

GENERAL SCRUTINY COMMITTEE

TASK AND FINISH GROUP

WASTE, A STRATEGIC REVIEW



September 2020

The Waste Task and Finish Group



Councillor Paul Symonds (Chair)

Cllr Symonds, a resident of Ross on Wye has a wealth of local government experience. Managing waste, highways and environmental health services for a number of local authorities across England.



Councillor Jenny Bartlett

Cllr Bartlett has spent 30 years working as a professional cartographer in the civil service, private sector, local authorities and utilities. As a community artist she has worked with Leominster in Bloom on the town banners and the Leominster in Stitches projects.



Councillor Jennie Hewitt

Cllr Hewitt for Golden Valley North has worked as a primary art teacher in the local community. She is passionate about working to address climate change, protect the environment and restore and protect biodiversity. Prosperity without harm.



Councillor Kath Hey

Cllr Hey has been closely involved in the care and development of young people she has worked to make a difference to her home city of Hereford.



Councillor Elissa Swinglehurst

Cllr Swinglehurst's experience includes planning appeals, flooding litigation and drafting a Neighbourhood Development Plan. She has a huge passion for her local area and works tirelessly to help protect our communities, natural habitats and resources.



Nicola Percival, Waste Operations Team Leader

Nicola is passionate about resource management and has many years of experience from developing, procuring and managing waste services through to promoting and educating the use of them across diverse communities.



Kenton Vigus, Waste Disposal Team Leader

Kenton is an experienced local authority waste manager with experience of developing waste strategy and policy, procurement and service management in Rutland, Lincolnshire and Herefordshire.

Introduction

How we produce, manage and view waste needs to change. The recent Resource and Waste Strategy 2018 outlines how England will make changes to move away from a make, use and dispose approach towards a circular economy.

Herefordshire Council is uniquely positioned to embrace this change and significantly contribute to a more sustainable future for its residents and future generations.

Herefordshire Council has a bold ambition outlined in its new County Plan:

"Respecting our past, shaping our future – we will improve the sustainability, connectivity and wellbeing of our county by strengthening our communities, creating a thriving local economy and protecting and enhancing our environment".

The Council's waste management service can contribute to this ambition. It is the only service which every resident uses, it is essential in supporting our communities every day. It supports the economy and business and is a source of job creation and economic opportunity. Recycling, treating and disposing of waste more effectively and tackling waste crime reduces emissions, safeguards resources and protects our natural environment.

In November 2019 General Overview and Scrutiny Committee established a Task and Finish Group to consider how we provide the council's waste management service in future.

This report sets out the findings of the group and the recommended actions to the council.

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APPENDICIES

(2019)

Glossary

AD	Anaerobic Digestion facility, a process where bacteria breakdown organic material in the absence of air. Commonly used to treat food waste to create syngas (methane) and digestate (organic residue).
AWC	Alternate Weekly Collection, the council's current method of collecting waste, residual one week then recycling the next.
EFW	Energy from Waste facility, accepts residual waste from household and commercial collections for incineration. Waste is burnt to generate steam to power steam turbine and create electrical power. Also capable of distributing heat (hot water) to local area
EPRS	Extended Producer Responsibility Scheme, measures detailed in the RWS 2018 that will make packaging producers responsible for (the cost of) dealing with packaging waste, similar to producer responsibility for end of life vehicles and electronic equipment.
EU-CEP	European Union Circular Economy Package, a set of measures to be implemented by EU member states to bring about a more circular economy, the UK Government has recently re-committed (August 2020) to implementing the same measure in the UK as required in Europe.
HRC	Household Recycling Centre, often known as a Household Waste Recycling Centre or Civic Amenity Site. A place where residents may deposit their own household waste.
MRF	Materials Recovery Facility, a place where mixed materials are sent to be sorted and segregated. Also commonly referred to as a Materials Reclamation Facility or Material Facility.
RWS 2018	Resource and Waste Strategy 2018. The government's strategy for how England manages resources and waste to bring about a more circular economy.
Waste-TFG	The Waste Task and Finish Group, established by the council's General Overview and Scrutiny Committee to undertake a Strategic Review of the Council's waste management service.
WTS	Waste Transfer Station, facility where waste is taken to for storage and segregation prior to onward transport to another waste management facility.

1. REVIEW PURPOSE

There are three main driving forces behind the need to review the council's waste management service, these are:

1. Our existing waste collection and disposal arrangements are **due to expire** at the end of 2023 and start of 2024 respectively.

There is an option to extend our joint disposal (Waste Management Services) contract by up to 5 years to January 2029. This would also extend our partnership arrangements with Worcestershire County Council. There is no further extension option for the Waste Collection Contract which will expire in November 2023.

2. Changes to waste policy are expected in the wake of the **Resource and Waste Strategy 2018** and progress through parliament of the **Environment Bill 2019-20**.

New policy and legislation will influence everything from packaging design & production to how local authorities provide their waste management services. Significantly this will see the requirement for councils to provide weekly food waste collections to all households from 2023 and make it available to businesses for a charge.

3. The council has the ambition to make sweeping changes to bring about a more sustainable county. Resource management, production and waste are significant contributors to carbon emissions*. By making changes to how materials are used in production, minimising use of raw materials, discouraging waste, maximising reuse, recycling and recovery we will be able to bring about large reductions in carbon emissions in response to the Climate and Ecological Emergency.

*Zero Waste Scotland (ZWS) believe these factors alone to contribute to 84% of total carbon emissions in Scotland, there is no reason to believe the contribution of these factors in England is any less significant (<u>See ZWS Corporate Plan</u>).

The review seeks to understand current arrangements and likely future demands of the service alongside the council's own aspirations for environmental protection, resource efficiency and carbon reduction.

Through a process of evidence & information gathering, learning from the experience of others and considering the needs and aspirations of the council the Waste-TFG have considered what the objectives for future improvements should be and different options for providing the service in future. The findings have informed the recommendations in this report.

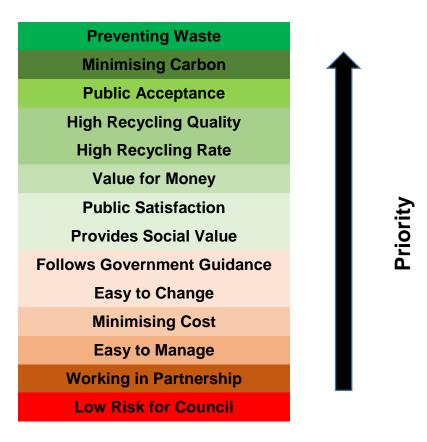
2. KEY CONSIDERATIONS

2.1. Member Briefings

In September 2019 the waste management team held two member briefing sessions to introduce the team and the service to councillors, many of whom were new to the organisation following the May 2019 elections. Members were taken through the government's Resource and Waste Strategy 2018 and what this could mean for the service and the council in future years. Some key comments from members at the briefings are captured below:

- There is confusion over what people can put in their bin
- Can we do more to encourage business waste reduction
- We need to tackle unnecessary plastics
- Household waste sites need to promote the reduce, reuse, recycle message
- Need to explore options for making use of the materials we collect more locally
- Waste composition in 5-7 years' time might be very different to now.
- We are in 4th most rural county, does the government's policy fit well with us?
- Can we combine or tailor the service for the differences between rural & urban?
- Water fountains in towns would help reduce need for plastic bottles
- Can we use electric vehicles for smaller rounds or urban rounds?
- Source separation will cause congestion in town due to the amount of time to collect
- Education is really important.

Overall 23 members took part in the briefings, at the end of each of the each sessions they were asked to rank their priorities for future delivery of the service, the combined result is provided here.



Overall members at the briefings felt our service should prioritise the prevention of waste, minimisation of carbon emissions and public acceptance. The least important were ease of

management for the council, working in partnership with others and the risks to the council. The task and finish group have considered these priorities in the findings and recommendations detailed in this report.

2.2. General Overview and Scrutiny Task and Finish Group

Consideration of the need for a review our waste management arrangements was made at the November 2019 General Overview and Scrutiny Committee (GOSC). The need for a strategic review of our service arrangements with contracts coming to their end and changes to policy expected was accepted. As a result, a cross party member Task and Finish Group (TFG) was established to work with officers to explore options, provide findings and make recommendations to the executive on how the council should approach these challenges.

Five members representing five political groups form the group with support for the Waste Operations Team Leader and Waste Disposal Team Leader. Details of the members of the Waste-TFG can be found at the front of this report.

2.3. The Waste Management Service

As a Unitary Authority, Herefordshire Council has a statutory obligation to collect, recycle and treat waste produced by residents in its area. These obligations are enshrined in law, particularly the Environmental Protection Act 1990, providing a basis for what services are to be provided and how. The law requires local authorities to:

- Collect household waste from residents in in its area
- Separately collect recyclable materials from households including paper, metals, plastics and glass
- Provide a commercial waste and recycling collection service
- Provide places where residents may take their household waste.

In Herefordshire the council fulfils its obligations by providing the following services to residents:

- Fortnightly collection of mixed dry recycling from green wheeled bins
- Fortnightly collection of residual waste from black wheeled bins
- Bulky waste collection
- Clinical waste collection
- 6 Household waste & recycling centres
- A commercial waste and recycling collection service

The waste collection service is simple, residents are provided with two wheeled bins, one for mixed dry recycling (paper, cardboard, plastic containers, tins, cans and glass containers) the other wheeled bin for general (residual) waste. Each bin is collected fortnightly or on an alternating weekly basis, hence this is termed Alternate Weekly Collection. The process is simply illustrated in Table 1.

	Householder	Collection	Waste Transfer	Processing	Outputs
WEEK 1 Recycling				40% to Recycling	Separated materials



Table 1. Herefordshire's current Alternate Weekly Collection (AWC) service. Recycling is collected one week from each property and residual general waste the next week. Each waste stream is thus collected every fortnight meaning the same vehicle can be used to collect mixed recyclable materials one week and then the general (residual) waste the next.

Our services are provided through two **outsourced**^{*} service contracts with private waste management companies.

*See section on service delivery options, page 14

Provider:	FCC Environment Ltd.
Services:	Collection of recycling and residual waste, bulky collection, clinical
	waste and commercial waste and recycling collection
Commenced:	2 November 2009
Expires:	1 November 2023
Value:	£4m per annum

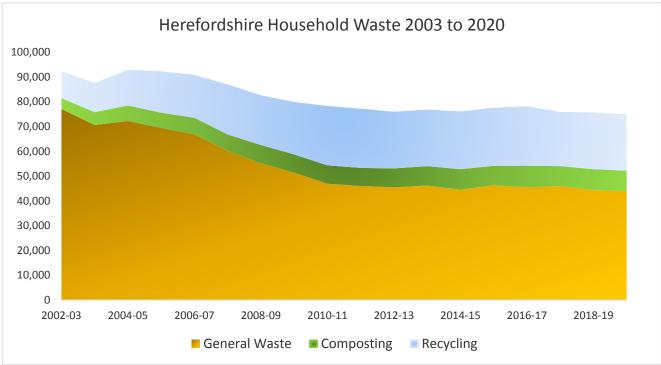
On expiry of the contract the council will retain waste collection depots located in Hereford and Leominster. These may be utilised for the continued provision of the waste collection service or be used for another purpose if not required.

The current service of Alternate Weekly Collection (AWC) was introduced in 2014 after a contract variation was agreed. Prior to this service the council provided a fortnightly collection of mixed recycling (from a green wheeled bin) and weekly collection of general waste in black sacks.

Waste Management Services Contract (Joint with Worcestershire CC)

Provider:	Mercia Waste Management Ltd.			
Services:	Waste transport and treatment (transfer stations, household			
	recycling centres, energy from waste, materials recovery, materials			
	handling, composting, landfill, waste transport)			
Commenced:	Jan 1999			
Expires:	Jan 2024 (5 year extension option)			
Value:	£11m per annum			

At the end of the contract the intention is that assets and operational resources transfer back to the councils. These are allocated to each of the two councils WCC and HC depending on the location of the asset and any sharing agreement. On expiry of the



current contract the transfer of the following assets will be made to Herefordshire Council (or appointed operator):

- Residual Waste Transfer Station Compactor Units and weighbridges in Hereford (x2) and Leominster (x1)
- Recyclable Waste Transfer Station and site office in Hereford
- 6 Household Recycling Centres
- A share (24.2%) in the Energy from Waste facility in Hartlebury near Stourport in Worcestershire.

The performance of the service has been relatively consistent since the introduction of kerbside recycling in 2009. Residents in Herefordshire currently generate 75,000 tonnes of household waste per annum. **41% sent for recycling and composting which compares unfavourably with the highest performing local authorities** (highlighted in Table 4) who achieve recycling rates around 60%. Even with the opening of an Energy from Waste facility in 2017, 20% of Herefordshire's waste continues to be sent to Landfill. The amount of household waste produced in Herefordshire has fallen from 92,000 tonnes in 2002 to 75,000 tonnes in 2019/20 a decline of 18%.

Household Waste	2002-03	2006-07	2010-11	2015-16	2019-20	
Waste Collected (e.g. from bins)		No data	No data	57,564	54,343	51,858
Waste deposited at HRCs		No data	No data	20,787	23,269	23,195
Whole Service	Dry Recycling	10,816	17,319	24,006	23,476	22,746
(Collection and	Composting	4,433	6,657	7,400	7,794	8,311
HRCs) General (Residual)		77,092	66,862	46,944	46,342	43,937
Total Household Waste		92,341	90,838	78,351	77,612	74,993
Recycling Rate		16.5%	26.4%	40.1%	40.3%	41.4%

Table 2 household recycling, composting and general waste arising in Herefordshire since 2002

The recent impact of COVID-19 has seen disruption to normal services from March 2020 on, there have been temporary closures of household recycling centres and an increase in

collected household waste. Although all services are now operating (from July 2020) it is likely there will be noticeable consequence on service performance in 2020-21.



