

Joint Municipal Waste Management Strategy for Merseyside Review

Issues and Options – Officer Workshop

Briefing Paper 2

Long List of Options

This document sets out a range of tools for delivering the range of themes identified in Briefing Paper 1. This should also include consideration of what targets should be set, what level is appropriate and the timescales over which they should be applied;

- Waste prevention; zero waste, reduction in total % waste, reduction in waste per head
- ReUse, Recycling and Composting; % targets, material specific targets, National Indicator based targets
- Landfill diversion: % disposed, % diverted; % BMW disposed
- Carbon Reduction; tonnage of CO₂ equivalent, % target, carbon footprint per household/person, ecological footprint
- Targets on Household/Municipal waste stream and broken down to other waste streams.

Section 1 - Waste Prevention Options

Number	Name	Option Description	Considerations	Cross Reference to Themes
1.1	Target Food Waste Prevention	Food waste has a disproportionately high environmental impact in many parts of the country because of the environmental effects. In the case of Merseyside the negative impacts of food waste disposal are notable because of the landfill of residual waste and in particular the greenhouse gas emissions associated. The long term PFI procurement in Merseyside aims to reduce landfilling of residual waste however there remain environmental burdens from the unnecessary generation of food that becomes waste that could be avoided through better	<ul style="list-style-type: none"> ▪ Joint or Individual approach to promotion of measures ▪ How to measure scheme success 	1,2, 3,5,7,9,10,11,13, 16,21,22,33

		<p>purchasing / cooking habits and through the transport and treatment of the food waste arising. The national 'Love Food Hate Waste' campaign, is centred on food waste prevention. This is an activity that could be continued through local campaigning, generation and distribution of materials to encourage smarter shopping and meal planning, recipes for left-overs etc.</p>		
1.2	Junk Mail Prevention	<p>The Mail Preference Service (MPS) exists to facilitate removal of junk mail from delivery to those residents that register with the service. The profile of this service could be raised across the Partnership area via promotional campaigns, etc. In addition, campaigns / materials can be developed to encourage prevention of free newspapers / magazines. Other unaddressed mail however will still be delivered unless the householder registers with the Royal Mail to be removed from such services. This could be a targeted element of campaigns / promotions.</p>	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ How to measure scheme success 	1,2,3,5,7,9,10,11,13,16,21,22,33
1.3	Home Composting / Digestion	<p>The composting of vegetable peelings / fruit and garden waste at home yields environmental benefits as the materials do not arise as a waste to be collected and transported prior to composting and then the compost transported again for application to land. The benefit of home composting, where an extensive garden waste collection service is present, is that the transport element is removed and a resource of compost is made available to be utilised by the householder. Also need to consider the role of having a green waste collection system at all, does this conflict with the promotion of home composting, should green waste collection systems be removed?</p> <p>Digesters are enclosed units, part buried in the ground, that can also process meat and fish and other cooked wastes. This increases the potential diversion from the waste stream, but they are more difficult to install, and</p>	<ul style="list-style-type: none"> ▪ Potential Conflicts with garden waste collection service ▪ Reduced transport requirement for collection and thus carbon impacts ▪ Political/Householder issues re removal of garden waste service 	1,2,3,5,7,9,10,11,13,16,21,22,33

		may not be appropriate for all property types.		
1.4	Master Composters/ Environmental Champions	Schemes where volunteers are trained to promote home composting practices, or a wider range of environmental themes such as re-use, other waste prevention / recycling practices and the link with key messages such as act local : think global.	<ul style="list-style-type: none"> ▪ Set up and management costs ▪ Joint or Individual approach required ▪ How to measure scheme success 	1,2,3,5,7,9,10,11,13, 16,21,22,33
1.5	Real Nappies	The support and promotion of using real (cloth, or 'reusable') nappies in preference to disposable nappies will reduce the waste arising from this source. Typically around 2 - 3% of household waste comprises disposable nappies. There are a variety of measures that could be taken forward to promote the uptake of real nappies, including promotional campaigns, nappycino mornings, incentives and subsidies for real nappy packs and support for nappy laundry services.	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Communication required ▪ Cost of supporting 	1,2,3,5,7,9,10,11,13, 16,21,22,33
1.6	Lobbying Government Business	The Merseyside Waste Partnership could place a higher priority on lobbying Government and working with local retailers / producers on reducing the amount of waste through measures to reduce packaging and partnerships to develop this area of resource management. Options to link into work of local trading standards office and pilot study to work with packaging producers in the North West already raised at a Partnership level.	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Cost of implementation ▪ Definition of scope 	1,2,3,4, 5,7,9,10,11,13, 16,21,22,33
1.7	Kitchen Waste Disposal Units	The use of kitchen macerators / grinders, also known as waste disposal units could be explored with a view to processing food wastes through the waste water / sewerage system rather than as a solid waste management issue.	<ul style="list-style-type: none"> ▪ Cost of implementation 	1,2,3,5,7,9,10,11,13, 16,21,22,33
1.8	In house waste prevention	The Merseyside Waste Partners could lead by example, through respective environmental policies, and the implementation of in-house waste prevention initiatives	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Cost of implementation 	1,2,3,5,7,9,10,11,13, 16,21,22,30,33

