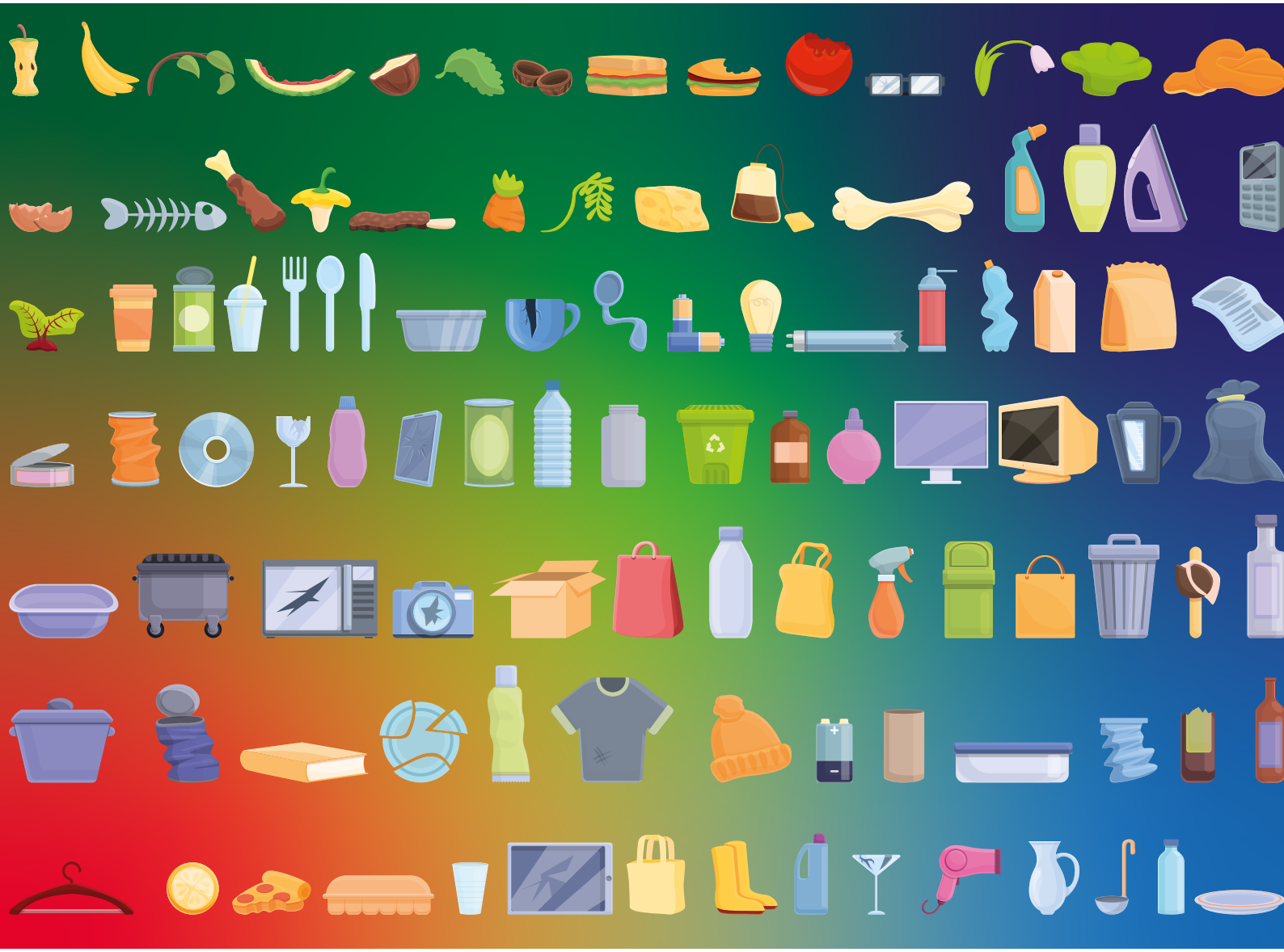
South Tyne and Wear
Waste Management Partnership

Joint Municipal Waste Management Strategy

2021-2025



Gateshead Council

South Tyneside Council

Sunderland City Council

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Foreword

Waste collection and disposal are two of the key services that our councils provide. Building on a history of collaboration within the waste sector, Gateshead, South Tyneside, and Sunderland City councils decided to work even closer together to tackle the growing environmental and financial issues that we were facing by continuing to landfill our waste. We created the South Tyne and Wear Waste Management Partnership (STWWMP) and in 2007 agreed a twenty-year Joint Municipal Waste Management Strategy (JMWMS) to support the further development and delivery of waste services across a total area of 34,300 hectares for a population of over 629,000 people.

There is no statutory requirement for us to produce a JMWMS…but we think its publication and our commitment to regularly monitoring and reviewing its delivery is 'best practice'. The JMWMS was first reviewed in 2012 and this document is the outcome of a review of progress against all aspects of waste collection and disposal services since 2013. It refreshes our aims and aspirations for the period 2021-2025.

Recently, around the world, we have all experienced unprecedented, difficult, and challenging times. This has impacted on every single aspect of our lives and also the services that local authorities have been able to deliver safely. But even before the coronavirus pandemic, the waste sector was already experiencing a prolonged period of uncertainty, which was impacting on our ability to undertake the scheduled review of the JMWMS. For example, the global waste sector has faced much stricter restrictions that challenged the quality of materials that could be imported as recycling in the Far East. As restrictions became more widespread, this even included outright bans on importing certain materials into popular Far East recycling outlets, which significantly impacted on the already-volatile recycling markets all around the globe, including in the UK.

Even now, the UK waste policy direction remains 'under development' despite the publication in late 2018 of the new, national, resources and waste strategy, *'Our Waste, Our Resources: A Strategy for England'*. The anticipated 2020 consultation exercise to clarify the implementation of the final proposals - and therefore the long-term future about how and what waste services local authorities will be able to provide – was delayed by the pandemic and, therefore, the future remains unclear. Furthermore, the implications on the waste sector of the UK leaving the EU are not yet fully understood, and the long-term impact of the coronavirus pandemic on all aspects of local authority services is not yet known. The unknown implications of such key issues have, somehow, still needed to be considered in carrying out this JMWMS refresh.

But, even within this ongoing uncertainty for the waste sector and the challenges that we all still face as we try to return our daily lives nearer to how they were before the pandemic, this JMWMS refresh will help to direct us through the interim period until things become clearer. We still want to do more to deliver the changes that we need to make as we continue to work towards our long-term ambitions. Our main aspiration is still to support people to reduce the amount of waste that we all produce, which will help us to protect our natural environment, sustain valuable resources for longer, and ensure waste materials can be managed properly at their end-of-life. In 2019, each of our partner authorities issued their own climate emergency declarations and STWWMP will be able to play a key role in supporting the move towards a carbon-free future, whether through the development of a more circular economy, or by considering the vehicles that we use to deliver our services, or by reviewing how our waste and recycling is reprocessed.

So we'll continue to find new ways to take our community engagement and education programme to local schools and community groups of all ages to raise awareness of the environmental impact of waste. We'll continue to encourage people to reduce 'unnecessary' waste by not always replacing items that could be serviced, and we'll ask our residents to think about re-using items whenever they can. We'll help our residents to understand what happens to their waste once it's been collected and help them to use our recycling services responsibly and as often as they can. For any waste that is left, we'll continue to generate low carbon energy at our dedicated energy-from-waste facility, where it will be incinerated as part of a process that generates electricity for use by the National Grid. By doing all of this, we'll be able to continue to divert our waste away from unsustainable, environmentally-unfriendly, waste disposal processes like landfill.

