INTEGRA

Project Integra

Joint Municipal Waste Management Strategy

Wood Group UK Limited – August 2021

Report for

Project Integra

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Contents

1. Introduction to Project Integra

Project Integra (PI) is a partnership in Hampshire consisting of Hampshire County Council as a waste disposal authority, 11 waste collection authorities and two unitary authorities, all providing a variety of collection services but based on a core theme of the comingled collection of dry recyclable material. The two unitary authorities, Portsmouth City Council and Southampton City Council also act as Waste Disposal Authorities. The Local Authorities that make up PI are:

- Basingstoke & Deane Borough Council (BDBC)
- East Hampshire District Council (EHDC)
- Eastleigh Borough Council (EBC)
- Fareham Borough Council (FBC)
- Gosport Borough Council (GBC)
- Hampshire County Council (HCC)
- Hart District Council (HDC)
- Havant Borough Council (HBC)
- New Forest District Council (NFDC)
- Portsmouth City Council (PCC)
- Rushmoor Borough Council (RBC)
- Southampton City Council (SCC)
- Test Valley Borough Council (TVBC)
- Winchester City Council (WCC)

In 1997 Hampshire County Council entered into a waste disposal service contract (now extended to 2030) which was awarded to Veolia UK. Portsmouth City Council and Southampton City Council became co-signatories to the contract after their formation as unitary authorities. Prior to the commencement of the contract, all 14 waste authorities of Hampshire (Disposal and Collection), along with Veolia Hampshire, became members of PI. The Partnership agreement sets out the principles of PI and the roles and responsibilities of the partnership authorities.

The work of PI is guided by three objectives:

- Customer focus
- Value for money
- Sustainability

Hampshire has been widely acknowledged for its partnership working on waste, its impressive integrated waste management facilities, relatively high performance and contribution to shifting fundamental thinking from waste to resource management, however in recent years performance levels have failed to keep up with those of the best performing authorities in England - this is a situation that the Partnership is determined to change.

1.1 Working Groups

The Partnership works to influence national policies, secure external funding, and promote sustainability, with a core aim being to communicate effectively to both the public and the businesses communities. Our strategy officer group is made up of officers from each partner authority and PI. Similarly, our strategic board is made up of officers and elected members from each partner authority.

There are a number of existing working groups within the Partnership, although additional groups are created to target specific issues when identified:

- The Resource Aware Group (RAG); deliver consistent, effective waste management communications and performance improvement across Hampshire.
- Operations; meet to discuss operational issues and programmes of work.
- Waste technical group; meet to discuss the materials analysis facility sampling programme and contamination.
- The Common Approach to Safety and Health (CASH); supported by PI and considers health and safety best practice and guidance aligned to waste and other environmental services.
- Fly-tipping Strategy; sits under PI for governance and information purposes

1.2 Our Vision

In support of the 14 waste authorities in Hampshire delivering its vision, the Partnership refreshed its 2006 Joint Municipal Waste Management Strategy (JMWMS) in 2012 with a vision to *manage the effectiveness of its sustainable material resources system to maximise efficient re-use and recycling of material resources and minimise the need for disposal in accordance with the national waste hierarchy.* It is recognised that the legislative and budgetary environment has significantly changed since the refresh of the JMWMS and that an update is required to take into account competing pressures on all partnership authorities within Hampshire, and to consolidate an agreed path for service consistency and best value in waste service delivery for the county as a whole, based on agreed priorities.

This updated JMWMS will be reviewed by the Partnership every three years, and the vision for Hampshire is:

"The Project Integra partners will work together to deliver high performing, forward looking recycling and waste management services which provide value for money for Hampshire taxpayers meeting local needs and recognising the climate emergency and need for a reduction in carbon emissions."

1.3 Joint Municipal Waste Management Strategy - Principles

The revised Waste Framework Directive (2008/98/EC) sets out the waste hierarchy which ranks waste management options according to what is best for the environment. Waste management in the UK is based on the principles of the waste hierarchy, which dictates that waste prevention is the most desirable outcome followed by reducing, reusing and then recycling resources before the worst-case option of disposal. Our JMWMS has always aimed to deliver engagement, education and raise awareness of waste management within the community to drive material up the waste hierarchy.

The Government's documents "Resources and waste strategy – Our Waste, our resources: A Strategy for England" (December 2018) and "Waste Prevention Programme for England: Towards a Resource Efficient Economy (March 2021)" set out priorities for action to manage resources and waste in accordance with the waste hierarchy and to focus increased efforts towards those steps at the top of hierarchy. This JMWMS is aligned to the requirements of these documents.

Operating our waste management services comes at a substantial cost. With budgetary constraints and legislative pressures it is important to maximise value for money as an overarching Partnership principle. Striving for improved performance through waste prevention in the first instance, followed by recycling, is resultantly the best option both financially and environmentally. By following this principle the Partnership and the wider community can contribute to and help ensure value for money is realised in the services delivered.

Besides public engagement the JMWMS aims to deliver waste collection, treatment and disposal solutions while minimising the environmental impacts. In addition to the waste hierarchy, the partnership also acknowledges the proximity principle that describes a need for materials to be handled, treated, and disposed of as near as possible to its place of consumption.

2. Performance and Service Delivery

Waste management in Hampshire has seen significant change since 2000 as illustrated in Figure 2-1. The landfilling of waste has continuously decreased, markedly between 2003/04 and 2005/06 when residual waste began to be treated within Energy from Waste (EfW) facilities.

