

Appendix I



PI Waste Prevention Plan 2014 – 17

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Executive Summary

This is the first Waste Prevention Plan for Project Integra (PI), achieving a key recommendation for authorities as set out in the recently launched Waste Prevention Programme for England and delivering an important action within the 2013 – 16 PI Action Plan.

It is acknowledged that whilst being a high achiever in terms of landfill diversion, PI has work to do in reducing the amount of waste produced by Hampshire households. The amount of residual waste produced by Hampshire households is one of the highest in England. Reducing the amount of waste is especially important at a time when local authorities are under significant pressure to reduce costs, and changes to the population, local economy and housing numbers are likely to impact on waste growth. Reducing the amount of waste generated and increasing reuse activities are one way in which local authorities can continue to provide effective waste services in a manner which represents good value for money.

In their capacity of waste collection and disposal authorities, PI authorities can help prevent waste through leadership in own practices, and through the provision of information and services to local residents. In doing so, this could lead to the following benefits:

- If waste is prevented, the cost of collecting, transporting and disposing of that waste is avoided.
- Waste prevention activities also have a positive knock-on effect of increasing recycling tonnages, thereby increasing income for partners.
- Improved performance on waste generation levels and recycling rates
- Reduced environmental impacts, such as reduced carbon emissions
- Social benefits resulting from engagement with the third sector, such as increased employment and provision of affordable household goods to those in need.

These benefits are outlined in more detail in *the case for action*.

The aim of this plan is therefore to support the PI Joint Municipal Waste Management Strategy target of limiting annual growth in residual waste per household to less than 0.5%.

The Plan outlines a series of actions intended to maximise the benefits for all PI partners. These actions are grouped in themes according to the actions for local authorities identified in the national programme, and they include:

- Assessing opportunities for greater diversion of bulky waste
- Increasing home composting promotion and support
- Designing and implementing a food waste reduction programme
- Reviewing residual waste collection policies

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- Improving internal practices to “lead by example”
- Maximising reuse at HWRCs by exploring opportunities with the third sector.

The plan covers the period 2014-17, and will be accompanied by an annual implementation plan setting out the progress expected, how each activity will be monitored and the resources required for delivery.

This document is split into 3 parts:

Part 1: Supporting Information including introduction, aims and objectives, context and the case for action (sections 1 – 6)

Part 2: Actions and Implementation including key principles, actions, and implementation for 2014/15 (sections 7 – 10)

Appendices: Including further supporting information as referenced in parts 1 and 2. Also includes a list of acronyms.

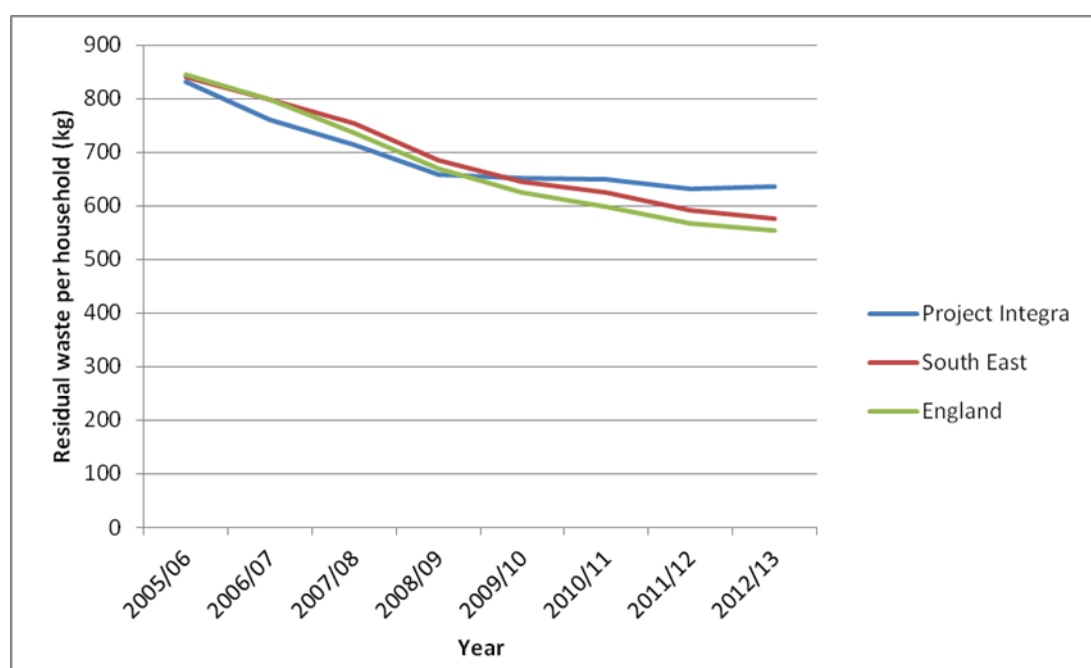
Part 1: Supporting Information

1. Introduction

Since the formation of the Project Integra partnership in 1995, the partner authorities have been widely acknowledged for their cooperation in providing an integrated waste management solution in Hampshire. This approach to partnership working has resulted in impressive facilities with generally good recycling performance (currently standing at 37.8%), one of the highest landfill diversion rates (currently over 92%) and a contribution to the fundamental shift in thinking from waste to resource management.

When comparing other waste-related metrics, however, the partnership still has work to do, as illustrated in Figure 1 below. In 2012/13 PI generated 637kg of residual waste per household. The disposal and unitary authorities of Hampshire County Council, Portsmouth City Council and Southampton City Council currently all rank in the lowest performing 25 disposal authorities for kg of residual waste produced per household. Demographic data, summarised in appendix 1, indicates a 16% increase in household number before 2026, as well as an ageing population and an increase in smaller households. In recognition of this, and in expectation of a national focus on Waste Prevention, the 2013 – 16 PI Action Plan included an action to develop a PI Waste Prevention Plan.

Figure 1: PI residual waste arisings (kg per household) compared to national and south east trends, 2005/06 – 2012/13



Government's Waste Prevention Plan for England (hereafter abbreviated to WPPE), launched in December 2013, sets out actions that Government, businesses, the wider public sector (including local authorities), civil society and consumers can take to deliver waste prevention, while highlighting the environmental, economic and social benefits which can be achieved. A key action for local authorities is to "develop a Waste Prevention Plan which sets out local action and which tackles priorities based on the greatest environmental, economic and social returns".

Reducing waste arisings through waste prevention presents an opportunity to improve PI's waste performance and reputation, while delivering savings to the partnership along with social and environmental benefits to the authorities involved – these benefits are discussed further in section 3: *The case for action*.

1.1 Project Integra

Project Integra is the partnership of;

- The 11 district/borough authorities in Hampshire (Waste Collection Authorities: WCAs),
- Hampshire County Council (Waste Disposal Authority: WDA),
- The unitary authorities of Portsmouth and Southampton (responsible for both collection and disposal) and
- Veolia Environmental Services (VES), the integrated waste management disposal contractor.

PI's vision is that:

In the period to 2023 Hampshire will manage the effectiveness of its sustainable material resources system to maximise efficient reuse and recycling of material resources and minimise the need for disposal in accordance with the national waste hierarchy.



1.2 Scope

As a local authority partnership, PI waste prevention activity will focus on household waste which can be measured across the Hampshire geographical area (including Portsmouth and Southampton). In order to bring about effective and sustained behaviour change however, the Plan also aspires to engage the whole community with the benefits of waste prevention, for example, schools, businesses, and residents as consumers.

The PI Waste Prevention Plan will seek to maximise resource efficiency and to capitalise on the value of waste materials through increased recycling alongside waste prevention activity. The revised Waste Strategy for England suggests that “we need to take an integrated approach to waste prevention, reuse and recycling – absolute prevention of waste is in many areas unrealistic, but we can prioritise prevention while seeking to reuse and recycle as much as possible of the waste which does arise”. Similarly, while the WPPE states seeks to “see less waste created in the first place” but also states that where waste arises, it should be “used as a resource and its potential maximised”.

This Plan will cover the period 2014 – 17. As this Plan will identify, waste prevention is a long term aspiration involving a range of behaviours which will not be changed quickly or easily. An annual Implementation Plan will allow on-going monitoring of progress and appropriate action planning.

1.3 Definition of waste prevention and the national Programme

Waste prevention is viewed as the top of the waste hierarchy (fig. 2), meaning it is the least environmentally harmful and therefore most preferred method of managing waste.

Figure 2: Waste hierarchy (from Defra)



The revised EU Waste Framework Directive defines waste prevention as measures taken before a substance, material or product has become waste, that reduce:

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- the quantity of waste, including through the reuse of products or the extension of the life span of products;
- the adverse impacts of the generated waste on the environment and human health; or
- the content of harmful substances in materials and products.

In practice, waste prevention is taken to encompass the following behaviours:

- Avoidance – reducing process waste, the reintroduction of unprocessed material into manufacturing processes, buying fewer items
- Reduction – designing products so they last longer and are used for longer (including upgradability and reparability and ease of disassembly), using fewer materials per unit and reducing the use of hazardous substances in materials and products, increasing the utilisation of products, e.g. through hiring, leasing and maintenance services
- Reuse – buying and selling whole used items, possibly after washing or minor repair (other terms used, particularly in the construction sector, include reclaimed)
- Remanufacturing – restoring a product to a like-new condition by reusing, reconditioning and replacing parts (other terms used include refurbishment)
- Repair – repair and/or replacement of a component part in a used item.

The WPPE also includes ‘preparing for reuse’, meaning checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be reused without any other pre-processing.

Under the revised Waste Framework Directive, home composting is not considered to be a waste prevention activity as it does not fall under strict avoidance, however it was recognised in the WPPE consultation that many local authorities would seek to promote it within their local areas as part of a waste prevention plan and in keeping with this, and to reflect the work already carried out in the partnership, the PI Waste Prevention Plan will include composting activity.

The WPPE is broken down into roles for five sectors of society, detailed in appendix 2:

- the role of Government,
- the role of business,
- the role of civil society,
- the role of consumers, and
- the role of the wider public sector, which includes activities such as “developing a waste prevention programme” and “educate and raise awareness”

2. Context

2.1 Waste management

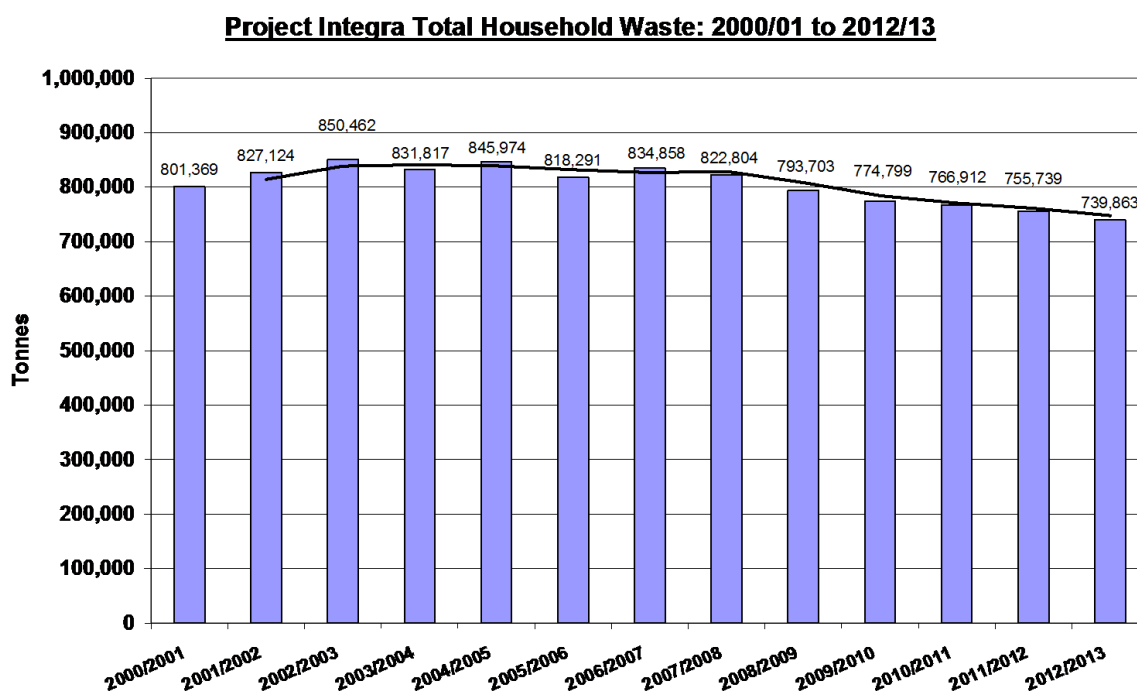
A summary of PI’s current waste performance will provide some context to the PI Waste Prevention Plan. All WCAs and unitary authorities within Hampshire collect the same five commingled materials for recycling at the kerbside, however differences in additional services have evolved over time, including the additions of glass, green waste (with varying charges and receptacles) and food waste collections. Eight authorities collect waste and recycling on an alternate weekly collection and five authorities collect residual waste on a weekly basis, with recycling being collected either weekly or fortnightly alongside this. The following figures and commentary are presented as a limited snapshot of the current situation, rather than a detailed analysis.