Councillor Linda Green

Chair, South Tyne and Wear Waste Management Partnership Joint Executive Committee

Introduction

Waste Framework Directive

Waste management in the UK originates from the EU Waste Framework Directive (WFD), which was revised in November 2008 (rWFD) and forms the basis of EU waste legislation and policy, setting the direction for all Member States. This was transposed into UK law through the Waste (England and Wales) Regulations 2011, (amended 2014).

For many years, the waste economy has been 'linear' - in the simplest terms: take, make, use, and dispose - where raw materials are used to make a product, and once the product has been used, whatever is left is simply thrown away. This approach is not sustainable. It produces far too much waste unnecessarily, which could be reduced if we make the products that we need more efficiently. If more materials were reused, the need for new, raw, virgin materials will be reduced, and damage to the natural and human environment will be avoided. A key element of the WFD and rWFD is the waste hierarchy, which introduces the concept of thinking about waste as a resource. The hierarchy manages the disposal of waste responsibly through preferential treatment routes, with the top priority being to prevent waste from occurring in the first place; followed by seeking to encourage the reuse of materials wherever possible; then promoting recycling of materials rather than disposal within the residual waste stream; then recovering energy from any genuine, unavoidable, residual waste; and, lastly, waste disposal (such as landfill) as a final resort. This 'circular approach' to the use of resources helps to 'design out' waste and keep materials in use at the highest point of value for as long as possible.

Therefore, where waste minimisation and reuse opportunities are no longer available, we must maximise the capture of any materials that can be recycled to ensure that they are not lost within the residual waste stream. Recyclable materials have a market value and the effective management of their disposal not only protects the environment but can also provide local authorities and their recycling contractors with a reliable and potentially a high-value income stream. Therefore, in such challenging financial times for the public sector, the potential to generate additional income can help to offset the costs associated with service delivery and, potentially, protect the delivery of other, vital, local authority services.

Any materials that are subsequently remaining should, therefore, represent the true residual waste stream. The STWWMP Residual Waste Treatment Contract (RWTC) has enabled the general household residual waste collected from across Gateshead, South Tyneside, and Sunderland to be managed through our own dedicated, state-of-the-art, energy-from-waste facility. This means that since April 2015, **no STWWMP RWTC waste has been disposed by landfill**.

Waste Sector Issues

In recent years, the UK waste sector has experienced a prolonged period of uncertainty, which this review of the JMWMS must take into account. For example, Materials Recovery Facility (MRF) operators separate different recyclable materials and sell them for onward reprocessing. The revenue generated through the sale of these recyclable materials is used by operators to offset the cost of processing/separating the recyclate they receive from local authorities. However, in 2017, China (for decades, the world's largest importer of recycling) introduced much stricter regulations and restrictions on contamination levels, which challenged the quality of the materials that they were importing as recycling. This was subsequently extended to complete bans on importing a wide range of 'recyclable' materials and other countries in the Far East began to follow suit by introducing similar restrictions, which further impacted significantly on the already volatile global recycling markets. Consequently,

this has resulted in a major shift around the world in how and where materials people dispose as recycling can now be reprocessed and, therefore, the levels of risks that MRF operators are prepared to carry in terms of recycling commodity prices. This has subsequent financial implications for the MRF contracts that local authorities are able to negotiate.

In recent years, the management of waste has received increased scrutiny and heightened public awareness and this is helping to drive legislative change. In June 2018, the European Commission published the 'Circular Economy Package' (CEP) revisions to the rWFD, which sets out requirements for Member States and includes revised overall recycling targets for municipal waste of:

- 55% by 2025
- 60% by 2030
- 65% by 2035

Achieving these targets will be challenging for many local authorities. The UK government has retained the principles of the EU Framework following 'Brexit', which means that across the UK, recycling rates will need to improve significantly in the years to come.

Furthermore, in late 2018, the UK government published the resources and waste strategy *'Our Waste, Our Resources: A Strategy for England*', which aims to help to preserve material resources by minimising waste and promoting resource efficiency and the circular economy. This new, national, strategy includes a number of proposals that, if implemented, will significantly impact on local authority waste management. Further consideration of the implications of the resources and waste strategy proposals can be found in *The National Picture* section (see page 13).

The impact of austerity over recent years and the ongoing financial pressures have brought an unprecedented landscape to public sector services. Such constraints have extensively impacted on waste services and will likely to continue to do so in the foreseeable future, especially as all aspects of the public sector and beyond attempt to recover from the significant impacts and consequences arising from the coronavirus pandemic. It is clear that the waste services provided by the partner authorities have changed significantly over recent years to meet these challenges, and this must also be considered in reviewing the JMWMS. However, the uncertainty around the further detail of how or which of the proposals highlighted within the national resources and waste strategy will be progressed, funded, or implemented is a key challenge that this JMWMS review must also consider.

Therefore, the JMWMS 2021-2025 needs to ensure that the partner authorities are provided with high-level guidance to support key decisions on future service delivery issues and models, which will ensure that short to medium term budget planning cycles are effectively informed in an appropriate timescale. The refreshed strategy must be:

- Be easy to understand, follow, and enable progress to be monitored.
- Consider the context of partner authority waste services within the resources that are available to them.
- Be clear about the key priorities and not commit partner authorities to deliver actions with unknown or unclear external outcomes and/or influences.
- Be proportionate and realistic about issues that together, as a partnership, the partner authorities are able to directly influence at a number of levels, e.g. nationally; within their own operational activities; and across other groups and services within their own councils.

Waste Services Across STWWMP

The municipal waste stream contains a range of materials - from common household dry recyclable materials like paper, cardboard, glass, plastic, and metals, to loose garden waste like grass cuttings and hedge trimmings, as well as general household waste (also known as residual waste), such as kitchen waste and non-recyclable materials.

Since the JMWMS was last reviewed in 2012, the context of the delivery of waste services across Gateshead, South Tyneside, and Sunderland has changed significantly, yet STWWMP partner authorities have continued to deliver the aims and aspirations of the JMWMS. The development of consistent approaches to waste management services across all STWWMP partner authorities has enabled the successful implementation of a number of JMWMS objectives (see Successes, Achievements, and Challenges section, page 11).

As Waste Collection Authorities (WCAs), Gateshead, South Tyneside, and Sunderland City councils are responsible for the collection of municipal waste. All three now deliver alternate, fortnightly, kerbside collections for household wastes, with residual collections being delivered one week, and dry mixed recycling the following. At the current time, household kerbside collection services consist of:

- 240-litre wheeled bin for residual waste.
- 240-litre wheeled bin for comingled recyclable materials with 40-litre inner caddy for the separate collection of paper-based materials.
- A range of communal recycling facilities for, e.g., high-rise flats etc., including 240-, 660-, and 1100-litre wheeled bins, as appropriate.

The partner authorities also operate a number of optional, chargeable kerbside services for residents. This includes:

- 240-litre wheeled bin for household garden waste.
- Bulky waste collection services for waste that is too big for the bin.
- Replacements bins for those lost or damaged by householders.
- Additional bins for larger families/ bin exchanges.
- House clearance services.

There are also four Household Waste and Recycling Centres (HWRCs) across STWWMP which enable residents to dispose small quantities of additional household waste free-of-charge.

The partner authorities also offer commercial/trade waste collection services to support businesses to meet their legal waste disposal obligations, including the provision of appropriate waste transfer documentation etc. The services also advise businesses about how to reduce the amount of waste they produce and, therefore, what they will need to dispose.

