



Waste management BRIEFING

**CONSERVATIVE
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NETWORK**

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CEN Councillors: waste management briefing

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This is not intended to be an exhaustive briefing, but an overview of the key facts, figures and information that can help you to respond to the topic. This is written as if the reader is a new Councillor who does not have a background in climate policy. If you are interested in finding out more, please see the useful organisations at the end.

1. Top tips for greening your waste management

- **Be aware of new duties and aim to act sooner rather than later:** The Environment Bill introduces several new duties for councils regarding waste management, including the commitment to roll out separate household food waste collection across the country by 2023. Integrating this into existing plans, and expanding services sooner, can help waste management companies to prepare in advance.
- **Communication is key, particularly for waste reduction:**
 - Households can find collection arrangements confusing. A good quality collection service, properly explained, will help to capture more environmentally and economically valuable material, and improve the quality and quantity of materials.
 - Local authorities can also engage the public about waste reduction, to reduce the amount of waste generated unnecessarily, particularly food waste. Several councils have positive engagement programmes with school children in particular (see below).
 - Clearly communicating collection information on what can and can't be recycled can also help to reduce contamination. In 2018, 500,000 tonnes of household recycling in England was rejected from recycling plants, reducing the quality and profitability of recycling.
- **Consider separate collections, including for food waste:** [Evidence](#) shows that the most successful household food waste collections are those where food waste is collected separately and weekly alongside the restriction of residual waste collections. Greater

collection of glass separately from paper would also help to improve quality, increase revenue and ensure more packaging can be recycled.

- **Consider the timing when implementing reforms:** Evidence from WRAP shows that the [optimum times of the year](#) to implement or relaunch waste collection schemes are spring (a few weeks either side of Easter avoiding the Easter break itself) and autumn (early October through to November). Consider a phased roll-out to ensure that any hiccups can be addressed promptly.

2. Background and the Environment Bill

Context

- The Government is ‘[committed to](#) moving towards a more circular economy – to raising productivity by using resources more efficiently’. The Resources and Waste Strategy (2018) outlined how England will preserve material resources by minimising waste, promote resource efficiency and move towards a circular economy in England.
- 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.
 - **1) Prevention:** using less material in design and manufacture, keeping products for longer and re-using them, using less hazardous materials
 - **2) Preparing for reuse:** cleaning, repairing, refurbishing, whole items or spare parts
 - **3) Recycling:** turning waste into a new substance or product, composting if it meets quality protocols
 - **4) Other recovery:** includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste, and some backfilling
 - **5) Disposal:** includes landfill and incineration without energy recovery

Statistics

- The Government’s [Waste and Resources Strategy](#) set the aim to prevent waste occurring in the first place as much as possible, in order to reduce the expenditure of our natural capital. Where waste is unavoidable, it must be managed in the most efficient way possible. The roles of local authorities and the waste sector are critical at this stage of the resource lifecycle.
- [Recycling rates in England](#) have improved since the turn of the century, rising from around 11% to nearly 45% for waste from households, though progress has recently stalled. The latest Defra figures show the official England ‘waste from households’ recycling rate was 44.7% in 2018, down from 45.2% in 2017. In 2018, total ‘waste from households’

decreased to 22.0 million tonnes, a 1.8% decline from 2017. This is equivalent to 394 kg per person, down from 403 kg per person in 2017, a decrease of 2.2%. In 2018/19, total local authority managed waste remained steady at 25.6 million tonnes, with 10.8% going to landfill.

