

# **APPENDIX ONE**

## **Joint Municipal Waste Management Strategy for Merseyside 2008**

### **Headline Strategy**

**DRAFT**

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## Executive Summary

This Joint Municipal Waste Management Strategy (JMWMS) sets out the guiding principles for the delivery of the waste management service in Merseyside, over the period 2008 – 2020. The Strategy represents the direction taken by the Merseyside Waste Partnership (MWP), and so is the agreed view of the following authorities:

- Knowsley MBC;
- Liverpool City Council;
- Merseyside Waste Disposal Authority;
- Sefton MBC;
- St Helens MBC;
- Wirral MBC.

It is an update of the previous JMWMS, published in 2005, designed to bring the Strategy in line with subsequent changes in legislation, policy and performance. The original aims and objectives have been retained as have all key policies and targets, unless superceded by external factors or new data. New commitments and recommendations have been added to the Strategy in the light of good practice, an analysis of the 'sustainability' of the strategy and recent developments. The aim of the Strategy is to **improve the sustainability of municipal<sup>1</sup> waste produced on Merseyside using the waste hierarchy** and to **continuously improve the services we provide in terms of efficiency, effectiveness and economy.**

### Recent Achievements

Merseyside has made significant strides in performance in recent years and these are reflected in improved recycling and composting rates which have risen from around 13% in 2004/5 to a pooled MWP target of 26% for 2007/8. The Partnership has also been nationally recognised for waste prevention initiatives. MWP has been successful in gaining approval for £90m of Government PFI credits for a residual waste recovery contract, to offset the costs of the significant infrastructure development required to meet the challenging targets to divert biodegradable municipal waste from landfill.

### Working Together

The local authorities within the MWP have a strong track record of working together for the benefit of residents in Merseyside for example through the pooling of recycling targets and joint initiatives on home composting, tackling junk mail etc. They signed a Memorandum of Understanding in 2005 and are seeking to formalise some joint working arrangements through legal documents known as Inter-Authority Agreements. The MWP has recently expanded to include Halton Borough Council, which has a separate but aligned Strategy and are working together in key areas such as procuring use of residual waste recovery infrastructure. The partnership authorities already have good links with the community and private sectors through the current delivery of the waste management service and are seeking to expand these relationships and also to engage with industry and commerce about improving the management of their waste.

### Behavioural Change

Another important emphasis in the JMWMS is the need for behaviour change and taking responsibility for managing our wastes more sustainably. This means at an individual, company

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<sup>1</sup> Municipal waste is waste under the possession or control of the Waste Collection or Waste Disposal Authorities (or their agents)

and institution level, and includes preventing waste arising in the first place as well as making recycling systems more accessible and comprehensive to enable citizens to participate in the schemes. The JMWMS explains how communications and education strategies will enable the key messages to be conveyed to the residents of Merseyside to help support behaviour change to meet the more demanding targets within the Headline Strategy. Enforcement issues are also discussed to underpin the implementation of the strategy and tackle any misuse of the service. A new element of the JMWMS is the commitment by the Partners to improve the management of their wastes (from Council offices etc) and to use / procure resources more sustainably.

### Waste Prevention

A range of waste prevention initiatives have been proposed through the separate Waste Prevention Strategy 2008. This includes continuing support for home composting, washable nappies, SWAP days, junk mail schemes and developing more re-use and refurbishment of waste goods through partnership with the community sector. The only key target altered in the JMWMS update is that of waste growth. This was revisited in the light of new waste growth projections and the significant resource identified through increased waste prevention activity. The estimates of combined MSW growth across the MWP are +0.6% / annum initially, reducing to +0.2% in 2015.

### Recycling and Composting

This Strategy sets very challenging targets for recycling and composting representing a combined MWP rate of 33% of household waste recycled or composted by 2010, 38% by 2015 and 44% by 2020. A new Household Waste Recycling Centre (HWRC) is due to be developed in Liverpool in 2008 to improve the coverage of these services to residents, and a new contract is being let for the running and development of the HWRC service across the Partnership. One aspect of this service is the need to improve recycling performance from the sites.

### Recovery, Treatment & Disposal

After waste prevention, reuse, recycling and composting have taken place a residual fraction of waste remains. This element currently is sent to landfill, however legislation sets (reducing) limits on the amount of biodegradable municipal waste that can be sent to landfill, and so the Merseyside Waste Disposal Authority is procuring alternative waste processes to treat residual waste. The specific technology will be subject to the availability of options delivered through the procurement process (i.e. what the market can deliver at an affordable cost whilst meeting or exceeding the ambitions of this strategy and the contract documentation), and it is anticipated that the waste treatment / recovery facilities will be in place in 2013/14.

### Sustainability of the JMWMS

The JMWMS has been the subject of a detailed Sustainability Appraisal, the findings of which have been incorporated into the Strategy. A key factor in the environmental sustainability of the Strategy is the focus on reducing greenhouse gas emissions from the service and therefore reducing impacts on climate change. There are a series of new performance indicators on climate change to be used by local authorities in reporting their activities, in addition to three new waste management indicators: Residual household waste per head; Household waste recycled and composted; and Municipal waste landfilled.

The JMWMS comprises a headline strategy (this document) and Action Plans detailing the implementation of the headline policies, targets etc. Supplementary Reports (which either add further detail or background information) support the JMWMS and include the following reports: Waste Prevention Strategy; Legislation & Policy; Sustainability Appraisal; Data & Projections; Partnership Information; Service Delivery Arrangements; and the Waste Arisings Study.

# 1 Introduction

## **Overview:**

This section explains what is covered by the Joint Municipal Waste Management Strategy (JMWMS) for Merseyside and the roles and responsibilities of those implementing the strategy. It also describes how the Strategy is set out and the purpose of this update to the JMWMS

This is the updated Joint Municipal Waste Management Strategy (JMWMS) for Merseyside<sup>2</sup>; it explains the roles and responsibilities for the management of municipal waste in Merseyside. It provides a strategic focus and sets out the policies and targets to deliver the national, regional and local objectives and requirements for the management of municipal waste in Merseyside. This document updates the previous JMWMS published in 2005 and indicates the direction the Merseyside Waste Partnership is taking with regard to delivery and planning of the municipal waste management service.

## **1.1 What is the Purpose of this Update?**

The 2005 JMWMS was not intended to be a static document and to ensure that it remains fit for purpose it requires updating and modifying to reflect changes in legislation, circumstance and new developments in waste treatment technologies.

The focus of this current update is to ensure the content of the strategy reflects present data, specifically in terms of waste arisings, waste growth, and current levels of performance. In addition the update takes into consideration key MWDA/Partnership projects and also the procurement process currently underway to develop new, more sustainable, options to manage Merseyside's waste. The update ensures policies, options and actions are deliverable, challenging and appropriate and give regard to the ever-changing and evolving local, regional, national and European waste and resource management agenda.

It is essential that the update remains consistent with the original strategy in order to support the ongoing procurement process and therefore the aims and objectives of the 2005 JMWMS remain the same and recommendations have only been amended if superseded by other policy, good practice and performance. A number of new recommendations have been developed where appropriate; as a result of the findings of the sustainability appraisals (refer to Supplementary Report 3 for more information on the sustainability appraisal of the updated strategy).

The 2005 JMWMS recommended that a full review of the strategy should take place every 5 years. The full review can amend or change aims, objectives and targets of the Strategy. This will be subject to a Strategic Environmental Assessment and public consultation. It is the intention that this will take place in 2010 and the 2008 update will be the basis for this more detailed review.

## **1.2 Who is the Merseyside Waste Partnership?**

The Merseyside Waste Partnership (MWP) was established in 2005, comprising of the five District Councils of Merseyside (Knowsley, Liverpool, Sefton, St Helens, and Wirral) and the

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<sup>2</sup> Merseyside comprises the following districts: Liverpool, Sefton, Knowsley, St Helens and Wirral. Halton Borough Council also forms part of The Mersey Partnership (TMP), as a member of the Liverpool City Region, which has increasing importance in the development of Merseyside.

Merseyside Waste Disposal Authority (MWDA). All members of the partnership have responsibilities for the effective delivery of sustainable<sup>3</sup> municipal waste management in Merseyside and work together to meet the increasingly challenging municipal waste management obligations now facing all local authorities in the UK.

In 2006 the Partnership expanded to include Halton Borough Council<sup>4</sup> and whilst Halton are actively engaged in establishing waste management solutions with the MWP to deliver shared waste management systems, the JMWMS for Merseyside, and the waste management strategy for Halton have not been merged. Therefore the focus of this update remains the original members of the MWP<sup>5</sup>. It is anticipated that the next scheduled review of the JMWMS in 2010 may provide the ideal opportunity to produce a joint partnership strategy which includes Halton.

### **1.3 How is the Municipal Waste Management Service Delivered?**

There are distinct roles within the MWP regarding waste management. Each of the five district partners are Waste Collection Authorities, responsible for the waste collection service within their district. They are also responsible for implementing appropriate objectives to reduce and recycle/compost waste at the local level.

The Merseyside Waste Disposal Authority is the statutory Waste Disposal Authority, responsible for the treatment and effective disposal of waste for Merseyside's residents. They offer a range of services including:

- Taking the lead in developing and co-ordinating the JMWMS;
- Managing the waste collected by the five Merseyside District Councils;
- Managing the waste delivered to 14 Household Waste Recycling Centres (HWRCs) by householders;
- Undertaking environmental monitoring, maintenance and restoration of seven closed landfill sites previously used by MWDA and its predecessors;
- Providing facilities for the acceptance, treatment and disposal of waste & recyclables collected by the Districts;
- Promoting waste minimisation and reuse activities.

### **1.4 Why do we need a Strategy?**

MWDA and the Merseyside Waste Collection Authorities are required by law<sup>6</sup> to produce a joint strategy for the management of Merseyside's municipal waste. This strategy needs to take into consideration European, national and regional policy and also the requirements of legislation. A key element is a recognition that the disposal of waste in landfill sites is unsustainable, a waste of limited resources and contributes to climate change through biodegradable materials breaking down to be released as greenhouse gases. The strategy represents a sustainable waste management solution, clearly identifying how the MWP intends to manage its municipal solid waste. The strategy aims to progress the MWP towards recycling / composting targets and also recovery of waste and diversion from landfill. It introduces more efficient options centred on good practice in sustainable waste management.

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3 Sustainable development is 'development which can meet the needs of the present without compromising the ability of future generations to meet their own needs', or 'a better quality of life now and for generations to come'

4 Closer working with Halton is consistent with the City Region Partnership

5 A separate update exercise is being carried out with the Halton Municipal Waste Management Strategy (MWMS).

6 The Waste Emissions Trading Act 2003 (WET Act)

Nationally the amount of waste being produced continues to grow, although the rate of growth has slowed over the last few years. Merseyside follows a similar trend with 856,399 tonnes of municipal waste produced in 2006/7<sup>7</sup> with generally static growth over the last three years for the Partnership as a whole. A high priority continues to be given to waste minimisation, recycling, composting and recovery (e.g. getting energy from the waste), making disposal in landfill sites the last resort.

## 1.5 Scope of the Strategy

The JMWMS for Merseyside covers the sub-region of Merseyside and deals with the strategic vision for managing municipal wastes in a sustainable manner, for the period of 2008 – 2020.

The focus of the strategy is *municipal* waste (also known as Municipal Solid Waste, MSW); wastes under the control of the local authorities. The majority of this type of waste comes from the household, but there are also some elements from commercial and industrial sources. National Government has recently emphasized the potential for providing new waste management facilities which can accept both municipal and other wastes (e.g. commercial wastes) to provide a more complete infrastructure for wastes management. Section 7 in this Strategy considers such 'wider wastes'.

## 1.6 Structure of the Strategy

This 'Headline Strategy' document sets out the key principles of the JMWMS for the MWP. It includes the policies, aims, objectives, and targets for the management of wastes and resources in the Merseyside area from 2008 – 2020. It is supported by action plans, and a series of supplementary reports as illustrated in Figure 1.

Figure 1: Structure of the Strategy



<sup>7</sup> Defra waste statistics

The Action Plans are the delivery mechanisms ascribing responsibilities, interim targets and performance aims in order to meet the headline targets and policies described within the Headline Strategy. Each of the Districts has an action plan, which are regularly reviewed and updated, detailing the current operational practices and intentions of the authorities to develop the service over the short to medium term. There is a separate action plan covering all the partners in relation to waste prevention and reuse (Supplementary Report 1).