An analysis of our residual waste (waste presented in black bins) was carried out in 2019. Only 8.6% of the contents was recycling items that could have been put into the green recycling bin. This is a **reduction from 12.4%** from a similar analysis carried out in 2011. This suggests that Herefordshire residents are good at separating waste for recycling at the home.

The most significant finding of the analysis was the amount of compostable waste (suitable for home composting) and food waste (suitable for food waste treatment). These two components made up over 40% of our residual waste. Another finding was that over 57% of the food waste component was food still in its original packaging.

The **simplicity of the current service**, both from the point of view of the user and in terms of practical delivery, is **recognised as a strength** by the Waste-TFG. Each household is provided with two wheeled bins, presented for collection on the same day and time on alternating weeks and no requirement to separate recycling out into different bags, boxes or bins. The service utilises a relatively small fleet of vehicles for the size of the county (20 household rounds). The vehicles are commonplace single compartment refuse collection vehicles.

Understanding that changes are almost certain to be required in future, the Waste-TFG have considered future requirements, compared the key options for delivering the service, service provision elsewhere and our own experience, needs and aspirations.

2.4. Waste Collection and Treatment Methodology

Collection Methodology	Description
Kerbside Sort	Recyclable materials are separated by residents into different containers and collected separately at the same time in different compartments on the collection vehicle, called a kerbsider. Materials are commonly presented by residents in 2, 3 or 4 60-90 litre boxes for collection. Crews can further sort, if required, into a greater number of compartments on the vehicle to gain a high degree of separation. Often further sorting is required, for example for plastics and metals before material is sent to on to re-processors.
Co-mingled Collection	All recyclable materials are placed by residents into one container for collection at the same time. This is Herefordshire's current recycling collection methodology.
Two Stream	Recyclable materials are separated into two different containers by residents to be collected by one or two different vehicles at the same or different times. For example paper and card in one container, plastics, and metals and glass in the other. You could have more than two streams.
Food Waste	Food waste is normally collected separately, but in one example above it is co-collected with garden waste. Commonly it is presented weekly by residents in small caddies that are collected

The analysis below provides a description of common collection methodology.

	by a dedicated vehicle or a separate compartment (pod) on a collection vehicle.
Garden Waste	Where provided separate collection is usually from a wheeled bin collected on a fortnightly basis. It can be seasonal with no service provided in winter months. Councils may make a charge for collection but may not for the treatment cost.
Frequency Frequency can vary between different waste types and the and size of container provided to store it prior to collection.	
Container TypesWheeled bins, boxes, reusable sacks and single use plast are all common for recycling collections. Wheeled bins a use plastic sacks are common for residual waste. Caddie 20-30 litres) are common for food waste collection.	

Table 3. Examples of waste collection methodology

The collection methodology in turn can influence options used for treating the material collected.

Recyclable Treatment

For mixed recycling collections (currently provided by Herefordshire Council) a sorting facility is required to separate the mixed materials back out into different material types. Here a range of mechanical and manual sorting techniques are employed. These are called by a number of names but the most commonly used is Materials Recovery Facility or MRF.

You can have simple MRF's separating out 2 or 3 different material types or complex ones sorting out many different material types. The more materials the more complex the sorting requirement and greater the likelihood of cross contamination and poorer recycling quality.

Storage and Separation

Where materials are separately collected they can be delivered straight to market. As it is uncommon for recyclable material re-processors or merchants to be located conveniently, materials are often stored in large warehouses. Materials may be stored loose or bailed ready for transport to market.

Residual Waste Treatment

For residual waste the most common treatment methods are Energy from Waste and Landfill, Mechanical Biological Treatment and Alternative treatment technologies are less common but have been used where councils have made a decision to avoid both Landfill and Energy from Waste.

Anaerobic digestion

Where food waste is separately collected it can be treated via anaerobic digestion. In this process bacteria are encouraged to digest food waste in the absence of oxygen to create methane gas. This can be extracted and used to generate power or exported to the gas grid. A residue or digestate is produced that can be applied to land to offset fertilizer use.

Composting (Windrow and In-Vessel)

Used for the composting of garden waste and treatment of food waste, however for the latter this needs to be in an enclosed area or container to prevent odour issues. Unlike anaerobic digestion no gas and thus no power is produced but it is a low tech and low cost treatment.

2.5. Service Delivery Options

As well as how the service is practically provided there are also many options for how local authorities may deliver waste management services. A summary is

Delivery Options	Description
In House Service	Practical service delivery is managed and provided by the council. This could be through direct employees of the council or through an arm's length operating company.
Outsourced	The service is provided by a third party for example a private company or non-profit making organisation.
Partnership	The council provides a service in partnership with a third party. It is different to an outsourced service in that practical and financial risks and benefits may be shared. For example a private operator and the council could be joint shareholders in the operation of an energy from waste plant.
Integrated	The whole service is provided by a single provider. This could be for a waste disposal service only or for a combined waste collection and disposal service. There are examples of both in table 1.
Aggregation/ Disaggregation	Where services are either combined together or split up into different service types. This could join up services of a similar nature or split up those which have different management and operational requirements. This can have benefits of creating efficiencies or encouraging competition from smaller, local and specialist suppliers
Combination	A mix of some or all of the above

Table 4 Examples of different approaches for providing waste management services

To help with their understanding and inform recommendations the Waste-TFG have sought to best understand the many options available to Herefordshire Council. This has been hampered somewhat by the COVID 19 crises, meaning much research has had to be carried out through desk based study and correspondence.

2.6. Comparison with Services Elsewhere

The waste management service is a large practical service, encompassing customer management, logistics, fleet management, asset management, engineering and materials handling. The redesign and commissioning of such a service is complex, there are many options for what services are provided and how they are delivered.

The Waste-TFG has considered a range of services provided elsewhere, focussing on those local authorities that have similar rural characteristics to Herefordshire. The Waste-TFG have also focussed on local authorities that:

- Are Unitary Councils like Herefordshire
- Services are already aligned to expected future requirements
- Are in the top 10 Unitary Councils in terms of recycling performance
- Have rural Characteristics (only Milton Keynes has been excluded)
- Report costs less than those of Herefordshire Council

Table 3 provides an analysis of the nature, performance and cost (both overall and per household) of services provided elsewhere. These are colour coded to indicate those authorities providing either a kerbside recycling sort, twin stream recycling or co-mingled recycling style of service. This is useful for comparing different service options later in this report.





Unitary	Household No.	Service Provided	How Delivered	Cost (pa)	Recycling Rate
Herefordshire	85,000	Fortnightly Mixed Recycling Fortnightly Residual	Waste Collection Contract (£4m) Waste Disposal Contract (£11m)	£15m (£176 per household)	41.3%
East Riding	155,000	Fortnightly Mixed Recycling Fortnightly Garden and Food Waste Fortnightly Residual	Residual Waste Treatment Contract MRF Contract HWRC Contract Organics Contract In House Collection (£9m)	£21m (£135 per household)	64.8%
Dorset Waste Partnership DWP CEASED TO EXIST END 18/19	201,000	Fortnightly Mixed Recycling Fortnightly Glass Weekly Food Waste Fortnightly Residual Waste Fortnightly Garden (Charge)	DWP running services on behalf of Dorset's local authorities In house collection (£9m) Residual Waste Treatment Contract (£11m) HRC, WTS, Haulage, MRF (£9m)	£30m (£149 per household)	59.6%
Cheshire West and Chester	156,000	Weekly Kerbside Sort Weekly Food Waste Fortnightly Garden Fortnightly Residual Waste	Waste Collection and Recycling Contract (£7.9m) Residual Treatment Contract (£6.5m) HWRC Contract (£2.5m)	£15.5m (£99 per household)	59.0%
Isle of Wight	71,000	Fortnightly mixed recycling Fortnightly paper and card Weekly Food Waste Fortnightly Textile Fortnightly Garden (Charge) Fortnightly Residual Waste	Integrated Waste Collection and Disposal Contract (£9m)	£9m (£127 per household)	55.7%
North Somerset Council	96,000	Weekly Kerbside Sort (inc textiles) Weekly Food Waste Fortnightly Garden (Charge) Fortnightly Residual Waste	Collection & HWRC contract (£7m) Disposal & WTS contract (£4.5m) MBT (£1.7m) (West of England Waste Partnership)	£14.6m (£152 per household)	58.7%
Bath & North East Somerset	82,000	Weekly Kerbside Sort Weekly Food Waste Fortnightly Residual Waste Fortnightly Garden (Charge)	(West of England Waste Partnership)	£14.5m (£177 per household)	58.7%
South Gloucestershire Council	117,000	Weekly Kerbside Sort Weekly Food Waste Fortnightly Residual Waste Fortnightly Garden (Charge)	(West of England Waste Partnership) Collection & Disposal contract	£18m (£154 per household)	57.8%

Rutland County Council	17000	Fortnightly mixed recycling Fortnightly residual Fortnightly garden (Charge)	Integrated contract for KS collections, transport, streets & ground maintenance Separate contracts for treatment of recyclables, compostable and residual	£2.9m (£170 per household)	56%
North Lincolnshire Council	75000	Fortnightly Kerbside Sort Fortnightly Residual Waste Fortnightly garden		£13.2m (£176 per household)	55.6%

Table 5. Comparison of Unitary Councils with food waste collection and similar characteristics to Herefordshire (source Defra waste stats 2018/19, Revenue Outturn (RO5) 2018/19 and respective council financial reports) Only Milton Keynes in the 10 top ten are excluded as a non-rural authority.

The analysis illustrates that all three main types of recycling collection methodologies are represented in the top performing (for recycling) Unitary Councils. 7 of 9 provide a weekly food waste collection and the remaining two have extensive garden waste collection services.

In the year the data was gathered North Lincolnshire, Cheshire West & Chester, and East Riding all provided a free garden waste collection service. Rutland had recently decided to introduce a charge. Free provision of garden waste can make a significant contribution to recycling performance. Garden waste is heavy and for residents it is simpler and more convenient to use a free council collection than avoiding the waste or composting it at home. Making a charge however continues to encourage avoiding garden waste and/or home composting.

The cost of service provided (per household) in each Unitary Council all tend to be lower or at least equivalent to Herefordshire's current service cost's. It should be highlighted that all of the council listed provide additional services to Herefordshire, whether it be food waste collection and/or free or chargeable garden waste collections.

2.7. Resource and Waste Strategy 2018 and the Environment Bill

The Resource and Waste Strategy 2018 (RWS 2018) introduces a raft of measures to adopt a circular economy approach. It is a strategy for England reflecting already enacted policy changes in Scotland and Wales.

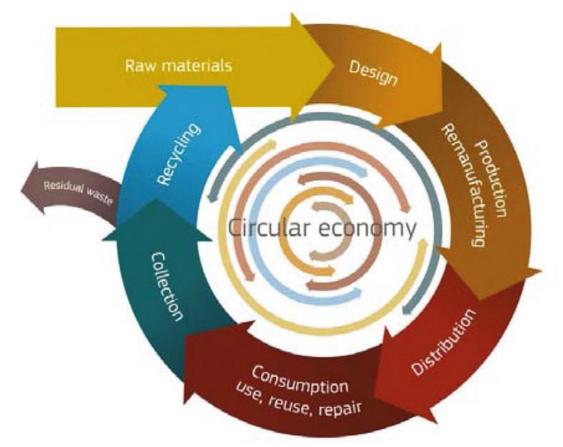


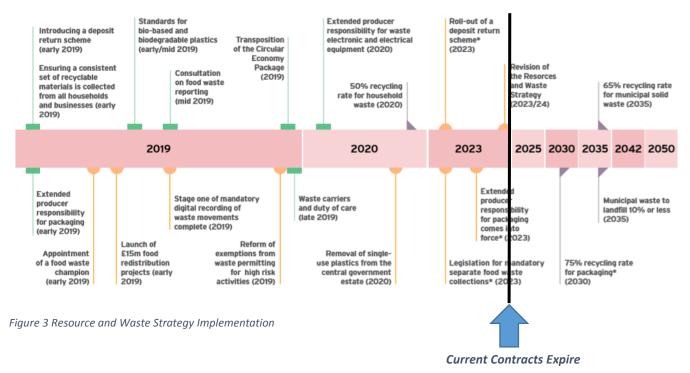
Figure 2 the Circular Economy

The strategy is broadly in line with the EU Circular Economy Package which has been in development for some years, if enacted in full it will mean our waste policy, legislation and targets will remain aligned to with those in Europe.

The implementation of new policies is expected in 2023. The timetable provided in *figure 2* outlines the government's expectations on when policies will be transposed to legislation and implemented. For local authorities the key year is 2023 when we expect to see the implementation of requirements for separate food waste collection, extended producer responsibility and deposit return schemes. How this schedule will be impacted by the COVID-19 pandemic is unknown.

The key measures in the Resource and Waste Strategy are:

- Extension of producer responsibility for packaging producers, meaning they will pay for the cost of dealing with packaging waste
- Possible bans for plastic materials where sustainable alternatives exist
- Consistent recycling collections (all local authorities collecting the same materials)
- Compulsory weekly food waste collection
- Separate garden waste collection
- Initiatives to encourage urban recycling
- Initiatives to tackle waste crime



The Environment Bill making its way through Parliament is expected to make required changes to legislation to enact or enable these measures to be implemented. No targets are set within the bill, however we anticipate the following targets as these are consistent with the EU Circular Economy Package (EU-CEP):

- a preparation for re-use and recycling (including composting/anaerobic digestion) target of 55% of municipal waste by 2025;
- a preparation for re-use and recycling (including composting/anaerobic digestion) target of 60% of municipal waste by 2030;
- a preparation for re-use and recycling (including composting/anaerobic digestion) target of 65% of municipal waste by 2035 (RWS 2018 Target);
- a gradual limitation on landfilling of municipal waste, to 10% by 2035;

The RWS 2018 included the target to recycle and compost 65% of municipal waste (household and household like commercial waste) by 31 March 2035, mirroring the target in the EU-CEP.

If adopted, it is not clear how these targets will flow down to local authorities, the national target of 50% recycling and composting by 31 March 2020 is a national target, however in the past there have been statutory recycling targets imposed on local authorities.