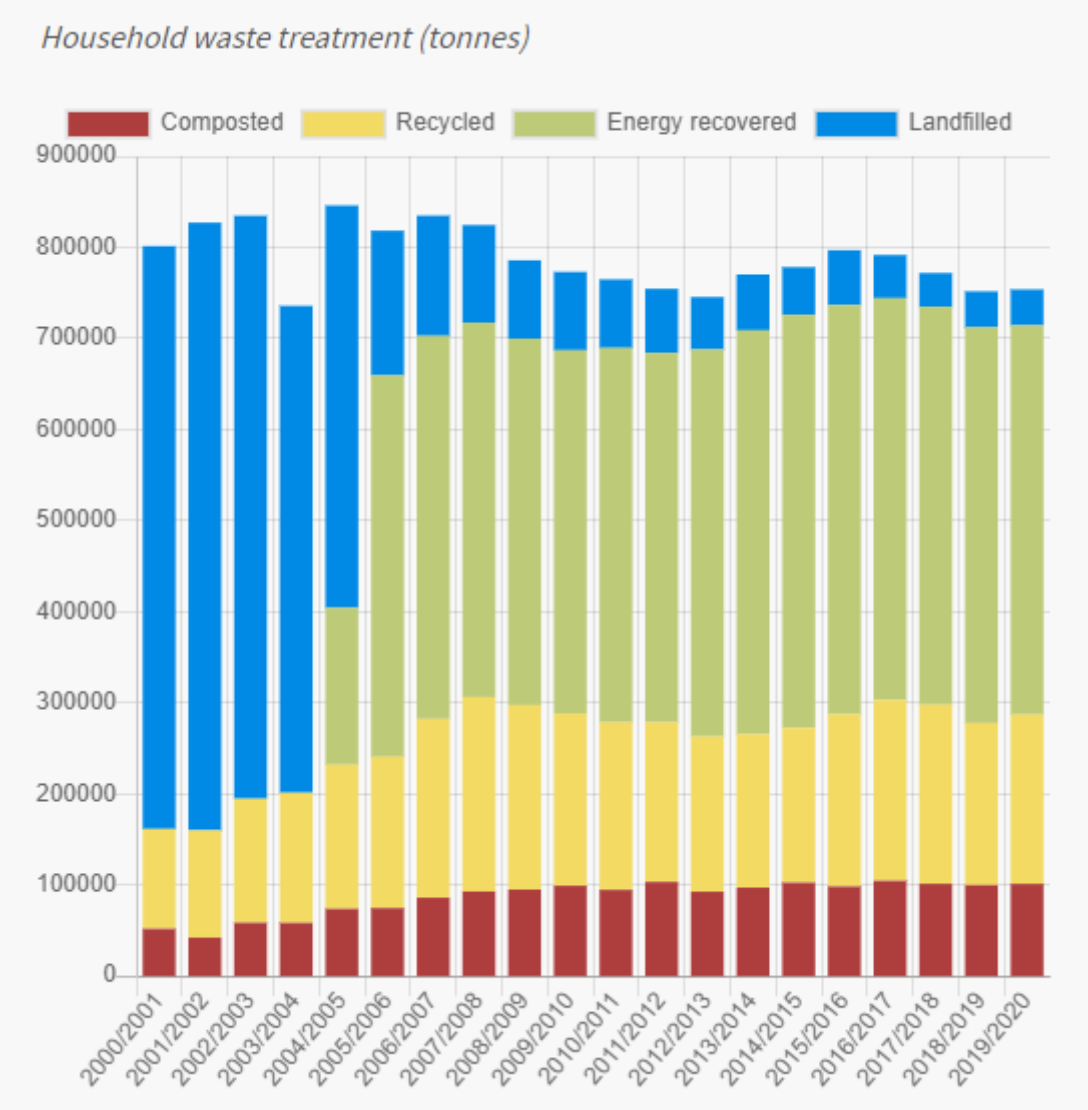
The total amount of generated waste in Hampshire has also reduced since a peak in 2005/06 of around 850,000 tonnes per annum to approximately 750,000 tonnes per annum in 2019/20, with a waste collection yield of 428.9 kg/person/year[1].

In 2019/20 Hampshire's recycling rate was 41.7% (across all recycling services, including HWRCs). The highest performing Partner had a recycling rate of 41.3%, with the lowest performing Partner having a recycling rate of 24.8%. Overall, the County sits within the lower half of the English local authority recycling performance league table, with the majority of partners sitting in the lower quartile. The recycling, reuse and composting rate has increased over time but has plateaued over 2018/19 and 2019/20. The level of performance being achieved has resulted in pressure being exerted on some Partner authorities by the Secretary of State to make improvements.

Contamination monitoring across the MRFs showed that the average comingled dry recycling contamination level was 15.9% in 2019/20 (an increase from 13.75% in 2018/19). However, the capture of comingled dry recycling has also slightly increased over this time period. Reducing contamination will continue to be a key focus going forward.

[1] https://www.letsrecycle.com/councils/league-tables/2019-20-overall-performance/

Figure 2-1 Household waste treatment for Hampshire from 2000-2020[2] (Hampshire County Council, 2021)



The Partnership is committed to improving performance to consistently high levels across Hampshire, Portsmouth and Southampton, to optimise costs and to achieve this while working to high and consistent levels of public satisfaction. This will be supported through regular and consistent service review, analysis and measurement to enable progress against targets to be tracked and further actions to be identified.

2.1 Current services

The waste collection systems in Hampshire vary between the partner authorities. However, all households receive a kerbside collection for dry mixed recyclables (paper & card, plastic bottles, cans, tins and aerosol cans). Garden waste collections are offered through chargeable, opt-in services and many households receive glass collections. Residual waste, comingled dry recycling (excluding glass), and separate glass is collected using different containers and on differing frequencies, as detailed in Table 2-1.

[2] https://www.hants.gov.uk/wasteandrecycling/projectintegra/performance

Table 2-1 2021 collection of MSW by the partnership authorities, Weekly: Collected weekly, Fortnightly: Collection every second week, AWC: Alternate Weekly Collection of Residual waste and Dry recycling, and 4-weekly: Collection every fourth week.