## **1.7 Consultation Process**

Consultation with the public across Merseyside provides the valuable link between the Authority's work and the developments and changes it needs to put in place to manage waste in the future. MWDA undertook extensive consultation during the development of the 2005 JMWMS and this consultation has been ongoing as part of the process of establishing new long term contracts for managing waste in Merseyside.

The consultation process has included the use of opinion polls and Citizens Juries. In addition the website and media have been extremely useful tools to supply information to a wide range of stakeholders.

The extensive public consultation undertaken in 2005 to support the development of the original JMWMS clearly found support for the aim to recycle at least 40% of household waste and to reduce the amount of waste generated<sup>8</sup>. In addition there were high levels of support for home composting and comprehensive kerbside recycling collections. Support was also shown for Mechanical Biological Treatment for energy recovery with high rate recycling and some landfill.

Recent public consultations have been linked to the development of new facilities to manage waste generated in Merseyside and include:

- Public consultation for a planning application for an In-Vessel Composting Facility at Gillmoss, Liverpool;
- Public consultation in partnership with Orchid Engineering for DEFRA New Technologies Demonstrator Facility at Huyton, Knowsley;
- Public consultation for Sefton Meadows Household Waste Recycling Centre redevelopment; and
- Public consultation for proposed new Holt Lane Household Waste Recycling Centre, Netherely, Liverpool.

An extensive and detailed public consultation programme that will cover planning applications and associated communications for a range of new waste management and processing facilities as part of MWDA's Procurement Programme is underway for 2007/08. In addition to the scheduled programme of consultations linked to the new developments, there is a requirement within the Household Waste Recycling Centre operations contract for the contractor to conduct satisfaction surveys to identify any actions for improvement to the service. This facilitates ongoing consultation and engagement with the public. A major consultation exercise will accompany the 2009/10 review of the JMWMS.

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<sup>8</sup> The responses were based on an approx 12,000 sample with a total of 1613 (13.44%) returns.

- 89.2% asked strongly agreed that we should we aim to recycle at least 40% of our waste
- 83.2% asked said we should reduce the amount of rubbish you create
- 64.6% asked said they would compost grass, hedge clippings, vegetable peelings in their garden
- 94.0% asked said they would separate out your recycling from their refuse so it can be picked up at kerbside
- 50.0% asked said they would separate and take recyclables to a HWRC, bottle bank etc

## 2. Setting the Scene

### Overview:

This section explains the important influences on the Strategy, which are mainly derived from legislation and local, regional or national policies. This policy and legislation can often be led by European and international developments as regards the environment and the issue of developing more sustainably.

A summary of key European, national and regional targets is given in Table 1. Further detail is provided in Section 2 and Supplementary Report 2.

Table 1: Summary of Key European, National and Regional Targets

Legislation	Target
<b>European Landfill Directive</b>	Reduce the amount of BMW going to landfill by: <ul style="list-style-type: none"> <li>• 25% of 1995 levels by 2010</li> <li>• 50% of 1995 levels by 2013</li> <li>• 65% of 1995 levels by 2020</li> </ul>
<b>Waste Strategy for England 2007</b>	<ul style="list-style-type: none"> <li>• Reduce residual waste (household waste not reused, recycled or composted) by 29% in 2010 compared with 2000. Aspire to reduce levels by 45% by 2020</li> <li>• Recycle or compost at least 40% of household waste by 2010</li> <li>• Recycle or compost at least 50% of household waste by 2020.</li> </ul>
<b>Regional Waste Strategy for the North West</b>	<ul style="list-style-type: none"> <li>• Reduce growth in MSW across the Region to 2% by end 2003; 1% by 2010; 0% before 2014</li> <li>• Recycle or compost household waste by 35% by 2010; 45% by 2015; 55% by 2020</li> <li>• Recover value from MSW by 45% by 2010; 67% by 2015.</li> </ul>

### 2.1 European Policy & Legislation

There is a broad and diverse range of European policy and legislation governing and directing all aspects of waste management from treatment and disposal options, to the management of specific waste streams. In addition to the formal Directives which require implementation into national legislation, the EU continues to produce environmental action plans identifying priority areas, supported by a number of ongoing 'thematic strategies' including one considering prevention and recycling of waste. This long-term strategy aims to help Europe become a recycling society that seeks to avoid waste and uses it as a resource. In addition, the contribution of sustainable waste management from waste prevention through to waste disposal has been identified internationally as a key policy area requiring action to reduce the overall gas emissions that contribute to climate change.

These policies and strategies have a direct impact on national and local waste management and influence the way in which municipal waste management strategies are developed. Full details of these policies and strategies are included in Supplementary Report 2.

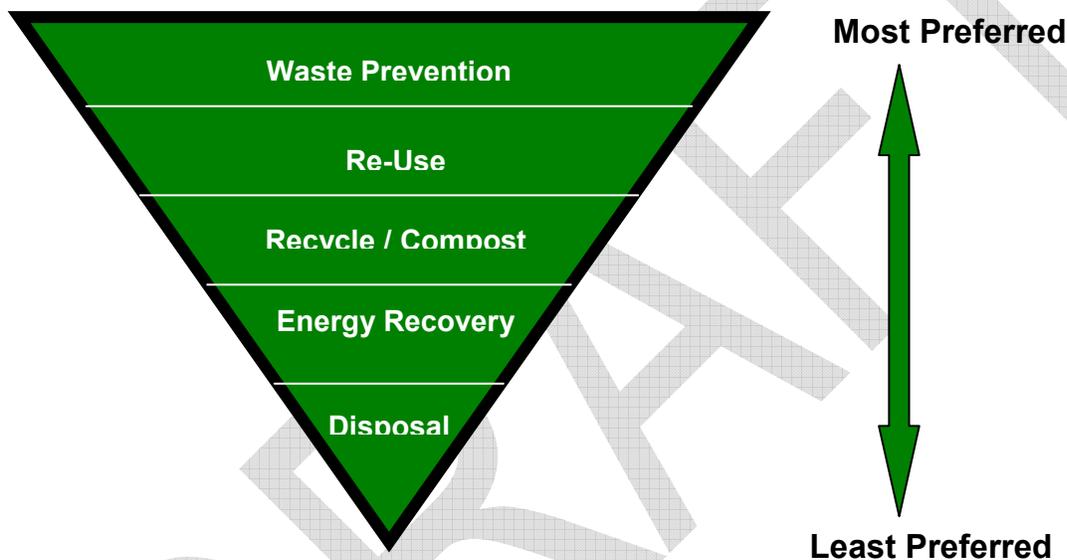
## 2.2 National Policy & Legislation

The waste management agenda is moving at great pace at a national as well as European level. In addition to implementing European policy and legislation, national policymakers have developed a wide range of legislation to control and direct the management of waste in a more sustainable and resource focused manner.

### 2.2.1 The Waste Hierarchy

A guiding principle of both national and European waste management is the Waste Management Hierarchy. This identifies the best way to manage waste is not to generate it in the first place (prevention), followed by reusing or recycling/composting and recovering energy from waste where practicable with disposal of waste being the least preferable option (Figure 2).

Figure 2: The Waste Hierarchy



### 2.2.2 The Landfill Allowance Trading Scheme (LATS)

The single biggest driver for change from the disposal oriented strategy is the Landfill Directive, as implemented in England through the Landfill Allowance Trading Scheme (LATS) and associated legislation. Each waste disposal authority (e.g. MWDA) is allocated a tonnage of biodegradable municipal waste (BMW) permissible to be deposited into landfill. This tonnage allocation is issued in the form of permits, and reduces each year. The permits may be traded with other waste disposal authorities and their value is open to the available market. There are fines of £150 / tonne of BMW landfilled over the amount permissible under the scheme.

### 2.2.3 Waste Strategy for England 2007

The aim of the national waste management strategy is to break the link between economic growth and the environmental impact of waste within a context of: waste related emissions contributing towards climate change; the unsustainable consumption of natural resources; and, the need to move towards 'one planet living' and sustain economic growth.

Key objectives of the strategy are to:

- Decouple waste growth from economic growth and put more emphasis on waste prevention and reuse;
- Meet and exceed Landfill Directive diversion targets for biodegradable municipal waste in 2010, 2013 and 2020;
- Increase diversion from landfill of non-municipal waste and secure better integration of treatment for municipal and non-municipal waste;
- Secure the investment in infrastructure needed to divert waste from landfill and for the management of hazardous waste; and
- Get the most environmental benefit through increased recycling of resources and recovery of energy from residual waste.

#### **2.2.4 Performance Indicators**

Local Authorities have a statutory duty to secure continuous improvement in their functions and Performance Indicators are one measure of determining performance. These have been amended over time and a new set of indicators will operate from April 2008. Local targets will be set through Local Area Agreements (LAAs) and will include some core indicators and others which may be included depending on the priorities and targets for individual areas. The key indicators relating to waste management from April 2008 are:

- NI 191 Residual household waste per head
- NI 192 Household waste recycled and composted
- NI 193 Municipal waste landfilled

In addition there are a number of indicators relating to climate change, which are indirectly linked to waste management activities.

#### **2.2.5 Specific Prevention, Reuse & Recycling Legislation**

The Waste Minimisation Act 1998 enables local authorities throughout the UK (except Northern Ireland) to take steps to minimise the generation of household, commercial or industrial waste. The Act gives recognition to the fact that local authorities also have responsibilities to promote waste minimisation. There is also legislation that promotes recycling through the Household Waste Recycling Act 2003. The Act requires Waste Collection Authorities in England to collect at least two recyclable materials from households, separate from residual waste by 2010.

Waste Disposal Authorities have also recently been granted increased flexibility in issuing of recycling or re-use credits<sup>9</sup> to parties undertaking these activities, and therefore avoiding the costs associated with disposal.

#### **2.2.6 Landfill Tax**

Additional charges are currently applied to waste going to landfill in the form of the landfill tax. The extra costs levied in 2007/08 are £24 per tonne; each financial year the landfill tax is predicted to rise by £8 per tonne per year up to at least 2010/11 when the rate will be £48 per tonne.

#### **2.2.7 Energy Policy**

There is a strong move to marry the energy policies and waste policies in England. At present landfill gas generates the most renewable energy in England, although incineration with energy

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<sup>9</sup> Guidance on the Recycling Credit Scheme, April 2006, Defra.

recovery is also a significant generator. Renewable energy incentives<sup>10</sup> are available for electricity generated from certain waste operations.

A recent emphasis from Government has been the consideration of utilising heat generated by certain recovery process (e.g. incineration) in addition to electricity generation to maximise the efficiency of energy recovery. This is known as combined heat and power (CHP), and requires a market and infrastructure to use the heat in particular. Where renewable energy can be efficiently captured from wastes this is seen as an environmentally sustainable approach and is increasingly encouraged in terms of reducing emissions which would otherwise have climate change impacts, and also providing security of supply.

The Government has also issued a new Planning Policy Statement (PPS) for Climate Change<sup>11</sup> which requires local authorities to provide for on-site renewable energy and local community energy schemes to help cut carbon emissions from new developments. It is the intention that this PPS will help speed up the shift to renewable and low carbon energy, by challenging councils to do more to support delivery of local renewable or local low-carbon energy.

### **2.2.8 Planning Policy**

Planning Policy Statement (PPS) 10 provides a set of strategic decision-making principles that should be adhered to in the preparation of waste plans. These principles are important for the delivery of the Key Planning Objectives for sustainable waste management set out in PPS10.

## **2.3 Regional Policy**

Key regional policies and strategies include the Regional Waste Strategy for the North West (2004); the relevant targets can be found in Table 1. This strategy is undergoing a review in 2008 and this will need to be a consideration for the JMWMS review in 2010. The Regional Spatial Strategy (RSS) is currently under development and will contain a number of relevant policies and targets relating to waste management activities across the region; once adopted these will become an important consideration in the development of the Merseyside Waste Development Planning Document and will also be a key consideration for the JMWMS review. The Regional Economic Strategy (RES) includes a variety of objectives for developing sustainable economic growth across the region and includes targets to reduce CO<sub>2</sub> emissions.

### **Liverpool City Region**

The Liverpool City Region<sup>12</sup> includes all five districts of Merseyside and Halton at its core therefore covering the wider Merseyside Waste Partnership authority area. The strategic development of the Liverpool City Region is under the overview of The Mersey Partnership. The priority areas in the City Region cover a broad range of issues including those against which the JMWMS will make a contribution, such as a 'sustainable neighbourhoods and communities' priority. The City Region agenda is a guiding influence on the development of the partnership area and there are priorities and actions defined through the 'Liverpool City Region prospectus' (2007) including aspects relevant to the JMWMS such as tourism, housing development etc.

