## Appendix 2

# Waste Management Strategy 2017-2027

# Household Waste Management Strategy: Forward Thinking Towards Zero Avoidable Waste

## Annual Performance Review: 2021-22

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#### Introduction

Wiltshire's Household Waste Management Strategy 2017-2027 contains a commitment to provide annual performance reviews.

This document provides a summary of waste management performance against the priorities set within the household waste management strategy during the period of April 2021 to March 2022.

Reviewing waste management performance against the priorities within the strategy is an essential step in the development of the Annual Action Plan, which sets out goals and outcomes for the next year of service delivery in the context of changing local and national circumstances and the resources available.

This document aims to explain the key waste management performance statistics and trends during the period, whilst offering some commentary on how the council's actions may have affected residents' behaviours and performance of the council's waste services.

The document will consider each of the priority areas in turn.

#### 1. Waste prevention performance

#### Priority 1 - Waste Prevention:

The council will work with national, regional and local partners to provide advice and information to encourage residents to reduce the amount of household waste they create.

The amount of household waste the council manages is impacted by numerous local and national influences, including how much disposable income people have to spend, the changing characteristics of product packaging, size of households and the collection services provided by councils for residents to dispose of their waste.

Data for Wiltshire shows that since 2016 there has been a general decrease in the total amount of household waste generated per household, with 2021-22 showing a notable increase in comparison the previous year – see Figure 1.



Figure 1: Total household waste per household (kgs), 2016-2022.

Both the years 2020-21 and 2021-22 were significantly impacted by the Covid-19 pandemic and the associated changes in behaviours due to lockdowns. Whilst Wiltshire's kerbside collections of waste and recycling were maintained throughout the pandemic, the need to maintain social distancing meant that changes to the operation of household recycling centres (HRCs) were required:

- HRCs were closed from 24 March 2020 to 17 May 2020, followed by the implementation of on-site social distancing arrangements.
- From 8 June 2020 to 18 July 2021 a booking system was used to manage HRC visitor numbers and maintain social distancing requirements.

These measures significantly reduced the number of visits to HRCs and the amount of waste and recycling taken to the sites, and therefore the total amount of household waste collected and managed during the pandemic was also reduced.

Trends show that the amount of non-recycled waste produced per household (after recycling) has not changed significantly since 2016. This is referred to as "residual" waste and is comprised of several waste streams including, but not limited to:

- Kerbside collected residual waste;
- Residual waste disposed of at household recycling centres (HRCs);
- Street litter and litter bin waste;



Figure 2: Residual household waste (after recycling) - kgs per household, 2016-2022. (Note: Figures include residual waste from all sources e.g. kerbside collections, HRCs, MBT residues etc.)

Over time the following changes have been introduced by the Council and its partners to encourage residents to reduce the amount of waste they produce:

- Providing wheeled bins for non-recyclable waste and enforcing a no sidewaste policy, which encourages residents to make full use of the kerbside recycling services available and to better manage their waste.
- Standardisation of bin size to 180 litres for residual waste bins. Where larger bins need to be replaced due to breakage or loss, these will be replaced with a standard 180 litre bin, unless the following criteria is met.
- Providing larger bins only in extenuating circumstances, such as:
  - six or more residents in a household;
  - o a family of five including one or more in nappies; or
  - o a medical need which creates large volumes of unrecyclable waste.
- Limiting the amount of non-recyclable waste which residents, who are unable to store a bin on their property, may put out for collection in bags (only bags with council-issued labels will be collected by the contractor).
- Introducing van and trailer permits at HRCs to help limit traders illegally disposing of their business waste at the sites.

- Introducing a proof of address scheme at HRCs to limit the impact of waste being disposed of by residents from outside of the Wiltshire Council area.
- Subsidising the purchase price of food waste composters for residents who wish to compost their food and garden waste at home see Figure 3.
- Introducing a charge for the collection of garden waste which, for some residents, would encourage composting at home.



Figure 3: Subsidised food waste digesters sold, 2015-2022.

