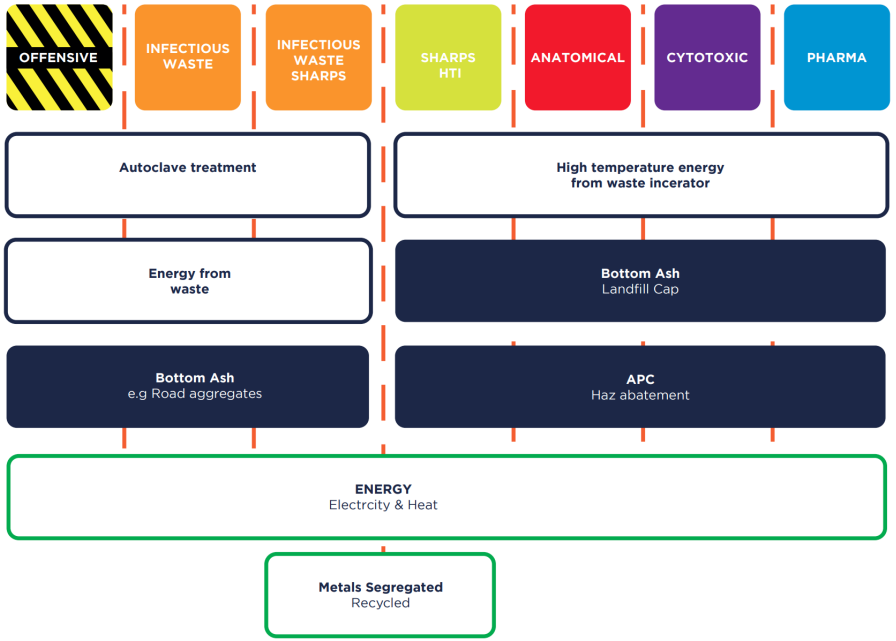
Anatomical Waste (Leak-Proof Containers): Human or animal body parts, organs, tissues, and other anatomical materials removed during surgeries, autopsies, or research activities fall under this category. Leak-proof and puncture-resistant containers, often biohazard bags or rigid bins, are crucial for safe storage and disposal of anatomical waste, preventing accidental exposure and protecting public health.

Cytotoxic Waste (Yellow Chemotherapy Waste Bags): Cytotoxic drugs used in cancer treatment are highly toxic to cells. Waste contaminated with these drugs, including empty or partially used vials, contaminated PPE (gloves, gowns), and other materials, needs special handling. Yellow chemotherapy waste bags, designed to be puncture-resistant and clearly labelled, ensure the safe collection and disposal of cytotoxic waste, minimizing the risk of environmental contamination or harm to human health.

Pharmaceutical Waste: Unused, expired, or unwanted medications, including prescription drugs, over-the-counter medicines, and veterinary drugs, pose a significant environmental and health risk if not disposed of properly. Proper disposal through designated channels helps prevent accidental or intentional misuse of these medications, protects water sources from contamination, and safeguards public health.

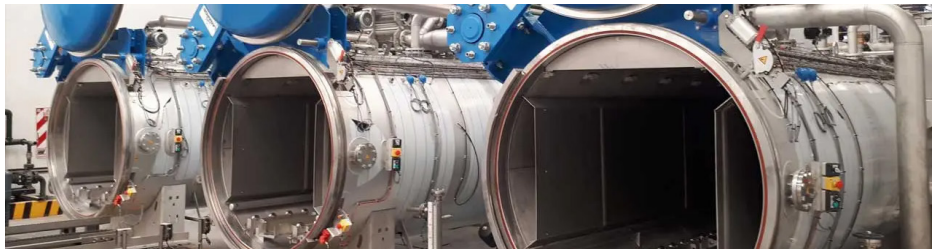
Our services

Due to the complex nature of clinical wastes, it is segregated to reduce the risk of cross contamination. Examples of these waste streams and their treatment methods can be seen below.