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10 Renewables Obligation Certificates, or ROCs, provide a preferential market for electricity generated from renewable sources, see Supplementary Report 2 for more information.

11 PPS "Climate Change" is being issued as a supplement to PPS1: "Delivering Sustainable Development"

12 The 'Northern Way' strategy for Northern England (2003) identifies a number of City Regions, of which Liverpool City Region is one, which are the focus of growth and economic development in the North of England. Further information on the development and role of these City Regions can be found within the 'Northern Way' strategy.

## **2.4 Local Policies / Targets**

Successful delivery of the JMWMS will involve a number of different stakeholders and will include key local policies and agreements, such as:-

- Local Area Agreements (LAA's)
- Sustainable Community Strategies
- Local Authority policies

The Local Strategic Partnerships (LSPs) comprise of key community organisations such as the council, faith groups, community groups, businesses, charity groups, the police, schools, health bodies and more. They are responsible for driving and implementing key local policy documents such as the Local Area Agreements & Sustainable Community Strategies. These documents, together with the Spatial Development Strategy, set out the priorities, objectives, vision and implementation targets for an area. In addition the new performance monitoring framework works within the LAAs to set appropriate local indicators of performance including waste management to support the strategic delivery of the JMWMS.

Other local policy drivers include local authority strategies and policies. These can include specific issues such as 'Green Procurement' (adopting purchasing or service procurement policies which are environmentally preferable) or Carbon Management Plans. The latter addresses the carbon impact of the actions for which the local authority is responsible, and new performance indicators include reporting on this aspect. Examples from the MWP are included in section 14.

## **2.5 Local Planning**

There is a legal requirement through the Planning and Compulsory Purchase Act 2004 and other national guidance for all planning authorities to develop a Local Development Framework (LDF). This comprises of a suite of thematic documents covering the different areas of development.

The key local development document (LDD) for waste management in the Merseyside Partnership area is the Merseyside Waste Development Plan Document (Waste DPD). This document covers all aspects of waste management planning including non- municipal waste streams such as hazardous waste, industrial waste, commercial waste, construction & demolition waste etc. The production of the Waste DPD for Merseyside is being taken forward through a process of joint working between the Merseyside Planning Authorities (including Halton).

The development of the Waste DPD involves needs assessments, technical site appraisals, development and refinement of waste planning policy options resulting in the preferred options and strategy. Sustainability Appraisal and Strategic Environmental Assessment, Habitat Regulations Assessment, and Strategic Flood Risk Assessment are mandatory parts of the process. Extensive public consultation is designed to recognise and manage the tensions between potential planning constraints and the clear need for waste treatment facilities.

The Merseyside Waste DPD is currently in the early stages of preparation, and a consultation has taken place over key issues and options to be incorporated within it. A great deal of consultation is required prior to finalisation of the Merseyside Waste DPD. The next stage of the process is the publication of the Preferred Options Report to be incorporated within the Waste DPD. The final Waste DPD is scheduled to be approved in late 2010.

### **Planning Risk Management**

For reasons discussed elsewhere in the strategy, specifically the need for landfill diversion of municipal waste, facilities for the management of municipal waste will need to continue to be approved and developed prior to 2010. In order to meet this need and mitigate against planning risks, MWDA is implementing a planning strategy that requires the acquisition and development of a range of sites in advance of the Merseyside Waste DPD publication. MWDA's approach to reduce planning risk (e.g. a type of planning risk would be procuring a service but failing to get planning permission to deliver that service) is to undertake to seek appropriate planning permissions in parallel with the procurement process (see Section 9).

### **Infrastructure Needs and Site Selection Process**

The MWDA Planning Strategy seeks to deliver the necessary recycling and recovery facilities within Merseyside to avoid the need for cross boundary movements of waste wherever practicable, thereby complying with the concept of Self Sufficiency. The sites selection programme undertaken by MWDA encompasses the principles of Planning Policy Statement 10 (PPS 10). Sites have been selected from a large database sources from the Waste DPD and updated with the addition of further sites identified. These have then been screened and further reviewed according to their likelihood of deliverability, proximity to strategic zones and feedback from consultation with the relevant planning and regeneration officers.

### **Consultation with Defra**

Defra have confirmed that the Authority's planning strategy is in compliance with their planning policy and has demonstrated that any attendant risks have been minimized and the necessary corresponding management processes to secure a successful outcome have been put in place.

## **2.6 Sustainable Development**

Waste management services impact significantly upon each of the three pillars of sustainability: environment; society; economy. Linkages between waste management and sustainability issues have become increasingly apparent, including the impacts to: climate change; soil, water and air protection; resource conservation; health; transport; urban regeneration; employment; local economic development; energy production; green procurement; and community engagement. Potential synergies have emerged, allowing waste management policies to contribute to the achievement of wider sustainability objectives.

### **Sustainable Development Strategy at the National Level**

In March 2005, the Government published its new sustainable development strategy 'Securing the Future'. The strategy identifies climate change as a major threat and focuses many of its actions around reducing its potential impact. Improved waste management has a vital role to play in this effort and the strategy recognises the importance of delivering on the actions and targets introduced by Waste Strategy 2000 and reinforced by the subsequent Waste Strategy 2007 in tackling climate change and resource management.

### **Sustainable Development at the Regional Level**

There is a strong commitment in the North West region towards adopting and adhering to sustainable development principles in all aspects of regional activities. The 'Action for Sustainability' programme (coordinated by the North West Regional Assembly) represents a regional framework and provides a strategic basis for the promotion of relevant issues within the region.

The Action for Sustainability has identified key areas of priority as:-

- Energy & Climate Change

- Sustainable Consumption & Production
- Natural Resource Protection & Environmental Enhancement
- Sustainable Communities

These priority areas underpin the JMWMS and the strategy makes a positive contribution to driving the key issues forward. The positive outcome of the Sustainability Appraisal of the JMWMS, which considers issues related to these priority areas, demonstrates the likely influence of the JMWMS with regard to key sustainability issues.

There are several good practice examples of packages developed to assist in the decision making for Sustainable Development in the North West, examples include:-

- Planit Waste, a simulation tool designed to consider environmental and other implications of waste and resource management decisions over a virtual timescale
- Integrated Appraisal Toolkit (IAT) – is a web-based toolkit for undertaking informal Sustainability Appraisals on strategies and plans

### **Sustainable Development in Merseyside**

Taking its lead from the Government, the MWP considers climate change to be a key driver for achieving sustainable development. The activities involved in producing and managing Municipal Solid Waste contributes some 3% of the total UK greenhouse gas emissions.

The Partnership are represented on a project, known as 'The EcoCarb Footprint of Waste in the North West', through MWDA, Sefton and the NW Recycling Forum, which has been granted resources from the Regional Support Fund, to design indicators that raise awareness of the impact that household waste in the North West has on sustainable development and climate change. These indicators will be used to influence attitudes and behaviour towards waste.

Through its Environmental Policy statement, MWDA is committed to minimising its negative impact on the environment through improvements in sustainable waste management and making more effective use of resources. In addition, it is focused on maximising waste prevention and minimising waste disposal using the waste hierarchy as a guide to sustainable waste management unless there are demonstrable reasons not to. The Sustainable Procurement Policy reiterates the commitment by the MWDA to consider the environmental, social and economic consequences of, purchasing and seek improved alternative options where practicable.

Several of the Districts within the Partnership are also developing carbon management plans and strategies; Knowlsey, Sefton, St Helens, Wirral and Halton have all signed up to the Nottingham Declaration<sup>13</sup>, and Sefton and Wirral have produced carbon strategies. More information on District activity is provided in Section 14 of this strategy.

### **Sustainability of this Strategy**

MWDA remains committed to delivering sustainable solutions in all its activities and incorporating sustainable development within its core policies and strategies; waste management is no exception.

To demonstrate its commitment to delivering appropriate solutions a Sustainability Appraisal (SA) has been carried out on this strategy and also on each of the District Council Action Plans (DCAPs). This complies with the Sustainable Development Policy Statement developed by the

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<sup>13</sup> By signing the Nottingham Declaration on Climate Change, authorities make a commitment to tackle climate

MWDA which requires an SA to be carried out on all plans, strategies, policies, services and activities to ensure they do not have a detrimental impact on the local, regional and global environment.

The purpose of an SA is to identify and assess the social, environmental and economic effects of strategies and policies. It provides a mechanism for ensuring that sustainability ideals and objectives are translated into sustainable policies and strategies. In addition it provides an opportunity for local level considerations to be taken account through the SA process and for outcomes to be incorporated into the JMWMS.

**For further information on this subject of the JMWMS read:**

Supplementary Report 2 - Legislation & Policy  
 Supplementary Report 3 – Sustainability Appraisal

### 3. Aims & Objectives

**Overview:**

This section details the aims and objectives of the JMWMS, and therefore what the Partnership intends to achieve in the delivery of the municipal waste management service

As discussed in Section 1.1 the aims and objectives remain unchanged from the 2005 JMWMS and can be seen in Table 1.

Table 1: Aims and Objectives of the JMWMS

Strategic Aim	Objective
<p><b>To improve the sustainability of municipal waste produced on Merseyside using the waste hierarchy</b></p>	<ul style="list-style-type: none"> <li>• <b>To provide services and facilities which directly contribute to the implementation of the JMWMS</b></li> <li>• <b>To optimise waste REDUCTION</b></li> <li>• <b>To optimise waste RE-USE where reduction is not possible</b></li> <li>• <b>To optimise waste RECYCLING and COMPOSTING where re-use is not possible</b></li> <li>• <b>To optimise waste RECOVERY where actions higher up the waste hierarchy are not practicable</b></li> <li>• <b>To landfill waste only where actions higher up the waste hierarchy are not possible</b></li> </ul>
<p><b>To continuously improve the</b></p>	<ul style="list-style-type: none"> <li>• <b>MWDA to lead in the development of a JMWMS for Merseyside</b></li> </ul>

<p><b>services we provide in terms of efficiency, effectiveness and economy</b></p>	<ul style="list-style-type: none"> <li>• <b>To deliver waste services to the required performance levels</b></li> </ul>
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All Partners are committed to working together to develop and deliver more sustainable waste management practices, increasing resource efficiency and reducing the carbon impact of waste management services and operations. In achieving good practice and increasing performance in terms of recycling and diversion from landfill, the partnership will work collectively on waste awareness and waste prevention programmes, and support each other in delivering high standards of collection and management of municipal waste. MWDA will lead not only on the development of the strategy to support and guide sustainable waste management, but also on the implementation and delivery.

## 4 Working Together

### Overview:

This section explains the important relationships that are needed to deliver the JMWMS in an effective, efficient and inclusive manner for the benefit of the residents of Merseyside.

### 4.1 Partnership Working

The Merseyside Waste Partnership (MWP) has been an informal but proactive grouping of the five districts and Merseyside Waste Disposal Authority working to co-ordinate activities in the delivery of the waste management service. There are potential practical and economic benefits of joint and partnership working, for example through: economies of scale; reduced interface issues between collection and disposal; and the sharing of resources to meet the challenges of sustainable waste management.

There has been a gradual move, within the MWP, towards more formal joint working, particularly with regard to the procurement activity of the long term municipal waste recycling, treatment and disposal contracts currently underway. In 2005 the MWP signed a Memorandum of Understanding (MoU) between the partners which was a voluntary agreement committing the partners to closer joint working. The operational aspects of joint working are only partly considered within the MoU. These are addressed in detail in two Inter Authority Agreements (IAA) documents which, unlike the MoU, have a legal status. One IAA is between each of the Merseyside Districts, and the MWDA, and the other IAA is between the MWDA and Halton Borough Council. The IAAs are currently undergoing finalisation and will support (through commitments to operate the service in a defined and coordinated manner) the procurement activities and ultimately the ability to deliver more efficiently and effectively the responsibilities of the Partners on behalf of the residents.

The MWP is also actively engaged with other organisations, working closely with the Merseyside Environmental Advisory Service for example, specifically the Waste Planning team. It is anticipated that the future for the MWP will be further expansion to include the private and

voluntary sector, ensuring that the partnership reflects and supports the changing governance structures on Merseyside i.e. City Region Board.