2.8. Local Aspirations

Herefordshire Council recently produced its County Plan 2020-24 setting out what it plans to achieve in the four years of the plan. The focus is on three areas, the Environment, Communities and the Economy. The waste management service contributes to all these aims directly contributing the plan objectives highlighted below:



Herefordshire Council's Principles:

Partnership	We collaborate to	maximise our	strengths a	nd resources
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- **Resilience** We use resources wisely so Herefordshire is fit for future generations
- Integrity We make decisions based on evidence and work with respect, openness and accountability
- **Democracy** We strengthen local democracy, decision making and service delivery and involve more young people
- **Engagement** We listen to and learn from our communities and help people connect through culture, creativity and care.

A strong theme of the county plan is to meet the challenge of climate change and ecological harm. Declaring a **Climate and Ecological Emergency** Herefordshire Council has agreed to:

- Accelerate a reduction of emissions and aspire to become carbon neutral by 2030/31.
- Deliver an updated carbon management plan and associated action plan for Council emissions by April 2020.
- Work with strategic partners, residents and local organisations to develop a revised countywide CO2 reduction strategy aspiring for carbon neutrality by 2030.
- Use 100% renewably sourced energy where this provides the best carbon reduction return on investment.

We know that waste management activities are a significant contributor to carbon emissions. Zero Waste Scotland estimate that waste management activities contribute over 12 million of Scotland's total 76 million tonnes of emissions (view source). This is equivalent to the combined emissions from all transport and domestic energy use in Scotland. It is reasonable to assume these estimates are applicable to other parts of the country including Herefordshire. Zero Waste Scotland estimate a further 52 million tonnes of emissions arise from the use of materials in the making of products. Here too, good waste management practice can help create a more circular economy, reducing, reusing and recycling materials so that they stay in use for longer, offsetting use of raw materials and reducing carbon emissions.

By making positive changes to our waste management service we can bring about a more circular economy for Herefordshire. We can reduce use of natural resources, make sure materials are in use for longer by creating opportunities for re-use and recycling. If data highlighted by Zero Waste Scotland is accepted, we can make perhaps the single biggest contribution to the council's objective for the county to be carbon neutral by 2030.

3. OUR VISION

The Waste Task and Finish group quickly expressed the need for us to no longer think of unwanted materials as waste but as a resource.

We have created a vision for the management of waste in Herefordshire, which encompasses the views of the Waste-TFG on how waste needs to be seen and managed in future.

Waste not, want not...we value resources and their use. We will reduce resource consumption and embrace the circular economy to maximise the life of products and materials. We treat the materials we collect as resources not waste.



4. OUR RECOMMENDATIONS

All the recommendations in this report are considered essential.

4.1. Priorities

Throughout the process key themes have emerged as priorities for the Waste-TFG, these are:

1. Treat Waste as a Resource

We must treat waste as a resource, adopt a circular economy, maximising reuse, recycling and recovery of waste to protect natural resources and minimise carbon emissions relating to waste management activities.

2. Prioritise Public Acceptance

Evolution of the current service has been very successful in promoting public participation, evidenced by the reduction in suitable recyclable material remaining in residual waste. We must make sure that the services we provide are user friendly to maximise proper use of the service, and the amount and quality of recyclable material gathered. We should consider different approaches to waste collection for certain housing types, such as flats and communal developments to maximise participation.

3. Maximise Reuse

We must consider how we can maximise the reuse of useful materials, particularly at Household Recycling Centres. Currently too much useful material is lost. We should facilitate opportunities for materials to be extracted from the waste stream, for them to be reused and re-purposed by businesses, charitable organisations and the wider community.

Recommendation 1

The council adopts the three priorities of TREATING WASTE AS A RESOURCE, PRIORITISING PUBLIC ACCEPTANCE and MAXIMISING REUSE as corporate priorities for waste management.

Adopting these principles as part of our county plan will provide leadership and direction for future decisions. The principles highlight the need for a more efficient circular economy, using our natural resources wisely as well as council resources, whilst reflecting the need to ensure our service are accessible and user friendly.

Measurement of our success in meeting these priorities will be through monitoring and reporting our recycling rate, diversion from landfill, participation rate (for recycling) and amount of waste diverted for re-use.

4.2. Objectives

4.2.1. Treating Waste as a Resource

In the future we will need to adopt a circular economy approach using resources efficiently and reducing the amount of waste we create. A circular economy will see us keeping resources in use as long as possible, so we extract maximum value from them. We will seek to reuse, recycle, recover and repurpose materials whenever we can, giving them a new lease of life and preventing them from becoming a waste. The Waste-TFG consider the following objectives are appropriate for enabling the council to achieve this, and have included recommendations alongside these objectives that would allow the council to meet them.

We will:

- Prevent waste through investing in measures, campaigns and initiatives to educate, incentivise and encourage the public to reduce waste.
 - We could limit residual capacity further to encourage residents to use existing and future recycling services. (<u>See WRAP</u> research on impact of limiting residual capacity)
 - Support residents to reduce the amount of food waste generated; making the most of the food they buy, encouraging smarter shopping, planning meals and using up leftovers
 - Continue to provide advice and support to those composting at home to reduce the amount of garden waste generated
 - Link in with national and local initiatives such as Love Food Hate Waste, and the Herefordshire Carbon Plan (Food Alliance). To enhance work we do, enable the community to be involved and support positive outcomes in reducing food waste and its impact on the environment.

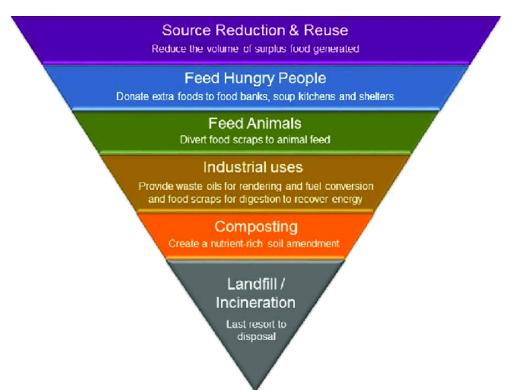


Figure 4 The food Waste hierarchy listing desired actions and behaviours with the most important at the top and least desired action at the bottom.

The council allocates resource to prevent waste from households, restricting residual capacity and investing in waste prevention campaigns and home & community composting initiatives.

Preventing waste will help both residents and the council save money. Residents through food waste prevention initiatives that help people to buy only what they need and the council as it will not need to pay for the cost of collecting and treating the waste avoided.

In recent years the council has been successful at reducing waste, particularly general residual household waste. This has resulted in a saving of over £500,000 per annum since 2011.

In terms of resource a dedicated member of staff with a small budget to manage waste prevention initiatives and waste communications in support of the service is recommended.

The council should set a target to reduce the amount of non-recyclable waste from 530 kg per house per annum (19/20) to 400 kg per house per annum by 2030

- Maximise the quality and quantity of recycled materials to improve market opportunities and income generation potential
 - Work with re-processors, considering material types and quality requirements to ensure we have secure markets for the materials we collect
 - Continue to investigate recycling opportunities for new material streams, both at Household Recycling Centres and the kerbside where reliable markets are available
 - Consider new collection systems and technologies that actively encourage residents to segregate more of their waste for recycling
 - Opportunities for using materials locally are actively explored. We work closely with
 partner organisations such as NMITE to develop reuse (repair and upcycling)
 capacity and encourage material re-processing to be established locally to turn
 waste into useful products minimising use of natural resources.



Figure 5 Swedish up-cycling mall (left) and Studio Mirai in Leominster (right)



The council prioritises the quality of recyclable material to increase its value and marketability. Secondly the council continually reviews and invests in increasing the quantity of material sent for recycling.

We must ensure that the recyclable materials we collect can be treated as a resource. We should design services that will encourage better quality materials to be collected so we are more likely to find outlets for them to use as a resource to turn into new products.

After quality we need to consider the best approach to maximise the quantity of materials collected for recycling. We can do this be ensuring our services are accessible and easy to use but also through investigating new opportunities and technologies that make the collection and recycling of materials possible. Our service needs to remain flexible enough to be able to accommodate these opportunities.

The council should adopt, <u>as a minimum</u>, targets to allow us to achieve the Resource and Waste Strategy 2018 objective of 65% recycling and composting by 2035:

- To recycle or compost 60% of household waste by 2025
- To recycle or compost 60% of both household and commercial waste by 2030
- To recycle or compost 65% of both household and commercial waste by 2035

• Adopt a zero waste to landfill approach

• Only send waste to landfill where there is no other viable alternative, this may include inert residues from recycling and recovery treatment processes and hazardous wastes such as cement bonded asbestos.

Recommendation 4

The council adopts a zero waste to landfill policy, sending only waste that cannot be recycled or recovered. This will minimise loss of resource and minimise harmful emissions, such as carbon and leachate.

The Resource and Waste Strategy 2018 sets an ambition to eliminate food waste to landfill by 2030. It also includes a longer term target of limiting municipal waste to landfill to a maximum of 10%. In **2019/20 we sent 20% of our waste to landfill**. The Waste-TFG consider that with our shared Energy from Waste Facility we should be doing better to avoid landfill. In order to consider waste as a resource only waste for which there is no other alternative should be sent to landfill

The council should adopt a target of no more than 1% of household waste to be sent to landfill from 2025.

4.2.2. Prioritising Public Acceptance

It is essential that the services we provide are user friendly and accessible to everyone. Herefordshire is a predominantly rural authority with large areas of sparse population. However this is in stark contrast to the urban areas of Hereford and the market towns. We must ensure our service reflects this, carefully considering our services so we can provide a high quality, easy to understand and accessible service. We will:

• Ensure waste management services are user friendly and accessible to all

- Consult with the public and business customers on proposed changes to the service to encourage their input into how they are provided to help ensure they are accessible and user friendly.
- Provide tailored solutions where the nature of housing and access can pose waste collection problems and create barriers to participation in recycling services. This can include town centres, communal developments and difficult to access rural areas where typical issues are limited waste storage, lack of suitable presentation points and poor access for normal refuse collection vehicles. By considering different solutions (alternative vehicles, containers, collection frequencies, communal recycling, etc.) we can maximize participation and compliance.
- Provide assisted collection services to support vulnerable less able bodied people to access our waste management services.
- Reconfigure our Household Recycling Centres to prioritise reuse and recycling opportunities, making sure they are accessible, user friendly and operatives provide quality assistance and guidance to residents.

The council ensures services are accessible and easy to use for all. Providing practical alternative solutions where possible/appropriate so that all residents and business customers can reasonably access them and be encouraged to manage waste safely and in accordance with our service.

The Waste-TFG consider public acceptance a key factor in the design of any services we provide. We must ensure that the public are included in the process of delivering any changes to our service through effective engagement and consultation. This does not mean that only the collection method residents prefer will be adopted, but that their preferences will be taken into account, balanced with financial and environmental impacts.

Through learning from our own experiences and those of other Local Authorities we can also consider what approaches may work best for Herefordshire residents and business customers.

Although we may need to consider different approaches in different areas of the county (such as town centres & communal developments) we want the service to be as consistent as possible from the user's perspective.

Participation rate will be measured and monitored for different housing types and demographics to inform where use of the service could be improved and the success of those improvements measured.

- Communicate service information to residents and businesses so they can make best use of the services
 - Provide an education service so that we can raise awareness of the importance of proper use of our services and benefits of reducing, reusing and recycling waste.
 - Provide up to date and simple guidance to residents and business customers on the council's website, through social media and printed guides.
 - Respond to customer enquiries and provide written and verbal assistance to help residents and businesses manage their waste safely, legally and to deliver better environmental outcomes.

The council allocates resource to provide effective communication initiatives with residents and businesses to promote proper use of the service and to help maximise waste reduction, reuse and recycling.

Alongside ensuring we have an accessible and user friendly service the Waste-TFG consider that effective communication is essential to help our residents and business customers use it in the right way. Effective communication will help reduce problems relating to the provision of the service and encourage better quality and quantity of recycling, reducing cost and increasing revenue.

Communication and education initiatives can be provided efficiently and effectively sharing resource used to provide waste prevention campaigns and initiatives.

4.2.3. Maximising Reuse

Opportunities for reuse are currently provided through textile banks and re-use containers located at Household Recycling Centres. Charity shops also provide an essential means of reusing many materials and these are supported by the council with a limited number of disposal permits to allow free disposal at the councils waste transfer stations. However the task and finish group see the potential for much more. Developing opportunities for reuse is a clear priority for the group particularly through the council's Household Recycling Centres service where useful materials are currently being wasted.

The Waste-TFG found that re-use initiatives have the potential to help deliver social value across a range of areas. Making materials available for re-use and supporting people and organisations to facilitate re-use of materials can provide opportunities for learning and development, offer employment opportunities as well as support disadvantaged people on low incomes. Two case studies are illustrated below to highlight both the resource management benefits and social value of re-use initiatives.

The current pre-booking system at HRCs has been very effective in managing demand which avoids queuing and gives time for operatives to advise customers on reuse options. This system should be retained and HRC staff trained to help minimise residual waste.

To maximise re-use we will:

- Develop reuse opportunities throughout the service to maximise the amount of useful material made available for re-use
 - Separate and make materials available for community use to increase opportunities for reuse and recycling
 - Maximise the quantity and quality of reuse of materials from Household Recycling Centres
 - Provide a "scrap store" facility to enable organisation to access materials for arts, crafts and other useful purposes and to support educational establishments.
 - Where possible the council re-use materials and/or distribute useful and needed materials (such as furniture and household goods) to organisations that can use them.
 - Enable the community, business, voluntary and charity groups to increase amount of waste diverted for re-use and recycling.

 The council should take advantage of current restrictions on service provision that have had the effect of creating capacity at the council HRCs. With less visits being made these facilities are quieter providing the opportunity for efforts to be made to separate materials for re-use. This could be achieved by re-tasking existing contractor's staff.

Recommendation 7

The council designs new services to expand reuse opportunities through both the household collection service and the Household Recycling Centres. Existing opportunities to extract reusable materials are explores and implemented.