2.1.1 Current performance

2.1.1.1 Total waste

The recent trend for PI has been reducing total household waste – from 835,000 tonnes in 2006/07 to 740,000 tonnes in 12/13 – it is thought that this is due in large part to the economic downturn. This trend is highlighted in figure 3 below.

Figure 3: Reducing household waste in PI



N.B. January to March figures have not been reconciled with WasteDataFlow; please expect changes

As already identified, PI authorities do not perform well in terms of the quantity of waste sent to disposal (NI191: kg of residual waste per household). As figure 3 indicates, however, when examining kg of total household waste per head (BVPI84a: kg of household waste per head, a predecessor of NI191), PI authorities perform much better, all near the top of their respective tables. Given that Hampshire authorities have a broadly average number of heads per household this suggests that while overall waste generation levels are not high, diversion to recycling is comparatively low.

Increasing recycling should therefore be considered as important as residual waste prevention when considering how to improve PI’s overall performance.

Table 1 below provides a snapshot of the destinations of PI’s household waste. HWRCs make a significant contribution to the amount of waste recycled and disposed of. Dry recycling, in particular from kerbside collections, is the main contributor to WCA recycling rates. The amount landfilled is very small, accounting for less than 7% of the total – this has been one of the key achievements of PI.

Table 1: Breakdown of total PI waste for 2012/13

		Waste Stream	Tonnage
Tonnes	Recycled	Kerbside & Banks	129,761
		Composted	30,545
		HWRCs	102,698
		Incineration	2,836
		Total	265,840
	Residual	Incinerated	423,056
		Landfilled	50,966
		Total	474,022
	Total Household Waste		739,862
	KG	NI 191 - Residual Waste Per Household	624.74
%	NI 192 - Household waste reused and composted	35.55	
	NI 193 - Municipal waste landfilled	6.8	

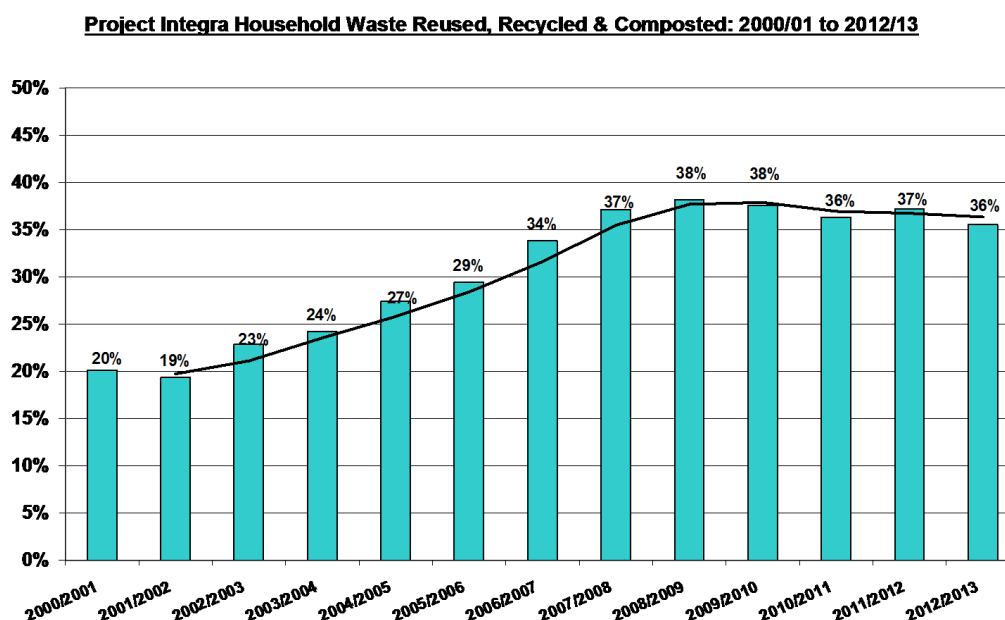
Despite the recent trend in total waste, PI’s performance in terms of kg of residual waste per household and kg waste per head is behind national and regional trends. In addition, recycling rates have begun to level or even reduce, and PI needs to fill a gap in knowledge about the composition of household waste. These issues and others are discussed in turn.

The data here refers to 2012-13. At the time of writing, 2013-14 data is not confirmed. However, early indications are that, compared to 12-13, recycling rates are c0.8% lower, and residual waste per household has significantly increased.

2.1.1.2 Total recycling rates

Figure 4 shows that recycling rates in PI have plateaued since 2009/10 following several years of increases.

Figure 4: Total household waste reused, recycled and composted 2000/01 to 2012/13



N.B. January to March figures have not been reconciled with WasteDataFlow; please expect changes

2.1.1.3 Kerbside: residual waste composition

In 2012/13, 344,288 tonnes of residual kerbside waste were sent for disposal in PI. There is currently no up-to-date full compositional analysis of PI’s residual waste stream. The last national analysis of municipal waste composition was conducted in 2006-7. The key components of municipal waste from this study are detailed below in table 2. These figures account for all municipal waste streams, not just residual waste. They do however show the importance of organic waste (garden and food) in the waste stream – accounting for almost a third. Whilst looking at national data is useful, improving knowledge of PI waste composition will be an important part of this plan, to enable accurate benchmarking and monitoring.

Table 2: Municipal waste composition, Defra study 2006-7

Fraction	%
Food waste	17.8
Garden waste	14.1

Paper	16.6
Card	6.0
Glass	6.6
Metals	4.3
Plastic	10.0
Textiles	2.8
Wood	3.7
Other	17.9
Total	100

2.1.2 Kerbside: DMR composition

2.1.2.1 Contamination

As shown in table 3, in 2012/13 just under 14% of all kerbside collected DMR material was classed as contamination or contras which were consequently sent for disposal at an additional cost. It would be of benefit to improve performance of DMR quality in order to reduce spend on disposal.

Table 3: End destination of kerbside collected DMR in Project Integra: 2012/13

	2012/13
Total Delivered	105,152.96
Landfilled Residue Rate	2.05%
Landfilled Residue	2,159.16
Energy Recovery Residue Rate	11.82%
Energy Recovery Residue	12,429.16
Total Recycled	90,564.64

2.1.2.2 Capture

Of the DMR kerbside stream sent for recycling, the 2012/13 material proportions are shown in table 4. Paper and card make up the largest proportions with plastics and metals being significantly lower. The capture rate is the proportion of a material in the waste stream that is recovered for recycling – in this instance through the Material Recovery Facility (MRF) process.¹ Whilst 100% capture is an unrealistic aim these figures indicate the significant scope and benefits from increasing capture of recyclable materials – particularly high value ones – while reducing the proportion sent to final disposal.

¹ To calculate capture rates, the average percentage of a material in the sampled residual waste is applied to the known total tonnage of residual waste to give an estimated tonnage of recyclables being ‘lost’ in residual waste (1). This tonnage is then added to the known tonnage of material recovered (captured) at the MRF (2) to arrive at the total tonnage of recyclable material in the domestic waste stream (3 = 2+1). The capture rate is calculated as (2) divided by (3).

Table 4: Make up of DMR stream and capture rates 2012/13

Kerbside Recycling Data	2012/13 Percentages	2012/13 Tonnages	Estimated capture
Aluminium Cans	1.09%	989.79	38.98%*
Steel Cans	3.82%	3,463.05	44.59%*
Mixed Plastic Bottles	6.38%	5,774.75	55.04%
Paper (Newspapers & Magazines)	36.13%	32,721.35	88.54%
Mixed Paper & Card	46.03%	41,686.98	84.68%
Cardboard (Baled)	6.54%	5,928.72	83.11%
	100.00%	90,564.64	

*In MAF residual waste sampling aerosols are not identified as aluminium or steel so they have been apportioned in the same proportion as found in MAF DMR sampling.

Table 5 below highlights how the total quantity of certain streams are changing. For example, paper and magazines have seen a very significant reduction since 2008-9.

Table 5: Material trends 2008-2013

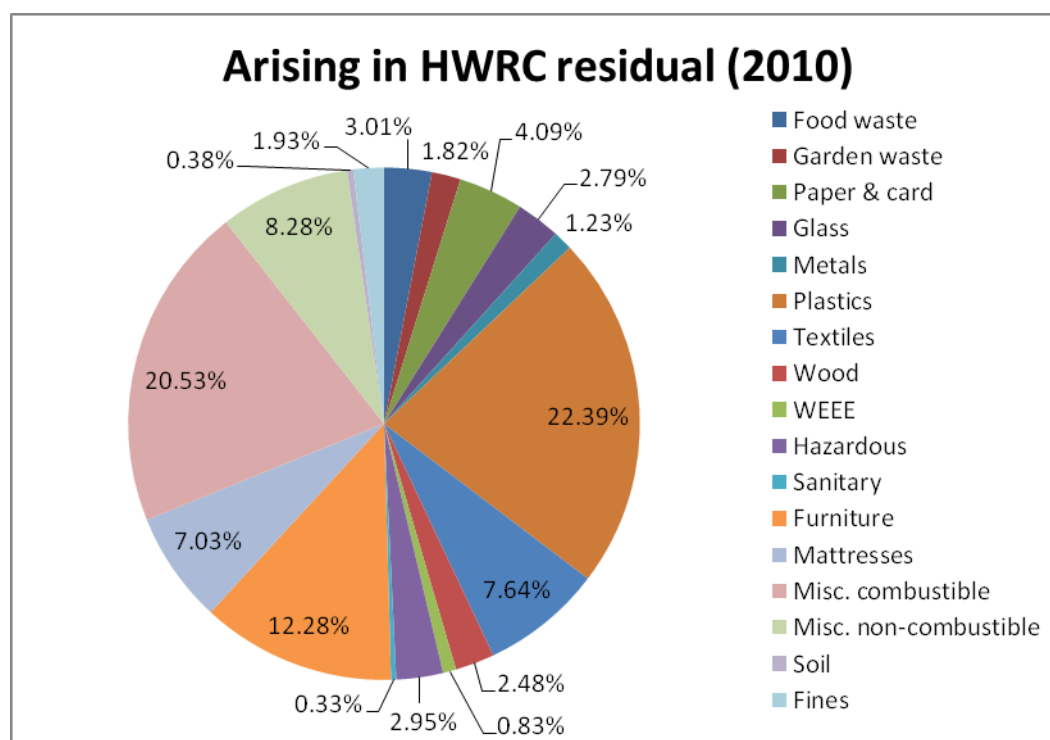
Kerbside Recycling Data	2008/09	2009/10	2010/11	2011/12	2012/13
Aluminium Cans	640	666	781	927	990
Steel Cans	3,128	4,520	3,828	3,606	3,463
Mixed Plastic Bottles	4,985	5,503	5,905	5,263	5,775
Paper (Newspapers & Magazines)	54,693	47,156	46,481	36,422	32,721
Mixed Paper & Card	38,327	33,363	36,323	43,063	41,687
Cardboard (Baled)	6,695	7,457	6,635	4,170	5,929
Tot	108,469	98,664	99,954	93,451	90,565

2.1.3 HWRCs

It is important to note that although HWRCs divert a significant proportion of waste from landfill (with an average recycling and recovery rate of over 80%, HWRCs contribute 46% of the total amount recycled in PI) due to the bulky nature of the waste, the HWRC residual waste stream makes up a significant proportion of the PI partnership's total waste arisings, with over 30,000 tonnes of HWRC waste sent to landfill in 2012/13. This Plan will therefore consider actions to reduce the amount of residual waste sent for disposal at HWRCs and to increase segregation for reuse, recycling and recovery.

A 2010 study commissioned by HCC analysed the residual bins of eight HWRCs and extrapolated this to suggest representative compositions across all sites, as shown in figure 5. It is worth noting that since this work was carried out, initiatives to further segregate waste have been introduced at HWRCs to improve performance, including bins for combustible residual waste.

Figure 5: Indicative HWRC residual bin composition (2010)



2.2 PI waste management strategic context

The PI Waste Prevention Plan sits within the context of the Joint Municipal Waste Management Strategy and the PI Action Plan, as outlined below.

Table 6: Key context from Project Integra Hampshire Joint Municipal Waste Management Strategy: Refresh of Core Strategy 2013 – 2023 (JMWMS)

Strategy section	Relevant objective
5.2.3	<p>Objective 3: Sustainability. PI partners will encourage the treatment of waste as close as reasonably possible to its source and at the highest level of the waste hierarchy as is economically practicable, minimising the cost of waste transport, and consistent with the principles of environmental sustainability and whole life cycle costs.</p> <p>Supporting Action 3: PI partners will give consideration to all appropriate alternative technologies to those currently employed as a means of maximising diversion from landfill, reducing CO2 emissions and balancing cost efficiency and waste management services.</p>
5.2.4	<p>Objective 4: Behavioural Change. 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 attitudes and behaviour towards maximising waste prevention, reuse and recycling in order to embed the waste hierarchy in our approach to waste</p>

	<p>management.</p> <p>Supporting Action 4: PI partners will continue to encourage and strengthen partnerships with the community, voluntary (including Third Sector Organisations) and private sectors, and investigate opportunities for external funding to generate practical, community based waste minimisation and reuse initiatives including the development and delivery of the Recycle for Hampshire communications and behavioural change programme and schools education programme.</p>
5.2.5	<p>Objective 5: Waste Prevention and Reuse. PI Partners will continue to encourage waste prevention and reuse and work with others, including manufacturers and retailers, to sustain an average annual rate of waste growth below 0.5%.</p> <p>Supporting Action 5: PI Partners will work with WRAP and other similar stakeholder agencies as well as private sector organisations and businesses involved in the supply chain operations that impact on local authorities in order to maximise waste prevention opportunities.</p>

A full list of JMWMS objectives are included in Appendix 3.