- [Half of all plastics](#) ever manufactured have been made in the last 15 years. Production increased exponentially, from 2.3 million tons in 1950 to 448 million tons by 2015 and is now expected to double by 2050. If the current rate of plastic consumption continues, by 2050 there will be more plastic than fish in the sea.
- UK consumers go through an estimated 14 billion plastic drinks bottles, 9 million drinks cans and 5 billion glass bottles per year. Covid-19 has also caused significant waste problems. The [Office for National Statistics](#) suggested 96% of adults who had left their homes in the first week of August 2020 had worn a face covering, but these disposable masks are not recyclable through conventional recycling facilities.
- Food waste typically makes up about a third of the residual waste stream. WRAP estimated that annual food waste from UK households and businesses in 2018 was around 9.5 million tonnes, only 30% of which was 'inedible' food waste (i.e. meat bones, vegetable peelings, and so on). This had a value of over £19 billion a year, and would be associated with more than 25 million tonnes of greenhouse gas (GHG) emissions. Over 85% (by weight) of this wasted food arises in households and food manufacturers, although waste arising in one part of the supply chain is certainly influenced by other parts of the chain.

Impact of Covid

- According [to the LGA](#), 8 in 10 councils saw an increase in the amount of recycling being collected since the outbreak and national lockdown. Half of councils reported that they were collecting up to 20% more recycling material than normal, with a third collecting up to 50% more, and some even 100% more.
- This has led to increased costs for councils, alongside Covid-related staff shortages and safety procedures, and difficulties on collection routes with more cars parked on roads as people work from home.
- Despite more people staying home, only 14% of local authorities [reported](#) less than usual tonnages of street sweeping or litter: 39% reported higher amounts, while 48% reported no impact (August 2020).
- During the first wave, the Recycling Association [warned](#) that a reduction in recycled materials collected could lead to a shortage in fibres used normally to manufacture cardboard boxes used for food and medical supplies distribution.

The Environment Bill - *we will be providing a more detailed briefing on new duties in the Environment Bill later this year.*

- The 25 Year Environment Plan (2018) outlined the government's ambitions to improve the environment. The Plan strives to ensure natural resources are used more sustainably and efficiently, to minimise waste and pollution, and to mitigate and adapt to climate change (aligned with the Clean Growth Strategy).
- Building on many of the actions within the 25 Year Environment Plan, the Environment Bill aims to ensure that the environment is at the heart of all government policy-making and that the government is held to account if it fails to uphold its environmental duties, including meeting wider long-term legally binding targets on biodiversity, air quality, water, and resource efficiency and waste management that are established under the Bill. The Bill also enshrines the five top environmental principles into law: rectification, precaution, integration, prevention, and polluter pays.
- The Bill will give Ministers powers to introduce charges on single use plastic items, in order to incentivise consumers to choose other, more sustainable products. There will also be new powers to ensure producers take responsibility for their waste, as well as powers to ensure a consistent approach to recycling, tackle waste crime, and more effective litter enforcement.
- The Bill creates powers to introduce a Deposit Return Scheme (DRS) for bottles and other items. This aims to reduce litter, increase recycling rates and improve the recycling quality of materials. There will be a consultation later this year on how the scheme will operate and the Government has committed to ensuring local authorities have sufficient funding for kerbside recycling services. Forty countries (and 21 US states) already have a DRS, and they are often associated with higher recycling rates.
- The Bill includes a power which will enable the government to deliver its manifesto pledge to ban or restrict the export of polluting plastic waste to non-OECD countries.
- The Government has committed to roll out separate household food waste collection across the country by 2023. When introduced, the changes will see food waste collected separately from all households, businesses and organisations. Defra will work closely with local authorities to introduce these changes, creating a framework which will help to identify where extra support is needed.
- The Bill will also introduce the requirement for all local authorities in England to collect the same range of materials for recycling from households.

Wider carbon impacts

- When you are next negotiating your waste collection contract, you should inquire about low emission vehicles, such as electric refuse collection vehicles (eRCVs). With these

vehicles entering neighbourhoods and the high street on a regular basis, they will contribute to your council's carbon footprint and local air pollution levels. While eRCVs are likely to be more expensive up front, they should be cheaper to run, and the carbon saving should be accounted for, worth an [estimated](#) £12,364 per eRCV. **Westminster City Council** [trialled several eRCVs](#) in late 2019 with the ambition for their entire 200 vehicle collection fleet to be fully electric by December 2021.