A dedicated joint partnership team based within STWWMP Lead Authority (Gateshead Council) now provides the Waste Disposal Authority (WDA) functions on behalf of the partner authorities. The team facilitates the disposal of the municipal waste collected by the WCAs through the provision of contract management functions with a range of external service providers. The disposal contracts that are in place as of 1 January 2021 are shown on page 7.

Waste disposal contracts in place across STWWMP as of 1 January 2021.

Contract	Contractor	Start date	End date
Residual waste treatment	SUEZ (through South Tyne and Wear Energy Recovery Limited)	22 April 2014	31 March 2039
Dry mixed recyclables			
Gateshead	Palm Recycling Ltd	1 April 2014	31 March 2021*
South Tyneside	Palm Recycling Ltd	1 April 2014	31 March 2021*
Sunderland	J&B Recycling Ltd	1 April 2015	31 March 2021*
Household waste and recycling centres			
Gateshead	SUEZ	1 April 2020	31 March 2023
South Tyneside	SUEZ	1 April 2020	31 March 2023
Sunderland	SUEZ	1 April 2020	30 September 2021
Garden waste			
Gateshead	Greentech Recycling	1 April 2016	1 March 2022*
South Tyneside	SUEZ	1 April 2016	31 March 2022*
Sunderland	Remondis JBT	1 April 2016	31 March 2022*
Waste electrical and electronic equipment	Valpak	1 January 2020	1 January 2023
Untreatable residues	SUEZ	1 April 2014	31 March 2023*

** Includes contract extension option previously agreed*

A statistical evaluation of the 2019/20 waste levels produced across the STWMMP is provided at Appendix 1 (see pages 25-29).

Successes, Achievements and Challenges

Since the previous review of the JMWMS was published, STWMMP has ensured that many of the actions and activities that were agreed in 2012 have been taken forward and embedded into the day-to-day waste-related functions of the partner authorities or within the role and functions of the joint partnership team. Some of the key successes and achievements in recent years include:

Residual Waste Treatment Contract

In 2014, STWWMP delivered a major milestone which has significantly changed how the majority of waste disposed by Gateshead, South Tyneside, and Sunderland residents is managed.

Using PFI (Private Finance Initiative) Credits, a global procurement exercise had previously appointed SUEZ (through the 'special purpose vehicle' South Tyne and Wear Energy Recovery Limited) as contractor for the treatment of STWWMP general household waste through the Residual Waste Treatment Contract (RWTC). Since the JMWMS was last reviewed, the new waste processing and treatment infrastructure has been completed and the twenty-five year RWTC is now fully operational.

This process enabled three larger, modern, fit-for-purpose waste transfer stations (one in each partner authority area) to open to facilitate the transfer of household waste to a dedicated energy-from-waste facility (EfW) that has been constructed for STWWMP on Teesside. The RWTC formally commenced service on 22 April 2014.

Prior to the last JMWMS review, in 2012 in Gateshead, 54.33% of municipal solid waste collected was sent to landfill; 61.77% in South Tyneside; and 65.51% in Sunderland. The introduction of the RWTC now enables all household general waste collected by the partner authorities to be managed through the EfW. To date, the facility continues to exceed contractual targets for both material 'recovery' (95.5%) and recycling (2.1%) and is continuing to deliver another significant achievement by diverting RWTC waste away from landfill - no STWWMP RWTC waste has been disposed by landfill since April 2015.

Improved Recycling Services

Since the 2012 JMWMS, STWWMP has successfully extended the range of materials that residents can recycle in their blue bins as part of the kerbside recycling collection service. Complementary kerbside recycling services have been developed across all three partner authorities, including the introduction of additional materials, such as drinks cartons and plastic pots tubs and trays. Communal recycling facilities for high-rise flats etc., have also been extended and now include the same range of materials as the blue bin household kerbside collection service.

The delivery of the management of all Household Waste and Recycling Centre (HWRC) contracts are now managed by the joint partnership team. Across STWWMP, the contracts are now incentive-based, where the contractor is rewarded for exceeding pre-agreed targets for recycling the materials that are disposed at HWRCs by residents. This has enabled new procedures to be established and additional recycling outlets to be secured for traditionally difficult-to-recycle materials, such as mattresses.

Community Education and Engagement

Alongside the service commencement of the RWTC, a dedicated community education and engagement programme was also introduced, delivered on our behalf by third sector environmental regeneration charity, Groundwork North East & Cumbria from our brand-new visitor and education centre at Campground. Although significantly impacted during recent months by the coronavirus pandemic, the programme is now well-established within communities across the STWWMP area and has engaged with over 32,000 children and young people, local residents, and a wide range of other community groups of all ages since its introduction in 2014. The programme aims to encourage local residents to become more responsible recyclers through the delivery of waste hierarchy-related activities with schools, colleges and universities, and different community groups across STWWMP. It utilises not only the visitor and education centre but also outreach activities in local schools and community settings themselves. Programme activities include waste awareness workshops and assemblies, specific waste minimisation projects and activities, reuse and upcycling craft activities, and site visits to the EfW itself.

The programme was further enhanced in 2017 with the development of an outdoor classroom at the visitor and education centre. This now enables a range of environmental activities to also be delivered including pond dipping, vegetable planting, and mini wormery making. The classroom also includes a greenhouse constructed from plastic bottles, some of which were collected from the Great North Run.

Joint Working

As highlighted earlier, the joint partnership team is now providing the WDA functions on behalf of the partner authorities. This includes day-to-day contract management functions for the range of waste treatment contracts that are in place with external service providers, including the RWTC, household kerbside recycling contracts - such as dry mixed recycling and garden waste - and other ancillary waste contracts such as HWRC management and WEEE producer compliance scheme management. Working together in the delivery of joint contract management arrangements has also enabled a number of other benefits to be realised. For example, by pooling the knowledge and experiences of each partner authority, best practice has been identified and adopted across STWWMP to harmonise back office functions by removing unnecessary duplication. This has ensured improved data robustness and consistency, therefore improving how data can be analysed and enable more effective benchmarking opportunities across STWWMP to be undertaken.

Joint working is now embedded into ancillary waste treatment contract procurement processes through single, joint, exercises that are now undertaken across STWWMP on behalf of all of the partner authorities. When compared to the delivery of separate procurement exercises, working together in this way has clearly brought tangible financial savings to each partner authority. Where required, the subsequent contract management arrangements are still able to afford partner authorities the flexibility to let individual contracts to different suppliers to ensure that their specific needs are met and that contractual arrangements are fit-for-purpose. Contract management arrangements are then delivered by the joint partnership team.

In 2016, a joint communications group was established to develop a cross-partnership communications plan to support the development of timely and consistent waste-related communication activities and materials across STWWMP. The plan targets all communities across Gateshead, South Tyneside, and Sunderland by identifying different messages for different groups of residents (e.g. general public, existing recyclers, new recyclers etc.), and is aimed at increasing recycling rates by promoting the waste hierarchy's 'reduce, reuse, recycle' message utilising clear, easy-to-understand, information. A range of communication techniques are used to distribute advice and guidance, including social media posts, editorials press releases, and regular website updates. A dedicated South Tyne and Wear Waste Management Partnership YouTube channel has also been created, which acts as a

central repository for a series of 'what happens to your waste' videos that have been developed by STWWMP and explain to residents how their waste is managed after it has been collected from the kerbside. A complementary series of 'how to recycle' videos have also been produced in-house, which provide practical advice on household recycling generally, as well as targeted information about recycling at specific holiday periods, such as Christmas and Easter.