Partner	Residual waste	Dry recycling (ex. glass)	Glass	Food Waste
BDBC	Weekly	Fortnightly	Collected with dry recycling in box	n/a
HDC	Fortnightly	Fortnightly	Collected with dry recycling in box	n/a
SCC	AWC	AWC	Fortnightly	n/a
RBC	Weekly	Fortnightly	Collected with dry recycling in box	Weekly from Oct
EHDC	Fortnightly	Fortnightly	4-weekly	n/a
HBC	Fortnightly	Fortnightly	n/a	n/a
WCC	AWC	AWC	4-weekly	n/a
EBC	AWC	AWC	Fortnightly	Weekly
PCC	Weekly	Fortnightly	n/a	Weekly
FBC	AWC	AWC	n/a	n/a
GBC	AWC	AWC	n/a	n/a
NFDC	Weekly	Weekly	4-weekly	n/a
TVBC	AWC	AWC	n/a	n/a

2.2 Infrastructure

Hampshire County Council has, in conjunction with the City Councils of Portsmouth and Southampton, entered a waste disposal service contract (now extended to 2030) with Veolia UK. The joint working arrangements put in place through the PI partnership have enabled the Councils to include recycling infrastructure within the remit of the contract. Investment has been made across a suite of waste management infrastructure solutions:

- Three Energy Recovery Facilities (ERFs);
- Two Material Recovery Facilities (MRFs);
- Two Composting Facilities;
- 26 Household Waste Recycling Centres (HWRCs); and
- 12 Transfer Stations.

Infrastructure requirements are being considered in light of the anticipated requirements of the Resources and Waste Strategy, and the changes in services that will be required. This is particularly relevant to the provision of MRFs, which will require reconfiguration or redevelopment should services transition to a two-stream collection of dry recyclate.

3. Policy and legislative drivers

This section summarises the key international, national and local legislation and drivers which impact upon the structure of this waste strategy.

3.1 International and National Policy & Legislation

Many of the roots of UK legislation governing the management of waste in this country can be traced back to European Union (EU) Directives, Regulations and Decisions. These are being retained in UK law through the European Union Withdrawal Act 2018 with minimal impact anticipated on how councils collect, recycle and dispose of household waste.

Circular Economy

A circular economy approach sees waste turned into a resource as part of 'closing the loop' with resources kept in use for as long as possible, with the maximum value extracted from them. It moves away from the more linear economy of 'take, make, use, throw' and prolongs the lives of materials and goods consumed, minimising waste and promoting resource efficiency.

In July 2018, the European Commission adopted an ambitious Circular Economy Package (CEP) introducing a revised legislative framework to help stimulate Europe's transition towards a circular economy, identifying steps for the reduction of waste and establishing an ambitious and credible long-term path for waste management and recycling. The UK government have transposed the majority of CEP measures into UK legislation to include a recycling target of 65% by 2035 and reduce landfilled municipal waste to 10% by 2035.

A Green Future: Our 25 Year Plan to Improve the Environment (policy paper) January 2018

This 25 Year Environment Plan sets out Government action to help improve the environment by delivering cleaner air and water, protecting threatened species and wildlife habitats and plans for changes to agriculture, forestry, land use and fishing to put the environment first. The Environment Plan aims to minimise waste, particularly plastic waste, and sets out the following actions for minimising waste:

- An ambition to achieve zero avoidable[3] waste by 2050;
- A target to eliminate avoidable plastic waste by the end of 2042;
- Meeting all existing waste targets – including those on landfill, 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, prioritising those of highest risk. Delivering a substantial reduction in litter and littering; and
- Significantly reducing and where possible preventing all kinds of marine plastic pollution – in particular, material that came originally from land.

[3] Avoidable in the sense of what is Technically, Environmentally and Economically Practicable.

Our waste, our resources: a strategy for England (Draft), December 2018

The Strategy gives a long-term policy direction in line with the 25 Year Environment Plan and has two overarching objectives:

1. To maximise the value of resource use; and
2. To minimise waste and its impact on the environment,

It sets out plans to preserve stock of material resources by minimising waste, promoting resource efficiency and moving towards a circular economy. The five strategic ambitions of the Strategy are:

1. To work towards all plastic packaging placed on the market being recyclable, reusable or compostable by 2025;
2. To work towards eliminating food waste to landfill by 2030;
3. To eliminate avoidable plastic waste over the lifetime of the 25 Year Environment Plan;
4. To double resource productivity by 2050; and
5. To eliminate avoidable waste of all kinds by 2050.

The Strategy also aims to minimise the damage caused to our natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.

Environment Bill 2020

The draft Environment Bill (2020) is a key piece of legislation for delivering the commitments made in the 25 Year Environment Plan and for setting long-term legally binding environmental targets, plans and polices for protecting and improving the natural environment in the UK. It is part of the UK Government's goal to develop the first generation to "leave our environment in a better state than we found it". The Bill will take forward and legislate the measures and proposals outlined in England's draft Resource and Waste Management Strategy, changing the way government, businesses and individuals produce and consume products. The national Strategy and Environment Bill aims to make it easier for people to recycle, improve recyclate quality and make way for a more circular economy. The Bill will allow the Government to:

- deliver consistent and frequent recycling collections across England;
- ensure councils operate weekly separate food waste collections, preventing food waste from going to landfill or being incinerated;
- introduce clearer labelling on certain products so consumers can easily identify whether products are recyclable or not;
- expand the use of charges on single use plastics, following the successful introduction of the carrier bag charge and will introduce a deposit return scheme on drinks containers, subject to consultation; and
- introduce new extended producer responsibility schemes to make producers responsible for the full net costs of managing their products when they are ready to be thrown away.

The Bill is supported by a series of proposals, with several relevant to waste management. The second consultation started in April 2021 and at the time of writing this JMWMS the process is still ongoing. Aspects of waste management under consideration by the Government include:

Consistency of Household and Business Recycling Collections in England

The Government will specify a core set of materials to be collected by all local authorities and waste operators to make services more consistent across the country.

The proposals in the Resource and Waste Strategy around food waste collections is yet to be finalised, but it is likely that separate, weekly food waste collections for all households will be a requirement. Therefore, PI partners need to consider this as a likely service requirement in the coming years, both from a collections and treatment perspective. It is anticipated to be a costly service to implement, and the Strategy consultation has suggested that 'new burdens' funding may be made available by the Government, however currently this is not confirmed, and details of any funding requirements have not been published.