- You should also consider how your offices collect their waste, and aim to implement schemes to reduce, reuse and recycle. One key way of reducing waste is to encourage employees to go paperless as much as possible, which many have already done. You could also try an in-house food waste campaign, giving staff members top tips on how to reduce their waste. Where possible, offering separate recycling and food waste bins can increase collection rates. Many Councils have also introduced plastic-free schemes to reduce their consumption of single use plastics, particularly targeting coffee cups and plastic cutlery.

3. Prevention and education

Background

- The first tiers of the 'waste hierarchy' are to prevent and to reuse waste. Education can be the key to encouraging both of these behaviours locally, particularly with food waste (see below), and through the producer incentives for plastic waste set out in the Environment Bill (see above).
- Incentivising reuse can involve repairing, upcycling or regifting through initiatives such as shwapping or donating to charity shops. 'Upcycling' is a process of transforming by-products, waste, or unwanted products into something wanted - such as repainting/revarnishing an old desk, turning cinder blocks into planters, teacups into candle holders and so on.
- As part of their campaign against fast fashion, the [Women's Institute](#) holds several workshops and offers tips on repairing old clothes. For instance, adding embroidery or a mending patch can cover up split seams or other examples of wear and tear on clothing. They also host 'shwapping' events, where people can come and trade clothes to refresh their wardrobes without buying first hand.
- WRAP [research](#) has shown that 23% of the household waste electrical and electronic equipment collected at Household Waste Recycling Centres could be re-used with a small amount of repair. The ['Recycle Now'](#) project also gives more information on how to repair unwanted electrical items or where to take them to properly recycle them.
- The charity TR Aid offers an [educational toolkit](#) for teachers to hold a lesson on sustainable clothing.

Education case studies

- [Wandsworth Council](#) runs an education programme to encourage pupils and staff in local schools to reduce, reuse and recycle as much as possible. This includes visits to the local recycling centre with hands-on activities, alongside workshops and schools. This works alongside their 'Recycle at School' programme to raise students' understanding of why it's important.
- [Herefordshire County Council](#) offers a school's waste education pack with information, facts and activities on waste and recycling.
- [Swindon Borough Council](#) also offers waste and recycling education events for groups or schools to cover core issues.
- [Warwickshire County Council](#) offers a similar service, with compost workshops, and ideas for schools to reduce their waste.

4. Food waste

Background

- The government has pledged to reduce food waste by 20% by 2025, with total food waste levels falling by 480,000 tonnes between 2015 and 2018. The Government [set up a £1.15 million fund](#) to help businesses and charities avoid food waste in January 2020, as part of a wider £15 million fund aimed at tackling the problem.
- [An area almost the size of Wales \(ca. 19,000km\)](#) would be needed to produce the food and drink currently wasted. Around 70% of the food we throw away post farmgate comes from the home (6.6 million tonnes). More efficient use of the food we produce could allow more land to be set aside for natural carbon sequestration and biodiversity.
- The Government's recent consultation on household and business recycling consistency found that, if all local authorities provided kerbside food waste collection, the amount of food waste collected would increase by 1.35m tonnes by 2029 - reducing greenhouse gas emissions by an estimated 1.25 million tonnes per year.
- Almost half of councils do not collect food waste from households. More than 13.4 million English households currently do not get their kitchen scraps picked up separately from the black bin rubbish.
- Some of the "biggest opportunities for dealing better with food waste" ([BEIS](#)) are in the hospitality and food service sectors. Starting conversations with local businesses and business partnerships could be a positive first step.

- WRAP provides a summary of all their resources (guidance, tools and research) to support taking action to reduce household food and drink waste via their [Household Food and Drink Waste Resource Listing](#).
- Separate food waste collections can also help people to visualise the amount of food waste they are creating and encourage them to reduce it. This can be further encouraged, for example, by using transparent food waste collection bags.
- In 2013, WRAP figures showed that the average UK family was wasting nearly £60 a month by throwing away almost an entire meal a day. One-fifth of what households bought was ending up as waste, and around 60% of that could have been eaten.
- Anaerobic digestion (AD) is a biological process in which food waste and other organic materials are broken down by microorganisms in the absence of light and oxygen, to produce renewable energy (cutting emissions) and a nutrient-rich biofertiliser for farmers. Most food waste which is collected separately will be treated in an AD plant.