The Waste-WFG believe that there are many social and commercial opportunities to be explored with reuse. A modest resource could help extract valuable materials so that they can be repaired, repurposed, upcycled and reused. Any costs will be recovered from savings in waste disposal cost, generating income from the materials and added social value.

In the short term the council develops a re-use facility to enable suitable items and materials to be diverted from waste (see case studies below). Such initiatives will very likely support the council's objectives and indicators being considered as part of its **corporate social value framework**.

The council should adopt a target to increase the current levels of reuse of 20 tonnes per annum to 500 tonnes per annum by 2025

Case Study 1 – Reuse in Leicestershire, Leicester and Rutland

Musb

Laying the foundations to double re-use

How research provided the catalyst for a new approach to re-use in Leicestershire, Leicester City and Rutland

Three neighbouring local authorities – Leicestershire County Council, Leicester City Council and Rutland County Council – were increasingly conscious that more could be done to drive re-use in their region. Though there was some bulky waste re-use taking place, via a number of routes, no-one was certain how much waste was being diverted from landfill, nor how much more could be diverted.

WRAP support helped answer these questions. Detailed research identified that over 1,390 tonnes of bulky items were being diverted into re-use by local furniture re-use organisations – but also that there was potential to almost double this in four years. With this target in mind, the local authorities, working with the third sector and waste contractors, agreed an action plan to achieve that level of re-use. The first actions in this plan took place in Summer 2013.

"The process of developing the Re-use Action Plan has been invaluable in bringing together the different stakeholders required to increase reuse and develop a more sustainable re-use sector. It will provide a road map for how we can all work together."

James O'Brien, Team Manager - Programme Co-ordination, Leicestershire County Council At a glance

- Quantified current levels of re-use across the region
- Identified potential to double the volume diverted from landfill
- Delivered a comprehensive action plan involving all parties local authorities, private sector, third sector
- Advised local furniture re-use organisations on how to increase their capacity
- Established a local re-use network, which has now been appointed to supply re-usable items to the Leicestershire Welfare Provision service (Social Fund)
- Working towards setting up a WEEE repair facility



The three local authorities hope to nearly double re-use from ca. 1390 tonnes to ca. 2600 tonnes by 2017/18.

Musb

Increasing re-use by combining resources

How the Surrey Reuse Network enables its members to make a bigger impact on waste than they could do alone

Since receiving the backing of Surrey County Council as part of its resource-led waste strategy, the Surrey Reuse Network has gone from strength to strength.

As a co-ordinated network, it is able to share resources and win large-scale local authority contracts for bulky waste collection. It is also now the primary supplier of goods to Surrey's Local Assistance Scheme (LAS), the new crisis fund for people in real hardship, and making a sizeable contribution to the Council's target of diverting 2,000 tonnes of furniture and white goods from landfill through re-use in the community.

Each of the individual Furniture Re-use Organisations (FROs) involved has seen their own returns increase, meaning they can help more people in need.

"After three years, the SRN has achieved more than we expected. Some members have doubled their incomes, increased tonnages and significantly increased the number of people they assist." Alex Green, Social Purpose Group. Interim Manager of the SRN At a glance

- Formally established in 2010; now a registered charity and company limited by guarantee
- Currently diverting ca.600 tonnes of furniture from landfill each year up 22% in 2012-13 compared to 2011-12
- By combining resources, the FROs have been able to set up a single 0800 number and online booking system for collections, run joint communications campaigns and win local authority contracts
- Re-use shop leased to SRN achieved turnover of £30k+ in first six months
- Assisting over 5,000 low-income households, and offering volunteering/ work-based training opportunities to 400 people a year
- Benefited from invest to save approach from Surrey County Council



4.2.4. Environmental Objectives

Waste management activities are a significant contributor to carbon emissions, Zero Waste Scotland believe this contribution is 15% of Scotland's total carbon emissions.

The service relies on large HGV vehicles to provide the service. Given the quantity of waste to be collected there are no real alternatives to HGV vehicles to facilitate the collection and movement of waste. However we can limit the impact of these large vehicle movements through a range of measures such as:

- Ensuring waste and recycling collection rounds are optimised
- Using in cab technology and round management systems to assist crews in reducing missed collections and helping to plan routes.
- Exploring the use of and incorporating alternative fuel vehicles such as electric and hydrogen fuel cell into the fleet where practical, for example by using smaller alternative fuel vehicles in difficult to access areas.

With waste treatment and disposal we should encourage local re-processing, to accept, re-use, recycle and treat materials more locally. We should also make sure that those accepting and processing waste on our behalf are doing so without risking any environmental harm, including where waste is sent oversees.

Reduce carbon emissions and environmental impact of the council's waste management service

 Encourage local options for treatment of waste to reduce impact of transporting waste long distances and create opportunities for using materials closer to the place of production

- Minimise impact of council waste management service on pollution, ensuring strict adherence to environmental compliance through contractual conditions monitoring and enforcement.
- Identify and tackle waste crime to deter fly-tipping, littering and encourage legal compliance
- Ensure that strict measures to minimise potential threats to the environment are in place with any arrangements for handling materials collected through the waste management service (e.g. contract conditions). Compliance with these conditions is monitored and enforced by council monitoring and enforcement teams.
- Ensure that anyone accepting our waste provides a full audit trail of where materials are sent for final processing doing all we can to ensure that our waste is not causing harm once out of the council's control.

The council will research and seek to develop and continually improve services to minimise carbon emissions and other environmental impacts of the waste management service.

The best data available suggests that avoiding the production of goods and materials from raw materials is the best way to avoid carbon emissions. The Waste-TFG believe the best way we can support global and our own ambitions to reduce the impacts of carbon emission is to reduce waste and discourage the consumption of goods and materials **and thus avoid the damaging need for production.**

We should also explore and seek to provide our waste management services in the most efficient ways possible that reduce our carbon emissions. This can include making sure our waste collection rounds are optimised to minimise fuel use, using alternative fuels for our waste fleets and investing in renewable power sources at waste treatment facilities.

We will work collaboratively with those engaged in work to meet our target of NET zero emissions by 2030 to identify, measure and consider way to reduce the impact of waste management activities. This includes the Energy and Active travel Team, Climate and Ecological Emergency steering group, and Climate Change Task and Finish Group.

The council should measure existing carbon emissions from both operational and embedded sources (e.g. from sale and transport of recyclables) of the service and adopt an achievable target to reduce them.

4.2.5. Social Value Objectives

The waste management service has many opportunities for providing added social value. The waste service is multi-disciplinary in nature encompassing, logistics, facility management, engineering design, materials handling, staff management, IT systems and more. There is a wealth of learning and career opportunities it can offer including HGV drivers, staff management, ICT and data handling, financial management, operation and maintenance, construction and engineering.

It is important, and a requirement for the council to consider how to provide social benefits through the service it provides. The Waste-TFG consider the waste management service can provide many opportunities for social value, these include:

 Ensuring good access to our service for vulnerable and disadvantaged people. Considering the needs of those who may struggle to participate in waste and recycling services.

- Making materials available to people and organisations that help to bring about positive social value outcomes (for example through community re-use projects)
- Provide learning and career opportunities for young and vulnerable people through offering apprenticeship and training positions.
- Provide specific support to care leavers to help find a route to work, with information, guidance and opportunities.
- Work with care providers to raise waste awareness of resource management issues with young people to encourage them to participate in recycling schemes in adult life.
- Supporting waste and resource organisations that help vulnerable people (such as social enterprises)
- Providing education services to schools
- Developing syllabus with NMITE to stimulate ideas, initiatives and provide skills to support the local resource and waste management sector.

The council is currently considering objectives and indicators to include within its <u>corporate</u> <u>social value framework</u>. It is currently a requirement to consider how social value can be provided and enhanced through public procurement regulations. However the council will need to ensure that any future service meets, or better exceeds, any objectives set out in the developing corporate social value framework.

The Waste-TFG consider the following objectives are important to help provide added social value in future:

- Establish apprenticeship and trainee schemes to encourage people into jobs across the waste management service areas.
- Support community recycling and/or reuse social enterprises that support vulnerable people
- Develop education programmes with educational establishments, schools, colleges and NMITE to incorporate resource and waste management into the syllabus at all stages of a young person's development, and to encourage new generations to consider careers in resource and waste management.
- Support a community larder "too good to go" with local food businesses for food nearing its perishable date.

Recommendation 9

Ensure the service contributes meets or exceeds the objectives set out in the council's developing Corporate Social Value Framework.

The Waste-TFG have identified many opportunities for how the waste management service can contribute to providing social value through a range of initiatives to a wide range of people and communities.

Recommendation 7 highlights the many opportunities provided through re-use initiatives, but there exists further opportunities across the service (note case study on Llanfoist).

To support both the social objectives and benefit the ongoing delivery of the service an apprenticeship or trainee scheme could help encourage people to choose a career in waste. Amongst other things this could help tackle a national shortage of HGV drivers.

The council should provide an apprenticeship and/or training scheme within its waste management service to provide young people an opportunity and career route into the waste management service. Key service providers will be required to provide trainee/apprenticeship schemes to provide opportunities for people to learn skills to fill key job roles such as HGV drivers.

WASTE-TFG CASE STUDY Llanfoist Reuse and Education Centre (Monmouthshire County Council)

Prior to the outbreak of COVID-19 and restrictions the Waste-TFG had planned a visit to see the reuse service provided by Monmouthshire County Council at is Llanfoist Household Waste Recycling Centre near Abergavenny.

Cllr Swinglehurst took an opportunity to see the facility in August and reported back to the group on how it worked and the benefits of the service.

REUSE SHOP

Monmouthshire opened a reuse shop in June 2019. Re-purposing an old site office and re-locating it at the Household Waste Recycling Centre. The shop has been provided as part of Monmouthshire's commitment to tackle climate change.

Members of the public bring things to the site and staff/volunteers actively intercept at the recycling centre. Staff working at the recycling centre are trained to maximise reuse and are able to buy at a discount from the reuse side so there is incentive for them to extract items. The reuse site is split between outdoors (crockery, garden things, waterproof stuff) and a medium size shed (indoor things, pictures, trinkets, some furniture, textiles).

The shop is only open 1 day a week (on a day when the recycling centre is closed). Visitors can buy items for just a few pounds, on average it re-uses 1.5 tonnes of material each month and makes an average of £600 each day it is open. Profit is donated to tree planting schemes across Monmouthshire.

HOMEMAKERS

A bulky collection and house clearance service is operated by a charity in association with the council. Household goods are collected for a charge (£180 for a van sized house clearance) and then sorted into reusable items (for sale or distribution), recycling (such as scrap metal) and waste. Small items are sold on eBay, high value furniture is sold (similarly to St Michaels Hospice) but serviceable low value furniture and appliances are made available to disadvantaged and vulnerable people for a nominal fee of £5 and even delivered.

EDUCATION CENTRE

Llanfoist also has an education centre that works with schools not only educating the young about the impact of waste on the environment but also showing them that Monmouthshire Council are doing something about it. Any schools, including those in Herefordshire are welcome at this facility.

Conclusions:

- This service has been simple to set up and is low cost to run, volunteers, charities are encouraged to get involved and it achieves positive outcomes for the council in terms of cost, environmental impact and social value.
- A business case should be drawn up as a matter of urgency with the view to providing a similar service in Herefordshire. This should be managed by the council to seamlessly combine all elements of the service to provide social, environmental and economic benefits. It can link into council social services supporting those going into care as well providing vulnerable people the means to source basis household items.
- To minimise costs use should be made of redundant but serviceable portable classrooms, containers and offices when they become available rather than paying substantial costs for them to be removed from premises when they are no longer required.

4.2.6. Economic Objectives

The view of the Waste-TFG is that the council needs to do more to support businesses and other organisations with their waste. Herefordshire has a diverse range of businesses with a varying degree of needs in respect of the waste we produce.

Providing an increased range of commercial waste and recycling services, including commercial recycling centres, will help support businesses in Herefordshire and our wider economy. The council should seek to recover the full cost of providing these services through customer charges but minimise its own costs and thus the charges made.

- Provide commercial waste and recycling services to non-households (businesses, charities and non-profit making organisations) to support our economic development.
 - Provide the same recycling and reuse opportunities to businesses as households.
 - Provide commercial recycling centres (at at our larger sites in Hereford and Leominster) to provide a place where businesses may take their waste, particularly where a commercial collection may not be appropriate.
 - Focus on small and medium sized enterprises, who may struggle more than large businesses to source and fund appropriate waste management services
 - Recover the cost of providing non-household services as described and permitted by relevant legislation.

Recommendation 10

The council should provide the same opportunities for non-household waste as it does for household waste. The same materials will be collected for recycling and commercial recycling centres will be provided. The council will recover costs as described and permitted by relevant legislation.

The Waste-TFG believe the council should provide services that are accessible, user friendly and flexible to meet the varied needs of businesses and other non-household entities in Herefordshire. Providing cost effective solutions will help improve compliance, reducing waste crime and the cost of dealing with it.

The council should adopt a target to provide at least one commercial recycling centre by 2025.

The Waste-TFG highlight the scale and significance of the decision that needs to be made in how this service is provided. This decision is conservatively valued at £150m based on current rates over a 10 year service period. The options assessment (detailed later in the report) indicates we should expect costs per household between £160 and £180 per household for providing this service (based on current rates and provision of a free garden waste collection service). The comparison Table 3 supports this assessment with rates of between £100 and £180 per household and an average of £150 per household, with most council's offering a chargeable instead of free garden waste collection service.

However the reader should note that there remain considerable variation between councils in the cost of providing the waste management services. To ensure we provide value for money the council must ensure it explores and considers its options carefully and acts adopts best practice solutions that are cost effective and preferably tried and tested elsewhere.

• Provide value for money to the taxpayer

- Investigate and understand best practice elsewhere to ensure our services deliver the best balance of quality, cost and performance.
- Carry out detailed financial assessments of service choices (e.g. different collection methods) and delivery options (e.g. in house, external provide, partnership) to inform decision making and avoid bias.
- Provide resource for to support the waste management service to plan and commission these services within a reasonable timeframe to deliver cost effective services for the council its residents and businesses.