		could be explored and delivered. This could include both the Councils and their partners (public and private sector) and be delivered through, for example sustainable procurement, environmentally friendly office practices (e.g. double sided printing, not printing materials unless necessary, etc.).	<ul style="list-style-type: none"> ▪ Internal EMS Required ▪ Legal implications 	
1.9	Schools Waste prevention	As part of wider behavioural and sustainable development education, to emphasise the importance of waste prevention, supported by initiatives facilitated by the Merseyside Waste Partnership such as schools composting activity etc.	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Cost of implementation 	1,2,3,5,7,9,10,11,13,16,21,22,33
1.10	Commercial waste prevention	To provide support to commercial waste generators on waste prevention and associated issues, to facilitate initiatives and develop partnerships where appropriate.	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Cost of implementation ▪ Definition of scope 	1,2,3,5,7,9,10,11,13,16,17,21,22,33
1.11	Charging for green waste collection	There is the potential for implementing a charge for green waste collections in Merseyside and therefore further incentivising alternative options such as home composting / digestion.	<ul style="list-style-type: none"> ▪ Joint or Individual approach required ▪ Political/Public considerations regarding provision/removal of a service ▪ Management of new system to collect charges ▪ Requires communication 	1,2,3,5,7,9,10,11,13,16,21,22,27,33
1.12	Removal of green waste collection scheme	See 1.3 above, Removal of kerbside collection scheme and provision at HWRCS.	<ul style="list-style-type: none"> ▪ Political/Public considerations regarding removal of a service 	1,2,3,5,7,9,10,11,13,16,21,22,27,33
1.12	Enforcement at HWRCS/Permit Schemes	Additional measures may be applied at Household Waste Recycling Centres to prevent non-household waste entering the household waste stream.	<ul style="list-style-type: none"> ▪ Permit Scheme trial currently underway but results not known at this stage 	1,2,3,5,7,9,10,11,13,16,21,22,27,33

1.13	Restriction of Residual Waste Capacity	The potential for reducing overall household waste arising through incentivising a change in purchasing behaviour through restriction in the capacity available to householders for collection / deposit of residual waste. This could be delivered by limiting capacity of containers for residual waste or moving to alternate week collection (reducing frequency of collection).	<ul style="list-style-type: none"> ▪ Cost of new containers ▪ Requires effective communication ▪ Potential for increase in waste at HWRCs ▪ Consistency across all MWP authorities 	1,2,3,5,7,9,10,11,13,16,21,22,27,33
1.14	Side Waste Policy	Consistent no side waste policy across all authorities and active enforcement	<ul style="list-style-type: none"> ▪ Fly tipping issues ▪ Cost of enforcement ▪ Consistency across all MWP authorities ▪ Communication to residents 	1,2,3,5,7,9,10,11,13,16,21,22,27,33
1.15	Zero Waste Places Standard	Sign up to the Zero Waste Places Standard operated for Defra through the BREW centre.	<ul style="list-style-type: none"> ▪ Joint or individual approach required ▪ Time and cost to set up and maintain 	1,2,3,5,7,9,10,11,13,16,21,22,27,33