Case studies

- [Derbyshire Dales District Council](#) was awarded a grant from WRAP to fund the rollout of a package of interventions designed to help increase food waste capture. WRAP covered the cost of providing all 34,000 local households with a free supply of caddy liners, and the distribution of the liners, leaflets and bin stickers. The interventions were delivered in May 2019 and tonnages were monitored for 9 weeks pre- and post-delivery. Food waste tonnage increased by a total of 23 tonnes in the 9 weeks post monitoring phase with an average increase of 2,603kg per week.
- **Somerset County Council** introduced a [‘Slim My Waste, Feed my Face’](#) food waste awareness campaign in 2019 to urge residents to separate their food waste. They found that around a quarter of their average household bin consisted of food waste, mostly unopened food or leftovers, and that recycling all of their local food waste could save them almost £1 million a year. With that in mind, the communications campaign involved eye-catching stickers on bins, posters and local press, to raise awareness of food waste issues.
- **Essex County Council** has produced an [educational video](#) which provides clear guidance and advice on recycling and reducing waste.

5. Recycling

Background

- There is no standard way to measure household recycling rates, which means that making direct comparisons (within the UK or across the EU) can be misleading. Each local

authority across the UK must enter data in accordance with the relevant national guidance, as set out on [WasteDataFlow](#), and the government publishes data regularly.

- However, the latest international comparisons are for 2015 when the UK recycling/recovery rate of 39.4% was slightly below the EU average of 40.3%. The UK figure was higher than that in France (25.5%) but below rates in other large European countries including Germany (48.8%), Spain (44.0%) and Italy (41.1%).
- The 25 Year Environment Plan sets out a number of actions aimed at improving plastics recycling rates to achieve zero avoidable plastic waste by 2042, including:
 - working with industry to rationalise packaging formats and materials formats to make sure that more plastics can be easily recycled and the quality of collected recycled plastics is improved;
 - reforming producer responsibility systems (including packaging regulations) to incentivise producers to take greater responsibility for the environmental impacts of their products; and
 - continuing to support the industry-led on-pack recycling labelling system and encourage all brands and retailers to use this system to provide information to householders.
- WRAP's [Recycle Now](#) brand is used by over 90% of local authorities in England, as well as major brands, retailers and community groups, and they provide [guidance](#) for local authorities to help to improve recycling performance through effective communications with residents.

Case studies:

- [East Devon Council](#)'s rocketing recycling rates mean it is already hitting its 2030 targets – and the Government has asked the council to share its knowledge with other local authorities. In 2016/17, East Devon District Council was recycling just 46% of its waste, a figure that increased to 54.2% in 2017/18. The Council has commissioned recycling trucks which act as mobile recycling banks.
- The [Worcestershire and Herefordshire partnership](#) standardised the kerbside recycling collection service across six waste collection authorities, and where the full recycling scheme was already in place the service was enhanced to allow the collection of more materials for recycling. They accompanied this with a communications campaign. By using standard design templates across the partnership, all of the local authorities were able to deliver consistent, localised messages to their residents and achieve financial efficiencies: 320,000 households at a total cost of £264,426, or 81p per household.
- [Nuneaton and Bedworth Borough Council](#) provides a weekly kerbside sort recycling collection to 54,283 properties. There are also 2,141 flats in the area that recycle using

bring banks. The Council provides a comprehensive collection service for most materials including food and drink cans, aerosols and foil. These are collected via a recycling box and sorted onto stillages on the recycling vehicles at the kerbside. Its communications campaign delivered a demonstrable increase in other dry recycling materials collected in some areas.

- **Rochford District Council** has a very clear [list](#) of what can or can't be recycled in their waste management system, and how to recycle certain products.