The Bill states that for households, each recycling stream must be collected separately from other waste and that recyclable waste must be collected for recycling or composting and separately from each other, where it is technically, environmentally and economically practicable (TEEP) to do so.

Extended Producer Responsibility (EPR) for packaging

The Government intends to invoke the 'polluter pays' principle with an EPR scheme for packaging by 2023. Producer responsibility will see businesses that manufacture, import and sell certain products responsible for the full net costs of those products at end of life, i.e. post-use stage, driving sustainable design decisions to be incorporated at the production stage in support of a more circular economy.

Payment contributions to local authorities for household packaging wastes is to be based initially on complex modelling taking account of issues such as rurality, housing type, deprivation and other criteria, but in the longer term the government intend for this to be based on actual costs incurred. The payment mechanism and process for distribution of funds to local authorities is still not clear.

Introducing a Deposit Return Scheme (DRS)

To incentivise consumers to reduce litter and increase recycling the government are consulting on introducing a DRS whereby consumers pay a deposit on drinks beverage containers at the point of purchase, which is then redeemed when the container is returned to the retailer for recycling. The government are currently considering a DRS that includes aluminium and steel cans, PET plastic and glass bottles but excludes disposable cups, cartons and pouches/sachets.

3.2 Drivers for Change

National Policy

The Partnership must ensure that all waste collection and management services are aligned to national policies, plans and strategies, including those outlined above. Once the proposal consultations are complete and the Government has provided its direction, we will need to carefully consider this and as a consequence may have to change some of direction expressed in this waste management strategy. The Partnership needs to retain flexibility in future service provision to enable the implementation of any required changes.

Budgetary pressures

This is a time of significant change for local authorities, brought about by pressures to make efficiencies and savings through greater collaboration and sharing services across authorities and with other public sector organisations. There have been significant impacts upon material income in the past 10 years due to a global reduction in the value of recyclable materials. This means that there is decreasing funding available to reinvest into waste services.

Climate Change and Carbon Impacts

Most of the partner authorities have declared a Climate Emergency, and their climate change strategies recognise the role of waste and the circular economy in supporting the reduction of carbon emissions, with a focus on waste reduction. Out of the 14 Partner authorities, seven aim to be carbon neutral or to meet net zero emissions across operations by 2030. Four Partner authorities have committed to become carbon neutral by either 2040 or 2050. The remaining three Partner authorities have not set or published their goals to be attained by a specific date.

Investment in Infrastructure

The waste management, treatment and disposal contract will come to an end in 2030. Before this, a review will need to be undertaken to determine the most appropriate long-term arrangements for service provision, which will be within the duration of this JMWMS.

With recycling performance for all Partner authorities sitting within the lower half of the national league table, the Council's existing contract coming into the final nine years of its life, and with anticipated changes in recycling and waste management legislation happening in the coming years, now is the time for all of the authorities to agree on the future state of recycling and waste services to best service the county through provision of improved performance, value for money services, and future compliance.

Investment decisions will be based on identifying the most appropriate waste management solution for Hampshire to provide value for money as well as compliance with future legislation.

Summary

This JMWMS takes into account the changing legislative landscape, and specifically the potential impacts from future progress of the Environment Bill and policy consultation in 2021. There is a keen focus on the identification of an optimal solution for waste management which results in meeting legislative requirements and delivers best value financially for all of the partnering authorities.

Pressure to reduce environmental impact, continuing budgetary pressure, and changes in the legislative landscape will necessitate change in the way services are delivered to residents. As a result, we must make some tough decisions; the competing requirements of budgetary pressures, a requirement to improve performance, and the need to align with legislative requirements mean that now is the right time to fully understand what an optimal system looks like.

By working together, the Partnership may be able to obtain better prices for commodities and ensure that our purchases of waste service resources (vehicles, bins, boxes etc.) meet best value requirements through gaining volume discounts.

4. JMWMS Key Objectives

The shortlist subjects are the main key objectives which will be delivered under the JMWMS. There are a number of other areas which are central to the strategy and cut across all objectives that will be taken forward. Service provision will continue to be delivered by PI which as mentioned has resulted in a number of benefits and synergies to date. Local decision making however will continue to be maintained across the Partnership to ensure local factors, budgets and challenges are taken into account within any decision making to ensure the approach is best suited for all partners.

A joint technically, environmentally, economically and practicable (TEEP) approach was seen as an important principle across partners going forward and we will look to ensure a collaborative effort is made with the waste collection service and compliance with the regulations.

4.1 Partnership Working

The following subjects form part of the partnership working theme. The existing partnership works to provide an integrated approach to waste management across Hampshire and has been beneficial for several reasons since its inception. To deliver the requirements of this JMWMS a framework will be developed to ensure partnership working is enhanced going forward, especially during the period of change likely to be encountered following the national Resources and Waste Strategy mandates. Partnership working will need to be supported and committed to by all PI partners with joint working across the county to deliver services in the most efficient and effective way.

Whole system thinking at PI level

Whole system thinking is a key priority for Members and is an objective which cuts across all of the shortlisted subjects. Whole system thinking at the PI level will allow the most effective and efficient waste management system to be delivered by understanding how changes made by individual members of the partnership impact on the system as a whole both in terms of cost and tonnages. Oversight of services and an ability to facilitate services from waste generation to waste disposal has and will continue to benefit all stakeholders within Hampshire. The HCC waste prevention and recycling webpages provide information on *Smart living* and *Hampshire Recycles* initiatives, both providing resources for all partners to make use of in a consistent manner. With future legislation changes likely to impact services across the county, an integrated approach and whole system thinking will ensure all potential scenarios are considered and the best outcomes at the local level are derived. This will include consideration of food waste treatment across the county, as well as the HWRC operations and network.