The PI Action Plan (2014 – 2017) sets out the operational focus for PI activities as working to reduce costs across the whole system through the following workstreams:

- communication and behaviour change
- waste prevention including reuse
- recycling and performance improvements – for instance through reducing contamination, increasing capture of materials, improving income for materials, changing management arrangements
- reducing landfill
- joint working arrangements and activities
- improving efficiency and effectiveness of services through collaboration.

The key actions in the PI Action Plan which have a positive impact on waste prevention are outlined in table 7.

Table 7: Waste prevention actions from the PI Action Plan 2014 – 2017

Action 3	Waste Prevention Plan	Workstream contribution
Detail	Implementation of PI Waste Prevention Plan, focussing on a reduction in residual waste collected and disposed of in PI.	Communication and behaviour change Waste prevention including reuse Recycling and performance improvements Reducing landfill

		Joint working arrangements and activities Whole system costs
Action 5	Joint working outside of PI	Workstream contribution
	Ensure engagement with further developments of the SE7 workstream and the waste partnerships in the south east region, to increase lobbying power and identify opportunities for closer working together.	All

2.3 Past and current waste prevention activity across PI

PI has carried out various initiatives to prevent or minimise waste in the past. A detailed list is included in Appendix 4, but in summary:

- 1990s: PI launched a number of initiatives to increase public awareness and facilitate waste prevention e.g. trial of a real nappy incentive scheme and a county-wide home composting campaign
- 2003: PI was awarded funding from Defra and WRAP to develop a recycling and waste minimisation strategy based on a community based social marketing approach.
- 2005: HCC was successful in receiving funding from Defra to carry out research into applying the 4 E's behaviour change model to encourage Hampshire residents to prevent waste. This two year project was branded 'Small Changes, Big Difference'.
- 2009: Five Hampshire WCAs worked together on the Waste Less Challenge (WLC) which invited residents to reduce their household waste over a seven day period during October and November.

Currently a range of countywide activity takes place on waste prevention, including:

- home composting promotion through the Recycle for Hampshire campaign,
- occasional Love Food Hate Waste promotion through the Recycle for Hampshire campaign,
- promotion of waste prevention through the Recycle for Hampshire Schools Recycling Programme,
- reuse of bulky household items at HWRCs.

A full list can be found in Appendix 5.

In addition, a variety of waste prevention activity is carried out at a local level in the individual WCA and unitary authority areas. This includes:

- authorities working with or promoting furniture reuse organisations,
- operational activity such as residual capacity restrictions,

- promoting waste prevention activity online and in advertising, including Love Food Hate Waste,
- developing individual waste prevention plans for authorities,
- working with internal departments to improve own practices (for example, procurement) to reduce waste disposal.

A full list of each authority's current activity can be found in Appendix 6.

3. Waste prevention – the case for action

The below summarises the key drivers for action. These are significantly expanded in appendix 7.

3.1 Performance

Waste prevention can provide performance advantages specific to local authorities, not just by decreasing total waste arisings but also increasing recycling rates by increasing diversion of materials to recycling and decreasing residual waste. Research carried out in Hampshire as part of the 2007 'Small Changes Big Difference' project found that raising public awareness of waste prevention led to greater overall awareness and engagement with resource efficiency, and in turn, 41% of households involved claimed an increase in the amount recycled.

3.2 Financial

The cost to local authorities for managing the collection and disposal of waste is directly linked to the quantity (by weight) and hazardous content of waste thrown away by Hampshire's residents. Reducing the amount of waste generated and increasing reuse activities will help to save money through avoided disposal costs and preventing the need for additional collection rounds and delay the need for significant financial investment for additional waste infrastructure in the long-term. As outlined in the section on performance (above), a waste prevention plan could lead to an increase in DMR recycled, increasing income for collection authorities.

3.3 Legislative

The Waste Regulations for England (2011) set out the requirement for any establishment which imports, produces, collects, transports, recovers or disposes of waste to take all measures available and are reasonable in the circumstances to apply the waste hierarchy in the order of priority. At the top of the waste hierarchy is waste prevention. Having a Waste Prevention plan in place and implementing activities demonstrates PI's compliance with legislation.

3.4 Environmental

Waste prevention is at the top of the waste hierarchy and is therefore considered the most environmentally sound option for dealing with waste. Waste prevention can also reduce carbon emissions, for example one tonne of reused household goods can save three and a half tonnes of carbon emissions.

3.5 Social

Waste prevention activities can bring social benefits to the wider community, for example opportunities for job creation and training from furniture reuse and repair schemes delivered by the third sector: 65 tonnes of material collected for reuse could provide one full time job and 12 training for work or volunteer opportunities per year. Waste prevention activity also assists in the provision of affordable household items to those in need, with 15 low income households potentially provided with goods from one tonne of reused household goods.

3.6 Economic

Engaging local businesses with the financial benefits that waste prevention and resource efficiency can provide can help them to reduce costs and to become more competitive. Buying reused household items instead of new can save a household up to £358.

4. Barriers to waste prevention

Despite the benefits of waste prevention, there has never been a cohesive waste prevention strategy or delivery plan for PI. There are challenges and barriers to delivering waste prevention, which need to be addressed for this Plan to be successful. These are detailed in appendix 8 but include the following:

4.1 Performance

While there are high profile national recycling targets and local ambitions to reduce the amount sent to landfill, up to now waste prevention has been less of a priority. There is however a target within the PI JMWMS (as discussed later).

4.2 Measurement

As the WPPE identifies, it is inherently difficult to identify the impacts of waste prevention. Reductions in waste are also difficult to assign to a particular activity as waste arisings can change for any number of reasons.

4.3 Financial

Waste prevention activities which aim to change peoples behaviour are generally considered to be resource intensive, requiring in-depth, sustained or repeated engagement with residents.

4.4 External factors

Waste materials arising from households are a function of material inputs, lifestyle choices, and external factors. Many of these variables which affect the quantities of household waste arising are outside of PI's direct sphere of influence.

4.5 Split incentives

In many cases the costs and benefits of waste prevention actions are realised at different stages. For example, a manufacturer may invest in redesigning a product to reduce waste (such as extending product lifetime), but the benefit may be to the consumer further down the line. In this way there may be little financial incentive to take preventative actions for those who are able to do so as the benefits do not always align.

5. Aims and objectives

Figure 6 shows how tonnages of household waste within PI are forecasted to rise in the coming years, in line with expected economic and housing growth. Predicted growth is calculated from a 2012/13 data baseline and based on dwelling stock growth and the three year waste volume service plans completed by each of the PI partners. Figure 7 provides some context for this through Defra's predicted household waste growth to 2020. Although not on comparable axes, the ranges of predicted waste growth nationally suggest much slower growth if any at all.

Figure 6: PI tonnage predictions to 2025/26 based on standard year growth rate

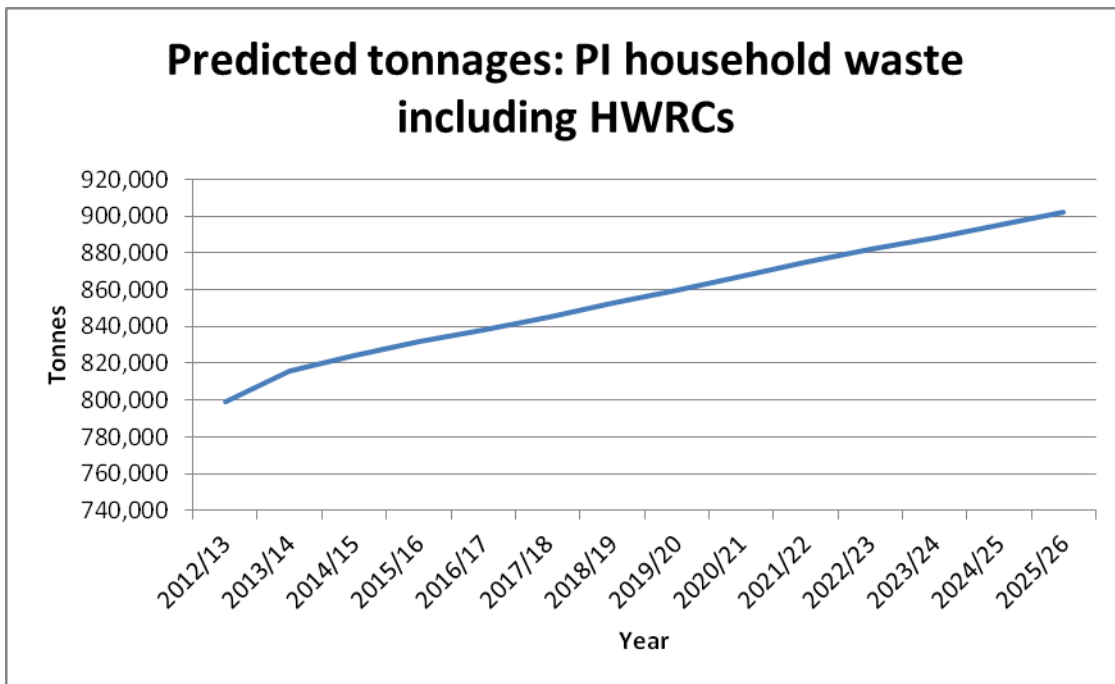
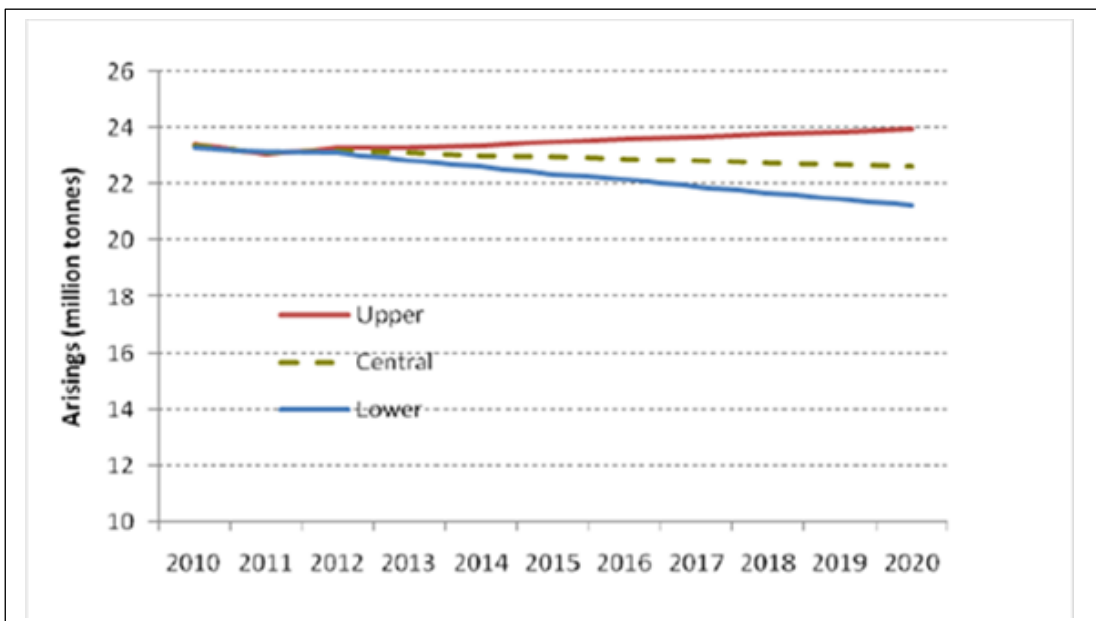


Figure 7: Defra’s predicted national household waste growth to 2020, ranges based on total MSW tonnages nationally and the expected growths



The long-term aspiration is for PI’s waste generation to be in line with or lower than the national average, and the aim of this waste prevention plan is to support the PI Joint Municipal Waste Management Strategy target of limiting annual growth in residual waste per household to less than 0.5%.

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Based on 2012/13 figures, a 0.5% reduction in residual waste would equate to around 2,400 tonnes across PI, or 3kg per household.

This can be used to measure the success of the plan, but it needs to be considered in the context of national trends and the economic recovery which, as outlined, could have a significant impact in Hampshire.