**KEY RECOMMENDATION 1:** All partners shall continue to develop the Waste Partnership, share best practice and seek to gain efficiency and improved service delivery where deliverable through joint working

## **4.2 Working with Stakeholders**

### **Market and Sector Development for Recyclables**

Envirolink Northwest is supported by the Northwest Regional Development Agency (NWDA) to improve the competitiveness of the region's energy and environmental technologies and services sector and to ensure North West companies realise the business opportunities this sector offers. MWDA helps fund the market and sector development programme and sits on the Waste Board of Envirolink Northwest and is a member of the Action Network.

The work of Envirolink Northwest is focused on market development opportunities for recyclables within the region and also procurement programmes which aim to close the recycling loop by promoting the use of recycled products by organisations in the region.

### **Community Sector**

The JMWMS aims to encourage and provide the opportunity for community enterprises to maintain and increase their involvement in the sustainable management of waste in Merseyside. There are a considerable number of community sector organisations currently active across Merseyside. They are involved in collection, repair, reuse and recycling of unwanted household items, specifically bulky and white goods and across the partnership support is given to this sector. These organisations are making a positive and effective contribution to waste management in Merseyside and the MWP recognises the added value that the community sector can bring. A recent study (commissioned by the MWDA) assessed the role of the community sector in Merseyside and made recommendations as to future activities and engagement. In 2007 MWDA actively engaged with the sector, consulting with regard to aspects of the Authority's new waste management contracts and in the development of the sector's role to deliver other services including trade waste collections and education.

The key role of the community sector in supporting and contributing to the delivery of sustainable management of waste is addressed further in the Waste Prevention Strategy for Merseyside (Supplementary Report 1).

### **Representation on Stakeholder Forums**

Representatives from MWDA and the MWP actively contribute to regional forums, such as the Waste Regional Advisory Group, the North West Waste Committee, the Regional Technical Advisory Body and other initiatives such as the North West Regional Development Agency's Wider Waste Action Plan, ensuring that actions to deliver the JMWMS also take the regional agenda forward.

**KEY RECOMMENDATION 2:** All partners shall build upon existing relationships, and foster new ones, with the research, business, voluntary, community and academic sectors across the partnership to ensure involvement where appropriate and practicable in delivering sustainable waste management solutions for Merseyside

**For further information on this subject of the JMWMS read:**

Supplementary Report 5 – Partnership Information

Supplementary Report 1 – Waste Prevention Strategy

## 5. Communications & Education

**Overview:**

This section emphasises the importance of communication and education in order to deliver the JMWMS aims, objectives and targets. It sets out the communications and education activity and explains the strategy, making recommendations.

### 5.1 Communications Strategy

The success of the JMWMS depends upon changing attitudes to waste. There is a need to encourage all residents in Merseyside to move from a position of some awareness regarding waste issues to active participation in the waste prevention and recycling services provided by the MWP, so that reducing waste and maximising recycling becomes an integral part of everyday living. All partners have been actively engaged in communications activities, and a successful bid to the Defra 'Behavioural Change Local Fund' provided additional support to four of the districts in further developing their communications strategies, plans and actions.

In addition to the local level activity, MWDA has a requirement to ensure that information provided is easily accessible, relevant and timely. To this end a Communications Strategy has been developed by MWDA which provides the corporate and systematic approach needed to identify and deliver effective communications and marketing opportunities and enable risks associated with these activities to be identified. The strategy aims to ensure that the MWDA has appropriate ways of encouraging, listening to and taking account of community views and aspirations about its services and also achieving good internal communications ensuring that both staff and Members are kept well informed and involved.

The next step for the Partnership is the development of a Joint Communications Strategy to provide a framework for education, information and awareness activities across all partners. This will contain a common set of messages both strategic, (such as climate change, energy issues, resource management, etc) and local. Joint working through the MWP will guide all communications of the partners providing a consistent coordinated approach. This will strengthen the Partnership's image and public awareness of its services and ensure that communications and marketing are an integral part of corporate planning and decision making. In addition, a Joint Communications Strategy will provide the opportunity to strengthen links with other Merseyside wide campaigns, for example the Merseyside Cleaner Safer Greener Partnership and to reinforce existing links with national campaigns such as Recycle Now. A Joint Communications Group is in place and a programme of work to develop the joint strategy is underway.

## 5.2 Education & Awareness Raising Activities

The Partnership is committed to delivering a range of education, training and awareness initiatives as part of the overall communications approach to sustainable waste management. Examples of activities within some of the districts can be seen in Box 1.

### Box 1 Case studies of education and awareness raising activities within the Districts

#### *Liverpool – Education and behavioural change*

Liverpool City Council has successfully obtained Neighbourhood Renewal Funding to support its education and awareness raising and is committed to providing a wide range of activities aimed at changing behaviour including : door to door canvassing; city wide educational roadshows; promotional campaign (including billboard advertising, press and radio adverts); and extensive partnership working with WRAP and other organisations. Multi-agency working is a key factor for the educational programme and strong partnership links are in place with a wide range of organisations including private sector companies, NGO's and local support networks. An extensive education and publicity plan is in place building on previous activities targeting a wide range of audiences across Liverpool.

#### *Sefton – Education & awareness raising in schools*

In addition to providing recycling services in schools, a number of initiatives have been developed and delivered in schools across Sefton, designed to raise awareness and increase understanding of recycling activities and improve recycling performance. These are wide ranging and include: a schools recycling handbook; presentations; theatre performances on recycling; recycling league tables; and, sustainable packaging competitions, with pupils redesigning the packaging of an Easter Egg.

#### *St Helens – Waste management and sustainable development*

St Helens have an Education Link Officer whose task is to raise awareness in schools by embedding sustainability and waste issues in the national curriculum, through the development of lesson plans, educational talks and presentations. St Helens promotes Eco-schools (15 at the moment); and holds a Green School Surgery which is drop in session for teachers and others in education where they can meet organisations and people who can support Education for Sustainable Development. St Helens have also developed a Sustainability Forum, currently managed by the Co-op with Council support. Other activities in schools include a Climate Change trailer which tours high schools and the Recycler robot which is targeted at primary schools.

#### *Wirral – Raising awareness and changing behavior of children and young people*

In addition to supporting recycling collection from schools, Wirral commissioned two DVDs (in conjunction with Liverpool City Council) to be given to schools along with "Teacher's Toolkits". The first of these, "Recycling with Jake", aimed at Primary School pupils, follows the journey of dry recyclates from Jake's House, to the MRF and through the various sorting processes to the end user. This DVD aims to give children a greater insight into the process of recycling as a whole. "Bin It", the second of these films, is aimed at secondary school pupils and is designed to spark a debate on the issue of littering. From taking part in focus groups to being part of the cast and crew during filming, local youths were given the opportunity to contribute to the overall end product. Wirral Council has also enabled local Community Groups to develop an environmental scheme called "Mini-Wardens". Engaging with children aged 7 to 14 this scheme uses a reward system where based on activities undertaken children 'earn' their "Mini-Warden" uniform as they proceed.

MWDA is keen to support District level education and awareness raising activities, building upon successes achieved to date, and is focused on coordinating activities and developing more of a Partnership approach. A key communications project 'Recycle for Merseyside' has been launched across the partnership with common messages and information being delivered across all the partner authorities<sup>14</sup>. In addition a 'Recycle for Merseyside Centre' has been developed at Bidston and also at South Sefton HWRC, to provide educational facilities for schools, community groups, local residents and other stakeholders, promoting the activities of the MWDA and the partnership with regard to sustainable waste management practices. A DVD has been produced by Wirral, Liverpool and Youth focus groups for use at Key stage 2 in schools about Recycling and the MRF. Training packs have been produced with an emphasis on raising awareness and understanding in relation to the recycling, reprocessing and treatment of waste and innovative techniques and creative tools are being employed at the Centres, based on good practice across the region and the UK. Further activities are anticipated through the new procurements with the likelihood for more Visitor Centres and educational activities associated with the new contracts (see Chapter 10).

The work of the Centres will build upon, complement and add value to the education and awareness activities of the districts, and aim to promote better understanding of waste prevention and recycling services and bring about positive behaviour change at the household level. With a broader focus in terms of the messages being conveyed, it is intended that residents will be encouraged to think differently about the waste they produce and ensure that residents are more receptive to service related information and motivational messages provided at local level.

In addition to the education Centres, visits to the Household Waste Recycling Centres are supported by the MWDA, and other awareness raising opportunities such as participation in joint/individual awareness raising campaigns and initiatives e.g. Big Recycle, World Environment Day, and training programmes including the Planit Waste simulation are promoted by the MWDA. The Planit Waste programme involves the virtual simulation of environmental effects and decision making and is used to demonstrate these aspects to key decision makers (e.g. Councillors).

MWDA has also launched a Waste Awareness and Education Programme for Community Groups on Merseyside which includes a Community Fund for waste awareness, recycling and prevention projects. The Fund aims to help local community and residents groups to deliver initiatives that will improve their local environment and could include projects such as community or educational workshops, education and awareness literature or events.

An Education and Awareness Plan is being developed which will facilitate the delivery of the communications strategy fully integrating a range of education, training and awareness initiatives within the overall communications approach to sustainable waste management. All activities will be aligned where appropriate with district local initiatives and requirements.

**KEY RECOMMENDATION 3:** The Merseyside Waste Partnership will develop, agree and implement a Joint Communications Strategy by 2008

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<sup>14</sup> Some of these aspects have not been developed with Halton, which has some separate arrangements

**KEY RECOMMENDATION 4:** Communications and education messages delivered by the Partnership should focus on waste prevention and recycling but make a clear link with climate change and energy / resource issues as driving forces behind the waste strategy

**KEY RECOMMENDATION 5:** The Merseyside Waste Partnership will develop, agree and implement an Education and Awareness Plan to support the Joint Communications Strategy by 2008

**For further information on this subject of the JMWMS read:**  
Education & Communications Strategies of the Partners including joint strategies (some still under development)

## 6 Enforcement

**Overview:**  
This section explains the approach and key priority areas to maintain a healthy and clean environment and avoid abuse of the waste management service. Enforcement covers a range of issues from flytipping and littering, to depositing non recyclable materials in recycling containers.

Enforcement is a key tool to ensuring that sustainable waste management practices are adhered to and adopted. Legislation is in place to support local authorities in enforcing against littering and flytipping, and powers are available as a result of the Clean Neighbourhoods and Environment Act, 2005.

An enforcement concordat is currently in place and deals with issues of consistency and fairness across the partnership. Enforcement Officers working in each of the districts have clear procedures which they can follow in terms of dealing with littering and flytipping and also with respect to bringing in other regulators such as the Environment Agency. Mechanisms are in place across the partnership to deal with waste left on the street as a result of missed collections and presented in the wrong receptacle for collection.

Where new collection schemes are initiated or problem areas are identified (for example where recyclables are contaminated by an incorrect material placed out for collection) education and / or enforcement measures may be applied. There are a range of practices currently in place tackling such issues across the Partnership. For example in Liverpool there are partnerships for crime related issues where sentencing delivered, for example to offences relating to graffiti, can include cleansing of areas and clean up of graffiti from the neighbourhood.

At present there are limited controls on Household Waste Recycling Centres (HWRCs) to protect against non-household (e.g. commercial) waste illegally entering these sites. This can make the challenge to divert MSW from landfill more difficult to achieve and impact on costs of the service. MWDA will develop stricter controls on HWRCs to prevent and reduce illegal deposit of non household waste at the site.

**KEY RECOMMENDATION 6:** MWDA will implement enforcement controls at all HWRCs by 2009, linked to awareness raising publicity and support to businesses for alternative methods to dispose of their waste correctly

**KEY RECOMMENDATION 7:** The Merseyside Waste Partnership will develop and implement a co-ordinated and resourced action plan for enforcement and education to tackle environmental crime and nuisances issues by 2009

**For further information on this subject of the JMWMS read:**

Waste Prevention Strategy

MWP Enforcement Concordat

Partner Communications & Education Strategies (where available)

## 7 Wider Wastes

**Overview:**

This section considers other (non municipal) waste streams arising in Merseyside which the Merseyside Waste Partnership can influence or have a role in helping to improve its management.

Although this strategy is focused on municipal waste, MWDA supports more sustainable management practices across all waste streams. 'Wider wastes' in this instance include: commercial and industrial; hazardous; and construction and demolition wastes. These key categories are targeted in the Regional Wider Wastes Action Plan. The tonnages produced each year are substantial, as discussed below.

### **Commercial and Industrial (C&I) Waste**

1,345,230<sup>15</sup> tonnes of C&I waste were produced in the MWP area (including Halton) in 2005/06. Government guidance contains requirements for reducing the amount of Commercial and Industrial (C&I) waste produced and to increase recycling in this sector. There are prevention and recycling targets in the Regional Waste Strategy for the North West for C&I waste, and an expectation that they will be handled in a more sustainable manner. In addition Waste Planning Authorities are also expected to give consideration to facilities needed to manage this waste stream.