Development of and commitment towards revised JMWMS Implementation Plan

This option is a key priority for Members as engagement by and commitment from all stakeholders will be central to implementing the JMWMS aims and objectives. An implementation plan with clear actions will be developed by a joint PI working group, along with responsibilities assigned to stakeholders to ensure objectives can be met. Local variations will be captured and considered in the plan as it is understood not all stakeholders will be able to follow the same approach in all instances. A clear consensus is required by all stakeholders with collaboration, regular engagement and decision making necessary to ensure the implementation plan is realistic and achievable. All PI partners will engage with and show full commitment to the JMWMS and the implementation plan to ensure their opinions are considered and the plan is fully inclusive. PI will be central to facilitating this approach and behaviours through delivery.

Setting agreed performance indicators and targets

Improving service performance will continue to be at the forefront of the JMWMS. Performance indicators and target setting for the waste management systems will continue to be measured and compared against the three now defunct, but still relevant, National Indicators.

For all authorities:

- NI 191 – KG of residual waste per household
- NI 192 – percentage of household waste reused, recycled and composted

For authorities with responsibility for waste disposal:

- NI 193 – percentage of municipal waste sent to landfill.

There are however a number of other performance indicators that will be used to ensure the performance of the service is at the expected quality across the county and that performance improvements are being duly made. National targets include a recycling target of 65% by 2035 and to reduce landfilled municipal waste to 10% by 2035. Performance indicators therefore need to be cognisant of these targets to ensure the Partnership is helping contribute to the wider national aims, whilst being reflective of the local challenges the county faces. Contamination of recyclable material is a key measure of performance for PI partners. Waste prevention and contamination with a focus on reuse and quality recycling respectively will be important in performance context going forward and these will be discussed and agreed with stakeholders before any decisions are made as part of the partnership working approach.

A performance monitoring regime will be developed and agreed by all PI partners to track improvements made against each performance indicator.

Revision to PI funding arrangements

It is recognised that improved joint working arrangements will support meeting national strategy and consistency framework requirements. Funding arrangements need to drive the right performance behaviours and the right approach with whole system thinking and be reflective of the performance of partners as well as the local challenges encountered across the county. The arrangement will fund consistent initiatives and be structured to incentivise and support positive waste management practices.

There is an aspiration that services delivered across the county going forward will be more in line and representative of PI aims and objectives once the funding arrangements have been revised and stakeholders recognise the benefits from better partnership working. One of the Partnerships main objectives is for all partners to achieve value for money; as a group we will consider and implement the best approach that will enable this.

This JMWMS does not commit Partners to a particular funding arrangement, this will be discussed and agreed through the work being undertaken on a revised Partnership Agreement. Instead, this strategy recognises the need to revise the current arrangements to ensure they are fair and all parties are incentivised to improve performance in light of the governments legislative changes, particularly Extended Producer Responsibility and the associated funding.

Identification of external funding opportunities

The identification of external funding opportunities is of critical importance to waste management services as it allows projects and initiatives to be developed and supported. An example initiative focused on supporting resource efficiency projects with the goal of diverting waste, reducing waste, and improving waste management was the Resource Action Fund. Funded by Defra, this provided £18 million for new projects in England, with the primary focus of supporting key policy outcomes in the area of food, plastics, textiles,

recycling infrastructure and litter. Funding was divided into small-scale and large-scale grants; small-scale grants covered food waste prevention, textile recycling and re-use, litter bin infrastructure, and value from food waste among other projects. Large-scale grants focused on plastic packaging and food waste prevention. As the focus on circular economy becomes more central, it is these types of funding opportunities that support PI services.

The Government has intimated that new burden funding will be provided for new services that will be mandated within the Resources and Waste Strategy. By working together as PI, all partners will have greater visibility of such funding and we will be able to maximise the chances of successfully meeting any funding criteria.

4.2 Recyclable Material Management

How PI manages recyclable materials is of great importance given the priority material quality is given in the Resources and Waste Strategy. The Partnership needs to ensure efforts are focused on improving the quality as well as quantity of the recyclables collected and reprocessed across the county. With recycling performance for all Partner authorities sitting within the lower half of the national league table, the Council's existing contract with Veolia coming into the final nine years of its life, and with anticipated changes in recycling and waste management legislation happening in the coming years, now is the time for effective change and for all of the authorities to agree on the future state of recycling and waste services to best service the county through provision of improved performance, value for money services, and future compliance.

Introduction of two stream collections

This is a key priority for members. A WRAP study was undertaken in 2020/21 supporting PI in identifying an optimal collection option, reviewing options for waste management based on two-stream and multi-stream (kerbsort) collections. The outcomes have allowed PI to plan for the implementation of a waste management solution for Hampshire that meets national and local recycling aspirations at the lowest overall cost. The modelling of a two-stream approach showed a potential recycling rate of 37.4%, compared to the current baseline rate of 24%. The two-stream dry recycling collection will consist of fibres (paper and card) in one container receptacle, and containers (glass bottles and jars, plastic bottles, plastic pots, tubs and trays, metal tins and cans) in another. This will require the redevelopment of waste transfer station infrastructure and MRFs to be capable of handling glass (either in new or upgraded facilities) within a containers material stream. The residual waste collection will remain unchanged.

The Partnership will identify those households that are not suitable for the standard service and will put an agreed exception process in place that is appropriate and also allows them to recycle as much as possible within the twin stream system. We will ensure that the service is agile and flexible to respond to the changing needs of individuals as those needs arise.

Two stream recycling collection

A number of authorities implement a two-stream recycling service with noted improvements following service roll out. A trial in Boston, Lincolnshire, which included over 3000 properties and the collection of paper and card separate from mixed recycling, showed that two stream collections can achieve improvements in both the quality of the recycling collected and increase in materials captured for recycling. Positive feedback was also well received from residents in the trial area.

Reduced contamination

Improving recycling performance through reducing contamination is a key operational focus for PI and will help us contribute towards meeting national targets. Contamination monitoring across the MRFs showed that average DMR contamination level was 15.9% in 2019/20 (an increase from 13.75% in 2018/19). However, the capture of DMR has also slightly increased over this time period.

Reprocessors are demanding material with less contamination, focused on quality rather than quantity and this puts pressure on MRF resources to ensure contaminated or non-target materials are removed. The quality of the MRF inputs needs to be improved which will also result in less MRF residue and reduce the costs that waste disposal authorities have to pay for this.