Section 2 - Waste Re-Use Options

Number	Name	Option Description	Considerations	Cross Referenced to Theme
2.1	Support of Re-use / Refurbishment – via Bulky Waste collections	<p>A variety of examples of good practice exist in the UK as regards re-use of goods, including: separate collections of re-usable goods from the household by third sector groups, and ; sorting of council collected bulky waste collections by third sector groups with a view to refurbishment / reuse / resale of usable items.</p> <p>The Merseyside Waste Partnership promote and work in partnership with a range of furniture re-use groups at present.</p> <p>Charging for Council bulky waste collections could also provide an incentive for use of community services for furniture reuse via referrals to free alternative services.</p>	<ul style="list-style-type: none"> ▪ Charging for bulky waste collection may see a reduction in use ▪ Potential for fly-tipping ▪ Political issue to introduce charging ▪ Need to ensure a consistent approach across Merseyside authorities ▪ Communication required 	1,2,3,5,6,7,11,12,13,16,17,23,25,33
2.2	Support of Re-use / Refurbishment – via Household Waste Recycling Centres (HWRC)	<p>A variety of examples of good practice exist in the UK as regards re-use of goods, including: reception points at HWRCs for the deposit of reusable electrical goods, paint, reusable wood, furniture, toys, bicycles etc. Re-use auctions and shops have also been delivered at some sites in the UK.</p>	<ul style="list-style-type: none"> ▪ Issues for current HWRC contract 	1,2,3,5,6,7,11,12,13,16,17,23,25,33
2.3	Re-use campaigning	<p>A wide variety of initiatives may be promoted through local campaigning on reuse, examples include:-</p> <p>SWAP Days - Free exchange services for re-usable goods can be facilitated through MWP or third sector run ‘SWAP days’ where a venue is provided and the event promoted to allow attendees to bring along goods for free and pick up other items of interest to them.</p> <p>Remaining goods could either be sorted by a third sector organisation or disposed of by the MWDA.</p>	<ul style="list-style-type: none"> ▪ Cost of set up/operation ▪ Detailed Rolling Timetable required 	1,2,3,5,6,7,11,12,13,16,17,23,25,27,33

		Merseyside has some experience of such events in the past. Freecycle - a web based group to which members of the public can advertise free items of unwanted goods for collection. It provides a community service and helps avoid unnecessary waste of goods.		
2.4	In-house Waste Re-use	The Merseyside Waste Partners could lead by example, through respective environmental policies, and the implementation of in-house waste re-use initiatives could be explored and delivered. This could include both the Councils and their partners (public and private sector) and be delivered through, for example sustainable procurement, environmentally friendly office practices (e.g. removal of single use cups, milk sachets etc. use of glass milk bottles, rechargeable battery units, repair and maintenance contracts for equipment).	<ul style="list-style-type: none"> ▪ Cost of set up/operation 	1,2,3,5,6,7,11, 12,13,16,17, 23,25,30, 33
2.5	Schools Waste Reuse	As part of wider behavioural and sustainable development education, activities to emphasise the importance of waste re-use, supported by initiatives facilitated by the Merseyside Waste Partnership such as schools swap days, book / CD / game re-use etc.	<ul style="list-style-type: none"> ▪ Cost of set up/operation ▪ Joint or collective action 	1,2,3,5,6,7,11, 12,13,16,17, 23,25,27,33
2.6	Lobbying Government/Business	The Merseyside Waste Partnership could place a higher priority on lobbying Government and working with local retailers / producers on reducing the amount of waste through measures to encourage re-use and partnerships to develop this area of resource management.	<ul style="list-style-type: none"> ▪ Need to define network/responsibility for leading on issues 	1,2,3,5,6,7,11, 12,13,16,17, 23,25,27,33
2.7	Re-Use Hub	To explore the development or facilitation of dedicated infrastructure for re-use, for example through partnership working on training, refurbishment, storage / sorting or retail space.	<ul style="list-style-type: none"> ▪ Cost of set up/operation 	1,2,3,5,6,7,11, 12,13,16,17, 23,25,27,33
2.8	Payment of Re-	Payment of Recycling and Reuse credits, in particular to		1,2,3,5,6,7,11,

	Use/Recycling Credits	ensure that support for the third sector is in place	12,13,16,17, 23,25,27,33
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Section 3 – Waste Recycling and Composting Options