STWWMP has also delivered successful submissions to external funding sources for the delivery of joint, targeted, waste-related projects and activities. In recent years, this partnership approach has led to funding being successfully accessed that may not have been available to the three authorities individually. For example:

- Funding from the Waste and Resources Action Programme (WRAP) to deliver a communications campaign across the STWWMP area targeting recyclable materials that residents were disposing within the residual waste stream.
- Funding from the WEEE Improvement Fund Distributer Takeback Scheme to develop and deliver projects that target the minimisation of WEEE waste and encourage residents to consider re-use and recycling options before replacing serviceable electrical and electronic items.
- WRAP funding to provide consultancy support for the development of the future STWWMP MRF contract specification and an options appraisal of the different kerbside collection models available to the partner authorities.

At an operational level, STWWMP has enhanced the mutual support arrangements to ensure service continuity across all partner authorities during any unforeseen circumstances. This not only includes sharing resources such as 'spare' vehicles, but also includes management support and staff expertise, staff training, and 'toolbox talks'. Furthermore, these arrangements also enable service issues to be considered against the experiences of an individual authority's actions, with all partners learning from the outcomes to develop consistent procedures and processes that meet common goals. This includes consistent approaches to various operational practices, including bin tagging for contaminated kerbside bins, the development of collection vehicle over-loading reports, and ensuring site user authorisations and inductions are up to date.

JMWMS Challenges

Since the publication of the 2012 JMWMS review, the impact of the programme of austerity on local authority and the financial pressures that the partner authorities have faced has meant that several of the previously-agreed actions were subsequently considered as 'too aspirational' for the current financial landscape and service delivery challenges that STWWMP waste services have faced. For example, several actions were linked to the delivery of voluntary commitments or identified legislation/recommendations from national projects and issues that had not yet been published, and, ultimately, the final outcomes or implications were not as had been previously anticipated.

Other actions that considered potentially significant changes to the delivery of waste services - such as the introduction of separate food waste collection services - have been examined and discussed on several occasions in recent years. This included comparing the environmental impact of treating food waste by anaerobic digestion to that of energy-from-waste and developing cost estimates associated with facilitating the implementation of a separate kerbside food waste collection service for households. STWWMP subsequently concluded that, at the current time, in comparison to the existing kerbside collection services available to residents, it was not yet financially viable to introduce separate food waste collection services due to the considerable capital and revenue costs involved with its implementation and operation. However, one of the key recommendations identified in the recent national Resources and Waste Strategy (RaWS) proposes that, by 2023, all households in England should receive a separate weekly food waste collection service. In doing so, the RaWS also states that the net cost of its proposals will be met by government where 'additional burdens' are placed on local authorities. Therefore, STWWMP

eagerly awaits further clarification arising from the next stages of the RaWS consultation exercises and the preparation of legislation that will enable proposals such as the weekly separate collection of food waste to be appropriately funded and implemented by the partner authorities.

STWWMP aims to manage all waste as appropriately as possible within the waste hierarchy and, where appropriate, improve all aspects of recycling performance to successfully deliver relevant waste-related targets - whether at a local, national, or European level. However, both the 2015 (45%) and 2020 (50%) European recycling targets have not been achieved. The latest STWWMP recycling performance is provided at Appendix 1 (see pages 25-29). At a national-level, recycling performance has stagnated in recent years and although there has been an overall reduction in recycling levels across the STWWMP authorities since the last JMWMS review, this, in part, can also be attributed to a number of external factors, such as:

- Changes in the composition of recycling and increased levels of residual waste;
- The development of lighter-weight recyclable materials and changes in the materials that manufacturers choose to use, e.g. glass to plastic bottles, steel to aluminium cans etc.;
- Increased electronic communications which have resulted in a reduction in junk mail levels and traditional newspaper readership, meaning that less paper materials are now being recycled; and
- The introduction of chargeable schemes for discretionary recycling services, such as garden waste kerbside collections.

However, as highlighted earlier, STWWMP remains committed to delivering environmental education to ensure that, wherever possible, waste is managed appropriately within the waste hierarchy and recycling performance is maximised.

Across STWWMP, the majority of household recycling is collected through the kerbside 'blue bin' collection service. However, within this service, the partner authorities have not only focused on promoting recycling participation, but also to support residents in improving the quality of the materials that they present for recycling. Wide-ranging communication activities have been developed and delivered to raise the profile of recycling with residents and reduce 'contamination' levels or the presentation of non-target materials. This includes editorials in council publications, recycling advice leaflets and stickers, and social media messaging.

A series of toolbox talks and training sessions for collection crews have also been developed to increase their vigilance and ensure that contaminated bins are 'red tagged' to inform householders why they have not been emptied – and that they will not be emptied again until the contaminated material has been removed. Furthermore, at the MRFs, the contractors have considered how to improve their processes to enable more recyclable materials to be captured. Additional council resources, working alongside contractor staff at the delivery points, have also been introduced so that, where possible, non-target materials are removed before transportation to the MRF. Grading sheets have been introduced to help to quantify STWWMP loads and agree those that should be rejected, which are also used to provide base data to inform further contamination analysis and help to identify the location of where such loads were collected.

Even within the RWTC, STWWMP has encouraged the contractor to implement additional opportunities to remove as much recyclable materials as is practicably possible at the waste transfer stations, prior to the transportation of materials to the EfW. However, within the RWTC, it should be noted that despite the significant success in diverting STWWMP waste away from landfill, materials that have undergone recovery operations such as energy-from-waste cannot be considered as recycling (excluding some metals) - even though the EfW incinerator bottom ash (IBA) that is produced by the process is used again in the construction industry as a direct replacement for quarried stone within road aggregates. Consequently, the STWWMP Joint Executive Committee has written to Defra in support of Project Integra (the Hampshire waste partnership), which is lobbying for the reclassification of IBA as a recyclable material.

The Next Steps

In carrying out this review of the JMWMS, all STWWMP partner authorities anticipate that there will be more challenges that will need to be overcome in delivering its objectives. A flexible approach to service delivery will be essential, so that key issues can be addressed and the most appropriate application of the waste hierarchy implemented.

However, the delivery of the JMWMS should be considered in the broadest terms possible, so that the conditions are created for enhanced, sustainable, levels of reuse and recycling across the partnership area by everyone. This may include identifying opportunities for the partner authorities to facilitate, wherever possible, additional support to local businesses and other private sector organisations to meet their environmental obligations in the sustainable disposal of their waste.

The National Picture

Environment Plan

Launched in January 2018, the '25-Year Environment Plan' sets out a wide range of goals and targets that aim to improve the environment 'within a generation'. It details how government will work with communities and businesses to target environmental issues such as cleaner air through improved air quality and reduced air pollution; enabling plants and wildlife to thrive; reducing the risks of natural environmental hazards, such as flooding, drought, and coastal erosion; managing exposure to chemicals; and enhancing biosecurity.

It also includes plans to minimise waste, reuse materials wherever possible, and manage materials appropriately at their end-of-life to reduce their impact on the environment. Commitments include:

- Working towards zero avoidable waste by 2050;
- Working towards the elimination of all avoidable plastic waste by the end of 2042;
- Meeting all existing waste targets (including those on landfill diversion, reuse, and recycling) and developing ambitious new future targets and milestones;
- Seeking to eliminate waste crime and illegal waste sites over the lifetime of the Plan;
- Delivering a substantial reduction in litter and littering behaviour; and
- Significantly reducing, and where possible preventing, all kinds of marine plastic pollution – in particular material that came originally from land.

Resources and Waste Strategy

Alongside the Clean Growth Strategy, the Industrial Strategy, and the Litter Strategy, the other key delivery mechanisms for the Environment Plan is the Resources and Waste Strategy (RaWS). Released in December 2018, officially titled 'Our Waste, Our Resources: A Strategy for England', this is the first significant waste-related statement from government since the 2011 Waste Review and the subsequent Waste Prevention Programme for England in 2013.