On site teams

Large sites with multiple waste streams require a different approach, we don't just provide you with the containers we also provide you with a skilled onsite team to manage the waste directly. Bywaters has partnered with a number of clients, delivering a team of trained individuals who monitor, manage and report on the various waste streams produced on site. The team are fully trained and vetted prior to attending site. They have a deep understanding of healthcare facilities, the different user profiles, container location and transportation of waste from container to storage, we aim to achieve 100% compliance.



CASE STUDY

The Crick's and Bywaters partnerships over the years

Bywaters and the Francis Crick Institute ('The Crick') share a vision; "to manage all waste in a holistic and sustainable manner". However, this would not be a simple achievement. The Crick is Europe's largest biomedical research laboratory, carrying out an incredible amount of scientific research whilst striving to reduce their burden on the environment.

This in itself presents significant challenges, as the nature of The Crick's work produces 25 individual waste streams (from general and food waste to clinical and radioactive materials), which have to be captured and disposed of compliantly and safely. Our partnership started in 2015 by providing support and guidance with the internal waste management set up (waste mapping) and subsequently implemented collection and disposal services for all waste streams produced at the Crick.

The Task

Bywater was tasked to develop a waste management system that could be seamlessly integrated within the Crick to support their research. To do so, Bywaters needed to encourage an ethos of collaboration by embedding Bywaters standards within 'the Crick family', and proactively identify innovative methods to support and enhance the Crick's environmental commitment. Essentially designing their entire waste management plan from the ground up.

Our Solution

Bywaters has been providing a 'cradle to grave' waste collection service from source to disposal, to increase efficiency and maximise the recycling rate in line with the Cricks recycling target of 75%.

For the Crick's Biological Research Facility, Bywaters identified an efficient and environmentally-friendly method to recycle uncontained animal bedding. This material is treated through IVC. Ensuring the composting process takes place in an enclosed and controlled environment to ensure that any pathogens present in the waste material are destroyed. The end product can be used for land remediation.

To help increase The Crick's recycling efficiency, Bywaters integrated custom waste containers to capture both recyclables and general waste whilst occupying the space of a single bin. They also implemented bespoke desktop bins for pipettes and testing equipment (miniaturised clinical waste containers), to help increase waste segregation without taking up floor-space.

Reuse schemes of non-hazardous items (tip boxes, cardboard, polystyrene, and wooden pallets) were also introduced. A process that enables the Crick to make the most of their waste resource before sending it to the supplier (close loop) for recycling or MRFs for further treatment.

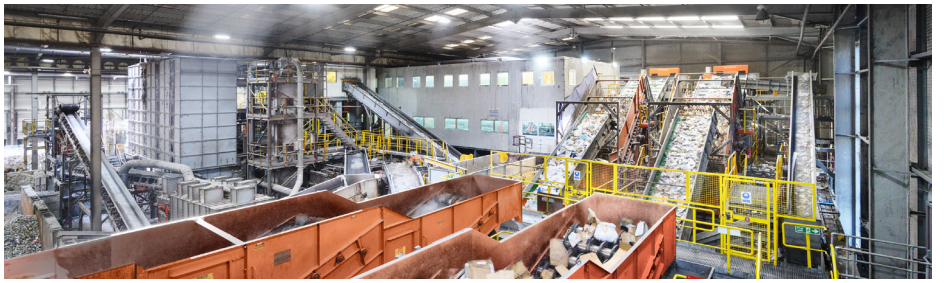
Bywaters modified a standard compactor to be more efficient whilst still complying with site restrictions around weight, space and noise. The modified machine is ⅓ the size of a normal compactor, but can process the same quantity of material and be transported on bespoke trailers, improving mobility.

To help increase overall recycling rates, behavioral change was necessary. Bywaters and The Crick's sustainability team offer workshops and waste training to employees.

The Outcome

Bywaters have made lasting contributions to The Crick that fully resonate with their ideology. Bywaters completely overhauled their waste management programme – floor by floor – achieving zero waste to landfill and making The Crick the only research facility in London to compost uncontaminated animal bedding and to send laboratory offensive waste to energy recovery.

The Crick produces over 820 tonnes of waste per year.



What happens to your waste in Bywaters MRF

Operating within a vast space in East London, Bywaters 24/7 operations are a hub of activity. A constant flow of material from all over the UK is tipped in the impressive facility, which makes up London's largest undercover MRF. Capable of processing up to 650,000 tonnes of material a year, recovering over 95% to be recycled.