To achieve that aim, there are 5 key objectives:

- Objective 1 – to fulfil the WPPE recommendation for local authorities to have a local plan, approved by partners, along with an annual implementation plan, to guide the partnership's work on waste prevention
- Objective 2 – to ensure that the quantity of bulky waste diverted from disposal is increased by assessing options for working more closely with the third sector
- Objective 3 – to carry out activity which reduces the quantity of avoidable food waste and garden waste in the residual waste stream
- Objective 4 – to carry out activity which increases resident awareness of waste prevention issues
- Objective 5 – to carry out activity that enables local authorities to lead by example.



Part 2: Actions and Implementation

6. Behaviour change

Waste prevention is comprised of many different behaviours which are often contrary to well-established habits which are influenced by people’s individual values and consumer trends, for example buying second hand goods or finding recipes for leftovers rather than throwing them away. In order for the PI community to benefit from waste prevention, multiple behaviours will need to change in the long term. This poses a particular challenge as unlike recycling, waste prevention behaviours are often unseen or carried out implicitly. Developing initiatives around Defra’s ‘4 Es of behaviour change’ model will help to ensure that waste prevention behaviours become easy for residents and others to carry out, and that they are more likely to be sustained.

Table 8: The Four Es approach to Behaviour Change including example activities²

Enable, e.g.:	Encourage, e.g.:
Remove barriers	Expenditure such as grants
Give information	Catalyse
Provide facilities	Reward schemes
Provide viable alternatives	Recognition/social pressure such as league tables
Educate/train/provide skills, provide capacity	Penalties, fines, & enforcement action
Exemplify, e.g.:	Engage, e.g.:
Leading by example	Community action
Achieving consistency in policies	Co-production
	Deliberative forums
	Personal contacts/enthusiasts
	Media campaigns/opinion formers
	Use networks

It will be useful to review any existing research or local public attitude surveys to help inform the Plan and develop a baseline for monitoring behaviours. This will support the business case where waste prevention is difficult to measure from tonnages alone..

7. Principles for the PI waste prevention Plan

The case for action set out in section 3 demonstrates the need to focus on waste prevention. To ensure that the PI waste prevention Plan incorporates current thinking and national best practice, it will use the WPPE for England: *Prevention is better than cure: The role of waste prevention in moving to a more resource efficient economy* as a framework.

² http://www.hiveideas.co.uk/attachments/045_4Es%20approach.pdf

The principles of the PI Plan will therefore be those roles and actions outlined for local authorities in the WPPE i.e.

- Become a local leader
- Develop a waste prevention plan
- Measure progress
- Educate and raise awareness
- Work with businesses
- Work with civil society
- Explore new ways of working

PI should also seek to raise its profile by engaging with and feeding into other national waste prevention activity identified in the WPPE as detailed in Appendix 1.

8. The way forward

8.1 Priority waste streams and materials

As outlined previously, the PI Plan will focus on household waste. The WPPE sets out priority materials for waste prevention activity, and in the absence of detailed local waste composition analysis for PI authorities, the PI Plan will seek to target the national priority materials as far as possible, both removing them from the residual stream and encouraging reuse and recycling. In line with the principle of “become a local leader”, the PI Plan will also seek to target Construction and Demolition (C&D) and Facilities Management (FM) waste through influence, although PI authorities are not directly responsible for these non-household waste streams. The priority materials as set out in the WPPE are shown in table 9.

Table 9: National priority materials and proposed PI activity to minimise waste

Material	Waste Prevention Plan activity
Food waste	Reduction of avoidable and unavoidable waste in the residual stream
Textiles	Reduce the overall amount entering the waste stream and increase reuse, repair and recycling where appropriate
Paper and board	Reduce overall amount entering the waste stream and increase recycling where it does
Plastics	Reduce overall amount entering the waste stream and increase recycling where appropriate
Electronic and electrical equipment (EEE)	Reduce the overall amount entering the waste stream and increase reuse, repair and recycling where appropriate
Reusable items (such as furniture)	Reduce the overall amount entering the waste

	stream and increase reuse, repair and recycling where appropriate
Construction and demolition and facilities management waste	Reduce the overall amount entering the waste stream and increase reuse and recycling where appropriate

In line with statutory obligations, PI's waste prevention activity will be focused on the household waste stream, allowing accurate monitoring and measurement of impacts. However in keeping with the principles identified in the WPPE, PI should seek to influence the entire community through its member authorities' roles of employers, purchasers and service providers. In particular, PI can lead by example by influencing businesses within the Hampshire area, since it is estimated that businesses make up around 27% of all waste generated in the UK. In Hampshire (including PCC and SCC) alone there are an estimated 1.2million tonnes of business waste produced annually, although only around 22,000 tonnes of this is collected directly by local authorities.

8.2 Stakeholders

As outlined above, the successful implementation of waste prevention will involve changing waste-related behaviours on a significant level. Achieving this will require the input of various stakeholders, including but not limited to, those listed below. It should be noted that in working with these stakeholders, PI authorities may also be working to positively influence their own behaviours and so they should also be considered as audiences for the waste prevention Plan.

- Project Integra partner authorities (waste function)
- Communications teams from partner authorities
- Partner authority corporate teams (e.g. procurement, facilities management)
- Other Council services, i.e. trading standards, housing, social care, planning
- Furniture reuse organisations, including TSOs and community groups
- WRAP
- Government, i.e. Defra, BIS and DCLG
- Academic institutions such as schools and universities
- Local residents
- Local businesses
- Current contractors and future contractors
- Future contractors
- Other local authorities, SE7 partners

PI should seek to engage with other Councils and Waste Partnerships to share best practice and guidance, and also consider forming new partnerships with other engaged organisations to make savings on collaborative delivery and widen opportunities for applying for funding.

8.3 Waste Prevention Advisory Working Group

In 2013 PI Resource Aware Group officers were invited to join a PI Waste Prevention Advisory Group. 11 PI authorities and the PI Executive are represented on the group which has met on four occasions since September 2013. The work of this group has directly influenced the development of the PI Waste Prevention Plan, by establishing:

- current waste prevention work within the Partnership,
- identifying the benefits and barriers to waste prevention for local authorities,
- contributing to a long list of potential waste prevention actions,
- prioritising these actions for inclusion in the Plan by scoring them against criteria such as potential tonnage reduction, timescales for realisation and social benefits. (A full list of the scoring criteria can be found in Appendix 9.)

In late 2013, Hampshire County Council commissioned a consultant to work on its wider waste strategy. As part of this work, the Working Group was able to use the commissioned resource to develop business cases for various waste prevention activities based on examples of best practices. The actions identified in the PI waste prevention Plan have therefore been prioritised as high, medium or low priority based on the scores developed by the Working Group combined with the business cases developed by the consultant.

9. Waste prevention Plan: actions

Table 10: Proposed waste prevention actions for the PI partnership, presented by priority level

Action	Target material (from WPPE)	Behaviour change approach	Link with WPPE	Fit with JMWMS (Appendix 3)
High priority				
Seek external funding and sources of non-financial support to deliver waste prevention work. Where possible work with partners to access funding.	All	Exemplify Encourage	Develop a waste prevention plan	Objective2: Value for money
Establish a baseline for all waste prevention work.	All	Exemplify Engage	Measure progress	Objective 1: Customer focus Objective 2: Value for money Objective 5: Waste prevention and reuse
Measure progress against the Plan at a local level and review progress annually.	All	Exemplify	Measure progress	Objective 1: Customer focus Objective 2: Value for money
Link with the national indicators when released by Defra.	All	Exemplify	Measure progress	Objective 1: Customer focus Objective 2: Value for money
Seek to increase home composting, e.g. with the aim of increasing uptake to reduce garden and appropriate unavoidable food waste such as peelings and tea bags. Review promotion of home composting with a view to increasing levels of support to lapsed bin users through online advice and regular promotion. Investigate opportunities for community composting where locally appropriate.	Garden waste, food waste	Enable Encourage	Educate and raise awareness	Objective 3: Sustainability Objective 4: Behavioural change Objective 6: Waste recycling and composting
Review options for delivering a campaign to	Food waste	Enable	Educate and raise	Objective 3: Sustainability

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reduce avoidable food waste focussing on Love Food Hate Waste and Fresher for Longer, including events, social media, links with Schools Programme, and Public Health campaign, advertising etc.		Engage	awareness	Objective 4: Behavioural change Objective 5: Waste prevention and reuse
Review all communications relating to waste prevention, including incorporating findings from Small Changes Big Difference/ Zero Waste Challenge. Promote ways to prevent, reduce and reuse waste across Hampshire, e.g. on one central website. Include 'easy wins' such as Mail Preference Service, reusable nappies and smart shopping. Also seek to deliver waste prevention through 'lifestyle' based messages to target traditionally 'non-green' residents. Use a range of methods such as events, social media and advertising which is localised and community based.	All	Enable Engage Encourage	Educate and raise awareness	Objective 3: Sustainability Objective 4: Behavioural change Objective 5: Waste prevention and reuse
Create a comprehensive database of reuse outlets including TSOs which is regularly updated for use by both the public and staff booking bulky kerbside collections. Where contractually possible, seek to formally promote furniture reuse organisations at booking stage of bulky kerbside collections.	Reusable items, EEE	Enable	Work with civil society	Objective 1: Customer focus Objective 3: Sustainability Objective 5: Waste prevention and reuse
Medium priority				
Support national waste prevention initiatives and their local implementation e.g. plastic bag levy.	Plastics (amongst others)	Exemplify	Become a local leader	Objective 4: Behavioural change Objective 5: Waste prevention and reuse

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Maximise opportunities and systems for reuse in the new HWRC contract beginning 2015. Seek to ensure regular reuse reporting is a requirement of the contract.	EEE, reusable items,	Exemplify Enable	Become a local leader	Objective 3: Sustainability Objective 5: Waste prevention and reuse Objective 6: Waste recycling and composting
Seek to embed waste prevention into internal business practices by developing best practice 'signposting' guide including WRAP case studies aimed at authorities' internal practices. Work with internal teams to consider waste prevention and resourcefulness in catering, facilities management, events, adults'/children's/ housing departments, schools, IT and procurement practices. Promote to wider public sector as appropriate.	Facilities management, EEE, reusable items	Exemplify	Become a local leader	Objective 2: Value for money Objective 3: Sustainability Objective 4: Behavioural change Objective 5: Waste prevention and reuse Objective 8: Leading the way
Seek to review residual waste collection policies, and where appropriate increase enforcement of policies such as no side waste, or consider introducing compulsory recycling/correct container policies to encourage kerbside recycling and reduce residual tonnages.	Textiles, paper & board, plastics, food	Exemplify	Become a local leader	Objective 2: Value for money Objective 4: Behavioural change Objective 6: Waste recycling and composting
Maintain a watching brief on central Government guidance, WRAP research and best practice from other local authorities to inform waste prevention initiatives.	All	Exemplify	Become a local leader	Objective 1: Customer focus Objective 5: Waste prevention and reuse Objective 8: Leading the way
Seek to improve available waste composition data, for example include residual composition analysis in the 2014 Resource Capture and Treatment Review.	All	Exemplify	Measure progress	Objective 2: Value for money Objective 5: Waste prevention and reuse
Consult on the option of introducing a chargeable	C&D	Exemplify	Work with businesses	Objective 2: Value for money

trade waste scheme at HWRCs as part of the contract starting in 2015, with the objective of diverting trade waste from the household stream and encouraging resource efficiency amongst local businesses. Work alongside WCAs to jointly promote their trade waste collection services.		Enable		Objective 6: Waste recycling and composting
Investigate options to increase reuse from bulky kerbside collections through both operational changes and links with existing partnerships including SE7 and the Hampshire Furniture Reuse Network (HFRN).	Reusable items, EEE	Exemplify Enable	Work with civil society	Objective 3: Sustainability Objective 5: Waste prevention and reuse Objective 6: Waste recycling and composting
Investigate potential for partaking in a reuse forum including furniture reuse organisations and local authorities, plus internal departments (adults'/ children's/ housing etc.) to aid better mutual understanding and identify innovative opportunities for increasing reuse through partnership working. Consider extending to wider public sector and possibly universities.	Reusable items, EEE	Engage Exemplify Enable	Work with civil society	Objective 4: Behavioural change Objective 5: Waste prevention and reuse
Lower priority				
Develop and deliver a countywide campaign to improve public perception of second hand items such as furniture and textiles therefore aiding market development. Promote the forthcoming reuse quality standard developed by WRAP and link to WRAP's recently launched 'Love Your Clothes' campaign	Reusable items, EEE and textiles	Enable	Educate and raise awareness	Objective 3: Sustainability Objective 4: Behavioural change Objective 5: Waste prevention and reuse
Look into the potential to deliver skills workshops/swap shops focussing on repair (textiles, furniture) and cooking skills. Available	Reusable items, EEE and textiles	Engage Enable	Educate and raise awareness	Objective 3: Sustainability Objective 4: Behavioural change

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to the wider community and advertised at secondary schools, universities, colleges and community groups. Approach education authority to establish curriculum links.				Objective 5: Waste prevention and reuse
Investigate ways to engage with local businesses on waste prevention and signpost them to resources.	All	Engage Exemplify Enable	Work with businesses	Objective 2: Value for money Objective 4: Behavioural change Objective 5: Waste prevention and reuse
Seek to work with private sector companies to identify product specific opportunities for reuse and waste prevention messages.	All	Exemplify Enable	Work with businesses	Objective 4: Behavioural change Objective 5: Waste prevention and reuse

10. Implementation

Delivering the Plan will bring benefits to the whole partnership, including:

- Potential for cost savings if services such as bulky waste are managed by furniture reuse organisations, for example
- Cost savings within the context of whole system costs – including waste collection and disposal costs.
- Potential for increasing recycling rates and recycling tonnages
- Improve overall waste diversion performance
- Raising the profile of PI and demonstrating best practice
- Improving quality and range of services provided to residents
- Supporting localised social benefits such as employment and volunteering opportunities
- Increased public engagement and waste awareness



Implementing the PI Waste Prevention Plan as a partnership will also maximise opportunities for joint working, sharing best practice and joint procurement.