It contains proposals that clarify the government's long-term waste policy framework and aims to deliver actions that encourage England to recognise and maximise the value of resource usage by minimising waste and its impact on the environment.

Subsequently, the Department of Environment, Food and Rural Affairs (Defra) issued a series of consultation exercises in February 2019 which considered some of the key areas identified within the RaWS. Although separate consultation exercises were issued, many of the RaWS proposals are inter-linked and potentially impact on each other. The consultation exercises considered:

Introducing consistent household and business recycling collections in England

- Proposals targeting the promotion of householder and business participation in recycling, including key issues such as:
  - Ensuring that a core set of dry recyclable materials is collected from all households and businesses;
  - Ensuring that every household in England receives a weekly separate food waste collection by 2023;
  - Introducing free garden waste collections for all households with gardens;

- Developing statutory guidance on refuse and recycling service standards; and
- Increasing recycling for businesses that produce municipal waste, including the separate collection of food waste.

Introducing a Deposit Return Scheme (DRS) in England, Wales, and Northern Ireland

- Proposals to consider the appropriate principles behind introduction of DRS, as government seek to increase recycling rates and reduce littering, including:
  - The materials and drinks that should be in-scope of a DRS;
  - The most appropriate DRS model ('all-in' or 'on-the-go'); and
  - The design and management of a DRS, including the location of return points.

Reforming the UK packaging producer responsibility system (also known as Extended Producer Responsibility or EPR)

- Proposals that aim to ensure that when products are made, they are designed in a way that uses less material and achieves greater circularity when they are disposed at their end-of-life, including:
  - Invoking the 'polluter pays' principle by extending producer responsibility requirements for packaging disposal;
  - Supporting improved collections/ infrastructure, including payments to local authorities for the management of waste collected; and
  - Mandatory obligation on producers to label packaging as recyclable/not recyclable.

The initial consultation period ended in May 2019 and STWWMP submitted a joint response to each consultation exercise on behalf of the three partner authorities.

However, it is possible that not all of the proposals identified within the RaWS will be implemented.

Feedback published by Defra in July 2019 on the results of the above consultation exercises indicated strong and often contradictory opinions from different respondents to different proposals. Further consultation exercises are required to further clarify which proposals will be taken forward and legislated, which are expected to include how they would be implemented and funded. The original timeframe for the further development of the proposals was anticipated to be:

- **2020:** Second consultation period.
- **2021:** Legislation prepared.
- **2023:** Implementation of final proposals.

Unfortunately, the coronavirus public health emergency delayed the second round of RaWS consultations, which (at the time of writing) are now expected in spring 2021. It is anticipated that this will provide more detail on the specifics of these reforms, including which proposals will be implemented.

Therefore, at the current time, a number of key questions regarding the implementation of RaWS proposals still remain unanswered. However, as the consultation programme progresses, STWWMP will continue to work closely with the partner authorities and directly engage with government to ensure that STWWMP is best prepared for the impact of significant legislative and funding changes as recycling services and producer responsibility requirements are overhauled in the years to come.

However, the RaWS also states that all the proposals that will be legislated will be assessed for any new 'burdens' that would be placed on local authorities, who will be subsequently funded in meeting the 'net costs' of their delivery. Therefore, STWWMP eagerly awaits further clarification arising from the next stages of the RaWS consultation exercises and the preparation of legislation that will enable the implementation of proposals to be appropriately funded by central government and introduced into service delivery by the partner authorities.

Environment Bill

The Environment Bill supports the delivery of the Environment Plan and aims to ensure that England maintains and improves its environmental protections following the UK leaving the EU.

It was first introduced to Parliament in October 2019 and passed its second reading unopposed by MPs and progressed to the Committee Stage for further scrutiny and the next stages of the Parliamentary process before becoming law.

Initially, the Public Bill Committee was due to 'scrutinise the bill line by line' and table amendments with the aim of reporting back to Parliament on 1 December 2019, but this process was paused following the dissolution of Parliament for the General Election that was held on 12 December 2019. The Bill was subsequently reintroduced at the end of January 2020 but, once again, its progress was paused on 19 March due to the COVID-19 coronavirus pandemic.

The Committee's discussions were not able to recommence until early November 2020 and following the completion of Committee Stage, the first day of the Report Stage was held in late January 2021. Once the Report Stage is completed, this will be followed by the Third Reading, before being passed to the House of Lords for further debate and scrutiny. However, government subsequently announced that the Bill will be carried over to the "next parliamentary session" and that its Royal can now be expected in autumn 2021.

The Bill provides the legal framework to deliver many of the waste and resource efficiency proposals identified in the RaWS, should government choose to do so. The introduction of new powers and amendments to existing legislation will have a number of implications for the resources and waste sector, especially local authority waste services.

STWWMP 'Green Agenda' – Environmental Commitments

The '*Special Report on Global Warming of 1.5°C*', published by the Intergovernmental Panel on Climate Change in 2018, described the enormous harm that a 2°C average rise in global temperatures is likely to cause when compared to a rise of 1.5°C. It also suggested that limiting Global Warming to the lower 1.5°C level may still be possible if ambitious action from national and sub-national authorities, civil society, and the private sector is undertaken.

Therefore, in May 2019, the UK government declared a climate emergency, which was subsequently followed by legislation and net-zero emissions targets for the whole of the UK by 2050. However, at the current rate of action, it has been predicted that the UK will miss these targets and the role of local authorities is now considered more crucial than ever.

The STWWMP partner authorities recognise the importance of our natural environment and agree that all levels of government (national, regional, and local) have a duty to act proactively to reduce the environmental impact of our operations to deliver urgent action to address this climate crisis. This is the biggest threat to our well-being and economic prosperity. All three partner authorities have now issued their own climate emergency declarations. These set their aspirations to lead by example by supporting local residents and businesses to do the same to deliver environmental improvements and establish themselves as champions for a carbon neutral future by balancing carbon emissions with carbon removal or even, where feasible, eliminating carbon emissions altogether. Where possible, they aim to achieve this ahead of any national targets that have been set. In doing so, this will create 'greener and cleaner' communities across Gateshead, South Tyneside, and Sunderland.

The climate emergency declarations issued by each partner authority commit them to tackle challenges corporately, such as:

- Identifying urgent actions that highlight the importance of taking the climate issue seriously.
- Reducing the emissions associated with their activities to net zero to ensure all our activities are, where possible, carbon neutral by 2030.
- Ensuring that all strategic decisions, policies and strategies, budgets, and approaches to planning decisions are in line with the shift towards the ambitious zero carbon emissions targets.
- Leading the way by being open and responsive in reacting to the climate crisis by guaranteeing that political and chief officers ensure that the carbon emission reduction aspirations are embedded in all areas of service delivery.
- Utilising advocacy roles to influence and support work with external partners to promote carbon reduction actions to raise awareness of the impacts of climate change. This includes inspiring all relevant agencies, businesses, and communities to help deliver this goal through all relevant strategies, plans and shared resources by developing a series of meetings, events, and workshops, such as 'Climate Emergency' summits.
- Working with external partners to ensure that steps are taken to proactively include young people in the process, ensuring that they have a voice in shaping the future.
- Lobbying the UK Government to provide the necessary legislation to provide the powers, polices, resources and funding support to deliver climate change goals.

- Following consultation with key stakeholders (including the voluntary and community sector), produce comprehensive Climate Change Strategies that will set clear unambiguous targets for carbon reduction.