Data shows that the purchases of subsidised food waste digesters increased significantly in 2020/21, particular at the start of the pandemic . This is likely to reflect those residents who do not pay for a kerbside collection of garden waste or make use of the HRCs for garden waste disposal. It may also reflect a growing recognition of climate change issues and residents' desire to manage their own waste in a more sustainable way.

### 2. Repair and Reuse Performance

#### Priority 2 – Repair and Reuse

The council will work with local reuse organisations and contractors to increase the opportunity for items to be repaired and reused. The council will continue to work with national partners and manufacturers to promote sustainable design so that items can be easily repaired rather than having to be replaced.

The amount of waste repaired or reused in Wiltshire is difficult to measure as much of this activity happens within communities and voluntary groups, and without the direct involvement of the council. Some Area Boards have successfully hosted Repair Workshops in their communities.

Repair and reuse performance are therefore not currently measured and reported. However, the council will be working with its contractors and partners to implement a system whereby reuse activities in Wiltshire can be measured and reported. Initiatives that the council delivered include the following:

- Encouraging residents to prioritise reuse of large items rather than requesting a large item collection from the council see Figure 4. The Environmental Protection Act 1990 allows the charge for this service to reflect the council's reasonable costs for collection (though disposal costs should not be charged to the resident). Despite charges having increased this service is still well used by residents.
- Promoting reuse organisations in Wiltshire through the council's website: www.wiltshire.gov.uk/large-item-collection
- Implementing a pilot paint re-use scheme at Salisbury and Amesbury HRCs where cans of paint which are suitable for use are separated out and set aside for residents to take and use. This will particularly support the council's social housing in the Salisbury area, where new tenants will be advised of the scheme.



Figure 4: Bulky waste collections, 2018-2022.

Data shows increased use of the chargeable bulky household waste collection service in the 2 years of the pandemic. This is likely to reflect the impact of the HRC booking system introduced to manage capacity at the sites and maintain social distancing requirements and residents choosing to pay for collections of large items as opposed to visiting an HRC.

### 3. Recycling Performance

Priority 3 - Recycling and Composting:

The council will continue to ensure that cost effective and efficient recycling services are provided so that residents are able to recycle a range of materials as easily as possible. The council will continue to review the potential for expanding the range of items collected for recycling and composting where it is environmentally and economically practical to do so.

Recycling, which includes garden waste sent for composting, comprises materials collected through the council's kerbside collection services and ten household recycling centres.

Wiltshire's recycling rate (the total percentage of household waste sent for recycling and composting) has remained relatively static in recent years at 42.3-43.8%, as has the split between dry recycling and composting – see Figure 5.





It was anticipated that a new kerbside recycling service, introduced in March 2020 with all dry recycling, except glass, being collected mixed in a wheeled bin would increase the recycling rate. The introduction of the service coincided with the first lockdown and significant changes to people's lives, which will have impacted on the amount and type of wastes households generated.

In support of the new recycling collections, a new materials recycling facility (MRF) was constructed to separate out the recyclables. The performance of the MRF, in terms of separating high quality recyclable materials for sale, has not been as high as anticipated. The council is working with the MRF contractor to increase the performance through a combination of updates to the facility and how the material is processed, together with communications to residents about what items should and should not be put into the recycling collections.

Regular assessments are undertaken of the input materials and how much 'contamination' it contains, together with the materials rejected through the sorting processes. Information from these data is used to inform public messaging to improve the quantity and quality of materials sent to re-processors to maximise the income achieved from the sale of recyclate.

Under the gainshare mechanism in the MRF contract the council receives 79% of the income from the sale of recyclate. In 2021/22 MRF income totalled over £3million, offsetting nearly 85% of the costs of operating the facility. Prices for recyclable

materials are historically volatile and subject to global influences and therefore it cannot be assumed that similar levels of income can be achieved in the future. Ensuring that good quality recycling is collected and processed for sale is our best way of achieving good income.

Figure 6 below shows how the cumulative recycling rate follows a similar pattern over the year, reflecting the seasonal impact of garden waste collected and sent for composting, which is very weather-dependent.