As previously outlined, this Plan will run from 2014 – 17 alongside an annual Implementation Plan and progress report to the Strategic Board. All proposals are currently subject to the approval by the PI Strategic Board. Some considerations for the annual Implementation Plan are however outlined below.

10.1 Communications plan

Effective communications will be vital to the success of the Plan. Various communications methods will be appropriate to reach different audiences and ensure sustained behaviour change and implementation of the Plan will require consultation with communications resources from across the partnership and the development of a standalone communications and engagement strategy. Any links with the existing Recycle for Hampshire campaign will need to be managed to ensure messages are clear and avoid confusing audiences.

In the current economic climate, there are limited resources available to utilise traditional methods of communications for engaging with the public. Developments in social media and

utilising existing communication channels or community networks already established in other service delivery areas may provide an efficient and cost-effective way of delivering messages, reaching audiences typically disengaged in 'green' issues.

10.2 Budget

In the context of whole system costs, delivery of waste prevention initiatives and campaigns in line with the priorities identified in this action plan will be funded based on the business cases they present i.e. on an invest to save basis.

PI should also consider external sources of available funding, such as WRAP's Waste Prevention Loan Fund and Defra's recently announced fund of £800,000 for community-led waste prevention, reuse and repair partnership projects.

10.3 Implementation Plan

The Implementation Plan will be updated on an annual basis so it is proposed that the Working Group continues in some form to maximise momentum and identify opportunities to engage with waste prevention, such as the European Week for Waste Prevention, for example. Smaller task and finish groups have worked successfully on previous projects (for example, small WEEE) and so it could be that this approach is used to implement the individual actions across the partnership, while recognising that not all actions will be appropriate for all partners to implement at the same time.

Some actions are already in progress, for example, development of a countywide database of reuse outlets, and it is recommended that these activities continue rather than await formal approval of the Implementation Plan.

It is likely that on-going work within the partnership can provide opportunities to deliver waste prevention activity, for example the Hampshire County Council HWRC contract retender, work with the SE7 regional partnership, the behaviour change campaign delivered by Recycle for Hampshire and the forthcoming PI Resource Capture and Treatment Review.

It is also likely that not all the actions will be delivered by the Waste Management teams of PI partner authorities where the same outcomes can be achieved through existing campaigns, for example some may be delivered through engagement with departments such as facilities management, procurement or adult services.

10.4 Roles, responsibilities and resources

Development of the PI Waste Prevention Plan has been led by Hampshire County Council working in collaboration with the PI Executive and representatives of nine WCAs and one unitary authority. For the plan to be successful, some staff resource will be required from across the partnership.

A key challenge for the Implementation Plan is to translate the actions into local work streams alongside different priorities and day to day operations at a time of restricted resources. The success of the PI Waste Prevention Plan will rely on all PI partners taking ownership of its content and participating in local delivery of the actions to achieve the aims and objectives within the context of whole system costs.

Hampshire County Council has procured consultancy support to develop a standalone waste prevention plan for the County Council. In addition, the County Council has procured access to a Waste Prevention Benefits Calculator toolkit on behalf of the PI partnership. The work of these two resources will inform the PI Plan by developing the business case for funding activity.

10.5 Monitoring

As previously discussed, waste prevention is notoriously difficult to measure, given that many behaviours are not visible and that waste arisings can fluctuate for a variety of reasons. In the WPPE Government committed to develop a suite of metrics by late 2014, and PI should input into the development of these where appropriate and adapt the Implementation Plan around these. In the meantime however, a localised monitoring and evaluation programme will need to be developed for each action within the Implementation Plan. Improved information on composition (for example, from the Resource Capture and Treatment Review) will also allow identification of priority materials at a local level. Monitoring and evaluation of the Plan will include:

- Monitoring inputs, for example, the number of information leaflets sent out to businesses.
- Monitoring outcomes, for example measuring declared awareness of schemes through a survey.
- Monitoring impacts, for example the number of people who have bought subsidised composting bins.

As well as local indicators, PI should engage in the development of national indicators and be involved in sharing good practice to compare performance and deliver best practice.

10.6 Risks

As referenced previously, waste prevention is a long term aspiration which is difficult to implement. Waste prevention activity such as reuse and repair often goes against the grain of consumer trends and challenges established linear business models. Waste prevention activity is also difficult to measure with waste arisings often influenced by a number of background factors. However the combination of the current economic climate, the launch of the WPPE and the growing acceptability of waste prevention behaviours has the opportunity to act as a catalyst for successful waste prevention on a large scale. However, when implementing the PI Plan, it will be vital to closely manage the risks outlined below.

Table 11: Summary of potential risks to the PI Plan, and planned mitigations

Risk	Impact (1 = low, 5 = high)	Likelihood (1 = low, 5 = high)	Mitigation
Insufficient communications support for waste prevention activity	4	3	Engage with communications teams early on to gauge available resource and make the case for prioritising waste prevention communications. Budget accordingly and make the most of free/cheap communications channels.
Insufficient staff resource to deliver waste prevention activity	4	3	Engage with all stakeholders at an early stage to make the case for prioritising waste prevention activity. Look for synergies with existing work and plan delivery accordingly. Plan a balance of resource intensive activity and activity which is not (e.g. social media). Engage a broad range of stakeholders so that waste prevention activity is delivered by a range of parties and is fully embedded to deliver a 'whole organisation approach'.
Limited budget available to deliver waste prevention activity effectively	4	2	Make the business case for waste prevention activity. Apply for funding where available. Look for synergies with existing work or seek partnership where appropriate. Deliver low cost activity as part of the plan (e.g. social media).
Economic recovery leads to an increase in waste arisings which can be interpreted as the Plan being unsuccessful	3	2	Targets set to take this scenario into consideration. Use of control areas for monitoring.
Business cases based on other author experience meaning anticipated results are not guaranteed	4	3	Where possible, test initiatives in 'trial' areas before rolling out across the partnership. Ensure baseline and subsequent monitoring is robust and comprehensive.

10.7 Review of Plan

It is recommended that the Plan is reviewed annually to report on progress, support the business case for funding until 2017 and to help develop the Implementation Plan for the next year. As outlined in the PI Action Plan, the Implementation Plan will cover the period from 2014 – 2017 and so a more detailed review will take place in 2016/17.

Appendices

Appendix 1 – Demographics of Hampshire

In 2011, the population of Hampshire (including Portsmouth and Southampton) was estimated at 1,759,700, increasing by 7.0% since 2001. The PI geographical area is a mixture of rural and urban areas, with a population density of 4.7 people per hectare, above both the South East and England and Wales figures of 4.5 and 3.7 respectively. The majority of the population lives in urban areas (83%).

The area's population is increasing, with 21,452 births in 2011 and an expected rise in the population of almost 128,000 people to 1,836,000 by 2026. Consequently, the number of dwellings is projected to increase by almost 119,000 to 857,500 dwellings by 2026. At the current level of 636kg of residual waste per household per annum, there will be an additional 76,000 of residual waste by 2026, inevitably leading to increasing pressure on existing facilities and services.

There will also be a change in the type of households that the population occupies, with a continued rise in the percentage of one person and cohabiting households. The population is projected to age during the period to 2026, with more people occupying the older age groups and fewer children.

The PI area has a low unemployment rate of 1.7% compared to the national average of 3%, and since 2000 the economy has grown by around 63%, compared to a growth of 57% in the South East region and 55% nationally. While this is good news for many, a prospering economy can also be perceived as an indicator of increased waste growth.

This context, of a dense population which is growing, experiencing economic growth and living in smaller households, suggests an increase in waste arisings and therefore stresses the importance of a PI Waste Prevention Plan.

Appendix 2: Summary of national Waste Prevention Plan

The WPPE is broken down into roles for five sectors of society, detailed below. It focusses Government activity “on the essentials that only government can do, and must do” and outlines many areas of work that are already taking place or where already planned before this programme was released, including:

- Introduction of 5p charge for single use plastic carrier bags from 2015
- Revision of the WEEE Directive, including introducing reuse targets for WEEE
- Improving the integration of waste prevention within sustainable procurement and FM within government
- Developing a quality standard for reused goods
- Facilitation of local authority forum to enable sharing of best practice
- Developing voluntary producer agreements
- Supporting access to finance for businesses which need support to improve efficiency

In addition the following new policy areas/actions were announced:

- Sustainable Electricals Action Plan – looking at improved design/manufacturing
- An £800,000 fund for communities to develop waste prevention initiatives in partnership with other organisations including local government
- A ‘postcode locator’ will be developed to signpost the public to local waste prevention and reuse opportunities
- WRAP to develop further tools and guidance as appropriate

The Role of Business

A core principle is that businesses should focus on waste prevention where it improves their own resource efficiency, enabling them to save money and increase profitability. Includes the following specific examples:

- Sustainable design of products
- Giving consumers confidence in reused and reusable items
- Measuring and reporting on progress
- Working across the supply chain to improve efficiency and reduce waste

The Role of Civil Society

This section recognises the role of civic society in increasing reuse and repair and encourages more joint working by this sector to improve access to materials and funding sources.

- Third Sector Organisations (TSOs) are encouraged to be more business-like in their operations

- TSOs are encouraged to work in partnership with local authorities and local stakeholders
- TSOs should develop services based on local customer needs.

The Role of Consumers

The programme recognises that everyone has a role in play in preventing waste, including individuals. Practical examples of how consumers can prevent waste include:

- Reducing food waste
- Reducing carrier bag use
- Increase in passing on goods, repairing items, purchasing longer life products and hiring or using second hand goods.

The Role of Wider Public Sector

The programme identifies the role local authorities and other public sector services have in preventing waste, not just through increasing awareness and provision of information to others, but by leading the way for others to follow through their own procurement and business practices. Key activities include:

- **Become a local leader** by taking a ‘whole organisation’ approach and exemplifying best practice in waste prevention in the collective authorities’ roles of employers, purchasers and service providers.
- **Develop a waste prevention plan** for the local area which prioritises actions based on the greatest returns in terms of environmental, social and economic benefits.
- **Measure progress** using locally based aims and indicators, and consider the impacts beyond waste arisings.
- **Educate and raise awareness** of the opportunities for householders and businesses to save money and make better use of products, while making use of national campaigns to provide consistent messages.
- **Work with businesses** by gaining information on the types of businesses operating in the local area and demonstrate the financial and competitive benefits of preventing waste.
- **Work with civil society** to develop waste prevention initiatives which deliver social benefits such as job creation and welfare assistance as well as economic and environmental benefits.
- **Explore new ways of working** by integrating waste prevention messages across services, delivering communications alongside other information to reach a wider audience at various life stages and points of interaction with the council.

The national Plan will be reviewed at least every six years.