STWWMP fully supports these aspirations and acknowledges that everyone must do what they can together to, wherever possible, stop the climate emergency from not only deteriorating further, but also ensure that carbon emissions can be reduced to improve our environment. In achieving these aspirations and the subsequent local benefits to health and well-being, one of the key issues to address will be to ensure that the changes that are required are fully understood and can be clearly communicated wherever necessary, so appropriate and proportionate actions can be developed and delivered - both now and for future generations.

The origins of managing waste lie in the protection of public health. In more recent times environmental protection and resource conservation have become increasingly important because the disposal of waste can have a huge environmental impact and cause serious problems. When waste is disposed in landfill sites some of it will eventually decompose, but during this process, the site may become smelly and methane gas, which is both explosive and a powerful greenhouse gas, could be generated. Therefore, poorly managed landfill sites can affect human health, primarily by air pollutants released in the atmosphere, but also if the leachate produced as waste decomposes causes pollution through the contamination of agricultural soils and freshwater sources. Such environmental issues were one of the key reasons why STWWMP decided to ensure that residents' household residual waste should be diverted away from disposal by landfill. Since April 2015, no STWWMP residual waste treatment contract waste has been disposed as landfill.

Although energy-from-waste and maximising recycling participation have been the main drivers of change so far, they have their own carbon footprint that should be considered and, where possible, reduced. Across the waste sector, efforts to reduce carbon emissions from energy-from-waste to date have largely focussed on increasing energy production and operational efficiency. However, new techniques and technologies are now emerging, including carbon capture and storage (CCS) which presents an opportunity to significantly reduce carbon emissions from energy-from-waste plants. In recent months, this has enabled STWWMP to support the RWTC contractor, SUEZ, to investigate the development of a potential CCS solution which would - if external funding is successfully secured - neutralise carbon through liquification for return to gas reservoirs in the sea via underground pipelines. This would remove the CO2 from the power plant flue gas streams before it is emitted into the atmosphere and significantly reduce the facility's carbon footprint.

However, it is clear that throwing things away wastes natural resources and the over-consumption of resources is creating a global crisis in unnecessary waste disposal. Therefore, STWWMP seeks to manage all waste appropriately within the waste hierarchy. In the first instance, the partner authorities will lead by example, seeking ways to reduce the waste generated through their own activities, but also encourage households and businesses across Gateshead, South Tyneside, and Sunderland to minimise the amount of waste that is being generated across the partnership area.

Encouraging households and businesses to think about the waste that they produce will likely reduce the amount of waste that they create and avoid unnecessary waste. This will not only reduce the environmental impact of waste by managing any waste that needs to be disposed higher up the waste hierarchy, but also support the partner authorities financially by utilising cheaper waste treatment options, such as recycling, or even by avoiding waste disposal costs completely - which could help to release resources elsewhere for the delivery of other vital local authority services.

In recent years, by working together, the partner authority waste services have enabled their residents to recycle more of their waste more easily, enabling our waste to continue to be successfully diverted away from landfill sites. The introduction of the alternate weekly collection model has also enabled the vehicle fleet to be reduced, which has improved carbon emissions across STWWMP.

Further improving the environmental impact of the waste vehicle fleets across STWWMP is an important and significant issue to address. There is a clear potential for alternative vehicle fuels to be used within the waste industry, which would reduce emissions associated with transport. The partner authority waste services have already begun to deploy new, environmentally-friendly, 'cleaner' technologies to 'green' the fleet by introducing electric vehicles in some service areas.

STWWMP is keen to consider new ways to further support the partner authorities' corporate plans to become carbon neutral. The potential acceleration of the transition from an internal combustion fleet to low and zero emission vehicles could realise tangible financial savings through lower fuel costs. Furthermore, most importantly, environmental benefits will be supported via noise impact reductions and reduced carbon emissions and associated pollutants, therefore, providing cleaner air for everyone across Gateshead, South Tyneside, and Sunderland.

In terms of waste disposal services, further clarification from government regarding the implementation of proposals arising from the RaWS could result in the use of alternative waste treatment technologies for the waste produced by residents and businesses across STWWMP. For example, the likely introduction of a mandatory separate weekly collection for food waste would likely see such waste treated by anaerobic digestion (AD). This process produces renewable energy by breaking down organic material by micro-organisms in an oxygen-free sealed tank called an anaerobic digester. Currently, STWWMP food waste is used for energy recovery through the energy-from-waste process.

STWWMP Joint Municipal Waste Management Strategy 2021-2025

As highlighted above, service commencement of the 25-year STWWMP residual waste treatment contract (RWTC) began in April 2014. After further consideration of the ongoing uncertainty within the waste sector and the unknown implications of several external factors, such as the implementation of the RaWS proposals, at the current time it is not proposed to realign the longer-term JMWMS timeline to complement the RWTC timeline.

The existing JMWMS objectives and policies are still considered as relevant to the STWWMP aims and aspirations. However, to address some previous areas of duplication it is proposed to merge them into a new set of six simplified objectives for the period 2021-2025:

Objective 1: The South Tyne and Wear Waste Management Partnership will continue to follow the waste hierarchy to prioritise the management of waste by providing opportunities to:

- Reduce the amount of waste that is generated;
- Reuse materials wherever possible;
- Recycle and/or compost waste responsibly, maximising participation and minimising contamination levels; and
- Recover energy from any waste that remains.

Objective 2: The South Tyne and Wear Waste Management Partnership will continue to provide environmentally sustainable waste services and facilities that offer value-for-money, which are accessible to all who live, work, and/or visit Gateshead, South Tyneside, and Sunderland. This will ensure that waste can be managed in a way that avoids environmental damage or danger to human health and considers the potential needs of future generations.

Objective 3: The South Tyne and Wear Waste Management Partnership will continue to develop and deliver a wide-ranging community education and engagement programme across all ages. This will raise awareness of waste management services and encourage behavioural change through the promotion of waste reduction, reuse, and recycling activities.

Objective 4: The South Tyne and Wear Waste Management Partnership will continue to work with government, other local authorities, trade associations, and industry organisations to support the development of waste strategy and policy.

Objective 5: The South Tyne and Wear Waste Management Partnership will continue to identify opportunities to access external funding to investigate and deliver service changes and share the costs and benefits in the delivery of the Joint Municipal Waste Management Strategy.

Objective 6: The South Tyne and Wear Waste Management Partnership will continue to review the Joint Municipal Waste Management Strategy objectives as required and undertake ongoing monitoring of progress in the delivery of their aims and aspirations.

It is important to acknowledge that in reviewing the JMWMS and developing future service delivery plans, the partner authorities do not speculate on the delivery of specific actions or activities where the full implications are not yet known. Therefore, to enable the partner authorities to focus on the strategic aims and aspirations of STWWMP, it is not proposed to continue to identify specific actions within the JMWMS 2021-2025. This will support partner authority waste services to focus on delivering the key service issues and challenges within the resources that are currently available to them.

Furthermore, this approach does not 'second guess' the outcome of external actions or issues that may result in the partner authorities adopting unsuitable actions or commitments.

As an alternative, it is proposed that specific actions are replaced by five broad, over-arching, themes which encompass the aspirations of the refreshed objectives. This will allow flexibility in delivering day-to-day services and activities, yet still provide opportunities to be considered to further joint partnership working or consider new ways of working through the development of trial activities or dedicated 'projects' targeting, for example, priority issues.

The JMWMS 2021-2025 themes are:

Community education, engagement, and communications

- To ensure more materials are moved further up the waste hierarchy to improve recycling performance/ material quality and ensure that more people have a better understanding of what happens to their waste and the services available to them.