Once your waste is tipped, it is greeted by Bywaters friendly staff for inspection. Contaminated waste and non-recyclable waste is separated from the recyclable material and siloed to produce energy from waste. To reduce emissions, the waste is transported to the incinerator via barge.

After the inspection is complete, your waste is collected by 'the grab'. An automatic material picking machine that scoops bulk material and deposits it into two large rotating bag splitters, to remove any excess packaging.

Before your waste goes through a wild journey of spinning discs, speeding conveyor belts, infrared lasers and whirling magnets. Bywaters employees remove non-recyclable waste at the presort cabin, as well as any other residue that could obstruct the efficient processing of the dry recyclables.

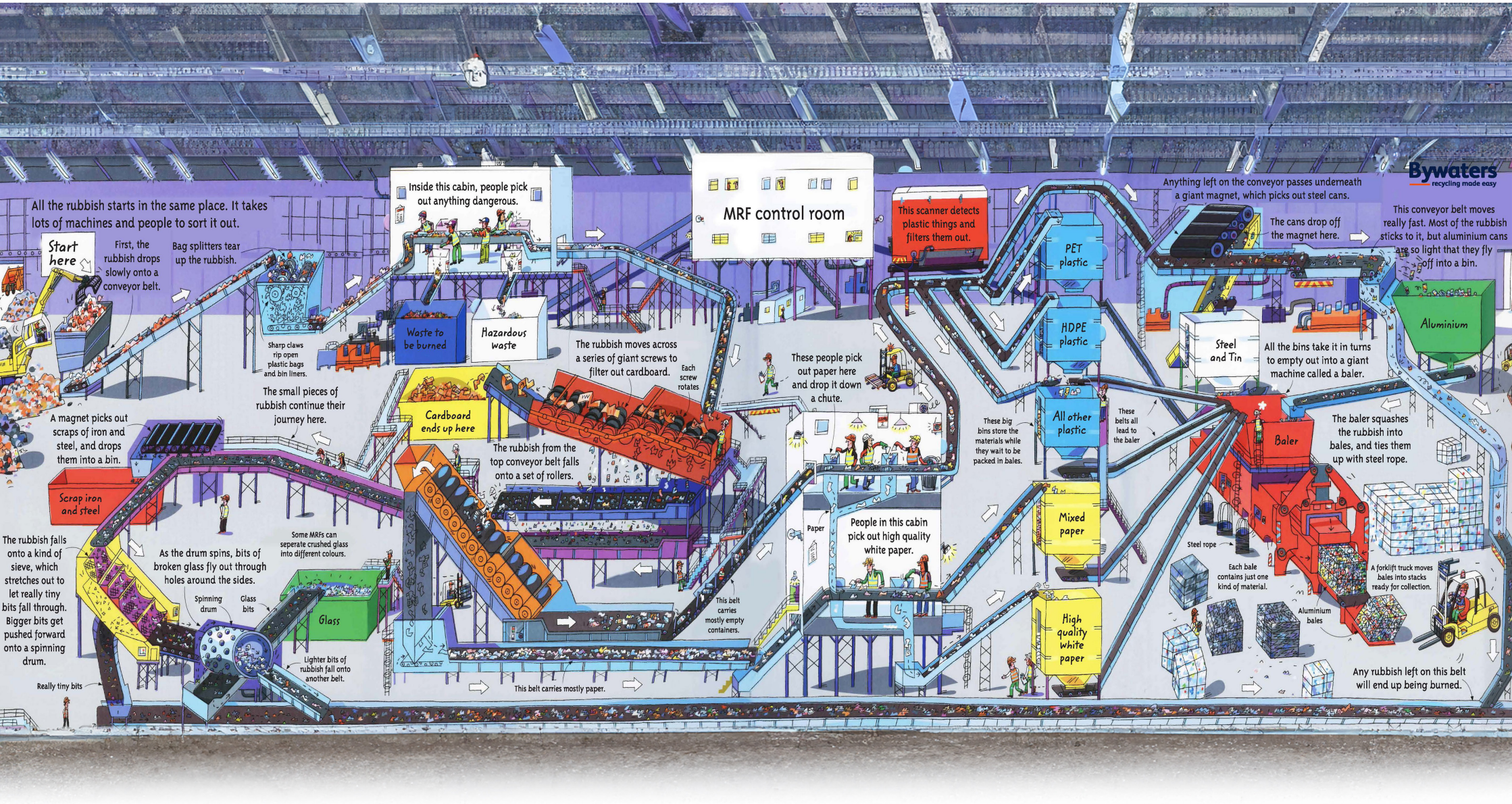
Bywaters state-of-the-art equipment works in harmony, taking mixed recyclables like metals, plastics and glass and sorting them to be turned into new products like cans, bottles and notepads.