Number	Name	Option Description	Considerations	Cross Reference to Theme
3.1	Separate Food Waste Collection & Treatment	The options and potential for separate food waste collection from households and potentially trade waste customers / commercial waste sources, to be sent for either specialist composting or anaerobic digestion .	<ul style="list-style-type: none"> ▪ Requires treatment capacity to be available ▪ Involve Joint or separate contract procurement ▪ Capital costs of scheme set up and operation ▪ Food waste collection is already being provided by Sefton and Knowsley Councils ▪ Collection Frequency ▪ Current contract has option for IVC capacity at Gilmoss 	1,2,3,7,10,12,13, 14,15,16,20,24
3.2	Commingled Food and Garden Waste Collection & Treatment	The options for commingling food waste with green waste and composting or digesting the organics at a specialist treatment facility may be considered as part of the evaluation.	<ul style="list-style-type: none"> ▪ Requires treatment capacity to be available ▪ Impact on tonnages collected 	1,2,3,7,10,12,13, 14,15,16,24
3.3	Expanding the range of dry recyclables collected at the Kerbside	The option of expanding the range of recyclables collected by all Waste Collection Authorities in the MWP may be explored in addition to the current service (which already comprises the main recyclable material groups). The additional materials considered will be:-	<ul style="list-style-type: none"> ▪ Ability of the MRF to accept all materials listed within current contract, e.g. plastic film 	1,2,3,7,10,12,13, 14,15,16,25,27

		<ul style="list-style-type: none"> • Cardboard • Colour separated glass • Other non ferrous metals: Aerosols, foil • Plastic film, other plastics • Tetrapaks • Batteries • Textiles • Small WEEE <p>Also consideration of the provision of common services to all households in the MWP, i.e. the ability to recycle the same range of materials across all authorities</p>	<ul style="list-style-type: none"> ▪ Capacity in collection system, e.g. container, vehicles ▪ Operational considerations, e.g. round sizes, timing ▪ Communication of changes ▪ Issues of common service provision or individual change ▪ Impact on choice of collection method (co-mingled/kerbside sort) ▪ Market considerations for material outlets 	
3.4	Improve HWRC performance	<p>To consider options for improving the recycling performance from the Household Waste Recycling Centres may be explored. Utilising the infrastructure to capture more recycle from the non household waste stream may also be considered.</p> <p>The impact of charging for green (or 'garden') waste collections may be considered in terms of the impact on recycling rates in addition to the overall waste arisings impact (see Waste Prevention options).</p>	<ul style="list-style-type: none"> ▪ Contractual & cost implications of higher targets 	1,2,3,7,10,12,13,14,15,16,25,27
3.5	Green Waste Charging	<p>Options to offer collection services to trade customers for recyclable materials such as paper, card, metals, plastic, food waste.</p> <p>This should also include consideration of flexibility in offering the services; approach to collection, charging policies and approaches to encourage take up, provision of facilities.</p>	<p>See 1.11</p>	1,2,3,5,7,9,10,11,13,16,21,22,25,27,33
3.6	Trade Waste Recycling Service		<ul style="list-style-type: none"> ▪ Operational / commercial considerations regarding how to charge for services ▪ How to collect – include in normal collection rounds 	1,2,3,7,10,12,13,14,15,16,24,25,27

			<p>A wider remit is the consideration of the co-location of facilities for handling both MSW and C&I waste streams.</p>	<ul style="list-style-type: none"> Impact on MRF contract 	
3.7	Provide Litter Recycling	<p>Also known as 'Recycling on the go', may be considered as part of the Municipal Waste Management Strategy, for example through strategic location of recycling bins on the street.</p>	<ul style="list-style-type: none"> Cost of implementation Outlets required for material 	<ul style="list-style-type: none"> 1,2,3,7,10,12,13,14,15,16,24,25,27 	
3.8	Recycling of Street Cleansing waste	<p>Specific measures for composting or recycling of street cleansing wastes including gully emptying can be appraised as part of the Municipal Waste Management Strategy.</p> <p>Street sweeping recycling is already being provided for Liverpool, this is only a proportion of street cleansing waste.</p>	<ul style="list-style-type: none"> Outlets required for material Cost of implementation 	<ul style="list-style-type: none"> 1,2,3,7,10,12,13,14,15,16,24,27 	
3.9	Incentivising recycling through reduced container capacity for residual waste	<p>The measures that may be adopted to incentivise recycling through the balance of recycling capacity to residual waste capacity may be considered as part of the appraisal. This could include alternate week collections (AWC), restrictions of size of residual bin.</p>	<ul style="list-style-type: none"> Links to AWC collection Container cost issues Public perception issues re service provision 	<ul style="list-style-type: none"> 1,2,3,7,10,12,13,14,15,16,24,25,27 	
3.10	Alternate Weekly Collection of residual waste	<p>This could be provided across all authorities to help incentivise recycling</p>	<ul style="list-style-type: none"> Would need to be supported by weekly recyclable collections Currently not provided by all authorities Public Opinion Importance of good communications Increased tonnage at HWRCs 	<ul style="list-style-type: none"> 1,2,3,7,10,12,13,14,15,16,24,25,27 	
3.11	Financial incentives/rewards for recycling at the kerbside	<p>Use of initiatives that incentivise recycling through a reward scheme for residents that recycle effectively, e.g. by provision of vouchers, may be considered as part of</p>	<ul style="list-style-type: none"> Cost of setting up and managing the system Varying success of 	<ul style="list-style-type: none"> 1,2,3,7,10,12,13,14,15,16,24,25,27 	