Appendix 3: Project Integra Hampshire Joint Municipal Waste Management Strategy: Refresh of Core Strategy 2013 – 2023 (JMWMS)

Strategy section	Relevant objective
5.2.1	<p>Objective 1: Customer Focus. PI partners are committed to placing a high priority on maintaining and enhancing high customer satisfaction in providing a waste and resource management service to the residents of Hampshire.</p> <p>Supporting Action 1: PI partners will maintain consistent and high standards of waste services across Hampshire, based on customer feedback and satisfaction surveys.</p>
5.2.2	<p>Objective 2: Value for Money. PI partners will seek to ensure that the public, and where appropriate, businesses – particularly small and medium enterprises – are provided with an efficient waste management and recycling & reuse service that represents best practice and best value through bring banks, kerbside collections and across the HWRC network. All waste services will be subject to continuous review and improvement of existing services and systems.</p> <p>Supporting Action 2: PI partners will continue to evaluate options to progressively extend and improve the efficiency of recycling & reuse collections to maximise the value of recycled & reused materials.</p>
5.2.3	<p>Objective 3: Sustainability. PI partners will encourage the treatment of waste as close as reasonably possible to its source and at the highest level of the waste hierarchy as is economically practicable, minimising the cost of waste transport, and consistent with the principles of environmental sustainability and whole life cycle costs.</p> <p>Supporting Action 3: PI partners will give consideration to all appropriate alternative technologies to those currently employed as a means of maximising diversion from landfill, reducing CO2 emissions and balancing cost efficiency and waste management services.</p>
5.2.4	<p>Objective 4: Behavioural Change. 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 attitudes and behaviour towards maximising waste prevention, reuse and recycling in order to embed the waste hierarchy in our approach to waste management.</p> <p>Supporting Action 4: PI partners will continue to encourage and strengthen partnerships with the community, voluntary (including Third Sector Organisations) and private sectors, and investigate opportunities for external funding to generate practical, community based waste minimisation and reuse initiatives including the development and delivery of the Recycle</p>

	for Hampshire communications and behavioural change programme and schools education programme.
5.2.5	<p>Objective 5: Waste Prevention and Reuse. PI Partners will continue to encourage waste prevention and reuse and work with others, including manufacturers and retailers, to sustain an average annual rate of waste growth below 0.5%.</p> <p>Supporting Action 5: PI Partners will work with WRAP and other similar stakeholder agencies as well as private sector organisations and businesses involved in the supply chain operations that impact on local authorities in order to maximise waste prevention opportunities.</p>
5.2.6	<p>Objective 6: Waste Recycling and Composting. PI Partners will continue to encourage participation in recycling and composting, and consider the value of materials and whole system costs and implement appropriate measures to achieve these aims.</p> <p>The HWRC network across Hampshire will continue to be developed in order to fulfil its role of providing convenient, innovative, and accessible reuse, recycling and composting services for the whole community.</p> <p>Supporting Action 6: PI partners will undertake regular waste analyses of reuse and recycling facilities (including the MRF performance process, bring banks, household collections and other collections e.g. bulky, commercial etc. in order to provide baseline data on a sufficiently regular basis to measure the effectiveness and enable consistent comparison of waste recycling and minimisation initiatives.</p> <p>Hampshire County Council, Portsmouth City Council and Southampton City Council will engage with the community to consider options aimed at improving the HWRC service provision across Hampshire, maximising value for money and helping service provision for SMEs. The management service contract will be retendered in 2015.</p>
5.2.7	<p>Objective 7: Waste Treatment and Disposal. PI partners will seek treatment of remaining, non-recyclable waste to achieve their aim for zero waste to landfill and continuously monitor and measure their progress towards it.</p> <p>Supporting Action 7: Consideration will be given to all appropriate alternative technologies to those currently employed such as anaerobic digestion, gasification, mechanical & biological treatment, pyrolysis and solid recovered fuel as a means of maximising diversion from landfill, reducing CO2 emissions and balancing cost efficiency and waste management services.</p>
5.2.8	<p>Objective 8: Leading the Way. PI will continue to develop its waste and resource management services through local and broader collaboration to ensure that:</p>

- the value of material resources is maximised;
- markets are supplied with high quality materials
- material is recycled through flexible, sustainable and ethical markets.

Supporting Action 8: PI partners will continue to explore innovative opportunities for both accessing and maximising value from waste and also for improving recycling and recovery performance.

Appendix 4: Summary of historic waste prevention activity within PI

In the mid 1990s PI launched a number of initiatives to increase public awareness and facilitate waste prevention where possible. This included a pilot scheme working with local hospitals to incentivise use of reusable nappies and conducting a home composting campaign linked to the promotion of subsidised home composting bins. An evaluation of schemes proved that despite being successful in terms of increasing public awareness, minimal impact on household waste tonnages were achieved due to low level of uptake by the public and participation in activities not being sustained.

In 2003, PI was awarded funding from Defra and WRAP to develop a recycling and waste minimisation strategy based on a community based social marketing approach. The recycling campaign developed as part of this strategy was based on findings from initial research which examined the public's barriers, motivators and triggers towards recycling and waste prevention. The research showed that overall the concept of waste prevention was misunderstood (often confused with recycling) due to a lack of knowledge and understanding of what it is, and certain aspects of waste prevention (i.e. donating and repairing) were more socially acceptable than others (i.e. buying less).

In 2005, Hampshire County Council was successful in receiving funding from Defra's Waste Evidence Branch to carry out research into applying the 4 E's behaviour change model to encourage Hampshire residents to prevent waste. This two year project, branded 'Small Changes, Big Difference' was carried out in partnership with PI and Brook Lyndhurst consultancy. It focused on engaging residents on waste prevention via 'communities of interest' defined by 'moments of change', i.e. people undergoing a significant change in their life whereby they may be seeking information and carrying out certain activities which can be tailored to prevent waste at the same time. The project evaluation showed the use of the 4E's model was successful in changing attitudes and behaviour, and as a result, was perceived to reduce household waste and was particularly successful in engaging new parents in waste prevention activities.

In 2009 five Hampshire collection authorities worked together on the Waste Less Challenge (WLC) which invited residents to reduce their household waste over a seven day period during October and November. Project delivery centred on timely communications and promotion of waste prevention actions. Similarly to the SCBD, WLC participants were asked to self-report on the waste reductions which they achieved, with 94% of the 101 participants stating they had reduced their residual waste. Those who reduced their weight did so by an average of 37.7%. Approximate calculations suggest that the overall money generated in revenue and savings for the 101 participants was £64.34.

Appendix 5: Overview of current countywide waste prevention activity

Activity	Description	Impact to date	Costs
<p>Home composting promotion through the Recycle for Hampshire campaign</p>	<p>Since 2007 all WCAs and the unitaries have promoted the WRAP home composting scheme (now operated by Straight). Prior to this a smaller number of WCAs promoted the schemes.</p>	<p>Up until early 2013, 93,912 home composting bins have been sold across PI through the home composting initiative. This is equivalent to 12.7% of all households in PI. Compost bins are currently promoted at cost price from the supplier.</p> <p>A compost bin will divert 150kg per household per year. To calculate the current diversion the number of bins sold is divided by 1.2 to account for households having more than one bin. WRAP studies show the annual lapse rate for compost bin use is around 9% for unsupported schemes, and around 4% supported. An unsupported scheme is when composting units are sold and no follow up or support is provided. The Hampshire scheme is unsupported. Therefore applying these assumptions to the annual sales, the estimated number of bins in use in Hampshire is 49,281 bins.</p> <p>The estimated current diversion through home composting is 7392 tonnes. This diversion will continue to decline if the home composting scheme remains</p>	<p>The Straight scheme is free for authorities to sign up to, and Recycle for Hampshire funds the printing of a small number of leaflets for each authority each year (£975.00 in 2012/13). (Excluding those authorities not currently in Recycle for Hampshire)</p>

		unsupported at a rate of 9% per year.	
Love Food Hate Waste promotion through the Recycle for Hampshire campaign	The Love Food Hate Waste (LFHW) campaign aims to raise awareness of the need to reduce food waste. To date, Recycle for Hampshire have promoted the LFHW at events, in print and through the website. In addition, 10,000 LFHW tea towels have been produced which have been distributed at events and passed on to WCAs to distribute at their own will.	No attempts to monitor these activities have taken place.	Printed 10,000 'Love Food Hate Waste' tea towels at a cost of approx. £4000.00. Website maintenance is minimal as the LFHW campaign website is managed externally.
Schools Recycling Programme through the Recycle for Hampshire campaign	The programme was designed for schools who wanted to learn more about recycling and improve their school recycling behaviour, but often includes delivery of waste prevention activities too. The programme offers schools the support of a dedicated Outreach Officer for three visits over the period of one school term. Together, the school and outreach officer works with the school community or a specific 'change team'. Over the term, the 'change team' are encouraged to introduce waste-saving measures throughout the school and communicate the messages learnt to the whole	The programme is successful in educating the school children to become good recyclers as well as improving the overall waste management at the school which results in cost savings for the schools themselves, from waste collection services to paper use reduction. Many of the schools have reported back that they have made small changes across the school community to help reduce overall waste arisings; e.g. <ul style="list-style-type: none"> • Collecting fruit peels and paper towels for the composter • Holding a Waste Free Lunch competition • Replacing plastic cups in staff room • Placing a paper recycling tray in photocopy/IT suites/resources rooms 	£50,000 is allocated to the Recycle for Hampshire education budget every year, with approximately £45,000 spent on salaries, and £5,000 which is spent on resources e.g. pencils, posters, equipment etc.

	<p>school community. The programme has been rolled out to over 300 schools across PI.</p>	<ul style="list-style-type: none"> • Printing double sided. <p>The Outreach Education Officers carry out a waste audit at the beginning and end of each programme to measure how much the waste has decreased and if there have been any changes to the amount recycled. The majority of schools see an increase in the amount of waste recycled when second audits are completed and a reduction in the residual waste. From the summary reports completed by the Outreach Officers, it is difficult to establish an average waste reduction weight due to the variables which can interfere in the audits.</p>	
<p>Reuse of bulky household items at HWRCs</p>	<p>Hopkins Recycling Limited are currently contracted by Hampshire County Council (HCC) to manage the operation of HWRCs across the County. Under terms within their contract, they are encouraged to promote the resale and reuse of appropriate bulky waste delivered to the site which would then count towards the recovery figures identified at each of the HWRCs. Site operators are required to</p>	<p>A three month trial was conducted during 2008 at nine HWRCs where all items sent for reuse were recorded and an average weight assigned based on the figures provided in the Furniture Recycling Network's (FRN) document 'Measure your Treasure'. This information was used to calculate a standard reuse figure of +4% on the total of a set list of material inputs which is extrapolated and applied to all HWRC tonnages in order to record reuse of</p>	<p>No major direct cost as the activity is part of the existing HWRC contract.</p>

observe potential items for reuse and capture them before items are placed in the bins. Each site has a dedicated 'reuse area' where items are clearly marked for sale. A 2012 report by WRAP recommended that HCC review its reuse measurement and seek to work with the third sector to increase reuse, and the current HWRC service provision review will seek to address these actions as part of the new contract in 2015.

bulky and bric-a-brac waste on WasteDataFlow.³

³ +4% is applied to the following material tonnages: Card, Ferrous, Non-Ferrous, Oil ('Mineral Oil'), Paint Recycled, Paper / Magazines, Plastics, Textiles, Other ('Vegetable Oil'), Car, Batteries, plus the total of the 'Authority Recycled' figure, which currently comprises: Glass, Green, Gypsum, Household Batteries, Soil & Rubble, WEEE and Wood.

Appendix 6: Overview of current waste prevention activity by individual authorities

Authority	Current LA led waste prevention activities	Non LA led activities	Internal waste prevention activity
Basingstoke and Deane	<p>Currently finalising a communications plan for promotion and education within the authority area.</p> <p>Hope to produce a joint waste strategy/prevention plan for both authorities by end of year – PI work will feature in it.</p>	<p>Basingstoke provides a grant to the Furniture Reuse Project (based in Basingstoke.) They collect and refurbish old furniture and white goods. Both BDBC and HDC use them to collect any white goods which residents wish to dispose of through the Bulky Waste service.</p> <p>St Michaels Hospice in Basingstoke runs a furniture reuse centre as well.</p>	<p>Basingstoke has an environmental champions network within the civic offices promoting reuse, recycling and waste reduction etc.</p>
East Hants and Winchester	<p>EHDC/WCC developed Joint Waste to Resources Action Plan – activities planned, and so far reviewed EHDC side garden waste. Plan identifies target areas in prevention, reuse or recycling.</p>	<p>Only aware of a Bordon based charity.</p>	<p>Have reduced number of waste bins and introduced recycling stations. Moved from roller towels to one sheet dispensers.</p>
Eastleigh	<p>Restrict residual waste capacity; this has to be requested and is subject to an officer visit.</p> <p>Conducting a project to reduce the number of residual bins – this will be through letter and house visits.</p> <p>Customer service centre staff also</p>	<p>Tools for self-reliance (Reuse).</p>	<p>Waste audits have been carried out in the past but are not up to date, new building could provide the opportunity to address/promote waste minimisation.</p>

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	<p>signpost people requesting the bulky waste collection to reuse charities in the first instance. Occasionally run swap shop type events and textile workshops.</p>		
Fareham	<p>Some work in previous years on promotion of Love Food Hate Waste but limited resource now available.</p>	<p>Only charity shops.</p>	<p>Nothing significant</p>
Gosport	<p>Nothing in place.</p>	<p>Gosport and Fareham Nappy Network and Bicycle Recycling by Motiv8 *</p>	<p>Procurement strategy – purchase in a sustainable manner. Energy Champion Group for sustainable activities. Textile collection weeks and ‘swap’ area on intranet.</p>
Hampshire	<p>Waste prevention strategy drafted ready for Member approval in March. Includes scope for PI work and internal actions. Bulky household items available for resale at 24 HWRCs. Adult Services have developed the Hampshire Furniture Reuse Network, working with local third sector organisations (TSOs) to fund low cost or free household items to residents in need. Waste Management looking to support this as part of future work.</p>	<p>Various TSOs in Hampshire, promoted on reuse pages of Waste Management website.</p>	<p>Policies and procedures in place for reusing IT equipment. Working with FM and project team to investigate opportunities for reusing unwanted office furniture from headquarters and reduce disposal costs.</p>