Flying out of the cabin, the mixed recyclables speed on to a series of large screens designed to separate waste based on shape. First, an OOC (old corrugated cardboard) screen consisting of numerous giant rotating axles/gears simultaneously sorts large pieces of cardboard whilst extracting fine material to be used as aggregate in many local building projects.

A second screen is aligned at a steep 45-degree angle, the gyrating screws help separate 3D and 2D items. 2D items gain traction, climbing up the polishing screen to a final sorting cabin where the paper is sorted based on quality – whilst 3D items tumble down the screen in a spinning whirl of colour, leaving just plastics and metals to be separated.

Trundling along the conveyor belt, the 3D materials, mainly consisting of plastic and metal drinks containers, travel toward the high-tech "triple-level near-infrared optical sorting system". Using infrared lasers to read the material's chemical makeup, plastics are shot with a jet of air throwing them into the required silo, ensuring HDPE, PET and any other plastics are kept seperate. An overband magnet attracts ferrous metals whilst an eddy current simultaneously repels non-ferrous metals like aluminium, sorting the materials ready to be baled.

The siloed materials are compressed and baled into blocks that can weigh up to 700kg. The baled material, which can be up to 99% pure, is sent to repressors, where it is cleaned and processed into brand new products that can be sold and reused, starting the process again.


All the rubbish starts in the same place. It takes lots of machines and people to sort it out.
Start here
First, the rubbish drops slowly onto a conveyor belt.
Bag splitters tear up the rubbish.
Sharp claws rip open plastic bags and bin liners.
Inside this cabin, people pick out anything dangerous.
Waste to be burned
Hazardous waste
MRF control room
This scanner detects plastic things and filters them out.
PET plastic
HDPE plastic
All other plastic
Anything left on the conveyor passes underneath a giant magnet, which picks out steel cans.
The cans drop off the magnet here.
This conveyor belt moves really fast. Most of the rubbish sticks to it, but aluminium cans are so light that they fly off into a bin.
Aluminium
Steel and Tin
All the bins take it in turns to empty out into a giant machine called a baler.
Baler
The baler squashes the rubbish into bales, and ties them up with steel rope.
Steel rope
Each bale contains just one kind of material.
A forklift truck moves bales into stacks ready for collection.
Aluminium bales
Any rubbish left on this belt will end up being burned.
These belts all lead to the baler
These big bins store the materials while they wait to be packed in bales.
Mixed paper
High quality white paper
These people pick out paper here and drop it down a chute.
Paper
People in this cabin pick out high quality white paper.
The rubbish moves across a series of giant screws to filter out cardboard.
Each screw rotates
Cardboard ends up here
The small pieces of rubbish continue their journey here.
A magnet picks out scraps of iron and steel, and drops them into a bin.
Scrap iron and steel
The rubbish from the top conveyor belt falls onto a set of rollers.
This belt carries mostly empty containers.
This belt carries mostly paper.
The rubbish falls onto a kind of sieve, which stretches out to let really tiny bits fall through. Bigger bits get pushed forward onto a spinning drum.
Really tiny bits
As the drum spins, bits of broken glass fly out through holes around the sides.
Spinning drum
Glass bits
Some MRFs can seperate crushed glass into different colours.
Glass
Lighter bits of rubbish fall onto another belt.
Bywaters
recycling made easy

Sustainability Executives & Activities

Think of our sustainability team as experts who are there to consult you on any sustainability related matter that could help your business increase recycling rates or lower its carbon footprint. At Bywaters, we're fully committed to sustainability. That's why each of our clients is assigned a dedicated sustainability expert as part of our service.