	and HWRCs	the appraisal.	reward schemes from Defra trials Halt on trial of chipped bins – information needed	
3.12	Weekly collection frequency for recyclables collection for all authorities	Financial Penalties - Currently not able to consider pay as you throw as an option in the UK. Providing weekly collection of recyclables is likely to have a positive impact on recycling yields.	<ul style="list-style-type: none"> ▪ Operational consideration regarding round sizes, container capacity ▪ Cost implications ▪ Requires communication to residents ▪ Implications for refuse collection frequency 	1,2,3,7,10,12,13,14,15,16,24,25,27
3.13	Ensure 100% coverage of recycling collection schemes	Increased bring bank provision for multi-occupancy properties and ensuring that all properties are able to receive the collection schemes, either included on existing scheme or provided with alternatives.	<ul style="list-style-type: none"> ▪ Cost implications ▪ Operational considerations ▪ Consistency across all districts 	1,2,3,7,10,12,13,14,15,16,24,25,27
3.14	Restrict use of HWRCs for non-recyclable waste	Promote HWRCs as centres for primarily reusable/recyclable material, e.g. provide some sites that accept material for reuse, recycling and composting only and reduce the number of sites offering services for non-recyclable waste disposal.	<ul style="list-style-type: none"> ▪ Cost of setting up and managing the system ▪ Any issue for HWRC contract? ▪ Political Concerns ▪ Communication effort required ▪ Fly tipping ▪ Requires good recycling outlets 	1,2,3,7,10,12,13,14,15,16,24,25,27
3.15	Variety of communication methods to improve participation	Use of Door stepping and other communication methods to ensure understanding of how to use scheme, motivate residents to take part and continue to reinforce key	<ul style="list-style-type: none"> ▪ Cost and resource implications ▪ Individual authority 	25,27

	and scheme performance	messages.	and Joint communication campaign required to ensure consistent delivery	
3.16	Provision of common services for refuse collection, recycling and composting collection	<p>Consider provision of common systems across Merseyside to help improve participation and scheme performance, could also lead to efficiencies of delivery. For example, all authorities provide fortnightly refuse, weekly food, weekly recyclables collection. Combined with common policies on green waste, bulky waste, side waste. Consistent container types and sizes and provision of extra bins</p>	<ul style="list-style-type: none"> ▪ Political Concerns ▪ Cost & Operational Implications of Change ▪ Communication required 	1,2,3,7,10,12,13,14,15,16,24,25,27,33
3.17	In-house Waste Recycling and Composting	<p>The Merseyside Waste Partners could lead by example, through the implementation of in-house waste recycling and composting initiatives. This could include both the Councils and their partners (public and private sector) and be delivered through, for example sustainable procurement, environmentally friendly office practices (e.g. recycling of office wastes, catering waste).</p>	<ul style="list-style-type: none"> ▪ Cost of set up/operation 	1,2,3,7,10,12,13,14,15,16,24,25,27,30

Section 4 –Other Options

Number	Name	Option Description	Considerations	Cross Reference to Theme
4.1	Joint Waste Authorities	<p>There are a number of options that could be considered under this heading;</p> <ul style="list-style-type: none"> ▪ Full Joint Waste Authority (Merseyside WCA&WDA functions) ▪ Combined Merseyside & Halton JWA ▪ Joint authority for collection only ▪ Joint Disposal Function with Halton <p>This could also deliver efficiency savings in terms of the management and operation of waste services.</p>	<ul style="list-style-type: none"> ▪ Cost implications ▪ Political resistance ▪ Levy considerations ▪ Legal considerations 	23,24,25,26,33
4.2	Joint Contract Procurement for Collection Services	<p>Again there are a number of contractual options here; Single or joint collection contracts at a Partnership level (including or excluding Halton), across the whole partnership or between two or more partner authorities</p> <p>Joint procurement of specific collection contracts e.g. refuse collection, recycling, street cleansing, kitchen waste, etc.</p> <p>WRAP study to look at feasibility of joint kitchen waste collection currently being undertaken</p> <p>Joint procurement to also include consideration of the optimisation of collection rounds/depots/other facilities to offer most cost effective service and also reduce the carbon impact of collection operations.</p>	<ul style="list-style-type: none"> ▪ Sefton/St Helens currently discussing options for joint procurement of collection contracts. ▪ Timescales for implementation based on current collection contract end dates ▪ Political resistance ▪ Cost Implications ▪ Levy Implications 	3,21,23,24,30,33
4.3	Collection efficiency and efficient service provision	<p>Either as part of the consideration of a joint approach to procurement or as a separate exercise the MHWP to consider the optimisation of collection</p>	<ul style="list-style-type: none"> ▪ Political resistance ▪ Cost Implications ▪ Levy Implications 	3,21,23,24,30,33