The council will ensure it provides value for money to the taxpayer by undertaking a detailed business case on preferred service options as part of any commissioning process encompassing the best approach to achieve cost effective services that provide value for money to the taxpayer

With a decision of a value in the region of £150m the Waste-TFG believe that a well thought through and considered approach is more likely to result in not only better quality, but also better value for money. We must ensure that our services reflect both best practice and best value through understanding and assessing our option, undertaking a business case and through comparison with services provided by other Local Authorities.

The council should periodically benchmark their waste management service to compare costs and performance with other councils providing similar services as well as those we aspire to provide. This will indicate if service costs are reasonable or not.

4.3. Service Options

Our existing arrangements to provide our waste management service expire at the end of 2023/start of 2024. With changes to government policy expected to be introduced from 2023. In order to meet future requirements change will be required.

At the time of writing this report the council has a little over three years to plan, design and implement new services which comply with the council's statutory obligations.

The challenge for Herefordshire Council is that although the Resource and Waste Strategy 2018 and the Environment Bill provide a vision for what will be expected in future detail on specific requirements is not yet clear. The lack of detail creates uncertainty for local authorities who in designing service will need to ensure that they are compliant with evolving policy and any legal obligations.

✓ What we do know is that:

- We will be expected to provide a weekly food waste collection service for every household and offer this as a commercial service to businesses.
- We will be required to collect garden waste separately
- The government's preferred approach is that we collect different recyclables separately to increase their quality
- The governments preferred approach is that no waste stream is collected less than every fortnight
- There is likely to be income arising from Extended Producer Responsibility Schemes (EPRS) requiring packaging producers to fund the costs of dealing with packaging waste
- There will be deposit return schemes for all drinks containers up to 3 litres.
- We should expect any additional NET costs of service provision to be met with government funding
- Our current services expire at the end of 2023 and we MUST have services in place to replace them.

× What we don't know is:

- Whether or not we will be allowed to make a charge for garden waste collection or if it will be free to households
- How much flexibility there will be on collecting separate recyclable materials (as currently exists)
- Whether there will be flexibility on frequency of collection for different waste streams
- What income to local authorities will be generated through EPRS and how it will paid
- What the impact of deposit return schemes will be, particularly in loss of high value recycling income to local authorities
- How the government will fund NET costs (capital grants, revenue funding, funding of transition costs, etc.)
- When exactly it will be required to provide new services (legislation will usually include a transition period)
- Our social value objectives (being developed in the Corporate Social value Framework)

Ensuring flexibility throughout the design and commissioning of the service is going to be essential to react to developing policy and as further clarity on requirements becomes evident. Engaging with government, through both Defra and local authority networks will be essential to gain intelligence and review plans to as necessary.

What is clear is that policy changes are going to have the greatest impact on waste collection services. Practically it is difficult to consider what changes to the waste disposal service are required without first understanding what materials you are collecting and how. Furthermore no significant changes to Household Recycling Centres (HRC) are considered in the RWS 2018. As such this report focuses on changes to the collection service (as does the RWS 2018).

Recommendation 12

The council will ensure flexibility during the design and provision of the service so that changes can be more easily made to accommodate requirements.

The Waste-TFG recognise that we are yet to receive specific details on the future policy. **This presents a risk that the council could design a service which is not compliant** with our statutory requirements. To mitigate this risk the council must be able to modify its approach during the design phase to ensure compliance with policy and legislative requirements.

In designing our service we must also make sure we do not restrict flexibility. This can be achieved by ensuring a holistic approach to service design where waste treatment and disposal services flex to the needs of the waste collection service. This could include avoiding long contracts that restrict the council to any particular approach for an extended period of time.

The Waste-TFG are also keen to explore introducing changes gradually over time to give residents and business customers time to adjust to new services. This may be also be beneficial to align service provision with promised government funding to support the delivery of the service.

4.3.1. Waste Collection Options

The government in developing their RWS 2018 considered three different options for providing waste collection services, these are summarised in Table 6. Although there are innumerable alternatives and service combinations for providing waste collection services, these options represent three distinct approaches that are often used to distinguish the style of waste collection provided by local authorities in the UK.

Scheme 1	Scheme 2	Scheme 3
Kerbside Sort Recycling	Two Stream Recycling	Comingled Recycling
Recycling: Materials are presented weekly for collection in three streams and separated into four compartments on the vehicle Residual Waste: Collected fortnightly from a wheeled bin Food Waste: Collected weekly on same vehicle as recycling Garden Waste: Collected fortnightly from a wheeled bin	Recycling: Materials are presented for collection in two streams both collected fortnightly Residual Waste: Collected fortnightly from a wheeled bin Food Waste: Collected weekly by separate vehicle Garden Waste: Collected fortnightly from a wheeled bin	Recycling: Materials presented mixed together in one stream (co-mingled) collected fortnightly Residual Waste: Collected fortnightly from a wheeled bin Food Waste: Collected weekly by separate vehicle Garden Waste: Collected fortnightly from a wheeled bin

 Table 6 Waste collection options considered in the Resource and Waste Strategy 2018

To consider Herefordshire Council's options the Waste-TFG have considered three similar approaches to those in the RWS 2018.

The RWS 2018 options were reviewed and adjusted by current waste collection operatives, drivers and managers to factor local knowledge, experience and expertise. These adjustments

reflected practical considerations from those providing the service to provide more flexible, reliable and cost effective solutions. Two main adjustments were made:

1. Weekly collection of food by separate vehicle assumed for all three options.

The RWS 2018 assumed food waste would be collected alongside weekly recycling in its Scheme 1 (Kerbside Sort). Our waste collection staff do not believe this method to be practical as it would require vehicles with 5 compartments, long collection times per property and low payloads. Inevitably one compartment will fill faster than others requiring the vehicle to empty its load when others compartments are only partially filled. Scheme 1 also assumes the disposal point for each material is the same which is rarely the case if co-collecting dry recycling with food waste.

A collection by separate vehicle will be more efficient with quicker collection, full loads and ability to use any disposal point. The benefit of being able to bolt on at a later date or more easily terminate this service means it provides much greater flexibility.

2. Alternate Three Weekly Collection (ATWC) with two stream recycling assumed for Option 2.

This option explores the impact of restricting residual capacity further. This has been proven to encourage greater participation and performance in recycling and food waste collection services. It should also be noted that with provision of a weekly food waste collection the **amount of residual waste will reduce.** The choice to combine with two stream recycling was from discussions with waste collection staff who were keen to be able to utilise single compartment refuse collection vehicles (RCVs). In this option the same vehicles can be used to collect three different streams of waste:

- Week 1: Paper and Cardboard
- Week 2: Plastic containers, tins, cans, glass bottles & jars
- Week 3: Residual Waste

This permits greater flexibility and delivers efficiencies by reducing the number of vehicles needed to carry out the service. A similar service has recently been adopted in Aberdeenshire.

Following these discussion the final options were provided to a consultant to undertake a waste collection options assessment, the options are described in Table 7. The options include both the costs of collecting recycling and waste as well as the anticipated treatment and disposal costs. They exclude costs associated with the provision of the Household Recycling Centre service as no significant policy changes are expected for this service (an estimate of these costs is included to allow comparison with other council services in Table 3).

	Option 1 Comingled Recycling		<i>Option 2</i> Two Stream Recycling	Option 3 Kerbside Sort Recycling
What bin lorries could look like…				
General (Residual) Collectior		Fortnightly Collection	Three Weekly Collection	Fortnightly Collection
Recycling Collection		Materials presented mixed together in one stream (co- mingled) collected fortnightly	Materials are presented for collection in two streams each collected every three weeks (alternating on the third week with residual)	Materials are presented weekly for collection in three streams and separated into four compartments on the vehicle
Food Was	ste	Weekly collection by separate vehicle	Weekly collection by separate vehicle	Weekly collection by separate vehicle
Garden W	aste	Fortnightly Collection by separate vehicle	Fortnightly Collection by separate vehicle	Fortnightly Collection by separate vehicle
No. Conta per House		4+1 (kitchen caddy)	5+1 (kitchen caddy)	6+1 (kitchen caddy)
edule	Week 1			
What Collection Schedule could look like	Week 2		2	
	Week 3	0		* 1.000
What (could	Week 4	1		

Table 7 Herefordshire Waste Collection Options, assessed in 2019

The relative resource requirements, performance and cost of each option was assessed by our consultant to help inform the council's service decisions. A summary of the resource requirements, cost and performance output of the assessment is provided in Table 8.

It should be noted that excluding the Household Recycling Centre (HRC) service from the assessment means that costs cannot be directly compared to other council services in Table 3. Based on previous assessments the cost of providing the HRC service should be in the region of £2m per annum. A more pessimistic value of £2.5 million per annum has been used to estimate the cost per household including HRC costs. This allows a representative comparison with costs of services elsewhere listed in Table 3. It should be noted that our assessments result in costs at the high end of those of services provided elsewhere, it should provide confidence that the assessment is both realistic and achievable (based on current rates).

		Option 1	Option 2	Option 3
		Comingled Recycling	Two Stream	Kerbside Sort
	1 – Resource Require		the comice	
	Residual	onal staff needed to provide		9
Fleet Requirement	Recycling	19	18	25
em	Food Waste	21	22	25
luir st				
-lee Req	Garden Waste	8	8	8
	TOTAL	48	48	63
	and Loaders	126	127	174
	d household waste arisi	busehold recycling and residence	ual collection	
Residua		24,401	20,987	26,193
Recycli	ng	16,756	18,132	16,756
Food		5,311	7,085	5,311
Garden		16,387	16,387	16,387
Contam	ination	3,211	3,475	1,420
Total C	ollected	66,066	66,066	66,067
Dry Red	cycling Rate	25%	27%	25%
	ing Rate	58%	63%	58%
		£2,078,705 £2,078,705	£1,458,007 £2,877,545	£2,078,787 £4,078,736
SUB TO Residua	ng Collection TAL al Treatment Cost	£2,078,705 £4,157,410 £2,398,617	£2,877,545 £4,335,552 £2,063,052	£4,078,736 £6,157,523 £2,574,790
Recyclir SUB TO Residua Recyclir	ng Collection TAL Il Treatment Cost ng Cost	£2,078,705 £4,157,410 £2,398,617 £368,628	£2,877,545 £4,335,552 £2,063,052 -£76,000	£4,078,736 £6,157,523 £2,574,790 -£1,084,428
Recyclir SUB TO Residua Recyclir Storage	ng Collection TAL al Treatment Cost ng Cost e and Transfer	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992	£2,877,545 £4,335,552 £2,063,052 -£76,000 £219,992	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264
Recyclir SUB TO Residua Recyclir Storage Waste	ng Collection TAL Il Treatment Cost ng Cost and Transfer Fransport	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992 £188,564	£2,877,545 £4,335,552 £2,063,052 -£76,000 £219,992 £187,774	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264 £193,941
Recyclir SUB TO Residua Recyclir Storage Waste T SUB TO TOTAL	ng Collection TAL al Treatment Cost ng Cost and Transfer Transport TAL	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992 £188,564 £3,175,801 £7,333,211	£2,877,545 £4,335,552 £2,063,052 -£76,000 £219,992 £187,774 £2,394,818 £6,729,448	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264
Recyclir SUB TO Residua Recyclir Storage Waste T SUB TO TOTAL SECTION Operatic separate the grea Note: Th	ng Collection TAL al Treatment Cost ng Cost and Transfer Transport TAL I 4 – Costs for food was ponal costs of storing, tra- ely illustrated as these r test impact on addition ne option of supplying c	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992 £188,564 £3,175,801 £7,333,211 ste and garden waste collect unsfer, recycling, treatment a epresent new services the collect all cost and improved perform addy liners has been exclude	£2,877,545 £4,335,552 £2,063,052 -£76,000 £219,992 £187,774 £2,394,818 £6,729,448 ion and treatment nd disposal of food and ga buncil does not currently p mance. d.	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264 £193,941 £1,910,567 £8,068,090
Recyclir SUB TO Residua Recyclir Storage Waste T SUB TO SUB TO TOTAL SECTION Operatio separate the grea Note: Th Food W	ng Collection TAL al Treatment Cost ng Cost e and Transfer Transport TAL I 4 – Costs for food was onal costs of storing, tra- ely illustrated as these r test impact on addition ne option of supplying c Vaste Collection	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992 £188,564 £3,175,801 £7,333,211 ste and garden waste collect ansfer, recycling, treatment a epresent new services the constant of the services of of the constant of the services of the constant of the services of the services of the constant of the services of the servic	£2,877,545 £4,335,552 £2,063,052 -£76,000 £219,992 £187,774 £2,394,818 £6,729,448 ion and treatment nd disposal of food and ga buncil does not currently p mance. d. £2,146,613	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264 £193,941 £1,910,567 £8,068,090 Irden waste collected. This is rovide, thus they represent £2,058,219
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Recyclir SUB TO Residua Recyclir Storage Waste T SUB TO TOTAL SECTION Operatic separate the grea Note: Th Food W Garden SUB TO Food Tr Garden	ng Collection TAL al Treatment Cost ng Cost and Transfer Transport TAL I 4 – Costs for food was boal costs of storing, tra- ely illustrated as these r test impact on addition te option of supplying c Vaste Collection Waste Collection TAL reatment Cost Treatment Cost TAL	£2,078,705 £4,157,410 £2,398,617 £368,628 £219,992 £188,564 £3,175,801 £7,333,211 ste and garden waste collect al cost and improved perform addy liners has been exclude £2,058,219 £1,684,144 £3,742,363 £138,086 £309,950 £448,036	£2,877,545 £4,335,552 £2,063,052 - £76,000 £219,992 £187,774 £2,394,818 £6,729,448 ion and treatment nd disposal of food and gas buncil does not currently p mance. d. £2,146,613 £1,684,144 £3,830,757 £184,210 £309,950 £494,160	£4,078,736 £6,157,523 £2,574,790 -£1,084,428 £226,264 £193,941 £1,910,567 £8,068,090 rovide, thus they represent £2,058,219 £1,684,144 £3,742,363 £138,086 £309,950 £448,036
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Table 8 Analysis of waste collection service options cost and performance

Analysis of Waste Collection Options:

The consultant's report (*Waste Options Assessment 2019*), provided as an appendix to this report, provides further detail and analysis on the relative resource requirements, performance and cost of the different options. However to help best understand the key features and differences between the three options and the reasons for them are summarised in Table 9.