Whether you're a boutique café owner or a Fortune 500 powerhouse, your sustainability expert will help you minimise your company's environmental impact and keep costs down.

Audits

Our sustainability team audits your waste streams, recommends improvements, and tailors a waste strategy for you.

Reporting

BRAD, our online platform, offers transparency into your waste data, including a recycling performance rating and actionable insights to help you improve your recycling.

Training

Level up waste management! Bespoke staff training & "Train the Trainer" empower long-term impact, ideal for sites and businesses with high turnover.

Signage

Recycle right every time. Our posters simplify sorting with color coded & clear instructions, and images. Customisable for any space and language.

Waste Awareness Days

Learn by doing with Waste Awareness Days! Gain hands-on experience through engaging activities including sorting challenges and VR tours.

Volunteering and community building opportunities

Clean up communities, fight food waste! Join our diverse volunteer projects: litter picks, beach cleans, and supporting charities.

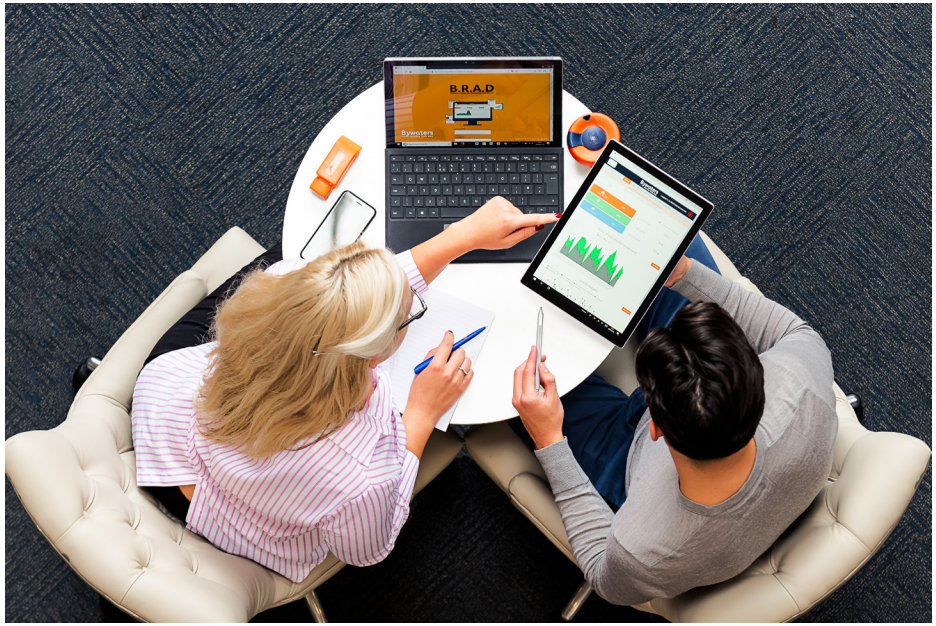
Facility visits

Go behind the scenes! Take a guided tour of our Material recovery facility (MRF) and see how your waste gets a second life. Learn sustainable disposal tips firsthand.

Sustainability webinars

Go green by joining our quarterly webinars! Learn about sustainability, engage with experts, and drive positive change in your facility.

BRAD



Bywaters Reporting Analytics Dashboard (BRAD)

Bywaters clients can monitor their environmental performance in real time with our bespoke reporting tool, the Bywaters Reporting Analytics Dashboard (BRAD). Through this specialised platform, all our clients can access their waste management and recycling data at the touch of a button.

The Bywaters Reporting Analytics Dashboard allows you to find and download all information about your business' waste management, in a variety of formats to make everything easily digestible. Using BRAD, you can access your recycling data, contracts, compliance documentation, CO2 emissions information, waste transfer notes (WTNs), monthly reports, invoices, complete service history, and more.