Joint working opportunities

- To continue to deliver joint procurement exercises and day-to-day management of waste treatment contracts/ waste disposal authority functions;
- To work closely with contractors to improve services and identify further efficiencies;
- To investigate opportunities to further develop links with the Third Sector; and
- To consider the further development of joint operational opportunities, where appropriate.

Income generation and external funding

- To maximise opportunities for the partner authorities to further enhance trade waste services, such as commercial waste recycling services;
- To continue to support economic growth and local prosperity through the promotion of job opportunities within the waste sector; and
- To source additional external funding opportunities as appropriate to develop and deliver dedicated waste-related projects and/or trial new, alternative, service delivery models etc.

Environmental benefits

- To support the delivery of climate change commitments by enabling household waste to be managed in the most sustainable methods available including, where feasible, green treatment services;
- To eliminate the number of high value, high carbon materials (such as plastics and metals) disposed within the residual waste stream; and
- To reduce the carbon footprint and improve the energy efficiency of the waste service vehicle fleets.

Lobbying activities

- To ensure that, where it is appropriate to do so, STWWMP is able to engage with government, other local authorities, trade associations, and industry organisations, on the implications of changes to relevant waste-related legislation and/or issues affecting local authority waste services.

APPENDIX 1: Waste Data

Waste Arisings 2019/20

Partner Authority	Population	Households	Total municipal waste (tonnes)	Total household waste (tonnes)	Household waste per head (kg)	Household waste per property (kg)
Gateshead	201,592	92,970	95,665	86,911	430	630
South Tyneside	149,418	70,950	79,203	66,791	444	631
Sunderland	277,962	127,180	126,303	113,613	409	635
Total STWWMP	**628,972**	**291,100**	**301,171**	**267,315**	**424**	**633**

Landfilled Waste 2019/20

Since the commencement of the Residual Waste Treatment Contract, no contract waste has been directly sent for disposal by landfill. However, a by-product of the incineration process at the energy-from-waste facility called Air Pollution Control Residue (APCR) is produced from the flue gas cleaning process which utilises chemicals such as carbon and lime to manage the strict environmental controls that the facility operates under. Therefore, due to its hazardous nature, the APCR must be disposed by specialist landfill.

Partner Authority	Total municipal waste (tonnes)	Municipal waste sent to landfill (tonnes)	Percentage landfilled
Gateshead	95,665	436	0.46%
South Tyneside	79,203	442	0.56%
Sunderland	126,303	582	0.46%
Total STWWMP	**301,171**	**1,460**	**0.48%**

Residual Waste Treatment Contract Performance 2014/15-2019/20

Contract year	Recycling target	Recycling results	Recovery target	Recovery results
2014/15	2%	**2.3%**	95.6%	**92.5%**
2015/16	2%	**3.1%**	95.6%	**96.7%**
2016/17	2.1%	**4.1%**	95.5%	**95.9%**
2017/18	2.1%	**4.1%**	95.5%	**95.9%**
2018/19	2.1%	**2.9%**	95.5%	**97.1%**
2019/20	2.1%	**2.8%**	95.5%	**97.2%**

Residual Waste Treatment Contract Composition Analysis: 2014-2020

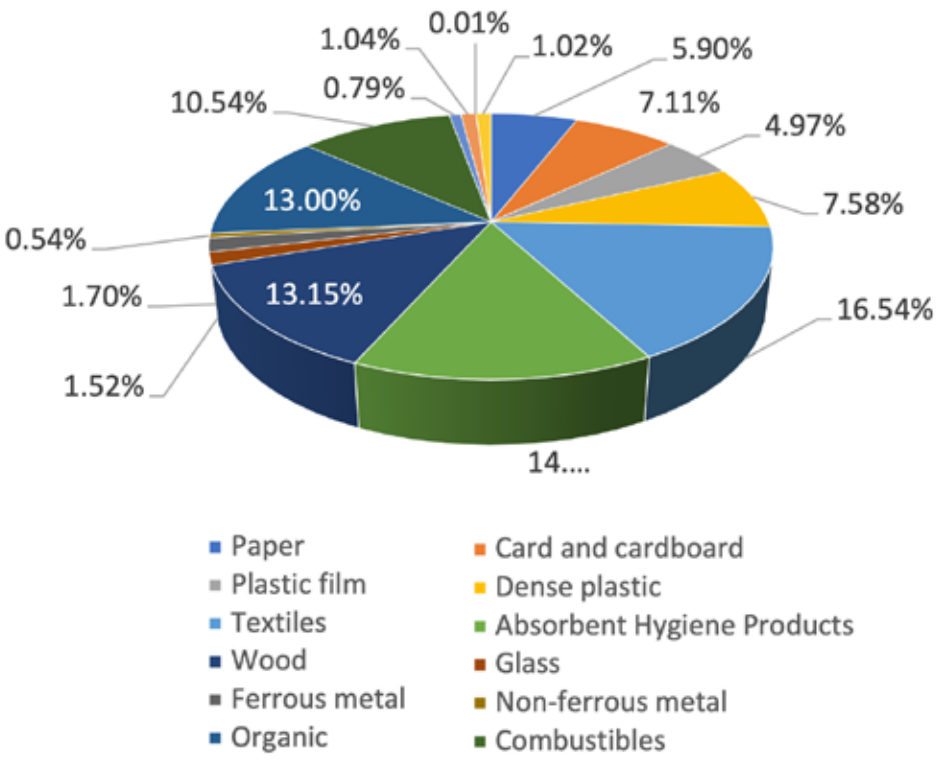
Since 2014, during January/February each year, the residual waste treatment contractor has appointed MEL Research to undertake an analysis of a small proportion of residual waste arriving at EfW Lines 4&5 to assess the:

- Compositional analysis of the material received;
- Biodegradable content (using predetermined values from Defra's Biodegradability of Municipal Solid Waste Report 2012); and
- Calorific value (and other gases and compounds), through lab-based chemical analysis.

The contractor also utilises third party waste to maximise the STWWMP EfW capacity, therefore, the samples for analysis can also include waste from outside of the STWWMP partner authorities:

EfW compositional analyses	February 2014	January 2015	February 2016	February 2017	February 2018	February 2019	February 2020	Average
Total sample size (tonnes	0.54	0.52	0.39	0.45	0.51	0.46	0.51	0.48
STWWMP	0.38	0.31	0.39	0.30	0.40	0.32	0.35	0.35
Third party/not separated	0.16	0.21	0.00	0.15	0.11	0.14	0.16	0.13
STWWMP sample	70%	60%	100%	67%	78%	70%	69%	73%

MEL Research Ltd: Average EfW Material Composition, February 2020



Primary Category - February 2020	Average
Paper	5.90%
Card and cardboard	7.11%
Plastic film	4.97%
Dense plastic	7.58%
Textiles	16.54%
Absorbent Hygiene Products	14.59%
Wood	13.15%
Glass	1.52%
Ferrous metal	1.70%
Non-ferrous metal	0.54%
Organic	13.00%
Combustibles	10.54%
Non-combustibles	0.79%
Waste Electrical and Electronic Equipment	1.04%
Household Hazardous Waste	0.01%
Fines	1.02%
TOTAL	**100%**

Residual Waste Forecasting 2020/21-2021/22

Every year, STWWMP forecast the projected waste levels for the forthcoming financial years. This is calculated by reviewing the latest waste information available (primarily tonnage data), the impact of any known changes to the future delivery of services (such as an increase in fees and charges or plans to expand or reduce service delivery), and the new additional housing stock scheduled for completion across the partnership area during the forecast period.