There are potential environmental and economic benefits that could be derived from developing more C&I Waste processing capacity within Merseyside and this is currently being considered within the waste planning and procurement framework.

MWP will explore opportunities to expand the provision of trade waste recycling services to support the Partnership in meeting its obligations regarding diversion from landfill and reduce the biodegradable element of commercial waste going to landfill.

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<sup>15</sup> Study to fill Evidence Gaps for Commercial & Industrial Waste Streams in the North West Region of England – For NW RTAB, May 2007, Urban Mines

### **Hazardous Waste**

222,444 tonnes of hazardous waste were produced in Merseyside (excluding Halton) in 2004; of this 186,917 tonnes were exported, but an additional 112,091 tonnes were imported<sup>16</sup>. There is currently only one landfill site within the Merseyside Waste Partnership permitted to dispose of hazardous waste and there is limited capacity in the North West<sup>17</sup>. Availability of appropriate alternative options for managing hazardous waste, such as recycling and recovery are also limited at the present time, although it is recognised within the Merseyside planning framework that new facilities to deal with this waste are likely to be needed.

### **Construction, Demolition and Excavation Waste (CD&E)**

With regard to CD&E Waste, availability of data at a regional and sub regional level is extremely limited. Whilst National surveys are regularly undertaken by the Department of Communities and Local Government, and a recent survey was commissioned by the North West Regional Technical Advisory Body for Waste and the North West Minerals and Waste Planning Authorities, the ability to interrogate this data down on a sub-regional level basis is not possible. Best estimates of this waste stream are given in the Waste Development Plan Document Issues and Options report, with 2,444,744 tonnes arising in Merseyside in 2003<sup>18</sup>. It should be noted that this is likely to be an under estimation.

A significant proportion of this waste stream is already reused or recycled and policy support through the planning framework is provided to encourage improved management of CD&E waste.

**KEY RECOMMENDATION 8:** The Merseyside Waste Partnership will engage in the wider waste debate to support more sustainable waste management and regional self sufficiency

## **8 What makes up our Waste?**

### **Overview:**

This section explains the make up of household waste as determined through waste composition studies

Household waste varies in its composition throughout the year. This is most evident in elements of the household waste stream such as garden derived wastes. It is therefore important to analyse household wastes at different times of the year to get a reasonable estimation of the total composition. A good understanding of what comprises household waste, makes planning for effective management of that waste more reliable, and it is essential that the results of any compositional studies undertaken by the partners<sup>19</sup> or contractors are made available across the MWP and their potential impact on services and operations considered.

16 Environment Agency Hazardous Waste Interrogator database

17 Regional Waste Strategy for the North West, NWRA, 2004

18 Original source is 'Survey of Waste Arisings and Use of Construction, Demolition and Excavation Waste as Aggregate in England 2003' Capita Symonds 2004. The figure for Merseyside was calculated from the North West arisings using population to establish proportions.

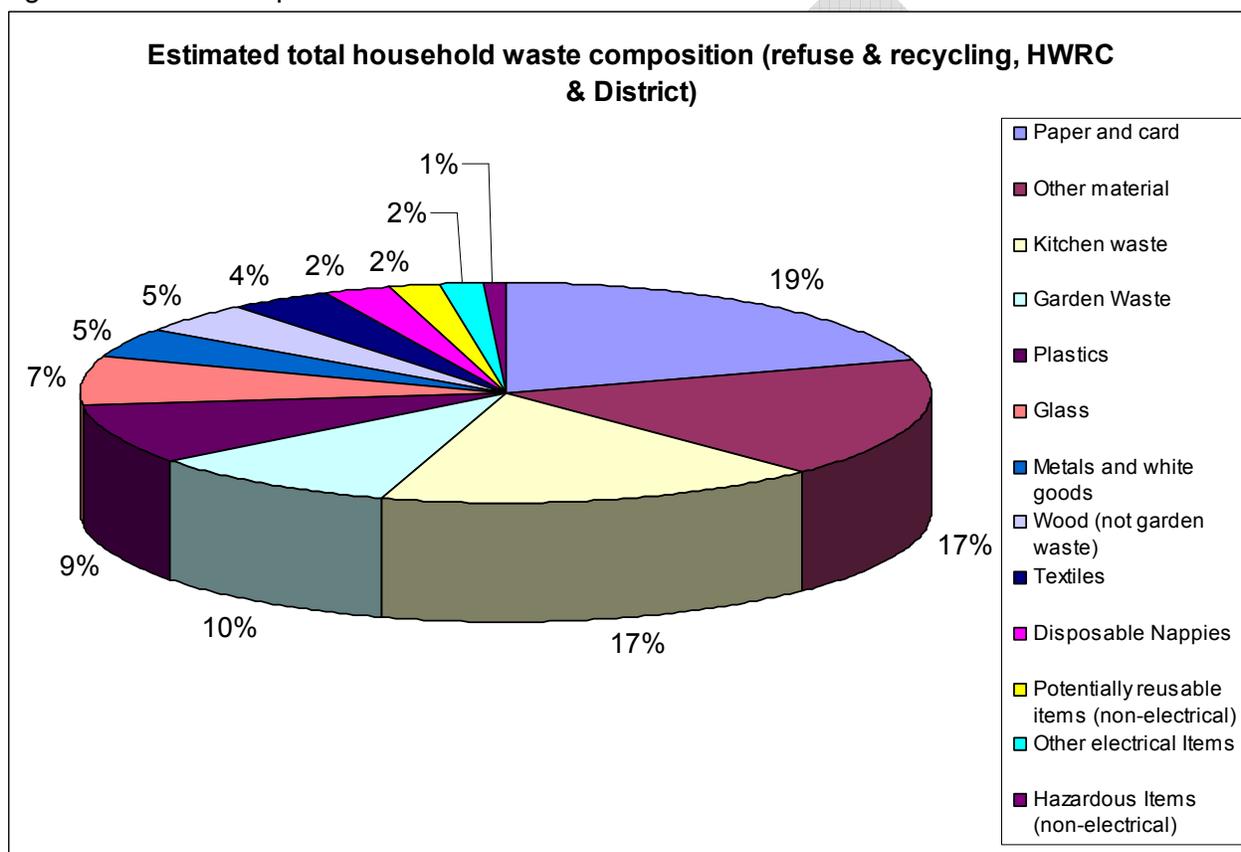
19 MWDA have proposed a series of composition studies across the partnership within the IAA. If agreed these will commence in 2008.

Figure 3 illustrates the composition of household waste in Merseyside (excluding Halton), rounded to the nearest whole percentile, and includes: recyclables; compostables; and residual waste collected from the kerbside, bring sites and the household waste recycling centres.

The total proportion of household waste considered to be biodegradable is 55.68%<sup>20</sup>.

The composition of the waste in Merseyside varies from the national average most notably through a lower proportion of garden waste which is estimated at ~12% on average nationally, a lower proportion of food waste which is ~19% nationally and slightly higher proportions of nappies and other sanitary waste & textiles in Merseyside.

Figure 3: Waste Composition



Source data, MWDA Household Waste Analysis Composition report, SWAP 2006.

**For further information on this subject of the JMWMS read:  
Supplementary Report 4 – Data & Projections**

<sup>20</sup> MWDA Household Waste Analysis Composition report, SWAP 2006

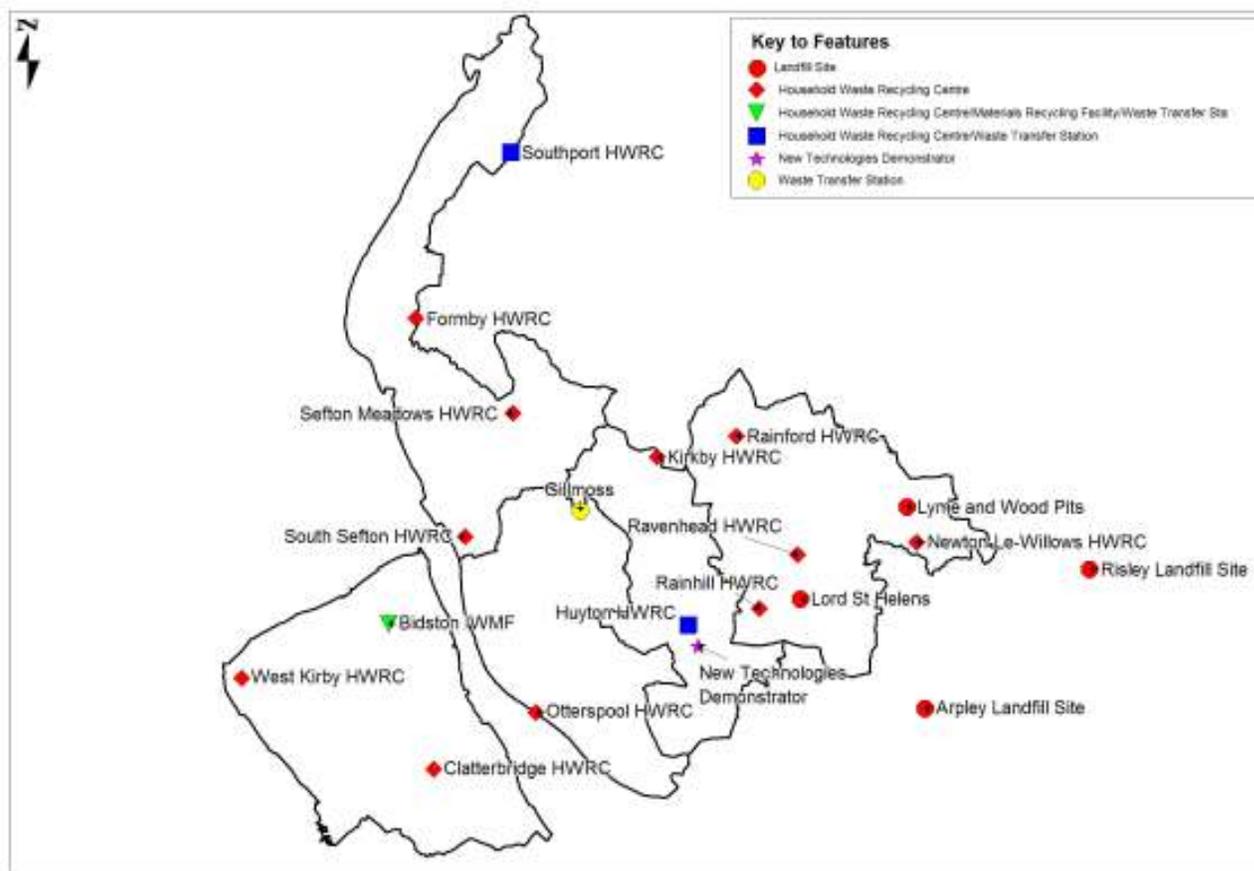
## 9 Current Infrastructure

### Overview:

This section describes the facilities and infrastructure that are needed to deliver the current municipal waste management service

The municipal waste management activities undertaken in Merseyside are primarily recycling, composting and landfill. MWDA presently has 14 Household Waste Recycling Centres (HWRCs) spread around the five District authority areas, for the deposit of domestic waste and recyclables. The MWDA is seeking to improve these sites and procure additional sites as part of new contract arrangements (refer to Section 10). There are also four transfer stations for the acceptance and bulking of collected waste/recyclables for onward disposal and reprocessing respectively. A Materials Recycling Facility at Bidston sorts recyclable materials, which have been collected via a co-mingled<sup>21</sup> service, into individual material fractions for onward reprocessing. Several landfill sites are used for the disposal of MWP municipal waste. Key infrastructure is shown in figure 4.

Figure 4: Key Infrastructure



Source: MWP, Outline Business Case, 2006, amended Reproduced from Ordnance Survey Mapping with the permission of the controller of Her Majesty's Stationery Office © Crown Copyright.

<sup>21</sup> 'Co-mingled' means a number of different recyclable materials collected together in the same container (for examples paper, cans and plastic collected in a single box or bin and separated later at a processing facility)

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Merseyside Waste Disposal Authority LA07635X

Windrow composting facilities are used by the MWP for processing green wastes and an In Vessel Composting (IVC) facility at Bidston is available for processing kitchen wastes.

Each of the Districts also provides bring sites (e.g. bottle banks, can banks) for the deposit of recyclables<sup>22</sup>.