Containers

Bycycler Containers

Bywaters provides external containers in three different sizes for dry recyclables and non recyclables waste, which are colour-coded for easy identification. The available sizes are 240 litres, 770 litres, and 1100 litres. The containers are coloured orange and blue, designed to complement the entire Bycycler range. Furthermore, all of these containers are fully compatible with our dustcart fleet, ensuring efficient waste management and collection.

240 litre | 770 litre | 1100 litre

Glass containers

Bywaters offers 240-litre containers for glass specifically designed for the recycling of mixed glass bottles and jars. These specialised containers are a part of our commitment to sustainable waste management, making it easy for individuals and businesses to participate in glass recycling efforts and contribute to a greener environment.

240 litre

Food Containers

Bywaters offers a sustainable food recycling service that keeps your food waste out of landfill. Our durable, clean, secure, and purpose-built food waste wheelie bins come in two sizes: 120 litres and 240 litres.

120 litre

240 litre

Confidential waste containers

Bywaters are pleased to offer the unique confidential secure container for all your confidential paper.

We offer a wide choice of secure solutions from security containers, sacks and seals, to enclosed lockable skips.

Confidential Bag

120 litre

240 litre

660 litre

Confidential waste tags

Bywaters confidential waste containers come with optional waste tags for sorting different confidential waste types.

Media waste only

Confidential paper only (small)

Confidential paper only (large)

Battery Containers

Bywaters makes battery recycling easy with our Box and Tube containers, which are durable and compact containers for recycling portable (household) batteries.

Battery box

Battery tube

WEEE & Fluorescent Tube Containers

We offer a wide range of containers to our clients, enabling them to recycle their WEEE waste efficiently. These specialised containers are designed to accommodate different types of WEEE waste, ensuring proper separation and disposal of electronic and electrical equipment.

WEEE Box

Fluorescent Tube Station

Internal Containers

The Bycycler internal containers make it easy for staff to recycle at source and are ideal for offices looking to maximise their recycling and minimise their effort.

Essential Bin

U Bin

Stark Bin

Bin soft close

Combi bin

Contemporary

External containers

Skip Containers

Bywaters can provide a range of skips from 4 to 12 cubic yards (3 to 9.2 cubic metres) in capacity, perfect for disposing of bulky household waste such as furniture, garden waste, and building materials.

Rear End Loading (REL) Containers

Bywaters offers REL containers for dry recyclables and residual waste, colour-coded orange and blue to work in conjunction with the full Bycycler range. REL containers are easily loaded through waist-height rear doors. They also have Duraflex lids with front access. Those containers with Duraflex lids are lockable. They come as 8, 12, 16 yard containers.

Rolonof Containers

Bywaters can provide a range of open and enclosed roll-on/roll-off containers in the following sizes: 15, 30 and 40 cubic yards. The 15 cubic yard container is particularly appropriate for heavy loads due to its low sides for ease of loading. The larger containers are walk-in and are suitable for bulky waste or when more capacity is needed.

Baby Hooklift Containers

These containers can be delivered on a baby hooklift vehicle and are therefore ideal for areas with space, height or weight limitations.
These containers feature ‘barn door’ walk-in access. They are fully enclosed and lockable, offering secure storage and are particularly suitable for large bulky items that may not fit into a standard skip container. The open door allows items to be wheeled in if desired.

Compactors

A waste compactor is a machine that compresses waste into manageable volumes. This process offers several advantages: efficient use of space, fewer collections, reduced costs, as well as a lower environmental impact.

Bywaters offers these to our clients with facilities that produce large amounts of waste.

Our compactor options vary to suit our clients’ specific requirements, from compact portable models to larger industrial units.

Skip Compactors

Bywaters specialises in compaction systems and holds the largest stock in the London area. These portable compactors are integral units incorporating the container and compaction unit.
Our compactors are fully supported by our team of compactor engineers who service and maintain our equipment to the highest standards.

Baby Hook Compactor

Much like the skip compactor, this baby hook compactor is also available with manual loading. This compactor also benefits from having its cylinders tucked away, ensuring that they do not need to be deep cleaned. This compactor is suitable for all waste types.