Maximising the material that can be collected and recycled is key and we will continue to improve communication and education campaigns to help residents recycle better and reduce contamination. Reduced contamination will improve quality of material as well as reduce costs. Non-target materials in the wrong containers can cause processing problems at the MRFs, with whole loads of recycling sometimes having to be rejected. It is anticipated contamination will reduce with the segregation of paper and card from other materials when the two-stream service is implemented, as well as it being easier to identify contamination.

Along with communications, we will continue to implement the contamination monitoring programme to ensure that all dry recycling rounds are identified and targeted at the correct sites. A consistent contamination policy (and training) across the partnership will also ensure partners adopt the same approach when looking at contamination and efforts and activities to reduce it.

Retained and maximised income share for materials

Material collected for recycling is sold and the money received helps to reduce the overall cost of running waste services. There have been significant impacts upon material income in the past 10 years due to a global reduction in the value of recyclable materials. This means that there is decreasing funding available to reinvest into waste services.

Linking to the above priority options, improving recyclable material management through service changes and efforts to reduce contamination will indirectly retain and maximise the income share for materials across PI. Sampling of MRF inputs is undertaken to gauge the level of non-target material being delivered within dry recyclable streams, and thus performance is measured. This provides a focus on quality recycling and the need for partners to reduce their contamination rates to maximise income share.

EPR and DRS will ultimately affect this income share however the impact of this is not currently known. Less materials being collected and processed across the Partnership as a result of these schemes will however indirectly reduce the treatment costs paid by the waste disposal authorities. However, conversely there will be a loss of income where valuable materials are redirected elsewhere.

4.3 Waste Reduction

Although overall material tonnages have reduced over time, more still needs to be done across the partnership to drive down waste generation and contribute towards meeting national residual waste reduction targets. Waste prevention is top of the waste management hierarchy, is the most environmentally sound option and where the greatest gains can be made in terms of resource management. It incorporates reduction, reuse and repair initiatives. Waste reduction will be the most effective and efficient way of delivering waste services over the duration of the strategy, reducing treatment and landfill use, reducing climate change impacts and contributing to a cleaner, greener environment. Waste reduction also reduces waste collection and processing costs, helping deliver a cost-effective waste management service.

Development and delivery of waste prevention initiatives

This option continues to be a key priority for Members. PI partners will encourage and support residents to drive down the volume of waste that is produced through the development of appropriate initiatives. This is especially important given the number of housing developments and population growth in Hampshire, which will put further strain on services and increase the costs of waste collection and disposal.

We will develop the waste prevention plan as a driving tool, following further waste prevention guidance from Government; this will require engagement and commitment by all partners to drive the initiatives and ensure objectives are achieved. This plan will be regularly reviewed and updated to ensure its continued relevance to PI aims.

Waste reduction targets will help partners contribute and deliver on these initiatives, whilst recognising the challenges faced by some of the partners. Implementing initiatives requires agreement on funding, consistent messaging and resourcing, and responsible messages and engagement with residents at local levels will ensure local accountability.

Increased reuse from bulky waste

Material reuse is a key driver within the national strategy, ensuring circularity of resources. Reuse is defined as material that would otherwise be disposed or recycled which has its useful life extended through use for the same purpose without any additional processing. PI will endeavour to maximise reuse from bulky waste with third sector engagement where feasible.

All partners will work together to ensure that all opportunities are taken to maximise the diversion of bulky material out of the waste stream. As an example, by collecting, storing and managing items with the intention of reuse, we can reduce the amount of material that has to be disposed of through processing and treatment and provide residents with access to reused items at affordable prices.

Oxfordshire bulky waste case study

Local authorities in Oxfordshire have partnered with a local charity to deliver a combined bulky waste collection service. The partnership with Kathryn Turner Trust (KTT) has been a real success and the initial trial diverted more than 1.4 tonnes of material from landfill in the first six months. There is a call centre referral system, re-use collection organised with KTT, through the Biffa collection contract. The approach taken by South Oxfordshire and Vale of White Horse authorities in working with a local third sector re-use organisation, KTT, is both adaptive and new to Oxfordshire, and shows the benefits of collaboration and flexibility.

Continued promotion of home composting

Promotion of home composting has always been a key theme for PI and will continue to be a priority initiative under the waste prevention plan. Composting food and garden waste at home is the most sustainable use of waste, reducing carbon footprint as less waste needs to be transported away, processed and re-distributed.

The *Smart Living* waste prevention and lifestyle initiative promotes home composting from start to finish, including advertising where to buy a compost bin online and how to make your own bin or heap. There are also community champions who provide support and advice to any resident wanting to know more about home composting. There is an improvement opportunity for the partners to engage with the *Smart Living* initiative and expand and develop the programme further so all residents benefit from the resources available.

The Partnership recognises that uptake of this initiative requires engagement with the householders to encourage them to undertake home composting, which we will aim to deliver on in the drive to reduce waste.

4.4 Best Practice

We will continue to investigate and deliver on best practice within the waste management sector.

Zero waste to landfill

Zero waste to landfill is a key aspiration for Members, with landfill reduction also being a legislative driver and the least preferred option according to the waste hierarchy. In 2019/20 Hampshire County Council sent 5.37% of their municipal waste to landfill.[4] There is now only one landfill site open in Hampshire for disposing of household waste and the only household waste currently landfilled is bulkier items delivered to recycling centres. PI partners will seek treatment of remaining, non-recyclable waste as well as reuse options to aim for zero waste to landfill and continuously monitor and measure their progress towards it.

Evaluation and introduction of alternative fuels for vehicles

An alternative fuel is an alternative to standard hydrocarbon-based vehicle fuels (diesel & petrol) such as electric, hybrid, biofuels or hydrogen. The need to consider alternative fuels is growing as local authorities look to address the climate emergency and reduce their carbon footprint, opting for low carbon transport options. Net zero emissions is also a legislative driver with the government looking to ban the purchase of diesel/petrol vehicles by 2030 to support this.

