

What happens to your recycling and waste?

Read below to find out what happens to your recycling and waste.

Food and garden waste

After the contents of your Green-top bin or cornstarch/paper sacks are collected the material is taken to the transfer station at Nathan Way, Thamesmead. It is then loaded onto a larger collection vehicle and taken to an In-Vessel Composting (IVC) facility at Dagenham, Essex.

At this facility, the material is shredded and loaded into enclosed bunkers where it is heated up to 70 Degrees Celsius to kill bacteria and weed seeds. After this process, the material is then transferred into bays where the natural composting process breaks the material down further into a product used for agriculture and landscaping.

It is very important that items such as plastic bags or textiles are not put into your green-top bin, once shredded it is difficult to remove these contaminants from the final product and therefore the material is rejected.

Mixed dry recycling

On collection day your Blue-top bin or clear sacks are picked up by our recycling crews and taken to the Material Recycling Facility (MRF) located in Thamesmead.

The recycling is tipped onto the floor and then picked up by a loader shovel and loaded into a bag splitter, which tears open all the sacks.

The material then moves up a conveyor belt into a trommel screen, which is like a big washing machine drum that separates out the heavy materials, like glass which falls through the holes, from the light material, like paper which floats through to the end.

The paper and cardboard continues its journey along another conveyor belt to the paper cascade separating the paper from the cardboard.

The cans, glass and plastic containers fall through the smaller holes in the drum into a vibrating sieve separator which simply sieves out small particles of glass and other small items.

The containers flow into a “V” screen separator. Any paper is moved by paddles back up to the paper cascade. Steel cans are removed from the containers by an overband magnet and aluminium cans are removed by an eddy current separator – this is a set of spinning magnets that repel the cans and allow them to be separated.

The glass and plastic containers are put through a piercer/crusher unit where the glass is crushed and plastic bottles are pierced and flattened. The glass and plastics then go onto a disc screen where the glass falls through holes and the plastic continues across the holes by being moved on by rotating discs.

The materials have all now been separated and are baled, ready to be delivered directly from Royal Greenwich to recycling re-processors.

The majority of the output from the MRF is processed in this country.

- Cans are made into other items such as planes, cars or more cans.
- Plastics are made into more plastic bottles, fleeces or garden furniture.
- Glass is used to make either more glass bottles or as aggregate in road surfacing.
- Paper and cardboard is used to make more paper and card.

Contaminants, such as food waste and nappies cause real problems in the MRF and can potentially ruin a large amount of otherwise good quality recycling. That's why it's important that only cans, cardboard, paper, plastic and glass is put into your Blue-top bin. You can keep it simple if it's easier and just recycle your newspaper and glass bottles – every little helps. And always play it safe – if you're not sure whether or not an item can be recycled, either check our website for more information, or put it in your black-top bin or black sack.

On average, we collect 80 tonnes of mixed dry recycling from Royal Greenwich residents a day, and deliver it to the MRF.

Non-recyclable waste – what's left over

The contents of your Black-top bin and black sacks are transported by our refuse collection vehicles directly to SELCHP, an energy from waste facility, operated by Veolia Environmental Services, located in the neighbouring London borough of Lewisham. It is burnt at very high temperatures to generate electricity to power around 48,000 households and more recently the process can now provide excess heat and hot water for local homes.

However, it is a lot better to recycle and compost as much of your household waste as possible, rather than send it for incineration, as any recyclable material is lost forever during the process. Recycling helps to preserve natural resources and reduce carbon emissions and is also a cheaper waste treatment option in comparison to incineration or landfill. Recycling helps to keep costs down and enables Royal Greenwich to maintain other important local services such as caring for the elderly and education.

So please make sure you recycle as much as possible, or even better reduce and reuse before recycling.

Batteries

Used household batteries collected from the Royal Greenwich's network of Recycling Bring Sites or from the Reuse and Recycling Centre are taken to the SWEEEP facility at Sittingbourne, Kent. Battery types are sorted and metals such as mercury and zinc are extracted for recycling.

It is much more environmentally friendly to recycle batteries due to the heavy metals they contain.

Waste Electrical and Electronic Equipment (WEEE)

Small WEEE items (e.g. broken toasters, kettles and power tools) collected from the pink containers at Recycling Bring Sites and also larger electrical items (e.g. washing machines, fridges, televisions and cookers) that are collected as part of the household bulky waste service and from the Reuse and Recycling Centre are transported to the SWEEEP facility at Sittingbourne, Kent. Items are dismantled to separate metals and plastics which are crushed and baled and then sent to various companies for recycling.

As with batteries, there are potentially hazardous substances such as lead and mercury that can be found in certain electrical items. Recycling them responsibly will mean that these substances are removed properly and reused again.

Textiles

Textiles that are collected via the kerbside service are processed by BCR Global Textiles, who also have a number of banks at Royal Greenwich's Recycling Bring Sites.

BCR Global Textiles sort reusable clothes and shoes and send them abroad to provide clothing for those who either do not have access to, or are unable to afford new garments.

There are also textile banks managed by Salvation Army, TR Aid and Oxfam at a number of Royal Greenwich's bring sites.

Please do not put any soiled or dirty textiles into the banks as it may ruin the other good quality, clean textiles. Also try to keep shoes together by using a carrier bag to contain them.