The POD

The Pod, smaller than traditional compactors, fits into confined spaces where most don’t. It comprises two sections - the Pod and the Compaction unit - allowing for easy exchange of full Pods during collection. It can compact up to four tonnes of material, equivalent to 24-30 1100L bins, while occupying the space of only six bins. When space is limited but waste production is high, the Pod System offers an ideal solution.

Compactors

Static Compactor

On-site static compactors are heavy-duty machines, explicitly designed for compacting large volumes of dense waste material into a smaller physical space. For businesses of all sizes, a static waste compactor can provide a variety of advantages and are a more efficient alternative to bins and skips.

Balers

These are typically found in recycling facilities or businesses that generate a lot of waste. They compress materials like cardboard, plastic, metal cans, or paper into dense cubes. This reduces the volume of the waste, making it easier to transport and store.

In-Bin Compactor

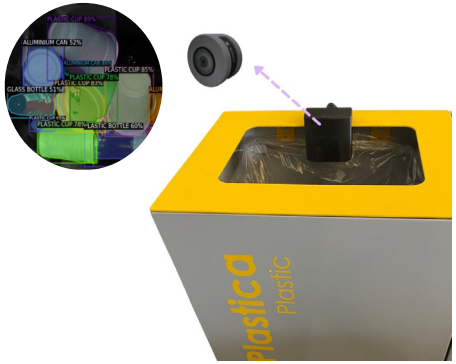
Bywaters offers 1100-liter in-bin compactors for general and recyclable materials, perfect for limited space. Specifically designed for durability, cleanliness, and security, these compactors offer a lasting and safe waste solution. With up to four times increased volumes per bin, maximum payloads are achieved without additional space requirements.

Innovations

Weightron

Weightron is specially designed on-site weighing solution. It provides accurate and detailed data of their liking to help you with a wide range of issues, including monitoring recycling, monitoring financial waste information for multi-level sites and giving you clear indications for developing clear auditing plans.
To complement the Byweigh system, Bywaters are able create tailored barcoded stickers for each tenant or floor (dependent on your requirements). The barcode data is pre-programmed into the Byweigh system to enable data streaming, making the Byweigh system a convenient and easy way to keep track of all your waste.

Nando AI



Nando uses AI technology to reduce environmental impact by monitoring waste produced by weight and type as well as picking up on any contamination. This data can be used to identify the most common cause of contamination as well as providing the information required to increase environmental sustainability.

ORCA

ORCA is an innovative new technology designed to process your food waste on site; reducing vehicle movements, minimising CO_2 emissions and eliminating bad odours. This versatile system helps you to take control of your kitchen, reducing wastage through detailed reporting and cutting-edge technology. Mimicking the natural digestion process, ORCA mixes your food waste with microorganisms within a compact container. Once digested, all that is left is a liquid which is safely expelled down your waste pipe.

Awards

Bywaters' commitment to sustainable waste management has been recognised through numerous awards over the years, a testament to our dedication to continuous improvement. These accolades not only validate our efforts but also highlight the impact achieved in collaboration with our valued clients.

We take pride in partnering with clients to win awards. Bywaters approaches each contract as a true partnership, working hand-in-hand to enhance sustainability, boost recycling rates, and champion environmental initiatives. These shared successes demonstrate the power of collaboration in driving positive environmental change.

A selection of awards we have won:

Accreditations

Bywaters is fully compliant with all relevant waste management and sustainability legislation, and we have also attained a variety of accreditations for going above and beyond these requirements.

Corporate Social Responsibility (CSR) & Environmental, Social and Governance

Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) are central to Bywaters' mission. We strive to provide the most sustainable waste management solutions possible while collaborating with our clients and select charities to build a more sustainable society. We participate in a multitude of initiatives and partner with multiple charities to achieve this goal!

SOCIAL VALUE CONTRIBUTION

% turnover	Total Social Value	Social Value per Employee
7.7%	£3,713,228	£14,618

Our People	Community & Volunteering	Donations	Environmental impacts
£71,112	£48,37	£14,653	£3,637,027

Charities we work with:

BORN FREE

SWITCHBACK

FEAST With Us

HAVEN HOUSE

traid

Reliable Resource Management

High Quality Reporting

Reduced Waste and Costs

On Site Support

Hit Sustainability Goals