**For further information on this subject of the JMWMS read:  
Supplementary Report 6 – Service Delivery Arrangements**

## 10 Procuring New Infrastructure and Services

### **Overview:**

This section explains the current and forthcoming activity to procure new services for the management of municipal waste in Merseyside.

The MWP has initiated a procurement process for three major contracts; these will form the delivery mechanism for the processing, treatment or disposal of the collected waste from the Partnership in the short, medium and long term. The close working of the partners within the MWP is important to achieve good value from contracts as it reduces risks to the contractor/s delivering the service who will be working with all the partner authorities. The Partnership have improved the systems in place to demonstrate close working and are also developing Inter Authority Agreements (IAAs) to commit partners to a specified level of service delivery.

The three contracts involved in the procurement process are described in box 2.

These new contracts and associated infrastructure provide an opportunity for the sustainable development of the service into the medium and longer term. The procurement process should ensure that new contractors are considered for high performance in customer care, good environmental management and high standards of staff training, specifically operational waste management staff. Innovative training techniques, such as the use of secondment opportunities across the partnership should be supported, and sharing of good practice amongst the partnership should be encouraged.

New infrastructure should be considered in the light of impacts to the local community (including accessibility) and environment and any benefits that can be provided from the development. In terms of accessibility, the wide range of statutory responsibilities should be recognised, for example the need to undertake an equalities impact assessment and adopt any measures proposed. Joint procurement of infrastructure should be undertaken where feasible or appropriate across the partnership, benefiting from economies of scale.

Sustainable procurement policy (see Section 2.5) is a relevant consideration in this area.

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<sup>22</sup> Details of bring sites near to any locality can be found at [http://www.recyclenow.com/where\\_to\\_recycle/index.html](http://www.recyclenow.com/where_to_recycle/index.html)

Box 2 Key Procurement Activity<sup>23</sup> anticipated 2007 - 2010

1. *Recycling contract for the development of additional recycling, composting and reception infrastructure and operation. It includes the operation of existing recycling facilities including the Household Waste Recycling Centres, currently operated by Mersey Waste Holdings Ltd. This contract is due to commence in 2008.*

2. *Recovery contract primarily for the processing of residual municipal waste to divert it from landfill. This is the largest of the contracts with >90% of the new infrastructure investment required over the next twenty years to be delivered through this contract. Government funds through the Private Finance Initiative (PFI) scheme were sought to enable access to PFI credits to support the expenditure needed for the infrastructure. In order to obtain funding the partnership needed to demonstrate its plans for the contract, and a Reference Case has been developed which would deliver the targets within this strategy. The reference case in terms of the recovery contract is for two Mechanical Biological Treatment (MBT) plants each with a co-located thermal treatment facility to process part of the outputs from the MBT. The PFI credits have been approved by Government for this contract. This contract is due to be awarded in 2008.*

3. *Landfill contract to secure additional landfill services from the period prior to commencement of the recycling & recovery contracts to the point of commissioning of the reference facilities. This contract will commence in 2010.*

*Furthermore, two separate contracts are being let for the Design and Construction of a new Materials Recovery Facility (due to commence 2008) and an interim landfill diversion contract seeking additional diversion capacity in the period prior to the recovery facilities being built.*

**KEY RECOMMENDATION 9:** All public waste management facilities shall be accessible to all members of the community

**KEY RECOMMENDATION 10:** All new waste management facilities shall be well designed and where practicable be in keeping with local character, and where appropriate have visitor centres / open days as part of the education and awareness raising plan for municipal waste management (and its environmental implications)

**KEY RECOMMENDATION 11:** All operational waste management staff shall be trained to high standards and NVQ level 1 & 2 awards or equivalent offered as a minimum to encourage staff development, and improve and maintain high levels of service delivery

**KEY RECOMMENDATION 12:** The Merseyside Waste Partnership will maintain a watching brief on waste and resources R&D which may impact on the delivery of the service and protection of the environment, workers and the public, including health impact studies

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<sup>23</sup> Excluding collection services

**KEY RECOMMENDATION 13:** All partners shall seek more environmentally friendly transport options in all new waste related procurements (e.g. bio-diesel, intermodal transport etc)

## 11 Waste Prevention

### Overview:

This section considers the issue of avoiding waste arising in the first place and what the Partnership can do to achieve this aim. This issue is explored in more detail in the accompanying Waste Prevention Strategy

Waste Prevention is defined as activities designed to reduce the quantity of municipal solid waste that would otherwise arise for collection<sup>24</sup>. This also includes the re-use of unwanted goods/items which would otherwise enter the municipal waste stream.

The importance of taking responsibility for our waste is an important theme of this strategy and national policy. This has particular relevance for waste prevention initiatives as they often require behavioural change upon the part of the either the producers or consumers of products.

JMWMS 2005 set the following waste prevention targets for MWP:

- Reduce the level of residual waste to below the English average by 2010;
- Reduce the growth of waste to 2% by 2010;
- Reduce the growth of waste to 0% by 2020.

However, the rate of increase in MSW and household waste is lower than previously observed in Merseyside, showing no consistent increase over the last four years. The 2005 JMWMS was based upon a rate of 3% growth historically observed across the Partnership, declining over time (2% by 2010, 1% by 2015) to a zero rate of growth by 2020. This does not appear to remain a realistic estimate of future growth and it is on this basis that the new targets have been developed within the Waste Prevention Strategy (Supplementary Report 1).

The following targets represent total MSW arisings growth rates across the MWP:

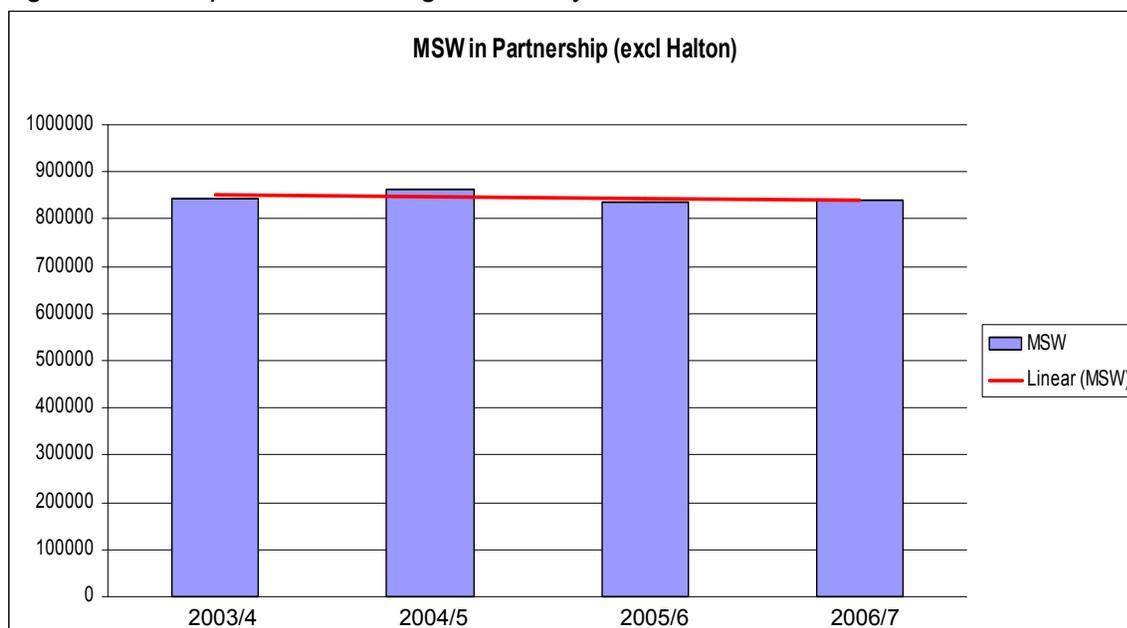
- Limit municipal waste growth to +0.4% per year by 2010;
- Limit municipal waste growth to +0.2% per year by 2015;
- Limit municipal waste growth to 0% per year by 2020.

Waste minimisation and reuse strategies were developed by the Partnership to attempt to influence and reduce waste generation rates. Figure 5 illustrates the rate of growth of municipal waste over the last five years, and the red line the linear trend of growth over this period.

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<sup>24</sup> This definition is based on the NWRf Waste Prevention Toolkit plus a review of definitions used in other local authority waste prevention strategies. This definition is considered to be fit for purpose and meet the needs of the MWP.

Figure 5: Municipal Waste Arisings in Merseyside



The MWP have been engaged in a wide range of waste prevention activities, and whilst these are discussed in detail in the Waste Prevention Strategy (Supplementary Report 1), a summary is provided below.

In 2005, MWDA and the districts established the Merseyside Real Nappy Network. As well as promoting the benefits of real nappies through promotional material (leaflets, booklets, and nappy mornings in local community centres), midwife nappy training kits were produced and delivered at events and in maternity wards. In addition an incentive scheme was established where new parents could either claim £50 to do home laundry of reusable nappies or receive a 1 month free trial of nappy laundry service.

The Merseyside Composting Network was established by MWDA to help raise the awareness of composting and also highlighting the benefits of recycling green waste either at HWRCs or using the kerbside collection service. Local events are used to distribute the compost to residents for no charge. In addition, all districts have now become involved with the WRAP home composting scheme, and residents are able to purchase subsidised compost bins.

MWDA funded a pilot scheme in 2006 to promote the Mail Preference Service (MPS) with a roll out of the scheme in 2007. Liverpool, Sefton & MWDA won an environmental award for this work.

MWDA have coordinated a number of Swap Days where unwanted items are brought to a centralised point in the community and residents can take items away for free, this also received an environmental award for good practice.

In the longer term, incentive schemes to encourage householders to reduce waste put out for disposal and therefore reduce waste to landfill could be considered. Potentially these may include financial incentives such as variable or direct charging for waste management.

The Waste Prevention Strategy builds upon the success of the activities undertaken to date, and supersedes the 2006 Waste Minimisation Strategy and Reuse Strategy. It aims to achieve unified

waste prevention, recycling and diversion targets as a whole and highlights the requirement for partnership working and the need for effective communications and awareness raising to facilitate a positive behaviour change.

Targets and recommendations in relation to waste prevention can be found in the Waste Prevention Strategy (Supplementary Report 1).

**For further information on this subject of the JMWMS read:**

Supplementary Report 1 – Waste Prevention Strategy

Supplementary Report 4 – Data & Projections

Supplementary Report 7 – Waste Arisings Study

## 12 Recycling & Composting

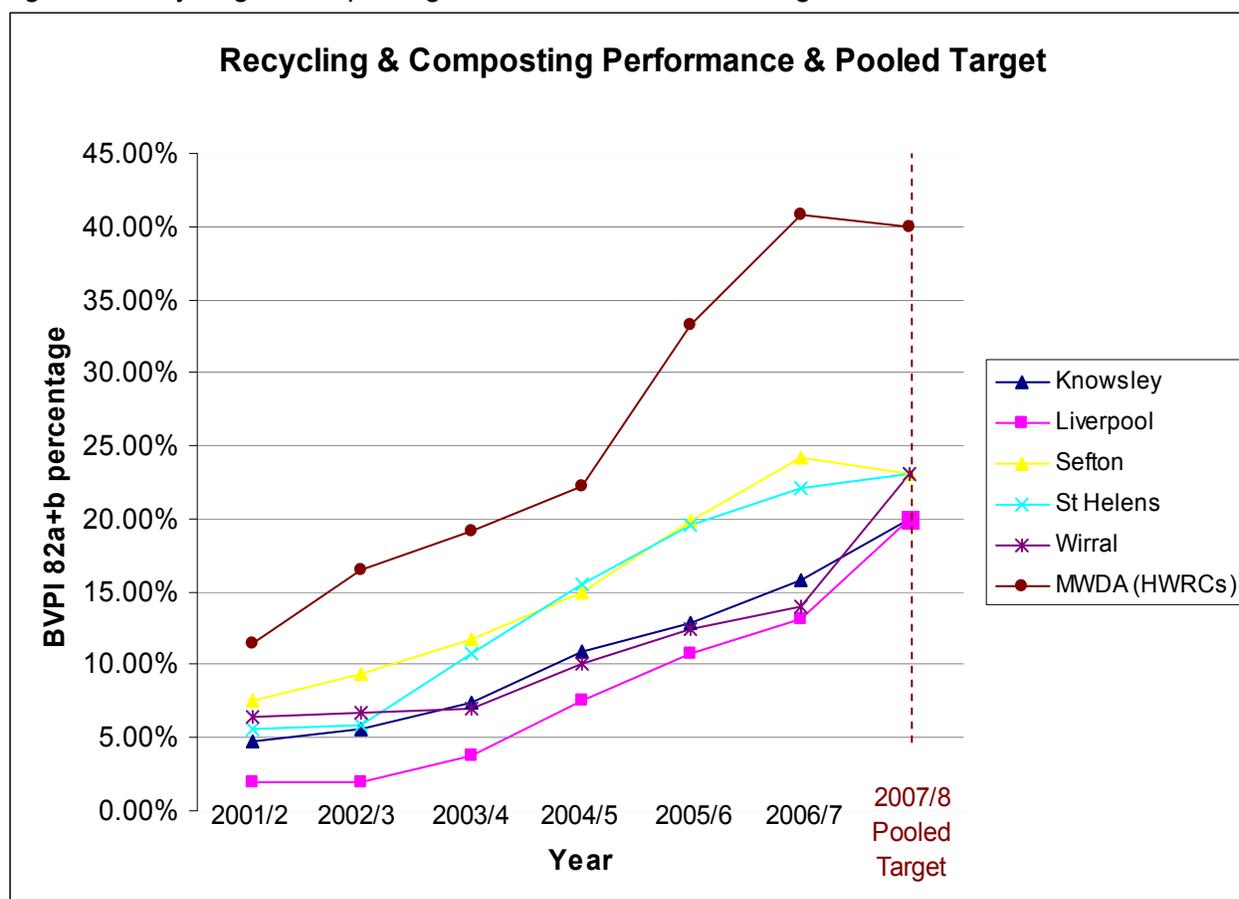
**Overview:**

This section considers the past performance and future targets for recycling and composting in Merseyside. This includes the types of materials separately collected from households and the management of recyclable materials or compost that are collected.