Figure 6. Cumulative recycling and composting as percentage of household waste, 2016-2022.

### 3.1 Kerbside Recycling Collections

The council collects paper, cans, foil, plastic bottles, pots, tubs and trays, cardboard and drinks cartons from the kerbside as a fortnightly co-mingled collection. Glass is collected separately on the same day. Residents also have the option to subscribe to a chargeable fortnightly kerbside collection of garden waste.

In March 2020 the kerbside recycling service changed from a 'kerbside sort' system to a 'co-mingled' system. 'Kerbside sort' means that materials are sorted at the kerbside by collection crews and any items not suitable for recycling are left for residents to dispose of in their residual waste. The new co-mingled system means that residents place all their dry recyclables (except glass) into a wheeled bin for collection. The glass is collected at the same time but kept separate from the other materials to avoid contaminating those materials with broken glass. The co-mingled materials are taken to a materials recycling facility (MRF) for separation and removal of any unwanted or unsuitable items before being baled for sale to materials reprocessors.

Figure 7 shows the split between the tonnage of dry recycling and green waste collected and from 2016/17. It shows that the amount of dry recycling collected using the new co-mingled system introduced in March 2020 increased significantly, with

high tonnages collected in both 2020/21 and 2021/22. Tonnages collected during 2020/21 were particularly affected by Covid-19 restrictions with an increased number of people working from home and therefore generating more waste in the home environment.

Figure 8 shows how Covid-19 impacted the type and quantities of materials residents were buying and putting out for recycling. With the exception of plastic bottles, which might be considered an 'on the go' waste there were significant increases in all other kerbside collected materials. This is likely to reflect more food and drink being consumed at home, generating glass, cans and plastic pots/tubs/trays and increases in on-line shopping generating more cardboard.



Figure 7: Tonnes of kerbside recycling and composting, 2016-2022



Figure 8: Kerbside collected dry recycling by material, 2019-2022.

Although significantly more dry recycling was collected from residents in 2020/21 and 2021/22 with the new co-mingled collection system, the amount of contamination and rejected material separated out from the collected recycling at the MRF also increased. Work is ongoing to improve the performance of the MRF to reduce the levels of rejected materials, but in parallel communications to residents about what items to include in their recycling also needs to be undertaken to maximise the amount of material which can be captured at the MRF for recycling.

Waste composition research undertaken in Wiltshire in 2012 showed that over 36% of material in residents' non-recyclable waste bins could have been recycled using the council's kerbside collection services – Figure 8. Waste composition analyses of kerbside collections of recycling and residual waste are scheduled to be completed in June and October 2022 and will provide current data for comparison and to inform public messaging and the development of services.

	Average % of material in residual waste which could have been recycled at the kerbside			
Paper and card	15.68%			
Plastic bottles	8.48%			
Textiles	5.50%			
Glass	3.83%			
Tins and cans	2.99%			
Total:	36.46%			

Figure 8: Percentage of recyclable waste found in non-recyclable waste bins.

#### **3.2 Household Recycling Centres**

Wiltshire Council has a statutory duty (under section 51 of the Environmental Protection Act 1990) to provide places where persons resident in its area may deposit their household waste, free of charge. The council currently operates a network of 10 sites, located across the county where residents can dispose of their general waste as well as recycle many other items.

The number of visitors to the sites and the amount of each waste type collected is monitored and reported. The number of residents visiting the site varies depending on the site capacity, layout and the density of the population surrounding the site. The following service changes have also influenced visitor numbers:

- Asking visitors who are suspected of bringing trade waste to the sites to complete a trade waste disclaimer form to limit the illegal use of the sites.
- 2015-16: The reduction of HRC opening hours and days introduced.
- 2016-17: The introduction of a van and trailer permit system to help limit traders illegally bringing waste to the sites.
- 2017-18: The introduction of a 'proof of address' scheme to reduce the amount of waste being disposed of by non-Wiltshire Council residents.

- 2018: Closure of Everleigh HRC.
- March 2020 July 2021: HRC closures, and social distancing arrangements (including a booking system), implemented in response to the Covid-19 pandemic.