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	Trading Standards support consumers in identifying and reporting excess packaging and from time to time will publicise this.		
Havant	Promote use of other sources of disposal via web site and customer services. Carry out communication at events/magazines of various waste minimisation themes.	Some in the past years but they have not sustained trading due to demand and finance.	Encourage recycling and waste minimisation at work: office waste, batteries, recycling etc. Sustainable procurement where possible but unsure of priority in specific services. Operational Services – procure sustainably e.g. wheeled bins, recycling literature, merchandise etc. and always encourage innovative ways to reduce waste by recycling all waste types e. g. metal scrap wheeled bins etc.
Hart	Reviewing communications within the area at present. Hope to produce a joint waste strategy/prevention plan for both authorities by end of year: PI work will feature in it.	Furniture Reuse Project based in Basingstoke collect and refurbishment old furniture and white goods.	Starting environmental champions network to promote reuse, recycling and waste reduction.
New Forest	None specifically but waste	New Forest Nappy Network / Nappy Bliss	Internal eCO ₂ group that

	<p>prevention will form part of upcoming five year waste strategy. In mean time promoted in education sessions, advice on website on ways to reduce and reuse materials, promotion of external schemes on NFDC literature, promotion of Love Food Hate Waste.</p>	<p>New Forest Transition (Eat and Grow Local campaign – general food sustainability campaign including WP and occasional special events such as Jean Genie making bags from old jeans and bike repair shops)</p> <p>Tools for Self Reliance (Community project based in Ringwood that refurbishes tools and sewing machines to be sent to developing countries)</p> <p>Dorset Reclaim, SCRATCH and BHF (Local charities donate unwanted furniture for resale to low income/emergency need households)</p> <p>Plastic bag free (community-led projects to reduce/ ban plastic bags in parts of New Forest)</p>	<p>promotes sustainable behaviour whilst at work – Oct/Nov 2013 saw the focus change to waste reduction and recycling.</p> <p>Sustainable procurement policy (Strive to adopt the BS8903 practices, including procurement of goods that have been made from recycled or reclaimed materials or that have minimal impact on natural resources. And consider a basic lifecycle analysis of a product).</p>
<p>Portsmouth</p>	<p>Waste reduction is a future stage of the current project known as BIG recycle. PCC continues to promote Love Food Hate Waste and other related schemes through the council’s website.</p> <p>The PI Waste Prevention Plan will be incorporated within the Business Plan for 2014/15 with set</p>	<p>Local charities reuse of furniture.</p>	<p>‘Green Champions’ is an internal group of officers who raise the awareness of, and promote, all issues related to sustainability.</p>

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	actions for the team. Waste prevention will form part of the waste and sustainability communications campaign.		
Rushmoor	Nothing currently but standard size bin for residual waste is 140L, which is supported by bin audits and face to face advice for residents struggling to manage their waste.	Aware of furniture reuse organisations in local area, but do not have any formal links with them.	Building Services team actively practice waste prevention methods, such as ensuring the reuse of surplus or good condition building materials (i.e. aggregate). Also sustainable procurement policy.
Southampton	No waste prevention plan currently but selling home composters and Green Johannas at subsidised prices to residents.	Promote the British Heart Foundation and Oxfam furniture stores on SCC website and also by Actionline. Promote SCRATCH (who need furniture, white goods and kitchen items to help families in need) and Jamie’s computer club (take IT equipment for revamp and resale). They form part of a St James Homeless Society.	Work with Capita and other council departments to give away any unwanted office furniture, stationery and sundries not needed to other departments, schools, charities and not for profit organisations.
Test Valley	Reuse schemes with charities promoted as alternative to bulky waste collections: Twice as Nice (reused household furniture/goods), British Heart Foundation (reused household furniture), Andover MIND, (reused	None	Sustainability champions for each service. Sustainability Strategy 2012 – 2017, with an Action Plan. Sustainable Procurement

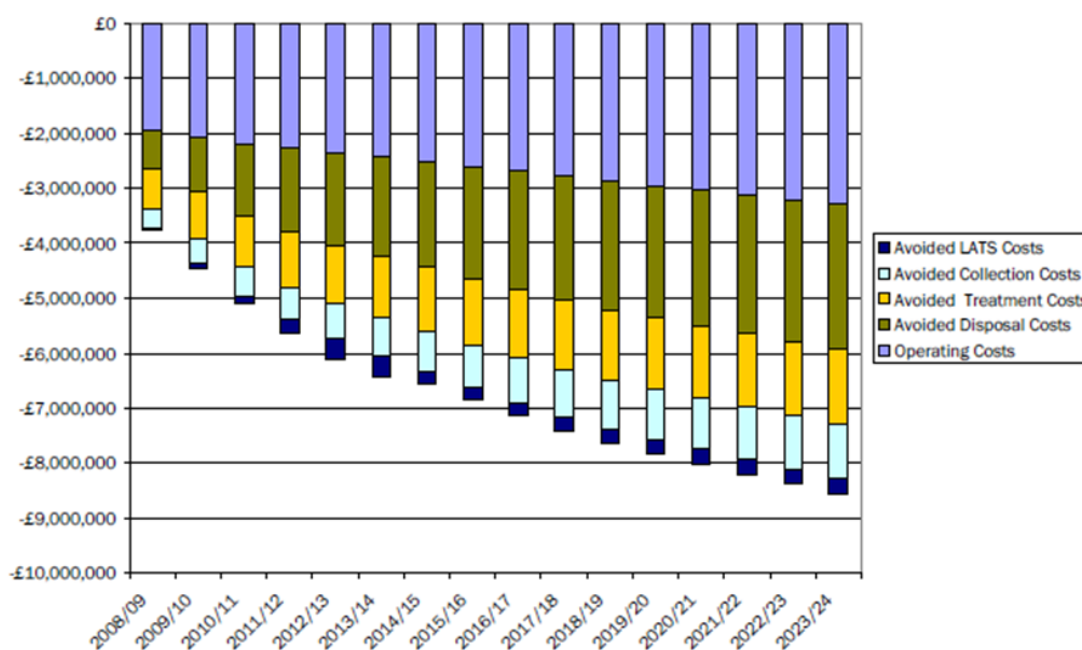
<p>household furniture /goods) and the Oxfam furniture shop. Andover Day Services (collection of Aluminium foil across the borough at various local recycling centres).</p>	<p>Strategy Waste & Recycling Strategy</p>
<p>A variety of Collection Banks across area for the following charities: Salvation Army, Hampshire Air Ambulance, TRAIID, Oxfam, BHF, Dreams come True, Variety Club.</p>	

Appendix 7 – Information in support of the case for action

Financial

By preventing waste from occurring in the first place, local authorities have the opportunity to make cost savings through a reduction in waste collection, transport and disposal costs. The most direct savings from waste prevention to be made is in waste disposal costs, however the costs of waste collection, transport and treatment are also significant in the long term. Spend on waste is often a considerable proportion of local authority budgets and at a time of increasing public sector spending cuts, effective waste management, including waste prevention, can help keep costs low.

The following figure from Eunomia illustrates the potential financial impact of waste prevention activities.⁴



Changing the delivery of services to focus on waste prevention can be a financial incentive for local authorities. For example, if a furniture reuse organisation takes over a bulky waste collection service, this can both increase reuse and reduce the financial burden of providing a service themselves.

⁴ Modelling the impact of waste prevention activities: output from Eunomia modelling a range of waste prevention measures.
<http://www.eunomia.co.uk/shopimages/10%20Ways%20to%20Cut%20Local%20Authority%20Waste%20Collection%20Costs%20V1.pdf>

Waste prevention can also financially benefit PI authorities as organisations and across all services through our own internal practices, for example reusing IT equipment rather than procuring new equipment. Similarly, there are also financial benefits for other public services, businesses and householders through spending less on resources, and reusing and repairing rather than replacing equipment, for example.

If significant reductions in kerbside residual waste are achieved there may be opportunities for utilising any resulting spare capacity at the Energy Recovery Facilities.

Finally, as outlined in the section on performance, a waste prevention plan could lead to an increase in DMR recycled, increasing income for collection authorities.

Performance

Waste prevention offers performance advantages specific to local authorities. Reducing the overall waste arisings will logically lead to a higher dry recycling rate, assuming that Dry Mixed Recycling (DMR) tonnages remain stable. Research carried out in Hampshire as part of the 2007 ‘Small Changes Big Difference’ project found that raising public awareness of waste prevention led to greater overall awareness and engagement with resource efficiency, and in turn, 41% of households involved claimed an increase in the amount recycled.

As waste arisings decrease, PI’s kg per capita and household performance will also improve. Table 7 below briefly shows the extent to which PI’s per household arisings would need to decrease in order to meet certain performance milestones.

Table 7: Required equivalent kg reductions per household and per household per week required for PI performance to reach national and regional levels (based on 2012/13 data)

2012/13	Kg per household reduction required	Kg per household per week reduction required
To reach SE average	61 kg	1.17kg
To reach national average	83kg	1.6kg
To fall within top 30 performing WDA/unitary authorities	139.3kg	2.68kg

Finally, due to the financial and social benefits afforded by waste prevention activity, developing waste prevention initiatives can be viewed as improving performance through an increase in public service provision.

Environmental

Waste prevention is at the top of the waste hierarchy and is therefore considered the most environmentally sound option for dealing with waste. Activities such as repair, reuse and remanufacturing use fewer material resources and less energy and water, with an associated reduction in carbon emissions, and by prolonging the life of products and materials, mean more resources remain in the economy with less waste sent to final disposal.

In the long term, if there is less waste to be collected and processed, this may lead to a rationalisation of collection services and subsequent reduction in carbon emissions.

Social

Waste prevention activities can bring social benefits to the wider community, for example opportunities for job creation and training from furniture reuse and repair schemes delivered by the third sector. Such schemes often also provide affordable household items to those in need and bring financial support to charitable and community organisations.

Economic

Engaging local businesses with the financial benefits that waste prevention and resource efficiency can provide can help them to reduce costs and to become more competitive. In turn this supports the wider economy of Hampshire, Portsmouth and Southampton. Waste prevention also contributes to the concept of a circular economy, for example by keeping more material resources useful within the economy and also supporting new service driven business models such as renting household tools and appliances.

Legislation relating to waste prevention

The Waste Regulations for England (2011) sets out the requirement for any establishment which imports, produces, collects, transports, recovers or disposes of waste to take all measures available and are reasonable in the circumstances to apply the waste hierarchy in the order of priority. At the top of the waste hierarchy is waste prevention. Having a Waste Prevention plan in place and implementing activities demonstrates PI's compliance with legislation.

The table below summarises key areas of legislation:

European legislation	Relevance to waste prevention
Packaging and Packaging Waste	The Packaging and Packaging Waste Directive requires Member States to take measures to prevent the formation of packaging waste, and to develop

Directive (94/62/EC)	packaging reuse systems reducing their impact on the environment. This directive led to the formulation national regulations detailed further down.
The Landfill Directive (1999/31/EC)	The Landfill Directive requires improvements to landfill management, bans certain materials from being landfilled together with other waste and requires the pre-treatment of all waste before landfill. This Directive aims to prevent, or reduce as far as possible, negative effects on the environment from the land filling of waste, by introducing stringent technical requirements for waste and landfills and setting targets for the reduction of biodegradable municipal waste going to landfill. Under the Landfill Directive, the UK is obligated to reduce the amount of landfill based on the amount of biodegradable municipal waste in 1995, to 75% by 2010, to 50% by 2013 and to 35% by 2020.
The Waste Electrical and Electronic Equipment Directive (2002/96 /EC)	This Directive set targets for the collection, recycling and recovery of electrical products. By July 2007, collection systems had to be introduced to separately collect electrical and electronic appliances for recycling and reuse. The Directive was recast in 2012 (2012/19/EU) and transposed into UK law via the WEEE Regulations 2013 – the new Regulations place obligations on producers and their producer compliance schemes to prioritise, where appropriate, the reuse of whole appliances.
Revised Waste Framework Directive (rWFD) (Directive2008/98/EC)	<p>The revised Waste Framework Directive requires the Member States to create national waste prevention programmes by 12 December 2013. The objective of these programmes is to present a coordinated national approach to waste prevention, delineating targets and policies, and aiming to decouple economic growth from the environmental impacts of waste generation. The waste hierarchy is also defined in Article 3 of the Waste Framework Directive, and a legal duty is placed on organisations to consider waste in the order of the hierarchy so waste prevention must be considered.</p> <p>By the end of 2014, the European Commission will present a report on prevention and propose measures, if appropriate, including waste prevention and decoupling objectives, to be achieved by 2020. National waste prevention programmes may need to be adapted to meet these new targets.</p> <p>In addition, Article 8 authorises Member States to establish extended producer responsibility compliance requirements for producers, manufacturers, processors or distributors, including free take-back programmes and public disclosure obligations on product reusability and recyclability.</p> <p>This has been transposed into national legislation by via the Waste (England and Wales) Regulations 2011 (see further down).</p>
National Legislation	Relevance to waste prevention
Environmental Protection Act (EPA) 1990	The EPA defines, within England, Wales and Scotland, the fundamental structure and authority for waste management. It gives WCAs the authority to specify how household waste will be collected, allowing use of tools to prevent waste through collection frequency and container size and type.