6. Energy from Waste (EfW)

Background

- EfW incineration involves burning waste to turn it into a usable form of energy, including electricity, heat and transport fuels. EfW can have secondary benefits, for example the ash produced by the process can be used to make aggregate products for road-building and construction.
- Within EfW, there are different technologies for certain waste streams. For example, anaerobic digestion is the preferred technology for managing residual food waste, whilst combustion EfW is used for mixed residual waste.
- In order to drive EfW decarbonisation, the level of fossil carbon in the waste must be minimised, and the biogenic (renewable) component, which currently makes up around two thirds, must make up the near-totality of residual waste. Removing plastics from the residual waste stream and redirecting them to be recycled will be key to decarbonising EfW further.
- In the [Resources and Waste strategy](#), the Government set out its long-term ambitions to move away from EfW in favour of maximising recycling, with the possibility of implementing an incineration tax: *"Should wider policies not deliver the Government's waste ambitions in the long-term, we will consider the introduction of a tax on the incineration of waste. Incineration currently plays a significant role in waste management in the UK, and the Government expects this to continue. However, Budget 2018 set out the Government's long term ambition to maximise the amount of waste sent to recycling instead of incineration and landfill."*

Criticisms of EfW

- EfW incinerators can cause air pollution which can negatively affect people nearby, although the available evidence on air pollution from incinerators suggests the problem is less significant than around other industrial sites. Nevertheless, a [report](#) from Zero Waste Europe found that air pollution is "an unavoidable consequence of waste incineration"

and can “cause well-known respiratory diseases, cancer, immune system damage, and reproductive and developmental problems”.

- While EfW creates fewer emissions than landfill, evidence has shown that more than [90% of the materials that end up in incineration plants and landfills could be recycled or composted](#). Burning these valuable materials in order to generate electricity can discourage efforts to preserve resources and create perverse incentives to generate more waste to ensure EfW plants remain economical rather than focusing on prevention and recycling.
- However, local authorities can sometimes face a binary choice between landfill or EfW via incineration, with EfW being the relatively cleaner and more efficient choice. Recycling and composting can save up to five times the amount of energy produced by EfW.

Case Studies

- [The Allerton waste recovery park in North Yorkshire](#) is reducing the amount of household waste going to landfill in the county by 90%. Diverting this waste away from landfill means it generates enough energy to power the equivalent of 40,000 homes.
- [The Allington Quarry Waste Management Facility in Kent](#) can take up to 500,000 tonnes a year of non-hazardous waste from households and businesses in and around Kent for energy recovery. Up to 65,000 tonnes of mixed recyclates and food waste are transferred off site for further separation or compost.
- The [Glanford Power Station in Lincolnshire](#) generates around 13.5 megawatts (MW) of electricity, which is enough to provide power to about 32,000 homes.
- The [Great Blakenham energy facility in Suffolk](#) has 269,000 tonnes capacity and generates 20MW of electricity, enough for 30,000 homes.

7. Litter and fly tipping

Background on litter

- More than two million pieces of litter are dropped in the UK every day. The cost to the taxpayers for street cleaning is over £1 billion a year. It can take years to degrade, causing harm to wildlife and habitats. Forty-eight percent of people admit to dropping litter, while litter levels have increased 500% over the last 50 years.
- Littering has increased as more people have visited parks during the coronavirus pandemic, with councils each having to clear up an average of 57 tonnes of additional waste from April to July, according to a [survey](#) by Keep Britain Tidy. The “broken window theory” predicts that clean, well-maintained areas will be subject to less deliberate littering and less anti-social behaviour in general, so breaking the vicious cycle of littering, which begets more littering, is important.