Key Features &	Option 1	Option 2	Option 3
Differences	Comingled Recycling	Two Stream Recycling	Kerbside Sort Recycling
Collection Methodology	 Option 1 represents an "as is" service with additional service for the collection of food waste and garden waste bolted on. Fleet size minimised through collecting the least number of waste streams Least change for householders 	 Option 2 represents a modification of the existing service where the current collection frequency is extended from every two weeks to three weeks to allow for an additional waste stream to be collected on the third week. Additional services for the collection of food waste and garden waste are bolted on Fleet size minimised by reducing collection frequency 	 Option 3 represents a fundamental change in how recycling is collected utilising different recycling collection vehicles (kerbsiders) to allow for the separate collection of multi materials from each household. Large fleet required due to number of waste streams and reduced capacity of each vehicle Greatest change for householders
Recycling	 Residents provided with one bin to put all their recycling in, no separation is required. Recycling is presented on the same day every two weeks (same day as general waste on the alternate weeks) Unavoidable cross contamination from mixing with other materials (e.g. glass shards, plastic and paper fragments, container residues, etc.) Avoidable contamination from user accidentally or deliberately putting in waste that are not accepted. Volatile cost of Materials Recovery Facility gate fees, due to volatile markets for recyclable materials Restricted markets for poorer quality materials 	 Residents provided with two bins. One for paper and card the other for glass containers, plastic containers, tins and cans. One recycling bin is presented one week, the other the next and residual waste the third. Residents are provided with more recycling capacity (two bins collected in a three week period instead of one every two weeks) Unavoidable cross contamination is reduced Avoidable contamination may not be reduced Volatile markets for recyclable materials More sustainable markets due to moderate improvement in quality. 	 Residents provided with three boxes collected weekly. One for paper and card, one for glass bottles and jars the other for plastics and cans. Residents are provided with the most recycling capacity of all options Cross contamination is minimal Further inspection and sorting by recycling crews eliminates obvious contamination Minimal further sorting and separation required Volatile markets for recyclable materials Most sustainable markets due to better quality materials
Food Waste	 Residents provided with a small kitchen caddy, and a larger caddy for presenting each week. Getting people to participate in service can be difficult Relatively low yields mean high cost of collection 	 Residents provided with a small kitchen caddy, and a larger caddy for presenting each week. People encouraged to participate by restricting residual capacity Relatively low yields mean high cost of collection 	 Residents provided with a small kitchen caddy, and a larger caddy for presenting each week. Getting people to participate in service can be difficult Relatively low yields mean high cost of collection

Table 9 Key features of each option

Table 10 provides a qualitative assessment to illustrate the strengths and weaknesses of each option. This highlights how each option best fulfils the outcomes (priorities and objectives) desired by the Waste-TFG and other key criteria.

Crit	oria	Option 1	Option 2	Option 3
Unit		Comingled Recycling	Two Stream Recycling	Kerbside Sort Recycling
rities	Treating Waste as a Resource	Material collected are the lowest quality of the options presented. Materials must be sent to a commingled MRF for further sorting and separation with more limited market options.	Improved quality due to further separation into two streams. Greater capacity and flexibility to change materials accepted for recycling. Less complex sorting requirements and greater market opportunities.	Best quality material due to separation at kerbside and ability of crews to reject materials. Least sorting requirement and greatest market opportunities with the potential to stimulate local re- processing.
Our Priorities	Prioritising Public Acceptance	Simplest service for the resident, one bin for all recyclable materials.	Requirement to store another bin and separate recycling into two streams	High degree of separation and effort of resident required. Storage of three boxes
	Maximising Reuse Opportunities	Limited options for further waste streams to be accepted as number of materials to be sorted out is high.	Twin stream increases opportunities for additional materials to be introduced in either recycling bin.	Multi stream provides best opportunity for additional materials to be collected as crews are able to sort at kerbside (e.g. batteries, WEEE, textiles, spectacles).
	Environmental (Vehicles)	Fleet size minimized, less transport impact and carbon emissions.	Fleet size minimized, less transport impact and carbon emissions	Most vehicles greatest carbon emissions and transport impact.
ctives	Environmental (Resource)	Relative poor quality of recycling materials not in use for as long.	Improved material quality and quantity.	Best quality recycling keeping materials in use longer.
Our Objectives	Social Value Objectives	Improved opportunities for employment, training and skills.	Improved opportunities for employment, training and skills.	Most opportunities for employment, training and skills. More opportunities for local reprocessing and reuse
	Economic Objectives	Moderate cost of service to council	Lowest cost service to council	Highest costs service to council
	Legal Compliance (Frequency of collection)	Fortnightly collection	Three weekly frequency of collection presents risk of non- compliance	Governments preferred option very likely to be compliant.
	Legal Compliance (Recycling Quality)	Does not meet requirement to improve recycling quality	Improves recycling quality	Governments preferred option very likely to be compliant.
Other Criteria	Practical Service Delivery	Least change required and best understood. Utilises current vehicle types and design. Use of wheeled bins means waste is stored safely and required minimal manual handling on collection.	Some change required. Utilises current vehicle types and design. Use of wheeled bins means waste is stored safely and required minimal manual handling on collection. Moderate increased number of bins. More complex collection schedule.	Introduces multiple boxes creating storage, collection and manual handling difficulties. Collection times will be increased requiring more staff and vehciles to service. High demand for and cost if replacement boxes Multi compartment approach likely to result in some compartments filling up quicker than others.
	Flexibility of Service	Once procured it will be difficult to make changes to the type and number of vehicles without incurring significant additional cost. New materials may be added for recycling but this may be restricted by treatment/sorting methodology.	Once procured it will be difficult to make changes to the type and number of vehicles without incurring significant additional cost. New materials may be added for recycling but this may be restricted by treatment/sorting methodology.	Once procured it will be difficult to make changes to the type and number of vehicles without incurring significant additional cost. The range of materials accepted for recycling may more easily be altered due to the number of containers and ability of collection crews to sort materials at kerbside. Often kerbside vehicles can be reconfigured

Table 10. Qualitative analysis of options against key criteria

In summary:

Option 1 <u>represents an "as is"</u> service with a food waste and garden waste collection bolted on. It is most favourable in terms that it requires the least change for both our residents, operational staff and the council. However it is most disadvantageous in terms of resource management due to the loss in quality from collecting dry recycling together in one container. This not only reduces the value of the material collected but presents a risk that markets for those materials may be difficult to source.

Option 2 is a modification of the existing service that would allow the introduction of a second recycling wheeled bin. It is favourable in that it would allow paper and cardboard to be separated from other dry recyclable to improve the quality of both streams. Users are also encouraged to separate materials for recycling by reducing the frequency of residual collection to three weeks. Retaining wheeled bins for the collection of dry recycling means existing type vehicles can be used to provide the service. It is disadvantageous in that collection frequencies for residual waste are reduced to every three weeks but recycling is collected on the other two. The government have indicated a preference that no waste stream should be collected less frequently than every two weeks. This option would also require each household to accommodate an additional wheeled bin for the storage a second dry recyclable waste stream.

Option 3 is the governments preferred approach. It would mean collection of the highest quality of recyclable material maximising the value of the recyclable material collected and minimise risk of loss of market. It is disadvantageous in that it will require a wholesale change to how the service is currently provided, moving from wheeled bins for recycling to a box or bag collection service. This not only requires a much larger fleet of vehicles and more staff but introduces manual handling concerns that do not currently exist with staff requiring to repeatedly bend down to lift boxes or bags for sorting and emptying.

Each option has different strengths and weaknesses. Option 2 performs best both in terms of the amount of material sent for recycling and lowest cost. Option 3 provides the highest quality recycling and is in alignment with the governments preferred option in the RWS 2018. Option 1 would require the least change and thus likely to be easier to implement and gain public acceptance.

On balance the Waste TFG believe that options 2 and 3 are best able to fulfil the priorities, objectives and recommendations outlined in this report. Both options will result in improved quality of materials for recycling, improving opportunities for treating them as a resource in line with the circular economy approach. The Waste-TFG also believe Herefordshire Council needs to be brave if it wishes to fulfil its aspirations to be a leader in tackling climate change.

Recommendation 13

Options 2 and 3 are progressed to public consultation with feedback and preferences used to inform the council's decision on its preferred approach. Progressing Option 1 is not recommended.

The Waste-TFG understand that no option is without merit or risk however both option 2 and 3 best fulfil the priorities, objectives and recommendations of this report. Option 2 as the best performing option and Option 3 as the governments preferred approach in the RWS 2018.

The council should consult with residents, business users and key stakeholders to obtain their views on these two approach to providing the service. The consultation should highlight future requirements and the need to change and ask for views on how best those changes can be delivered.

The Waste-TFG feel at this stage it is critical to obtain public feedback on future approach. The consultation should be clear that change is required and explain the reasons for it to bring forward views on how best to make the changes required.

To help inform the consultation selection of preferred waste collection option and subsequent service design the Waste-TFG have highlighted a number of key requirements that should feature in any future service.

Recommendation 14

In designing a new service the council should ensure it incorporates features that will enable it to meet the objectives and recommendations detailed in this report:

- 1. Design of the service enables the collection of high quality materials for recycling to ensure they are useful, valuable and in use for as long as possible to help protect natural resources in accordance with circular economy values.
- 2. The service is designed from the outset to be capable of meeting a 65% recycling and composting target for all the waste collection by the council.
- 3. Residual (general waste) capacity should be restricted in order to encourage the use of recycling and food waste collection, for example by smaller bin size or reduced collection frequency.
- 4. Reasonable and practical alternative collection options are provided to households where the nature of development makes it challenging to accommodate the standard collection service. For example providing different containers and or an increased frequency of collection.
- 5. Flexibility of service should be built in where possible, for example:
 - a. By ensuring waste treatment and disposal arrangements dovetail with those for waste collection, for instance by aligning contract periods. This will ensure that treatment and disposal arrangements do not constrain opportunities to make changes to waste collection services.
 - b. By having more flexible shorter term contractual arrangements with a range of providers to more easily flex to changes in materials collected for recycling.
- 6. A charge for garden waste collections should be made if permitted (to continue to encourage those residents able to do so, to compost at home).
- 7. The same opportunities provided for householders for recycling will be offered to commercial (trade waste) customers at a charge
- 8. Social value will be maximised through re-use initiatives, education and training.
- 9. The service will incorporate effective communications and initiatives to support provision of the service and encourage positive public behaviours to benefit the service (e.g. waste prevention, proper use of recycling services).

4.3.2. Household Recycling Centre Options

Around 30,000 tonnes a third of waste managed by the council is accepted at the 6 councils Household Recycling Centres (HRCs). The range of waste streams accepted for recycling encourages much higher recycling performance than through the kerbside service with all HRCs in Herefordshire recycling over 70% of the waste received.



Figure 6 The Household Recycling Centre service

The service satisfies the council's duty (under s51 of the Environmental Protection Act 1990) to provide places where residents in its area may deposit their household waste.

Future policy requires few changes to the Household Recycling Centre service however the Waste-TFG recognise the importance of this service in meeting both anticipated national policy and local ambitions. The Waste-TFG have made two recommendations relating to HRC service provision that will bring about increased resource recovery but also support local business:

Recommendation 7

The council designs new services to expand reuse opportunities through both the household collection service and the Household Recycling Centres. Existing opportunities to extract reusable materials are explored and implemented.

Recommendation 10

The council shall provide the same opportunities for non-household waste as it does for household waste. The same waste collection services will be provided to businesses as they are to households and commercial recycling centres will be provided. The council will recover costs as described and permitted by relevant legislation. Household Recycling Centres provide great opportunities for providing social value, particularly through re-use initiatives highlighted earlier in the report. We must design services so that re-use organisation are encouraged to be a part of the provision of this service. The Waste-TFG have considered that one way to achieve this would be to consider the HRC service as a separate service, potentially run in house or in partnership in a way that those involved in re-use and delivering social value are not excluded.

A further consideration of the Waste-TFG was the design and layout of these facilities. It was felt that the layout and signage of the site should be improved to encourage separation of recyclable material as much as possible and discourage disposal of useful materials to waste. The council should use the opportunity of providing new services to make these changes.

4.3.3. Waste Treatment and Disposal Options

Similarly to HRCs, this report does not have a focus on waste treatment and disposal options. This can only be considered once the council has determined what materials it is going to collected from households.

What is clearer in the RWS 2018, and from progress through parliament of the Environment Bill, is that weekly collection of food waste and separate collection of garden waste is very likely to be required. This requirement will facilitate the need for additional services, the council does not currently provide which will generate new waste streams requiring treatment.

Recommendation 15

The council commissions a piece of work to understand what changes to its disposal service will be required to best manage the materials arising from the waste collection service options detailed in the analysis above.

A better understanding of the changes required to existing waste treatment and disposal service will inform requirements to support the delivery of the waste collection options outlined in this report. As a priority the council should seek to understand what changes are required to:

- **Waste Transfer Stations**, to understand how best materials collected could be accepted and stored for onward transport to treatment facilities elsewhere, and what required changes to existing transfer stations would be required, and:-
- Waste Treatment Facilities, to understand current waste treatment methods and capacity, what waste treatment facilities are required, and if there are any opportunities for developing more effective and resource efficient solutions for dealing with the materials collected.
- A full **analysis of potential markets** for materials arising from the new service and opportunities for local processing to be commission alongside public consultation to inform decision on preferred approach.