The cost of purchasing alternative vehicles remains high as it is an emerging market, but as more and more authorities look to purchase e-RCVs the cost is anticipated to reduce. The charging infrastructure is also costly to install. There are however long-term savings related to the lower cost of alternative fuels. The reduction in emissions in a move away from standard diesel vehicles will have a positive impact on air quality as well as carbon emissions.

PI partners will evaluate and discuss the introduction of low carbon transport options, whilst being mindful of the budgetary and contractual constraints that exist across the partnership. Adoption of vehicles will also be

The Use of Greener Fuels for Waste Collection

In late 2020 the London Borough of Islington became the first London Local Authority to deploy fully electric refuse collection vehicles (eRCVs) as part of an initiative to improve local air quality. The Borough Council introduced two 26t eRCVs to its fleet and is also seeking to reduce the overall size of its waste collection fleet.

The introduction of the electric RCVs was facilitated by a £3.5M development at the Council's Waste and Recycling Centre involving the installation of a new sub-station, high voltage supply and charging infrastructure for the electric vehicles.

In early 2021 the Greater Manchester Combined Authority committed £9.7M to purchase of 27 new eRVCs (approximately half of the Authority's collection fleet) following two years of successful trials. This believed to be the largest commitment of its type to date by a UK Local Authority and has been accompanied by a £880k investment in vehicle charging infrastructure at two of its depots. The deployment of the quiet, low emission eRCVs is expected to reduce greenhouse emissions by 900 tonnes per annum.

[4] https://www.gov.uk/government/statistics/local-authority-collected-waste-management-annual-results

dependent on whether they are suitable to the geography of the area and the structure of collection rounds. Fleet conversions will ultimately be a local decision.

Identification and evaluation of alternative technologies

A number of alternative technologies exist for treating typical household wastes, all of which have a number of advantages, as well as disadvantages. Due to the existing contracts based on EfW technology it will not be financially viable to move away from EfW for the duration of the current contract, but PI will continue to keep a watching brief on alternative technologies for both MSW as well as the recycling fractions. Identification of the best solution for treating waste for Hampshire is a priority for the Partnership and this requires being mindful of the location of such technologies, treating waste at the highest level of the waste hierarchy as economically practicable, maximising diversion from landfill, reducing carbon emissions and balancing cost efficiency and waste management services.

Further consideration will be made towards opportunities to incorporate alternative technologies in the delivery of collection and waste processing services, identifying ways in which efficiency and cost savings could be achieved. By understanding material values we will consider the benefits from making changes to the MRFs to enable additional materials to be collected and processed.

4.5 Service Delivery

A number of strategic options will optimise the delivery of the waste management service across Hampshire.

Consistent, best practice approach to service provision

This option is a key priority for Members. A consistent approach to service provision aligns with the whole system thinking partnership approach discussed at the start, with benefits to the approach being realised through potential synergies and savings. In particular, PI partners will aspire to implement consistent side waste, clinical waste and contamination policies. A consistent service which provides best practice and consistent for flats and communal properties would also be beneficial for the partnership and residents. This will ensure messages across Hampshire are consistent with a clear system of segregation and collection for both operatives and residents. A consistent approach will improve the transparency of the service for residents with the potential for cross boundary savings and a central support system. The partnership will be mindful of local decisions that may prevent a consistent approach across all policies.

Improved and consistent communications campaigns

Communications are central to conveying messages to residents about the waste and recycling services and present an opportunity to increase resident engagement with services. Communications cut across a number of strategy areas and have an overarching impact on service delivery and performance – they should be output driven. PI partners will work to improve their communications and have a consistent, standardised approach for maximum impact county wide. This will include:

- consistent PI level messaging utilising 'Hampshire Recycles' initiatives; responsible messages will be presented at the local level to increase accountability, tailored to individual partner needs where necessary;
- development of a behavioural change communications plan; PI partners will challenge themselves, the wider community, including the private sector, and government by raising awareness and ownership of resource management issues to change society's attitude and behaviour towards maximising waste prevention, re-use and recycling;

- increase use of social media / technology to communicate and engage with residents about the service to increase impact of messaging;
- provide enhanced consistent communications to support residents in understanding the roll out of any new waste services.

By improving and standardising our communications campaign, we aim to increase correct use of the service, drive down waste tonnages and increase our recycling rate. Our approach will create synergies in the service with a significant impact upon whole system costs in the medium-long term.

Consistent approach to staff training

Following on with the consistency approach, PI partners will implement a consistent approach to staff training, both at operational and support staff levels. This will be centrally organised by the PI Executive with best practice training to include identifying contamination amongst other topics to improve performance county wide. We may be able to leverage better training costs if training is organised across county rather than at individual partner level, with better value for money, for example the Driver CPC Training organised by PI.

Increased cross boundary working

PI partners will look to increase cross boundary working through greater collaboration and sharing of services across partners, to make efficiencies and savings within the service and across the partnership.

Currently the majority of services are delivered within respective partner boundaries apart from a few contracts where this is allowed (e.g., Basingstoke & Deane and Hart where difficult access properties are serviced across border). There is opportunity for the principles to be expanded out across more boundaries to maximise efficiencies where circumstances and services allow (in the short and long term). We would look at opportunities to increase our cross-boundary services across the partnership including for example bulky waste service, clinical waste service and HWRC services and for the delivery of any future food waste collections, treatment and disposal system. Services would be easier to deliver together if they were aligned; cross boundary service delivery will allow for journey routes to be optimised, with potentially less vehicles on the road, as well as the sharing of knowledge and best practice. Cross boundary working will need to be coordinated with Hampshire County Council and Veolia to manage disposal points and ensure that any proposals were feasible, with agreements made on funding and allocation of tonnages across partners, and considering delivery lead authority, cost sharing arrangements, inhouse vs outsourced delivery and the location of the most appropriate depots and waste transfer stations.

Sharing of customer satisfaction surveys for the benefit of all partners

Where customer satisfaction surveys related to waste services are carried out, the outcomes will be shared with all partners to share knowledge with the aim to improve service delivery. This ensures the residents views are shared amongst the partners allowing for feedback and best practice to be more easily identified and implemented.