However, following the impact of the coronavirus pandemic on all aspects of daily life and waste services, further analysis has been undertaken to assess the current impact of increased residual waste levels arising from home working etc. Consequently, this may require further adjustment as the restrictions arising from the pandemic are lifted in the longer-term.

Period	Gateshead (tonnes)	South Tyneside tonnes)	Sunderland (tonnes)	STWWMP (tonnes)
2020/21	65,339	53,210	89,993	**208,542**
2021/22	65,993	53,742	90,893	**210,628**

Household Waste Reuse, Recycling or Composting 2019/20

Partner Authority	Household waste not recycled (tonnes)	Household waste sent for reuse, recycling or composting (tonnes)	Percentage reuse, recycling or composting	Household waste sent for dry recycling (tonnes)	Percentage dry recycling	Household waste sent for composting }(tonnes)	Percentage composting
Gateshead	59,116	27,795	32.0%	18,589	21.4%	8,824	10.2%
South Tyneside	45,412	21,379	32.0%	14,279	21.4%	7,012	10.5%
Sunderland	82,572	31,041	27.3%	21,482	18.9%	9,269	8.2%
Total STWWMP	**187,100**	**80,215**	**30.0%**	**54,350**	**20.3%**	**25,105**	**9.4%**

Household Waste and Recycling Centres (HWRC) Contract Performance 2019/20

Four HWRCs are provided across STWWMP so that residents can dispose of small quantities of household waste free-of-charge, including items that are unable to be disposed of through the kerbside collection services.

Partner Authority	Total HWRC material (tonnes)	Total sent to EfW (tonnes)	Total sent directly to landfill (tonnes)	Total recycled/ composted/ reused (tonnes)	Percentage recycled/ composted/ reused
Gateshead	18,901	9,200	0	9,701	51.3%
South Tyneside	16,978	8,202	0	8,776	51.7%
Sunderland	20,205	11,067	0	9,138	45.2%
Total STWWMP	**56,084**	**28,469**	**0**	**27,615**	**49.2%**

Waste Electrical and Electronic Equipment (WEEE) Contract Performance 2019/20

Across STWWMP, a range of opportunities are provided to encourage residents to recycle WEEE materials.

Partner Authority	Total WEEE waste (tonnes)	Total HWRC WEEE (tonnes)	Total WTS WEEE } (tonnes)	Total Household Batteries (tonnes)
Gateshead	714	543	171	3
South Tyneside	708	538	170	2
Sunderland	583	443	140	0
Total STWWMP	**2,005**	**1,524**	**481**	**5**

Bring Site Network Performance 2019/20

Bring sites are places that provide residents with an additional method of recycling household materials to that of the kerbside blue bin collection service. Each site has at least one container for mixed materials (such as glass bottles and jars; tins and cans; plastic bottles and pots, tubs and trays), and at least one separate container for paper materials only, such as newspapers and magazines. At the end of October 2016, the existing North East region-wide bring site contract with an external service provider ended its five-year tenure. Subsequently, STWWMP decided to procure new mixed and paper materials containers and return the bring site network to an in-house collection model, which, through the inclusion of cardboard materials within the mixed material containers, now replicates the household kerbside blue bin collection service. A number of sites also include containers from different charitable organisations to collect books, CDs, and DVDs, and textiles and footwear.

Partner Authority	Total Dry Mixed Recycling (tonnes)	Total Paper Materials (tonnes)	Total Textiles & Footwear (tonnes)	Total Books, CDs & DVDs (tonnes)
Gateshead	57	43	136	22
South Tyneside	0*	0*	51	25
Sunderland	58	64	104	18
Total STWWMP	**115**	**107**	**291**	**65**

** Not separated from household kerbside recycling collections*

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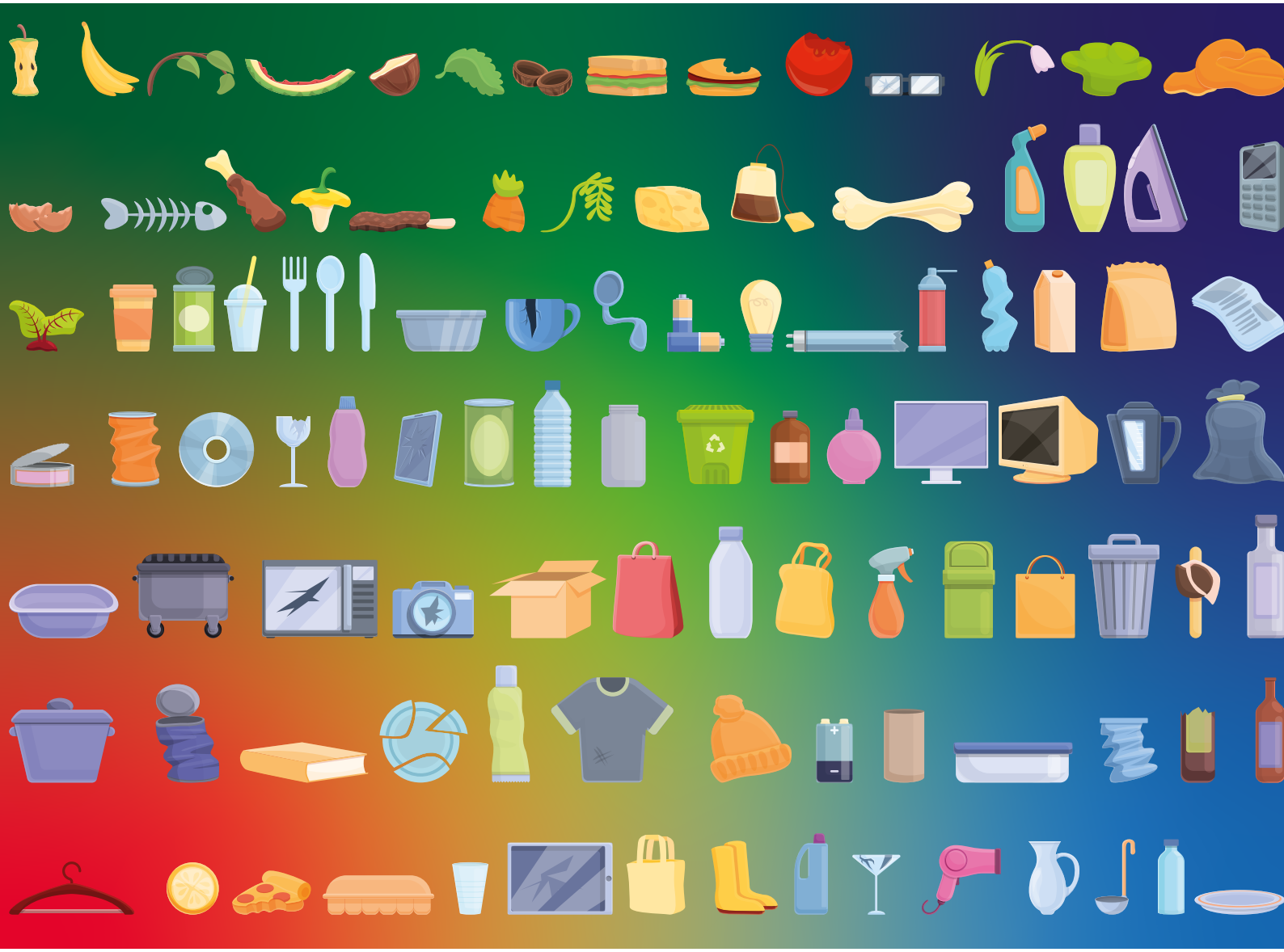

Gateshead Council

South Tyneside Council

Sunderland City Council

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