The requirement for a weekly collection of food waste will generate up to 7,000 tonnes of household waste plus additional food waste from commercial collection the council will provide. This will require treatment capacity for at least 10,000 tonnes of food waste. Anaerobic digestion (AD) is the most favourable means of treating food waste highlighted by government in its RWS 2018. Although there are a number of AD facilities located in Herefordshire, these are dedicated for the treatment of agricultural waste and energy crops.

The Waste-TFG are mindful that many AD facilities were developed on the back of incentives, such as feed in tariffs, the benefit of which are likely to come to an end. The Waste-TFG are keen to investigate if there are any opportunities for any existing agricultural facilities could be converted to food waste treatment as well as wider consideration of the alternatives of developing our own AD facility or using existing facilities out of county.

Recommendation 16

An early study is undertaken to evaluate if any existing AD facilities could be utilised for the treatment of food waste in Herefordshire.

The Waste-TFG recognise that Anaerobic Digestion facilities are likely to be required to treat food waste collected in Herefordshire. Although there are a number of options such as developing our own facility, using existing out of county facilities, the option of converting an existing agricultural facility may be advantageous.

A study engaging with existing operators would reveal if there is any appetite and possibility for this. The Waste-TFG believe this could also provide added incentives in discouraging the use of energy crops to as feedstock.

As for residual waste a zero waste to landfill policy (Recommendation 4) should be adopted. It is anticipated that any residual waste arising from the service in future will be sent and treated by Herefordshire's Energy from Waste facility it shares with Worcestershire County Council in Hartlebury, Worcestershire.

Recommendation 17

The council should seek to agree an approach with Worcestershire County Council on how their joint Energy from Waste (EFW) facility will be managed and operated to the mutual benefit of both council's on expiry or extension of existing arrangements

Even if the council were able to meet or exceed the governments expected target of 65% recycling by 2035 there will remain a need to treat residual waste arising from Herefordshire's waste management service.

Energy from Waste (Incineration) remains the only reasonable alternative to landfill for residual waste treatment so sending waste to our own shared EFW is expected. However the Waste-TFG wish to see the plant optimised by generating heat as well as power and other options to maximise the efficiency of the facility explored and implemented where advantageous to the two councils both financially and environmentally (through reducing the impact of residual waste treatment on climate change).

Any excess tonnage capacity created from increased recycling should be sold to generate commercial revenue for the two councils.

4.3.4. Management of the Service

The council's waste management team is currently comprised of 8 staff working under a head of service with responsibility for Environment, Climate Change and Waste. The team have a predominantly operational role managing contractors, dealing with service requests and managing the council trade waste, bulky waste and clinical waste collection service.

The waste collection contract is a master a servant style contract providing a service as specified by the council to provide vehicles and staff to collect waste from domestic properties and trade waste customers. The contractor has no strategic and only limited administrative responsibilities for the service.

The disposal service is a management contract where the contractor is required to make suitable arrangements for the treatment and disposal of waste delivered to it by the council. The service is managed by Worcestershire County Council on our behalf. The contractor has no strategic responsibility and has only limited administrative responsibilities for the service.

The decision the council must make on the future of this service is conservatively valued at £150m based on current rates and a 10 year contract. We currently rely on one officer with intermittent consultant support to deliver this. The Council's Waste Disposal Team Leader, who acts as the main contract officer for waste disposal and has lead on future strategy, is due to leave the council in October 2020 which presents a significant loss of knowledge at a key time.

The scale and significance of the work ahead should not be underestimated and time is now a critical factor.

Recommendation 18

Waste Management Team is augmented with required staff and resource to plan, commission and implement new services and manage our new arrangements.

The Waste-TFG consider it is essential to replace our Waste Disposal Team Leader as soon as possible and to create 3 new posts. A Waste Strategy Officer to provide support to the current post in developing the contract(s) and researching collection and disposal options. A Waste Communications Officer to lead the process of public engagement. They will need to be supported by an Administration Officer.

These new posts are required no later than 1st April 2021 and will need to be in place until at least 31st December 2025 to allow for bedding in of the redesigned waste collection services. The cost of these new posts is insignificant in terms of contract value and the financial and reputational impacts of getting this decision wrong. They will also be significantly less than the cost of bringing in consultants to bail us out at the 11th hour if we continue to rely on a single officer to deliver this.

Further resource is likely to be required to appoint legal, financial and technical advisers as required, particularly in support during any procurement. Investing in building the capability in the team will however minimise the need for expensive consultants as well build a more capable team to manage and continue to develop the service.

5. NEXT STEPS

The task ahead is to plan, design and implement a new waste management service. A clear plan with resourcing strategy is required to map out how the authority is going to achieve this.

Typically large scale waste management commissioning projects (to provide new services and/or waste treatment infrastructure) require a minimum of three years to complete successfully. The more time and resource an authority invests the better chance the outcome will deliver favourable outcomes in terms of quality, performance and cost.

As highlighted in **Service Management**, above, time is now a critical factor. In particular based on anticipated time required to consult and determine preferred approach the council will have around a year and a half to design its service in preparation for procuring it. With **local elections** scheduled in May 2023 the council must ensure it leaves sufficient time for service providers to mobilise (e.g. it could take a year to procure a new fleet).

Target End	November 2020	March 2021	May 2021	December 2021	December 2022	Start November 2023
Length	3 Months	3 Months	2 Months	6 Months	1 Years	10 Months
Action	Considering Options	Public Consultation	Select Preferred Option(s)	Design Service and Produce Strategy	Commission / Procure Service	Mobilise and Implement
Key Tasks	Complete Strategic Review Report to General Overview and Scrutiny Report to Cabinet	Consult on key options with public and key stakeholders to inform preferred service options	Report to Cabinet to approve approach	Design service and produce strategy for how it will be delivered Report to cabinet to approve strategy Research and pilot services as required	Commission new services whether that be by procuring private service contractors or providing the service in house or a mix of the two.	Minimum 9 Month mobilisation period to enable providers to resource new service

A list of key tasks and suggested timings is provided in Table 11.

WE ARE HERE

Table 11 Key tasks and milestones in implementing a new service

This report is a critical element of the "considering options" phase to determine what service the council's wishes to provide in future. Following completion of this Strategic Review the recommendations within will be put to the council to inform next steps. It is anticipated that a public consultation exercise will follow to obtain service user's (residents and businesses) and key stakeholder's views on key service options.

The Waste-TFG is very keen to ensure that public engagement happens at an early stage and continues throughout the process of developing the service. It is hoped that this will foster a collective approach and increase awareness public acceptance of the changes that will be required.

The results of consultation will inform the council's decision on its preferred service options to take forward into a service design and strategy development phase. Here detailed work is required to ensure the service can be delivered to meet the recommended priorities of treating waste and a resource, prioritising public acceptance and maximising re-use opportunities.

The significance and scale of the challenge ahead is huge. The findings and recommendations in this report clearly identify that the challenge cannot be ignored or delayed further. To do so will place an essential and critical council service at risk. To ensure the council stands a chance of having a new service in place on expiry of existing arrangements adequate resources must be allocated to the Waste Management Team. Initially this should support carrying out a public consultation exercise and commence the planning and design of new services.

6. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This report conveys the findings and recommendations of the Waste task and Finish Group, established by the General Overview and Scrutiny Committee (GOSC) to undertake a Strategic Review of the council's Waste Management Service.

It is hoped that the findings and recommendations within can be agreed by GOSC and be presented to the executive to provide direction and inform the council's progress in responding to the challenges presented by the approaching expiry of existing arrangements and new government policy.

What is clear to the Waste-TFG is the scale of the task ahead. The Waste Management Service is a significant and essential statutory service which Herefordshire Council must provide for all its residents and offer to its businesses. It is a vital element in our everyday lives and for our economy to thrive.

The government also consider resource and waste management a priority, recently confirming its commitment to implementing equivalent measures set out in the EU circular Economy Package. This will mean a once in a generation transformation of our waste management service which we must be equipped to deal with if we want to avoid significant negative implications for the council as well as make the best of the opportunities this brings.

The council is ambitious, it wishes to bring about changes that help protect and enhance our environment, make best use of our resources to keep Herefordshire a great place to live. We now have a once in a generation opportunity to take our waste management service to a new level and meet this challenge.

"We must be brave!"

Next steps:

- 1. Report to be presented to General Overview and Scrutiny Committee on Monday 28 September 2020
- 2. Agreed findings and recommendations to be presented to Cabinet on **29 October 2020** to recommend approval and initial implementation strategy (to include initial public consultation on key service options)
- 3. Public consultation carried out and report on findings and recommended approach to providing new service to be presented to Cabinet in **April 2021**.

The Waste-TFG has provided a cross-party view on our future Waste Management Service options developing a balanced and pragmatic set of recommendations that will allow us to meet future requirements and our own aspirations as a council. We believe the establishment of a permanent cross party member working group would continue to benefit and support the council in meeting the challenge ahead. It can do this by:

- Aiding the development and carrying out of public consultation
- Keeping all political groups informed and included in the process
- Providing political and policy support and guidance to officers (linking with other council priorities and actions that officers may be unaware of).
- Bringing a different perspective
- Providing oversight, being a critical friend
- Identifying gaps and flagging required corrective actions

Recommendation 19

The council should maintain the Waste-TFG as a cross party member group to provide oversight and support to officers until implementation of new services in early 2024.

A cross party member working group will help include political groups throughout the process of planning, commissioning and implementing new services. It can help provide support to officers in offering balanced views and guidance. This group should help to re-enforce the governance processes of the council to ensure that decisions are made in the best interest of the council and its residents.

APPENDIX 1 RISKS

There are significant and potentially severe financial, practical and reputational risks associated with getting this wrong. Worst case scenario is total failure of the service and termination of high value contracts. High profile cases in Greater Manchester (Waste Disposal), Allerdale (Waste Collection) and Derby (Waste Treatment) in recent years highlight the risk. These situations tend to be acrimonious resulting in lengthy litigation and costs to both the council and service provider. Adequate resourcing to plan, design and commission services as well as informed decision making will minimise this risk.

Table 12 provides a list of key risks that currently exist. Risks should be regularly reviewed throughout the planning, commissioning and implementation phase to identify new risks and put in place appropriate measures to control them.

Key Risks	Likelihood	Severity	Implications	Mitigation
Not enough time to complete required work	Moderate	High	Not sufficient time to fully consider all key options and implications of different service choices. This will inevitably result in rushed and not fully thought through commissioning process.	Do not delay in resourcing and ensure effective decision making processes are in place. Consider a single Commissioning Manger with delegated responsibility (as advised by DEFRA in early 2018)
No strategy for commissioning new service	Moderate	High	Without a resourced strategy for putting new service in place there is no certainty that the council will be able to deliver its obligations as both Waste Collection Authority and Waste Disposal Authority in time for expiry of existing arrangements	The council does not delay to adequately resource the planning, development and commissioning of new services. Staff are recruited and resources allocated to undertake the work (Recommendation 18)
Service is not compliant with legal requirements	Low	High	Council will be in breach of statutory obligations Potential government intervention Damage to councils reputation Potential high cost to make compliant (negotiating with incumbent contractor or new service)	Ensure flexibility through the design and commissioning process to reflect that policy is still in development and legislative requirements are yet to be finalised. Engagement with government on developing policy and likely requirements Effective governance in place to take informed and timely decisions and corrective action. Option 1 is not pursued as an option.
Carbon emissions not minimised	Moderate	High	The service is a significant contributor to the county's total carbon emissions. It is likely that requirements are going to directly result in increased carbon emissions due to additional vehicles and additional waste produced from garden waste collections. No measure of current emissions or expected emissions	Indirect carbon savings from improved resource management will be achieved from preventing waste and maximising reuse and recycling. Consideration of how best to provide collections to minimise use of vehicles, introduce low carbon technologies and recover energy from residual waste are required to minimise the services impact on climate change. The carbon (climate change) The Energy and Active Travel Team provide support to measuring current emissions and assess impact of changes.
Poor Value for Money	Moderate	High	Lack of effective commissioning strategy and poor/slow decision making leads to higher service costs than expected. Taxpayers required to fund avoidable costs meaning less funds for other council services	The council does not delay to adequately resource the planning, development and commissioning of new services. Effective governance in place to take informed and timely decisions and corrective action.

Poor Quality and Performance of the services	Moderate	High	Lack of effective commissioning strategy and poor decision making leads to poor service design, quality and performance of services, resulting public dissatisfaction. Potential dispute (if private contractor) or stress on council staff providing the service. Need to re-commission failed services is not uncommon resulting in high unplanned costs	The council does not delay to adequately resource the planning, development and commissioning of new services. Effective governance in place to take informed and timely decisions and corrective action. Strong council management team able to understand service options and take actions to bring about best outcomes for council.
Volatility of recycling markets, availability and prices	High	Moderate	Reduced income and value for money Loss of market require changes to materials accepted through recycling schemes Customer dissatisfaction and confusion Reputational damage Possible contractual disputes (e.g. if changes mean provider(s) cannot comply with conditions)	Recycling services designed to accept core materials as priority Quality of materials is prioritised to maximise market opportunities and value Flexibility to allow changes to accepted recyclable materials without incurring unreasonable costs. Decisions on any new materials to be accepted are based on a sustainable market being available and not on public/political demand.
Availability of HGV (all vehicles above 3.5t) drivers for larger fleet	Moderate	Moderate	A shortage of HGV drivers nationally could result in difficulties recruiting and retaining enough qualified staff to provide the service	Consideration of a mix of multi compartments where practical and smaller 3.5t vehicles may help reduce the requirement for HGV drivers. Support of local training programmes, internal training opportunities to encourage a greater number of qualified staff.
Health and Safety Implications of Service	Moderate	Moderate	Physical demands of service leads to poor health of waste collection and disposal operatives. Changes to services will place additional physical demands on crews particularly increased risk of repetitive strain injury from bending down to collect food waste containers and recycling boxes (where used). With a kerbside sort crews may also be required to handle materials, sorting them into different compartments on the vehicle. This will expose staff to injury from sharp materials.	Where practical we should consider use of wheeled bins for collecting both waste and recycling to minimise manual handling risks. Include manual handling training and physiotherapy support for operational staff to reduce sickness and long term ill-effects.