5. Action Plan

This JMWMS sets out the strategic direction for the Partnership and will be supported by a new operational partnership agreement and detailed action plan to take PI forward including meeting the requirements of the Environment Bill. We will collaboratively develop a detailed implementation plan based on the key objectives covered within the Strategy and PI partners will engage and agree on the approach to be taken going forward. A clear consensus is required by all stakeholders with collaboration, regular engagement and decision making necessary to ensure the implementation plan is realistic, achievable and reflects local needs and circumstances.

Implementation of the objectives will be vital for the Partnership in developing and ensuring a waste management service that is customer focused, delivers value for money and has sustainability incorporated throughout. The implementation plan once agreed will be managed by the PI Executive to setup any task and finish groups required for delivery of the plan, and to keep track of progress. Given the scale of the actions required to deliver the strategy, they will be prioritised, and all partners will be required to commit resources to assist with the delivery.

The table below sets out the key strategic actions that all PI Partners are signed up to by approval of this JMWMS, however it is not reflective of the final Action Plan:

Strategic Objective	Strategic Actions
Partnership Working	• Approval of the Joint Municipal Waste Management Strategy • Adopting a whole systems approach to waste services in Hampshire
Recyclables Material Management	• Commitment to move to a twin stream system for dry recyclables. • Commitment to reducing contamination of all waste streams through joint working.
Waste Reduction	• Support the aim of reducing waste in Hampshire. • Commitment to work together to increase the reuse of bulky waste.
Best Practice	• Commitment to reviewing and sharing best practice to improve both performance and service delivery.
Service Delivery	• Commitment to consistent communications to support service delivery across the partnership.

Appendix one: The strategic options considered

Engagement with key stakeholders across PI's partnering authorities was undertaken to identify and agree JMWMS aims and objectives. A series of engagement workshops were undertaken to firstly identify, and secondly assess options available to the Partnership, resulting in a short list of subjects to be incorporated into this JMWMS.

As support this process PI engaged Wood Group (Wood), a waste management consultancy, to review and update the JMWMS. Wood has previously supported the Partnership on a project identifying the most optimal service collection option; this has allowed the Partnership to plan for the implementation of a waste management solution for Hampshire and this current review builds on that work to develop a new forward looking JMWMS.

Identification of strategic options

The identification of strategic options commenced with a wide-ranging consideration of potential actions and activities that could be implemented in the management of waste; this resulted in an extensive longlist of options being identified, consisting of waste management options across areas including but not limited to:

- Waste collected (which materials are separated for recycling)
- Collection frequencies
- Waste containers (type and capacities)
- Recyclate separation at the kerbside (fully separate/two stream)
- Collection charges
- HWRCs
- Bulky waste
- Alternative fuels
- Waste treatment technologies
- Communications

Evaluation criteria were identified based on anticipated priority areas for the partnership, as well as fundamental criteria for appraising waste management services. This consisted of a number of criteria grouped into four main themes – financial, environmental, social and technical.

Officers workshop

During the PI Officers workshop, officers were presented the long list subjects and evaluation criteria for consideration and evaluation. Officers had the opportunity to identify any long list subjects that they believed should be removed from the list, and to capture any additional subjects that should be included. Where there was consistent feedback the long list was updated accordingly. A similar process was undertaken for the evaluation criteria.

Officers then scored each evaluation criterion based on level of importance. Scoring allocation ranged from 1 (least importance) to 4 (greatest importance). Officers were asked to carefully consider these criteria and ensure that they provided a spread of weightings to ensure differentiation between importance. This resulted in an average evaluation criteria score being developed.

Options appraisal

Following the Officer workshop, Wood independently evaluated the long list against the criteria. Wood undertook a qualitative assessment of whether the impact of the subject was anticipated to be positive, negative or neutral against the current position. Those deemed to have a positive impact scored positively. Any evaluation criteria that were not relevant to a subject were scored as a 0 (no impact). The average score for each criterion as identified at the Officers workshop was used by Wood in the assessment of the agreed long list subjects.

Following the scoring and weighting exercise the long list subjects were ranked, allowing a short list of between 15 and 20 subjects to be identified. Following discussions with the Partnership a number of subjects were consolidated and some subjects which ranked low were also incorporated into the short list to as they were identified as being of long-term priority / importance for PI, therefore requiring inclusion within the Strategy, e.g. 'Retained and maximised income share for materials', as well as subjects which shape future service change e.g. 'Introduction of two stream collections'.

Members workshop

The proposed shortlist of subjects was then considered at the Members workshop. The aim of the Members workshop was to gain input from Members on the suitability of the proposed short-listed subjects, and to gain an understanding of which subjects have a greater priority. Following discussion on each group, Members were asked to rank each subject within each group in order of priority; numbers between 1 and 5 were allocated to each of the subjects in each group, with no repeated numbers being allowed.

The final shortlisted subjects are presented below within their respective groupings:

- Group 1 – Partnership Working
  - Identification of external funding opportunities
  - Revision to PI funding arrangements
  - Development of and commitment towards revised JMWMS Implementation Plan
  - Whole system thinking at PI level
  - Setting agreed performance indicators and targets
- Group 2 – Recyclable Material Management
  - Introduction of two stream collections
  - Reduced contamination
  - Retained and maximised income share for materials
- Group 3 – Waste Reduction
  - Increased reuse from bulky waste
  - Development and delivery of waste prevention initiatives

  - Continued promotion of home composting
- Group 4 – Best Practice
  - Zero waste to landfill
  - Evaluation and introduction of alternative fuels for vehicles
  - Identification and evaluation of alternative technologies
- Group 5 – Service Delivery
  - Improved and consistent communications campaigns
  - Consistent, best practice approach to service provision
  - Consistent approach to staff training
  - Increased cross boundary working
  - Sharing of customer satisfaction surveys for the benefit of all partners

There were a number of points raised by both the Officers and Members during the workshops that although not shortlist subjects they are still central to the JMWMS, and these are therefore referenced throughout.