		<p>rounds/depots/other facilities to offer a cost effective service and reduce the environmental impacts from transport related to waste collection.</p> <p>Options for sharing of collection infrastructure to be considered at a partnership level as well as option through the formal procurement process.</p>	<ul style="list-style-type: none"> ▪ Time and cost to investigate 	
4.4	Transport Optimisation	<p>Consider options for linking into modal transport infrastructure being developed in the Liverpool City Region, e.g. multi-modal approach.</p> <p>Also consider potential for incorporating vehicles using low carbon fuels into the vehicle fleets, e.g. hybrid vehicles, electric vehicles, biofuels, etc.</p> <p>Linked to 3.15 and underpins all activity. The need for an effective communication campaign.</p>	<ul style="list-style-type: none"> ▪ Cost Implications ▪ Levy Implications 	1,2,4,8,7,20,21,22,26,30,33
4.5	Communication		<ul style="list-style-type: none"> ▪ A common theme underpinning the whole range of options ▪ Key messages and detailed strategy required 	25,26,27
4.6	Procurement Policies & the Supply Chain	<p>Consider the use of procurement policies to influence behavioural change in terms of specifying the use of recycled materials, low carbon construction materials (to BREAM standards in new build), low carbon transport activities (driver training, energy efficient vehicles, low carbon fuels) as part of contracts procured for waste services, covering all aspects such as;</p> <ul style="list-style-type: none"> ▪ Waste & Recycling Collection ▪ HWRCs ▪ Treatment/Disposal facilities ▪ Consultancy Support ▪ Containers 	<ul style="list-style-type: none"> ▪ Time and cost to implement ▪ Operational / contractual implications ▪ Consider results from the HWRC Low Carbon Study 	4,5,6, 7,8,9,29,30,33

4.7	Specifying End Markets	Consider benefits of specifying the use of local markets, closed loop recycling markets as part of the procurement of waste contracts Also consider options for working together to share common end markets and obtain best market prices.	<ul style="list-style-type: none"> ▪ Impact on WMRC contract ▪ Cost Implications 	31,33
4.8	In-house environmental management system	To include action around waste prevention, recycling and composting as referenced in 1.8, 2.4 and 3.17.	<ul style="list-style-type: none"> ▪ Individual or Joint ▪ Time and cost to implement and maintain 	30
4.9	Calculate Carbon Footprint of MHWP waste management	Calculate the carbon footprint of waste management activities across the MHWP and actively promote its reduction.	<ul style="list-style-type: none"> ▪ Need to define system boundaries ▪ Time and Cost of completion 	3,7,9,22,30,32
4.10	Make carbon commitments by signing up to available programmes	Sign up to Carbon Trust Local Authority Carbon Management Programme - National programme which aims to cut carbon dioxide emissions and reduce energy bills. Sign up to 10:10 – a commitment to reduce carbon by 10% in 2010 (although may now be a bit late) and research similar options/programmes	<ul style="list-style-type: none"> ▪ Time and Cost of completion ▪ Joint or Individual commitment 	3,4,7,9,22,30,32
4.11	Community Infrastructure Levy	Consider the role of the community infrastructure levy to fund the provision of waste management services in the MHWP area.	<ul style="list-style-type: none"> ▪ Time and Cost of implementation ▪ Joint or Individual funds 	14,15,17,18,24,27,30,33
4.12	Financial considerations	Consider the role of the Levy in funding waste management service provision in line with any proposed changes to common or joint services. Also consider the ability to reflect target commitments into levy payments.	<ul style="list-style-type: none"> ▪ Time and cost associated with change ▪ Political implications 	23,27,33