The MWP has focussed its efforts to date on improving recycling and composting collection and processing in order to deliver on their Best Value Performance Indicator obligations. Figure 6 illustrates the levels of recycling and composting achieved by the individual MWP members for the period 2000/1 – 2006/7, and also includes the target for 2007/8. The 2007/8 target is a statutory performance target derived from an application to pool recycling targets across the partners. This application was approved by Defra in 2007. Despite most partners missing their targets for 2003/4 and 2005/6, there has still been a significant rate of progress as shown in Figure 6.

There is however still a long way to go for all partners in terms of recycling performance if the Partnership Strategy for diversion from landfill is to be realised. Part of the challenge lies in the housing type and urban nature of Merseyside making the highest levels of recycling more difficult to achieve. This issue is explored in more detail in the Data & Projections Supplementary Report. The Partners are however making strides in developing the collection systems and the HWRC performance in order to make the step changes needed in recycling performance. This is a key challenge of this strategy.

Figure 6: Recycling & Composting Performance & Pooled Target for 2007/8



The District Councils have set out challenging individual annual recycling and composting collection targets to help continue to deliver performance improvement. Key longer term recycling and composting targets agreed by the MWP are included in table 4 and illustrated in Figure 7.

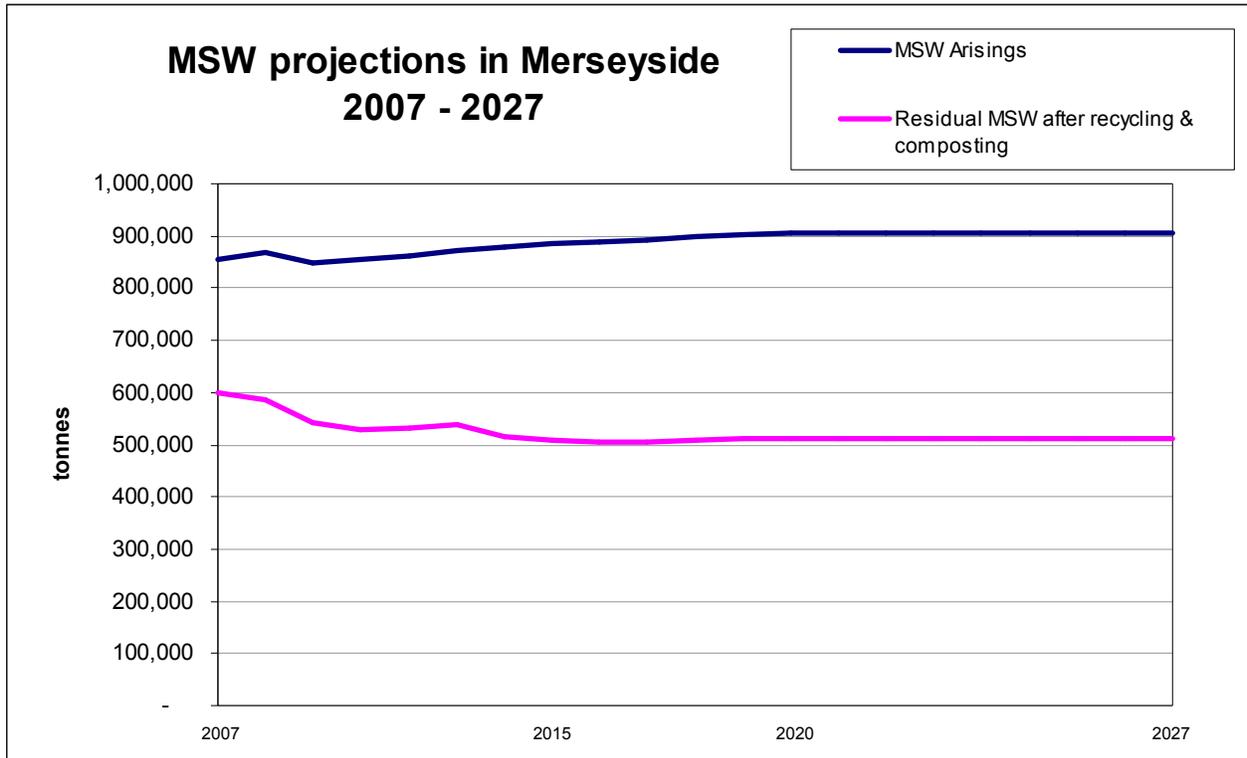
Table 4: Key Targets

Household Waste - % recycled, composted	2010 Target	2015 Target	2020 Target
<b>MWDA – (HWRC Sites)</b>	45%	50%	55%
<b>Knowsley</b>	33%	38%	44%
<b>Liverpool</b>	33%	38%	44%
<b>Sefton</b>	35%	38%	40%
<b>St Helens</b>	33%	38%	40%
<b>Wirral</b>	30%	40%	40%
<b>Overall Pooled Targets</b>	<b>33%</b>	<b>38%</b>	<b>44%</b>

The combined recycling and composting performance has been projected<sup>25</sup> to 2027 and Figure 7 shows the remaining residual waste after recycling and composting has taken place, set against the overall MSW arisings estimate. The fall in arisings is a prediction of the effect of introducing enforcement measures at HWRCs, excluding an element of non household waste from the municipal stream.

25 Enviros, 2007

Figure 7 Residual waste after estimated recycling and composting



The processing of this residual municipal waste is considered in Section 13 of this Strategy.

**KEY RECOMMENDATION 14:** All Districts are committed to improving recycling performance and achieving key targets and will incorporate a range of approaches to ensure that the challenging recycling and landfill diversion targets of 2010 and beyond are delivered. These approaches include:

- Maintain the separate collection of dry recyclables, biodegradable waste and residual waste, using kerbside sort, commingled or wheeled bin collection systems.
- Collect recyclables as frequently as practicable, moving towards fortnightly residual waste collection
- Move towards the kerbside collection of kitchen waste
- Optimise Bring Bank locations to complement the kerbside collection service towards an optimum saturation rate.

## **12.1 Kerbside collections for recycling & composting**

Separate collection of biodegradable recyclable materials is often a cost-effective means of diverting BMW from landfill. Levels of recyclables, including biodegradable material such as paper, card and some textiles, collected through existing kerbside schemes will be increased by:

- A full Merseyside-wide roll-out of multi-material kerbside collections
- Increasing public awareness of schemes
- Assessing and implementing best practice for the collection of recyclables and compostable material.

Garden waste is a significant component of BMW in the waste stream. Therefore, it is vital that garden waste is managed effectively in all Districts by:

- Introducing garden waste collections to all suitable properties
- Expanding garden waste collections to all suitable properties
- Increasing public awareness of schemes
- Work with Merseyside Waste Partnership to increase composting capacity for green waste to at least 100,000 tonnes per annum by 2010
- Support for community composting groups
- Co-ordinate home composting and green waste collection activity

As recycling and compostable material collections are enhanced and further developed, fortnightly collections of residual waste offer the opportunity to offset the costs of new collections. Alternate week residual waste collections can also impact on the level of participation in recycling schemes, in a positive manner. The introduction of alternate week waste collections will be investigated through:

- Consultation with elected Members to seek an understanding of financial implications
- Consultation with the public and members to consider alternate week collection schemes
- Review of good practice and latest research in this area<sup>26</sup>

Kitchen waste is a further significant element of BMW, however at present not all members of the partnership are collecting this element of household waste. There are two technologies primarily used for treating this material: In-vessel composting and; Anaerobic Digestion. As kitchen waste is a considerable proportion of the residual waste stream, work is required as to how best treat this waste stream. This will be done by:

- Consulting with the public on kitchen waste collections
- Consulting with elected Members to seek understanding of the cost implications of not diverting sufficient BMW and the implications of kitchen waste collections
- Continuing work on setting internal targets for District Councils on BMW recycling/composting
- Considering energy / environmental benefits of processing kitchen waste
- Working with the Waste Resources Action Programme (WRAP) through their ROTATE team to understand the specific impacts of introducing kitchen waste collection on each District.

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26 The WRAP guidance on AWC highlights that it is not an appropriate system for all areas, WRAP 2006

**KEY RECOMMENDATION 15:** MWDA will consider treatment options including Anaerobic Digestion for the processing of kitchen waste by 2010

## **12.2 Development of HWRCs**

Currently a quarter of Merseyside's household waste is collected through the HWRCs. A new Household Waste Recycling Centre is planned in Liverpool in 2007/8 and improvement of existing sites is scheduled within new contract arrangements. In addition, as part of the new contract arrangements it is intended that the range of materials collected at HWRCs is to be extended. Also each HWRC will be a designated collection facility for WEEE items.

The Partnership will optimise separate collection of BMW through HWRCs and increase recycling by:

- Establishing short, medium and long term recycling targets for HWRCs
- Increasing and improving education and awareness
- Establishing best practice for operations at HWRCs to increase recycling
- Improving provision of HWRCs where required e.g. in Liverpool
- MWDA to upgrade existing HWRCs to make them more user friendly by 2010
- Reduce non household waste illegally entering the sites through improved systems and enforcement.

**KEY RECOMMENDATION 16:** MWDA will improve the segregation of paper and card for recycling and garden waste for composting at HWRCs by 2010. MWDA will work closely with its current and future contractors to identify ways of improving performance to optimise recycling rates.

## **12.3 Bring Banks**

The JMWMS will support the expansion of District 'Bring Bank' locations across Merseyside. All District Councils in Merseyside are expanding 'Bring' Site provision and / or recycling facilities for multiple occupancy properties and the JMWMS will encourage this to continue.

The Waste Strategy for England 2007 encourages the assessment and development of on street recycling bins to improve the opportunities to recycle litter waste, and a consultation has recently been held on this issue (Recycle on the Go, November 2007). This relates to the evolution of the Street Scene in each District and should be considered in this context.

**KEY RECOMMENDATION 17:** All Districts shall consider the potential for introduction of street recycling bins by 2010

## **12.4 Quality of Secondary Materials**

By meeting the targets within the JMWMS, considerable tonnages of additional secondary materials will be generated for application in the market. This should be set in a context of where

all other local authorities will also be separating more recyclables and compost and hence there may be competition for higher quality of materials by the reprocessors and mills receiving the material or for example, by the users of compost. In order to enhance the sustainability of these markets, it is important that the quality of output from recycling and composting collection and treatment processes is a high priority.

**KEY RECOMMENDATION 18:** All Districts shall agree a protocol for acceptance of collected materials for recycling with relevant parties, which meets the needs of all partners, by 2010

**KEY RECOMMENDATION 19:** All partners shall use awareness raising/enforcement measures where appropriate to improve the quality of recyclate collected and reduce contamination

**KEY RECOMMENDATION 20:** MWDA to procure recycling/composting/treatment capacity with a priority on high quality of output product. Relevant standards (e.g. BSI PAS 100) should be sought wherever practicable to enhance the value and application of secondary materials

**KEY RECOMMENDATION 21:** All partners are committed to delivering good quality recyclate to the market place and maximising the recovery of materials through an efficient collection and treatment process

**KEY RECOMMENDATION 22:** Links with Market Development organisations (e.g. Envirolink NW) shall be enhanced and local markets for materials should be encouraged.