Whilst it is important to monitor the number of visitors to the site, from a waste management perspective it is more important to understand how visitors manage their waste while on site. A core aim of the service is to increase the proportion of waste which is brought to the site being diverted from landfill.

Figure 9 shows the total tonnes managed through the HRC network over the four years and the impact of sites closures and social distancing measures put in place to minimise Covid-19 related risks to the public and site staff. Figure 10 then shows how the waste taken to each site during 2021/22 was managed and how much waste was diverted from landfill through either recycling/re-use, composting or other non-landfill treatment eg. energy from waste. Figure 11 shows the landfill performance in terms of percentages for comparison. On average, across all HRCs, 74% of the total waste taken to the site in 2021/22 was diverted from landfill. This compares well with 2019/20, which was largely unaffected by Covid-19 and when the landfill diversion rate was 75%



Figure 9: Household recycling centres, total tonnes managed, 2018-2022.



Figure 10: household recycling centres, waste management by tonnes, 2021/22 Note: Soil/rubble collected at Lower Compton and Purton HRCs is used as landfill cover at the contractor's landfill sites. Although this replaces a requirement to bring in other materials for this purpose, under waste classifications this is counted as landfilled material.)



Figure 11: household recycling centres, waste management by percentage, 2021/22 See note above regarding soil/rubble collected at Lower Compton and Purton HRCs.

## 4. Energy from waste performance

Priority 4 – Energy from Waste

Recovering energy from waste which cannot be reused or recycled remains strategically important for the council as it prevents this waste from going to landfill. The council will continue to review the feasibility of constructing small scale energy from waste plants within Wiltshire.

Much of Wiltshire's non-recyclable waste is sent to facilities that use the waste to generate energy, or process it into a fuel for this purpose, and divert waste from landfill.

The council has a 25-year contract, which runs to November 2038, to send 60,000 tonnes of non-recyclable waste to Northacre Resource Recovery Centre in Westbury, Wiltshire: www.northacrerrc.co.uk/.

At the Northacre mechanical biological treatment (MBT) plant the waste is dried and shredded to create a fuel, which is then used in energy from waste facilities in northern Europe. The MBT process reduces the amount of waste that would otherwise have been landfilled by two thirds – see Figure 12 below.



Figure 12: Percentage outputs from the MBT process (cumulative performance from contract start to Nov 2021).

During 2021/22 tonnage capacity was reduced because of odour management issues at the site, which resulted in an Environment Agency enforcement notice being served on the contractors, Hills Waste Solutions Ltd. Works to rectify the situation have been completed and reports of odour related to the site have significantly reduced since the end of 2021, despite the facility returning to full input capacity from mid-January 2022.

The council also has a 25-year contract, which runs to June 2033, to send 50,000 tonnes of non-recyclable waste to Lakeside Energy from Waste Plant, Slough: <u>www.lakesideefw.co.uk/</u>. At this plant the waste is incinerated to generate power.



Figure 13: Tonnes of waste sent to MBT and Lakeside Energy from Waste, 2021/22. (Note: MBT contract year runs from Nov to Nov).

#### 5. Less waste to landfill

A strategic aim for the council is to reduce the amount of waste sent to landfill, as this is widely recognised as being the least environmentally sustainable way of managing waste. The objective of all the waste services and contracts the council has in place, is to ensure that where possible the amount of waste sent to landfill is reduced.

Through improvements to waste prevention information and recycling services, together with diverting a significant proportion of non-recyclable household waste to energy from waste plants, the council now routinely sends less than 20% of collected waste to landfill each year.

There continue to be wastes, which because of their nature, are landfilled. These include wastes disposed of in the 'residual waste' containers at HRCs, separate collections of bulky household waste (except electrical items sent for recycling), and Street cleaning wastes including mixed litter and fly-tipped wastes. Work is being undertaken to consider options for shredding these wastes in the future to make them acceptable for non-landfill disposal, and further reducing the amount of waste sent to landfill.