<p>Landfill Tax</p>	<p>Landfill Tax is a tax payable for each tonne of waste sent to landfill and was introduced by the Government in 1996 to encourage diversion of waste away from landfill towards more sustainable management options such as prevention, recycling and composting. There are two rates of tax; a lower rate for solid inert waste and a higher rate all other wastes. The cost per tonne from April 2014 will be £80.</p>
<p>Packaging Waste Regulations 1997</p>	<p>Has been subject to a number of amendments and consolidation: it states that a shared producer responsibility approach is applied between the manufacturing and retail industries. Introduced system of packaging recovery notes (PRN's) and targets for recovery of packaging by material type (glass, paper, metal, plastic, wood).</p>
<p>Essential Packaging Requirements 1998</p>	<p>States that packaging weight and volume must be reduced to the minimum necessary for safety, hygiene and consumer acceptance of the packaged product – can be enforced by Trading Standards.</p>
<p>The Waste Minimisation Act 1998</p>	<p>The Waste Minimisation Act 1998 is a key driver for waste prevention at the National level. It enables local authorities to make arrangements to minimise the generation of household, commercial or industrial waste in their area through inserting the following provision into the Environmental Protection Act (as Section 63A): <i>“A relevant authority may do, or arrange for the doing of, or contribute towards the expenses of the doing of, anything which in its opinion is necessary or expedient for the purpose of minimising the quantities of controlled waste, or controlled waste of any description, generated in its area.”</i></p>
<p>Waste Strategy for England 2007</p>	<p>The Waste Strategy for England 2007 sets out the framework for waste management in England, including recycling targets, incentives and actions to stimulate infrastructure investment. With regards to waste prevention on a national level, the strategy:</p> <ul style="list-style-type: none"> • Aims to decouple waste growth [in all] sectors from economic growth and put more emphasis on waste prevention and reuse • Set a new target to reduce the amount of household waste not reused, recycled or composted. This means reducing it from the 22.2 million tonnes in 2000 to 12.2 million tonnes in 2020 (with a target of 15.8 million tonnes by 2010). • Identifies waste prevention measures as contributing to a net reduction in global greenhouse gas emissions of at least 9.3 million tonnes of carbon dioxide equivalent per year compared to 2006 (equivalent to annual use of around 3 million cars). • Encourages local authorities to take on a wider role (in partnerships) to help local (particularly smaller) business reduce and recycle their waste with cost savings through more integrated management of different waste streams. • Creates incentives that reflect the waste hierarchy, including increasing the landfill escalator.
<p>Waste Review 2011</p>	<p>The Government Review of Waste Policy in England 2011 (the Waste Review) was published on the 14th June 2011. The Waste Review sets out</p>

	<p>the framework for achieving a ‘zero waste’ economy, and includes a number of actions which aim to ensure waste is managed in line with the waste hierarchy, with waste prevention a priority. Food waste is identified as a priority waste stream and the Government’s long-term objectives are to reduce the amount of food wasted, whilst recognising that any food waste generated should be seen as a valuable resource and not sent to landfill.</p>
The Waste (England & Wales) Regulations 2011	<p>These regulations transpose the rWFD into national legislation. They make reference to the requirement for national waste prevention programmes and the waste hierarchy.</p>
Public Services (Social Value) Act 2013	<p>Under this legislation, local authority procurers must now consider how they can improve the social impact of their public service contracts before they start the procurement process. It is designed to make it easier for Social Enterprises to deliver public services. This is relevant to LA activity around bulky waste in particular.</p>

Appendix 8 - Barriers to waste prevention

Despite the benefits of waste prevention, there has never been a cohesive waste prevention strategy or delivery plan for PI. There are challenges and barriers to delivering waste prevention, which need to be addressed for this Plan to be successful.

Performance

PI's joint municipal waste management strategy to date has focussed on diversion from landfill, and having invested significantly in an effective energy recovery infrastructure, it is fair to say that reducing overall waste arisings has not been considered as a priority. While there are national recycling targets and local ambitions to reduce the amount sent to landfill, there are currently no national or local waste prevention targets.

Measurement

As the WPPE identified, it is inherently difficult to identify the impacts of waste prevention. For example, many waste prevention behaviours such as reuse and repair are unseen, unrecorded and may even not be considered as a 'waste' activity by the person carrying them out. Reductions in waste are also difficult to assign to a particular activity as waste arisings can change for any number of reasons, plus it is difficult to quantify the impact of 'avoided' behaviours which have not taken place, such as not buying items or not throwing items away. In addition, behavioural change initiatives take time to reach and be taken up by people within diverse local communities. Voluntary behaviour change is a slow process which may take a significant amount of time to result in noticeable adoption.

Financial

Waste prevention activities are generally considered to be resource intensive, requiring in-depth, sustained or repeated engagement with residents. The current economic climate has seen reductions in local authority staffing levels, and therefore combined with the cost of the initiatives themselves and the difficulties in measuring their impacts, this can make the business case for on-going waste prevention activity difficult to demonstrate.

Political

PI is a partnership of 14 local authorities, each with differing priorities. It can be difficult to obtain political buy-in and consensus across the board for new initiative, particularly those which may be seen to be difficult or slow to evidence and resource intensive.

External factors

Waste materials arising from households are a function of material inputs, lifestyle choices, and external factors. Many of these variables which affect the quantities of household waste arising are outside of PI's direct sphere of influence. These include factors such as demographics, the economy, central government initiatives and media activity. These

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external factors could impact negatively or positively on waste arisings, but they mean that this PI plan will always be subject to influences which cannot be controlled and may therefore be a barrier to this Plan.

Appendix 9: Scoring criteria used to shortlist waste prevention actions

Criteria	Definition
Synergy with national plan	Synergy with national plan including targeting a priority material
Ease of implementation/fit with local circumstances	How easy it would be to introduce this activity and whether there is existing support and/or infrastructure
Timescales for realisation	How quickly the tonnage and financial savings can be delivered
Potential tonnage reduction	The level of potential tonnage reduction which the activity can deliver
Cost/savings	The level of financial savings which will be delivered to the WDA/WCA
Political acceptance	How likely the activity is to be accepted by local politicians
Staff requirement	The level of staff resource needed to deliver this activity
Funding opportunities	Potential to externally fund this activity
Potential partnerships	Potential for partnership working with other authorities, third sector or private sector
Reputational	How will the activity be received by residents/media
Social benefits	What level of additional social benefits will the activity deliver

Appendix 10 - List of acronyms

Defra: Department for Environment, Food and Rural Affairs

DMR: Dry Mixed Recycling

EEE: Electrical and Electronic Equipment

EPA: Environmental Protection Act 1990

ERF: Energy Recovery Facility

FRO: Furniture Reuse Organisation

FRN: Furniture Reuse Network

HCC: Hampshire County Council

HFRN: Hampshire Furniture Reuse Network

JMWMS: Joint Municipal Waste Management Strategy

LFHW: Love Food Hate Waste

MRF: Material Recovery Facility

PCS: Producer Compliance Scheme

PI: Project Integra

PRN: Producer Responsibility Notes

rWFD: Revised Waste Framework Directive (2011)

SE7: The South East 7 Authorities

TSOs: Third Sector Organisations

VES: Veolia Environmental Services

WCA: Waste Collection Authority

WDA: Waste Disposal Authority

WLC: Waste Less Challenge

WPPE: Government's Waste Prevention Plan for England

Appendix 11 – “Indicative estimated costs” table (WRAP)

Waste prevention activity	Local authority input description	Capital costs	Net operating cost for local authority	Diversion information
1. Grass cycling	Provision of manual mowers suitable for grass cycling	Manual mower (£48 each)	Householder volunteer costs = 0	For average garden size 40m ² @3kg/m ² 120kg per year per mower
2. One small community composter	Pay for a shredder No other involvement	A. Shredder for 5 tpa = £540 B. Shredder for 20tpa = £2,000 C. Shredder for 100 tpa = £9,500	No subsidy = 0	5 tpa 20 tpa 100 tpa
3. Community composting (larger scale)	Pay agreed recycling credits/subsidy Community composter with tractor, a shredder and screen 2 part time operatives (7 hours per day) and volunteers Income from landscapers and sale of compost	Mobile shredder for 300 tpa (shared with local landscaper) = £11,000	Recycling credit/subsidy = £53/t (Total project costs per annum (excluding shredder) = £14,800; income = £1,500)	Approx 250 tpa
4. Unwanted mail packs	Unwanted mail parks (including MPS leaflets and other supporting information in glossy pack) and “no junk mail” stickers	N/A	Stickers £0.20 each Packs £1 each Distribution cost 20p each Total = £1.40/hh	4kg/hh
5. Unwanted mail –	Green champion	N/A	£20 per voucher per	4kg/hh

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exemplify activity	volunteers from local authority 1) Collect and measure junk mail 2) Sign up to MPS and use sticker		volunteer (one volunteer per household)	
6. Community bulky waste reuse project (e.g. FRN)	Support local community reuse group	N/A	Provide reuse credit payment of £47.50 per tonne (only on items sold or provided FoC)	30% of bulky waste collections
7. Give and take days	Arrange give and take days. Authority allocates venues and publicise event. (Publicity includes: adverts in newspapers, newsletters, emails etc. Also banners outside inside events)	N/A	£1,000 per event	1.2 t per event
8. Reuse shops operated by charities	Develop reuse community shops operated by local charities The authority can look at a variety of options from renting the shop, construction of a shop and free disposal of waste if less than 5tpa	N/A	Rent = £2,500 pa Elec = £600 pa Water = £500 pa Disposal of 5 tpa = £600 pa Total = £4,200	4 tpa per shop (on average)
9. Love Food Hate Waste (small scale)	Smaller awareness campaign, live cooking	N/A	Each cooking demonstration for 35	Approximately 10 people per event become a

	demonstrations, following a launch event		people (with local chef including roadshow and advertisement) = £2,250	committed food waste reducer 1 committed food waste reducer = 78kg/hh/yr One event = 0.78 tpa
10. Love Food Hate Waste (small scale)	Smaller awareness campaign with public participation with food waste diaries. Provide packs and scales to participants and £40 vouchers to participants for partaking over 4 weeks	N/A	Public participation in food waste reduction diaries = £50/hh Aim for 50 participating hh 50% of participating hh will become committed food waste reducers	1 committed food waste reducer = 78kg/hh/yr 50 participating hh converts 25hh to become committed food waste reducer = 1.95tpa
11. Love Food Hate Waste (small scale)	Authority-wide radio campaign for LFHW	N/A	Radio campaign with local chefs providing tips and hints for leftovers etc (includes press releases and 8 radio adverts per day) = £10,000 (for 4 weeks)	1 committed food waste reducer = 78kg/hh/yr Increase committed food waste reducers estimated by 0.5% (approx. 500 hh) = 39tpa
12. Love Food Hate Waste (large scale)	Large awareness campaign with outdoor media (buses, roadshows, leaflets) and working with local grocers. Also personal case studies with public	N/A	Cost per hh £0.30 Hence approximately £30,000 for market town local authority	1 committed food waste reducer = 78kg/hh/yr Increase committed food waste reducers by 10% (approx. 10,000 householders) = 780 tpa

<p>13. Home composting waste challenged families</p>	<p>Waste challenged families – with home composting emphasis. Provide packs, home composters and scales to participants and £40 vouchers to participants for partaking for 4 weeks</p>	<p>N/A</p>	<p>Waste challenged families waste diaries = £70 per family (incl. a home composter)</p> <p>Aim for 50 participating families</p> <p>30% of participating families to continue to reduce waste</p>	<p>0.34 t per family per year 50 participating families converts 15 families to continue to reduce waste = 5.1 tpa</p>
<p>14. Home composting subsidy</p>	<p>Provide £2 subsidy for a home composters</p>	<p>N/A</p>	<p>£2 per home composter</p> <p>(No leaflets or advertising included in the above costs)</p>	<p>150kg/yr but for effective new diversion (as a minimum)</p> <p>$(150 \times 50\%) / 1.2 = 62.5$ kg/yr (for every home composters sale)</p> <p>N.B current scheme is unsupported – therefore a high “lapse rate” of 9%</p>
<p>15. Master composter</p>	<p>Provide training to volunteers to provide advice and training to residents taking up/continue home composting</p>	<p>N/A</p>	<p>Management of volunteers = £2,000 per year</p> <p>2 day course for 10 volunteers (include visit to local organic gardens) = £1,500 (per training</p>	<p>Based on 3,000 home composters already sold in the previous year</p> <p>If 50 volunteers, lapse rate will be 4% equating to an additional 63 tpa</p>

			course) 1 volunteer will support up to 50 residents	
16. Real nappies	Nappucino events	£500 capital costs for the nappy library	£450 per event including venues, leaflets and banners etc Each event has 20 newborn babies (plus parents) and will convert 1 parent to use real nappies (without voucher provided) If vouchers are provided to parents at these events, 4 babies will use nappies	0.5 tpa per baby One event will divert 0.5t/yr (based on 1 baby to use real nappies as no voucher system) One event will divert 2tpa (based on 3 babies to use real nappies if there is a voucher system)
17. Real nappies	Vouchers	£2,000 for administration and leaflets per year	£42 per voucher	0.5tpa per baby