- Most products we buy and their packaging and use cause greenhouse gas emissions through production and distribution. Therefore, by cutting down on packaging production and improving recycling, we can reduce the amount of energy used and limit the release of further greenhouse gases into the atmosphere. Littering prevents waste from being recycled and damages the natural environment. For example, for every aluminium can collected and recycled enough energy is saved to run a television for three hours.
- Local authorities have a range of powers available to them to help tackle litter problems. As well as issuing Fixed Penalty Notices to individual people who drop litter, they can serve notices on other public bodies, businesses, land owners and occupiers that compel them to clear up litter, and implement measures to prevent the offence happening again. However, most councils issue less than one fine a week to litterers, with one in six issuing no fines at all across a year. Ultimately, behaviour change will have the biggest impact.
- In April 2017 the UK Government published its [Litter Strategy](#) for England, with the ambition to become “one of the most resource efficient countries in the world”.

Case studies on littering

- A number of councils, for example [South Bucks](#), [Devon](#) and [Cambridgeshire County Council](#) facilitate voluntary litter picking events by lending out litter pickers, providing bags, protective clothing, and offering a waste collection after a litter pick event at a designated collection point. CleanupUK have issued [Covid-19 guidance](#) for organising litter picks.
- Some councils, such as [East Sussex](#), have joined the ‘Don’t be a Tosser’ campaign from Keep Britain Tidy. Littering from a vehicle can be punishable by a fine of £150.
- [Essex’s](#) Love Essex campaign combined education with enforcement warnings. Messages highlighting the risk of a fine for littering were displayed on posters, buses, fast-food packaging, and promoted on social media. There were also regular litter-picks with local businesses and councils, highlighting the extent of the problem. A single clean-up along a six mile stretch of the A120 collected 120 tonnes of litter. All district and borough councils backed Love Essex, as well as Essex County Council, McDonald’s, KFC, Dominos, and around 300 local businesses. It was also supported by the Highways Agency and Keep Britain Tidy.
- [Kent](#) joined the Great British September Clean with their Keep Kent Clean campaign, bringing people together from across the county to help clear up the litter that blights towns, villages, countryside and coastline. They also decorated their bins to make them more attractive.


- Over the summer [Wandsworth Council](#) celebrated its superb green spaces under the 'Love Parks' banner. Running from Friday 11th September to Sunday 27th September the campaign aimed to reduce litter.
- In Edinburgh and London, Hubbub installed double slot 'ballot' bins for general waste and cigarette butts. The bins gave people the chance to vote with their rubbish. Light-hearted questions kept them engaged, such as 'Messi or Ronaldo?' or 'Batman or Superman?'. In London, the campaign focused on one busy street. Cigarette butt littering reduced by 8% during the campaign, at one point dipping by 18%, ballot bins collected 29% of a street's correctly disposed-of waste, voting-by-bin went viral on social media, while the campaign buzz drew 80 enquiries asking to use ballot bins in other areas.

Fly tipping

- For the [2018/19 year](#), local authorities in England dealt with over 1 million (1,072,000) fly-tipping incidents, an increase of 8% from those reported the previous year. 62% of those incidents involved household waste. Serious and organised waste crime is estimated to cost the UK economy at least £600 million a year.
- [Fly tipping](#) is the 'illegal deposit of any waste onto land that does not have a licence to accept it'. Fly tipping is a criminal offence, with the potential for imprisonment, fines up to £50,000, and an order to deprive rights to a vehicle used to commit the offence. Households can also be fined up to £400 if they pass their waste to an unlicensed waste carrier which is then fly-tipped. Both the local authority and the Environment Agency have powers to tackle fly-tipping, with LAs dealing with smaller scale, more frequent incidents on public land.
- The [Fly-tipping Partnership Framework](#) outlines best practice for the prevention, reporting, investigation and clearance of fly-tipping. They also [provide a guide](#) for local authorities on fly-tipping responsibilities.
- The Environment Bill includes new measures which aim to tackle fly tipping, including powers enabling Defra to mandate electronic tracking, allowing Defra to amend the levels of fixed penalty notices for fly tipping, and powers to allow the police to seize vehicles on behalf of the Environment Agency.

8. Other useful organisations

- [Keep Britain Tidy](#)
- [WRAP](#)
- [Local Government Association](#)
- [Recycle Now](#)



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