Table 12 Analysis of key risks and possible mitigation

Herefordshire Council

APPENDIX 2 SUMMARY TABLE OF RECOMMENDATIONS

No.	Recommendation	Reason for recommendation
1	The council adopts the three priorities of TREATING WASTE AS A RESOURCE, PRIORITISING PUBLIC ACCEPTANCE and MAXIMISING REUSE as corporate priorities for waste management.	Adopting these principles as part of our county plan will provide leadership and direction for future decisions. The principles highlight the need for a more efficient circular economy, using our natural resources wisely as well as council resources, whilst reflecting the need to ensure our service are accessible and user friendly. Measurement of our success in meeting these priorities will be through monitoring and reporting our recycling rate, diversion from landfill, participation rate (for recycling) and amount of waste diverted for re-use.
2	The council allocates resource to prevent waste from households, restricting residual capacity and investing in waste prevention campaigns and home & community composting initiatives.	Preventing waste will help save both residents and the council save money. Residents through food waste prevention initiatives that help people to buy only what they need and the council as it will not need to pay for the cost of collecting and treating the waste avoided. In recent years the council has been successful at reducing waste, particularly general residual household waste. This has resulted in a saving of over £500,000 per annum since 2011. In terms of resource a dedicated member of staff with a small budget to manage waste prevention initiatives and waste communications in support of the service is recommended. The council should set a target to reduce the amount of non-recyclable waste from 530 kg per house per annum (19/20) to 400 kg per house per annum by 2030
3	The council prioritises the quality of recyclable material to increase its value and marketability. Secondly the council continually reviews and invests in increasing the quantity of material sent for recycling.	 We must ensure that the recyclable materials we collect can be treated as a resource. We should design services that will encourage better quality materials to be collected we are more likely to find outlets for them to use as a resource to turn into new products. After quality we need to consider the best approach to maximise the quantity of materials collected for recycling. We can do this be ensuring our services are accessible and easy to use but also through investigating new opportunities and technologies that make the collection and recycling of materials possible. Our service needs to remain flexible enough to be able to accommodate these opportunities. The council should adopt, as a minimum, targets to allow us to achieve the Resource and Waste Strategy 2018 objective of 65% recycling and composting by 2035: To recycle or compost 60% of household waste by 2025 To recycle or compost 60% of both household and commercial waste by 2030 To recycle or compost 65% of both household and commercial waste by 2035
4	The council adopts a zero waste to landfill policy, sending only waste that cannot be recycled or recovered. This will minimise loss of resource and minimise harmful emissions, such as carbon and leachate.	The Resource and Waste Strategy 2018 sets an ambition to eliminate food waste to landfill by 2030. It also includes a longer term target of limiting municipal waste to landfill to a maximum of 10%. In 2019/20 we sent 20% of our waste to landfill. The Waste-TFG consider that with our shared Energy from Waste Facility we should be doing better to avoid landfill. In order to consider waste as a resource only waste for which there is no other alternative should be sent to landfill The council should adopt a target of no more than 1% of household waste to be sent to landfill from 2025.

5	The council ensures services are accessible and easy to use for all. Providing practical alternative solutions where beneficial so that all residents and business customers can reasonably access them and be encouraged to manage waste safely and in accordance with our service. The council allocates resource to provide effective communication initiatives with residents and businesses to promote proper use of the service and to help maximise waste reduction, reuse and recycling.	 adopted, but that their preferences will be taken into account, balanced with financial and environmental impacts. Through learning from our own experiences and those of other Local Authorities we can also consider what approaches may work best for Herefordshire residents and business customers. Although we may need to consider different approaches in different areas of the county (such as town centres & communal developments) we want the service to be as consistent as possible from the user's perspective. Participation rate will be measured and monitored for different housing types and demographics to inform where use of the service could be improved and the success of those improvements measured. After ensuring we have an accessible and user friendly service the Waste-TFG consider that effective communication is essential to help our residents and business customers use it in the right way. Effective communication will help reduce problems relating to the provision of the service and encourage better quality and quantity of recycling, reducing cost and increasing revenue. The Waste-WFG believe that there are many social and commercial opportunities to be explored with reuse. A modest resource could help extract valuable materials so that they can be repaired, repurposed, upcycled and reused. Any costs will be recovered from savings in waste disposal cost, generating income from the
7	opportunities through both the household collection service and the Household Recycling Centres. Existing opportunities to extract reusable materials are explores and implemented.	materials and added social value. In the short term the council develops a re-use facility to enable suitable items and materials to be diverted from waste (see case studies below). Such initiatives will very likely support the council's objectives and indicators being considered as part of its corporate social value framework. The council should adopt a target to increase the current levels of reuse of 20 tonnes per annum to 500 tonnes per annum by 2025
8	The council will research and seek to develop and continually improve services to minimise carbon emissions and other environmental impacts of the waste management service.	The best data available suggests that avoiding the production of goods and materials from raw materials is the best way to avoid carbon emissions. The Waste-TFG believe the best way we can support global and our own ambitions to reduce the impacts of carbon emission is to reduce waste and discourage the consumption of goods and materials and thus avoid the damaging need for production. We should also explore and seek to provide our waste management services in the most efficient ways possible that reduce our carbon emissions. This can include making sure our waste collection rounds are optimised to minimise fuel use, using alternative fuels for our waste fleets and investing in renewable power sources at waste treatment facilities. We will work collaboratively with those engaged in work to meet our target of NET zero emissions by 2030 to identify, measure and consider way to reduce the impact of waste management activities. This includes the Energy and Active travel Team, Climate and Ecological Emergency steering group, and Climate Change Task and Finish Group. The council should measure existing carbon emissions from both operational and embedded sources (e.g. from sale and transport of recyclables) of the service and adopt an achievable target to reduce them.

9	Ensure the service contributes meets or exceeds the objectives set out in the council's developing Corporate Social Value Framework.	The Waste-TFG have identified many opportunities for how the waste management service can contribute to providing social value through a range of initiatives to a wide range of people and communities. Recommendation 7 highlights the many opportunities provided through re-use initiatives, but there exists further opportunities across the service. To support both the social objectives and benefit the ongoing delivery of the service an apprenticeship or trainee scheme could help encourage people to choose a career in waste. Amongst other things this could help tackle a national shortage of HGV drivers. The council should provide an apprenticeship and/or training scheme within its waste management service to provide young people an opportunity and career route into the waste management service. Key service providers will be required to provide trainee/apprenticeship schemes to provide opportunities for people to learn skills to fill key job roles such as HGV drivers.
10	The council should provide the same opportunities for non-household waste as it does for household waste. The same materials will be collected for recycling and commercial recycling centres will be provided. The council will recover costs as described and permitted by relevant legislation.	The Waste-TFG believe the council should provide services that are accessible, user friendly and flexible to meet the varied needs of businesses and other non-household entities in Herefordshire. Providing cost effective solutions will help improve compliance, reducing waste crime and the cost of dealing with it. The council should adopt a target to provide at least one commercial recycling centre by 2025.
11	The council will ensure it provides value for money to the taxpayer by undertaking a detailed business case on preferred service options as part of any commissioning process encompassing the best approach to achieve cost effective services that provide value for money to the taxpayer	With a decision of a value in the region of £150m the Waste-TFG believe that a well thought through and considered approach is more likely to result in not only better quality, but also better value for money. We must ensure that our services reflect both best practice and best value through understanding and assessing our option, undertaking a business case and through comparison with services provided by other Local Authorities. The council should periodically benchmark their waste management service to compare costs and performance with other councils providing similar services as well as those we aspire to provide. This will indicate if service costs are reasonable or not.
12	The council will ensure flexibility during the design and provision of the service so that changes can be more easily made to accommodate requirements.	The Waste-TFG recognise that we are yet to receive specific details on the future policy. This presents a risk that the council could design a service which is not compliant with our statutory requirements. To mitigate this risk the council must be able to modify its approach during the design phase to ensure compliance with policy and legislative requirements. In designing our service we must also make sure we do not restrict flexibility. This can be achieved by ensuring a holistic approach to service design where waste treatment and disposal services flex to the needs of the waste collection service. This could include avoiding long contracts that restrict the council to any particular approach for an extended period of time. The Waste-TFG are also keen to explore introducing changes gradually over time to give residents and business customers time to adjust to new services. This may be also be beneficial to align service provision with promised government funding to support the delivery of the service.

13	Options 2 and 3 are progressed to public consultation with feedback and preferences used to inform the council's decision on its preferred approach. Progressing Option 1 is not recommended.	The Waste-TFG understand that no option is without merit or risk however both option 2 and 3 best fulfil the priorities, objectives and recommendations of this report. Option 2 as the best performing option and Option 3 as the governments preferred approach in the RWS 2018. The council should consult with residents, business users and key stakeholders to obtain their views on these two approach to providing the service. The consultation should highlight future requirements and the need to change and ask for views on how best those changes can be delivered.
14	In designing a new service the council should ensure it incorporates features that will enable it to meet the objectives and recommended detailed in this report	 Design of the service enables the collection of high quality materials for recycling to ensure they are useful, valuable and in use for as long as possible to help protect natural resources in accordance with circular economy values. The service is designed from the outset to be capable of meeting a 65% recycling and composting target for all the waste collection by the council. Reesidual (general waste) capacity should be restricted in order to encourage the use of recycling and food waste collection, for example by smaller bin size or reduced collection frequency. Reasonable and practical alternative collection options are provided to households where the nature of development makes it challenging to accommodate the standard collection service. For example providing different containers and or an increased frequency of collection. Flexibility of service should be built in where possible, for example: By ensuring waste treatment and disposal arrangements dovetail with those for waste collection, for instance by aligning contract periods. This will ensure that treatment and disposal arrangements do not constrain opportunities to make changes to waste collection services. By having more flexible shorter term contractual arrangements with a range of providers to more easily flex to changes in materials collected for recycling. A charge for garden waste collections should be made if permitted (to continue to encourage those residents able to do so, to compost at home). The same opportunities provided for householders for recycling will be offered to commercial (trade waste) customers at a charge Social value will be maximised through re-use initiatives, education and training. The service will incorporate effective communications and initiatives to support provision of the service and encourage positive public behaviours to be

15	The council commissions work to understand what changes to its disposal service will be required to best manage the materials arising from the waste collection service options.	 The council commissions a piece of work to understand what changes to its disposal service will be required to best manage the materials arising from the waste collection service options detailed in the analysis above. A better understanding of the changes required to existing waste treatment and disposal service will inform requirements to support the delivery of the waste collection options outlined in this report. As a priority the council should seek to understand what changes are required to: Waste Transfer Stations, to understand how best materials collected could be accepted and stored for onward transport to treatment facilities elsewhere, and what required changes to existing transfer stations would be required, and:- Waste Treatment Facilities, to understand current waste treatment methods and capacity, what waste treatment facilities are required, and if there are any opportunities for developing more effective and resource efficient solutions for dealing with the materials collected. A full analysis of potential markets for materials arising from the new service and opportunities for local processing to be commission alongside public consultation to inform decision on preferred approach.
16	An early study is undertaken to evaluate if any existing AD facilities could be utilised for the treatment of food waste in Herefordshire.	The Waste-TFG recognise that Anaerobic Digestion facilities are likely to be required to treat food waste collected in Herefordshire. Although there are a number of options such as developing our own facility, using existing out of county facilities, the option of converting an existing agricultural facility may be advantageous. A study engaging with existing operators would reveal if there is any appetite and possibility for this. The Waste –TFG believe this could also provide added incentives in discouraging the use of energy crops to as feedstock.
17	The council should seek to agree an approach with Worcestershire County Council on how their joint Energy from Waste (EFW) facility will be managed and operated to the mutual benefit of both council's on expiry or extension of existing arrangements	Even if the council were able to meet or exceed the governments expected target of 65% recycling by 2035 there will remain a need to treat residual waste arising from Herefordshire's waste management service. Energy from Waste (Incineration) remains the only reasonable alternative to landfill for residual waste treatment so sending waste to our own shared EFW is expected. However the Waste-TFG wish to see the plant optimised by generating heat as well as power and other options to maximise the efficiency of the facility explored and implemented where advantageous to the two councils both financially and environmentally (through reducing the impact of residual waste treatment on climate change). Any excess tonnage capacity created from increased recycling should be sold to generate commercial revenue for the two councils.
18	Waste Management Team is augmented with required staff and resource to plan, commission and implement new services and manage our new arrangements.	The Waste-TFG consider it is essential to replace our Waste Disposal Team Leader as soon as possible and to create 3 new posts. A Waste Strategy Officer to provide support to the current post in developing the contract(s) and researching collection and disposal options. A Waste Communications Officer to lead the process of public engagement. They will need to be supported by an Administration Officer. These new posts are required no later than 1st April 2021 and will need to be in place until at least 31st December 2025 to allow for bedding in of the redesigned waste collection services. The cost of these new posts is insignificant in terms of contract value and the financial and reputational impacts of getting this decision wrong. They will also be significantly less than the cost of bringing in consultants to bail us out at the 11th hour if we continue to rely on a single officer to deliver this. Further resource is likely to be required to appoint legal, financial and technical advisers as required, particularly in support during any procurement. Investing in building the capability in the team will however minimise the need for expensive consultants as well build a more capable team to manage and continue to develop the service.

	The council should maintain the Waste-TFG as a cross	A cross party member working group will help include political groups throughout the process of planning,
10	party member group to provide oversight and support to	commissioning and implementing new services. It can help provide support to officers in offering balanced views and guidance. This group should help to re-enforce the governance processes of the council to ensure
13	officers until implementation of new services in early	views and guidance. This group should help to re-enforce the governance processes of the council to ensure
	2024.	that decisions are made in the best interest of the council and its residents.



APPENDIX 3 WASTE COLLECTION OPTIONS ASSESSMENT (2019)

PROVIDED AS SEPARATE DOCUMENT