During 2021/22 capacity at Northacre MBT was reduced because of odour management issues on site, which impacted the amount of waste diverted from landfill. As a result of the restrictions, the amount of waste diverted from landfill decreased compared to 2020/21.



Figure 14: Percentage of waste sent to landfill in Wiltshire, 2017-2022.

#### 6. Litter

Since 2014 there has been significant improvement in the percentage of Wiltshire Council roads which were predominantly free from litter and detritus. In September 2019 Wiltshire Council received recognition from The Department of the Environment Food and Rural Affairs Agency (DEFRA) for consistently achieving a high standard of roadside cleanliness across Wiltshire using the standards as set out in the Code of Practice on Litter and Refuse. Litter includes mainly synthetic materials, often associated with smoking, eating and drinking, that are improperly discarded and left by members of the public. Detritus comprises dust, mud, soil, grit, gravel, stones, rotted leaf and vegetable residues, fragments of twigs and other finely divided materials. Detritus includes leaf and blossom falls when they have substantially lost their structure and have become fragmented.

Mechanically collected street sweepings are de-watered and sent for treatment, with the material separated out into aggregates for re-use and the putrescible content composted. In 2020/21 and 2021/22 street sweepings waste contributed 4,537 tonnes and 3,452 tonnes respectively to the council's recycling rate. Delegation of elements of streetscene services to some town councils will impact on the tonnes of streetscene wastes managed by the council in the future as these will be managed and paid for by the respective town councils.

These most recent results show a consistently high level of standard across the county and support the Councils initiative to introduce additional litter picking resources in 2019 and continue these through into the new Streetscene contract which commences in December 2022.

N195 Annual Indicators	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
% Wiltshire roads predominantly free of litter	68%	75%	86%	81%	86%	87%	85%	80%
% Wiltshire roads predominantly free of detritus	60%	59%	87%	69%	80%	81%	73%	76%

## 7. Fly-tipping

The Council received 2,971 fly tip reports in 2021/22 compared with 3,742 in 2020/21, a reduction of 21%.

During 2020/21, and the national lockdowns for Covid-19, levels of fly tipping rose nationally, with a reported national average increase in reports of 16%. In the same year fly tip reports in Wiltshire rose 33% above the national average levels.

The media has reported the cause for this as the closure of HRCs, however, analysis of the reports indicates approximately 60% of reported fly tips are of a commercial nature e.g. rogue commercial waste operators removing waste for profit, not actual businesses dumping their business waste. This is in line with previous years, and on the basis that commercial operators cannot use HRCs for their waste disposal it is considered that HRCs closures and visitor restrictions have had minimal impact on flytipping.



Figure 15: Number of fly-tipping incidents reported, 2016-2022.

Reports of fly tips vary significantly across the 18 community areas of Wiltshire – see Figure 16. All 18 community areas show report numbers per one thousand residents that are below the national average for 2021/22 of 20 reports per thousand residents annually. Southwest Wiltshire and Southern Wiltshire show the highest level of reports due to their rural make up and low



population density, with the high number of rural byways in the area attracting fly-tippers.

Figure 16: Fly tip reports per one thousand residents by community area, 2021/22.

Figure 17 below shows a comparison of fly tip report numbers for 2020/21 with those local authorities considered to be Wiltshire's nearest neighbours by the Chartered Institute of Public Finance and Accountancy (CIPFA). This is based on demographic, social, population make up and other factors and shows that Wiltshire compares favourably with its nearest statistically similar neighbours.



Figure 17: Fly tip report numbers per '000 people – Wiltshire compared with its near statistically similar neighbours, 2020/21

Figure 18 below shows the regional breakdown of reported fly tips in England during 2020/21. This identifies the South West as experiencing the lowest number of fly tip incidents per 1,000 people of any English region. Wiltshire's performance at 7.4 tips per 1,000 people is better than average for the South West region of 9.7 tips per 1,000 people.



Figure 18: Regional fly tip numbers per '000 people in England 2019/20 to 2020/21. Source: DEFRA official fly-tipping statistics for England, 2020 to 2021 (gov.uk)