**KEY RECOMMENDATION 23:** All partners shall specify appropriate recycled / secondary materials in purchasing and specifying decisions where practicable

**KEY RECOMMENDATION 24:** All partners shall highlight positive local uses for materials derived from recycling/ composting activity, promote compost give-aways and Swap shops

**For further information on this subject of the JMWMS read:**  
Supplementary Report 4 – Data & Projections

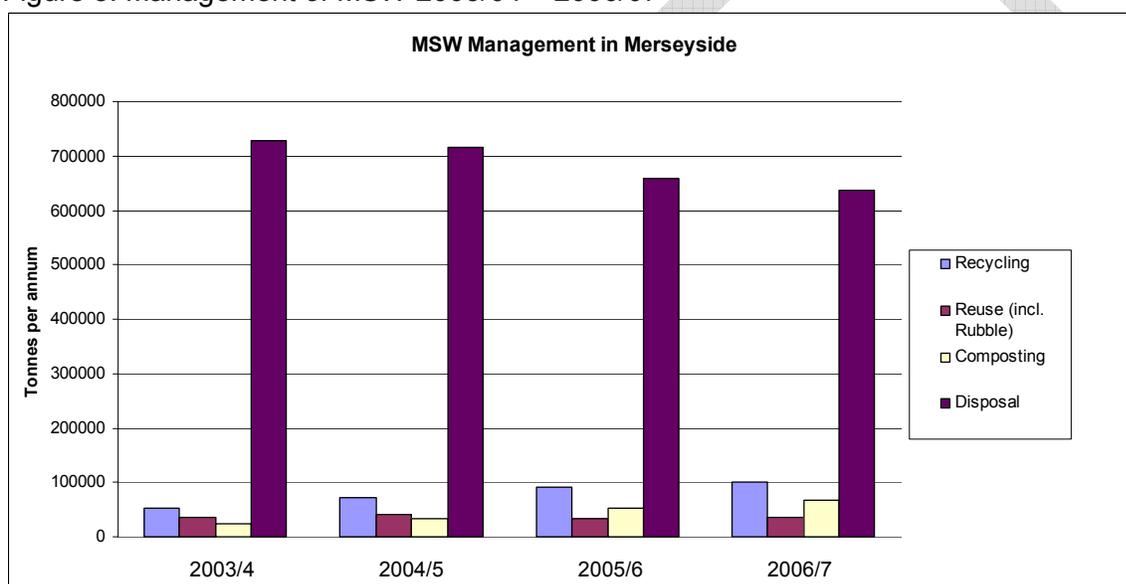
## 13 Waste Treatment & Disposal

### Overview:

This section explains the approach to dealing with residual municipal waste (e.g. 'black bag' type waste) as an alternative to the current practice of landfill disposal. It includes projections and targets for diverting waste from landfill, especially biodegradable waste which contributes detrimentally to climate change.

A key component of this strategy is to reduce the reliance upon landfill as a municipal waste management option. A significant driver for reducing landfill is the effect of the Landfill Directive which restricts the amount of Biodegradable Municipal Waste (BMW) permissible into landfill. Disposal to landfill in Merseyside has been reducing (Figure 8) however it is important that this reduction is not only sustained, but develops further and at a more significant rate over the next 5 – 10 years in particular.

Figure 8: Management of MSW 2003/04 – 2006/07<sup>27</sup>



The Landfill Directive requires all waste entering landfill to undergo pre-treatment. In the case of household waste this is achieved in Merseyside through the recycling collections altering the character and composition of residual waste going to landfill. There is also a need for commercial, industrial and other waste streams to undergo pre-treatment prior to deposit into landfill.

As shown by Figure 8 the prime diversion method from landfill to date has been to increase recycling and composting, however detailed modelling<sup>28</sup> has shown that despite a significant increase planned in recycling and composting (doubling the current level of recycling by 2020, to 44% of household waste) and intensive efforts to reduce waste (through waste prevention and reuse initiatives) there will still be insufficient diversion from landfill to meet the Partnerships' obligations. A significant amount of BMW will also require diversion through recovery techniques by either biologically degrading the waste under controlled conditions and/ or thermally treating (e.g. combusting) the waste under controlled conditions. Recovery technologies such as

<sup>27</sup> Excludes clinical waste sent for incineration (300 – 500 tonnes per year)

<sup>28</sup> Enviro Consulting, Waste PFI Project Outline Business Case, May 2006

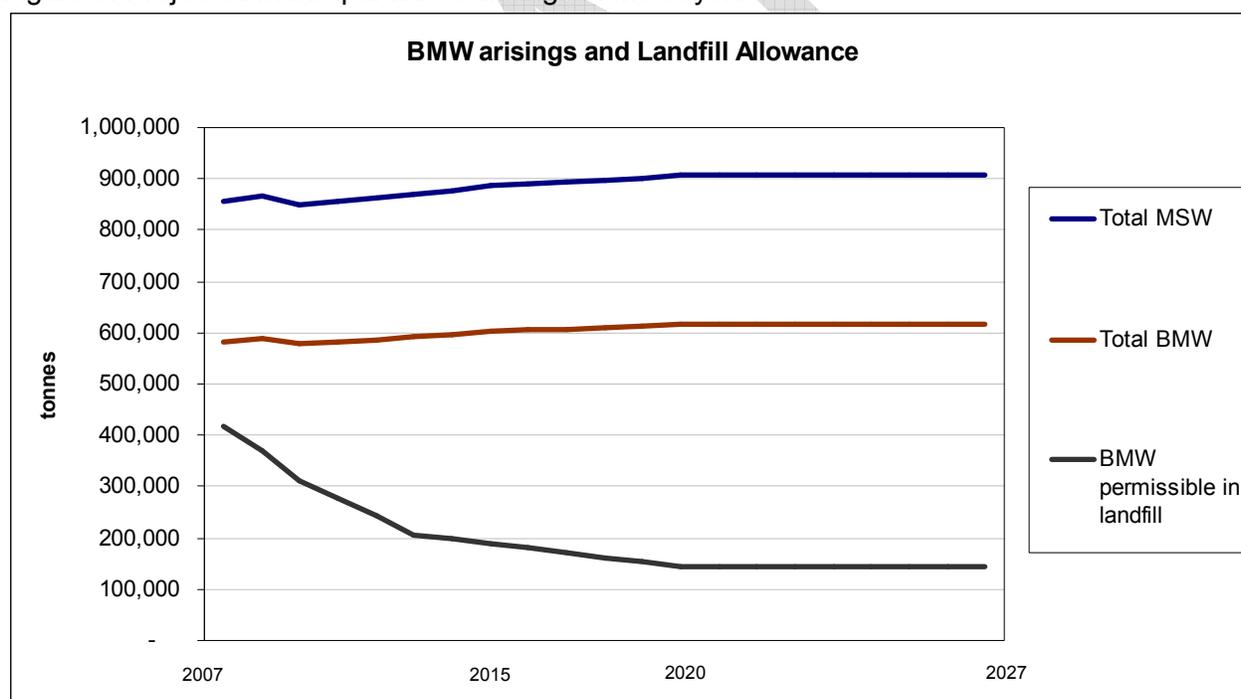
Mechanical Biological Treatment (MBT) and Thermal Treatment usually take between 4 and 8 years to implement, as facilities need to be properly planned and permitted prior to commencement of construction, and then commissioned prior to operation.

The MSW arisings and BMW component are projected to 2027 as illustrated in Figure 9.

Figure 9 shows that the need to divert BMW from landfill becomes more intense in the period 2010 – 2013 in particular. The projected decrease in residual waste in response to expanded recycling and composting, as shown in figure 7, does not keep pace with the diversion required in figure 9. Hence the interim contract procurement exercise (see Box 2, Section 10) aims to provide additional diversion of BMW in the period to 2013, and after that point the recovery technologies should be in place.

The technologies proposed for the recovery of municipal waste in Merseyside have been assessed through a series of modelling exercises to determine the likely costs, performance and risks posed by the various options. Public consultation (Section 1.7) also informed the decision over which technology solution was most appropriate for Merseyside. The ‘reference case’ (i.e. an option considered appropriate in the light of the work undertaken to date) comprises of two Mechanical Biological Treatment (MBT) plant, each co-located with a thermal treatment facility (e.g. an Energy from Waste plant).

Figure 9: Projected municipal waste arisings in Merseyside



An MBT plant is a facility designed to separate and / or prepare municipal waste into usable (biodegradable) fractions. Some MBT plants generate renewable energy through a process known as Anaerobic Digestion. One major output from most MBT plants is a combustible fraction (mostly the paper, plastics and in some cases dried organic fraction of the waste) usually known as Refuse Derived Fuel (RDF) or Solid Recovered Fuel (SRF). To ensure there is an outlet for

this fuel the Partnership has considered in its reference case<sup>29</sup> the siting of dedicated thermal treatment facilities to capture the energy content of the fuel.

A new technology for processing residual waste, known as a Mechanical Heat Treatment process, has been set up in Knowsley MBC as a demonstration plant to assess its effectiveness on residual MSW. This plant was part funded by Defra and uses the technology to heat and then separate MSW into different grades of alternative fuel, and also extract some recyclables from the waste. This plant was constructed in 2007 and commenced operation in 2008.

Central Government and EU policy is currently emphasising the importance and benefits of getting as much energy out of the waste as is practicable, where recovery operations take place. Recent policy drivers (regional & national, see Section 2) mean that CHP should be considered for any energy recovery operation in Merseyside.

There is a commitment divert residual waste from landfill through treatment and recovery. Table 5 includes the agreed targets.

Table 5 Key MWP Targets for Residual Waste

	2010	2015	2020
Recovery of Residual Waste	15%	46%	46%
Landfill of Residual * Waste	52%	16%	10%
Landfill Allowances	31%	16%	13%

\* After Recovery, Recycling and Composting

**KEY RECOMMENDATION 25:** Where energy is generated (either through biological or thermal processing), CHP systems shall be encouraged to maximise the efficiency of the conversion process.

**For further information on this subject of the JMWMS read:**  
Supplementary Report 4 – Data & Projections

## 14 Getting Our House in Order

### Overview:

This section explains what the local authorities are doing to improve their internal waste management practices (i.e. what they are doing in council offices to reduce their environmental impact).

<sup>29</sup> It is the procurement process combined with the planning and permitting processes that will determine the actual solution for Merseyside, which may differ from the Reference Case cited, based on an evaluation of the bids submitted by contractors, to tackle the MSW from the Partnership

The members of the Merseyside Waste Partnership, the Councils of Wirral, St Helens, Sefton, Liverpool, Knowsley and Merseyside Waste Disposal Authority, have made a commitment, through this Strategy, to improve the management of wastes within their offices and premises. The Partnership has also agreed to purchase more responsibly and consider the environmental implications of procurement activity. Some examples of current good practice from partner authorities are described in box 3.

Box 3 Case studies of good waste management practice in MWP Authorities

*Knowsley – Environmental Policy & Management System*

In the 2007 Groundwork Merseyside 21 Awards, Knowsley was awarded 'best local authority area'. Knowsley has made considerable efforts to put systems in place to reduce its environmental impact. An environmental policy explains the direction the Council is taking on improving environmental performance, and the introduction of a pilot Environmental Management System (EMS) to international standards will help in the continual improvement of that performance ([http://www.knowsley.gov.uk/resources/208889/environmental\\_policy.pdf](http://www.knowsley.gov.uk/resources/208889/environmental_policy.pdf)).

*Sefton – Setting a benchmark for sustainable delivery of services*

A series of policy and strategy developments in Sefton has led to a more sustainable approach to in-house activities and service delivery. Sefton was the first Merseyside authority to develop a Carbon Management Plan, containing actions for reducing carbon emissions. It is in the process of implementing a European Standard Environment Management System to demonstrate a systematic approach to considering and reducing environmental impact. Sustainable procurement policies are in place (e.g. buying 'greener' alternative products and introducing biodiesel into Council vehicles) and offices are also informed as to how well they are performing in terms of office recycling schemes.

*St Helens - Recycling & Reuse*

St Helens Council have made strides in improving recycling from their offices with paper, cardboard & ink cartridges separately collected in all offices and cans & plastic bottles also collected for recycling from some premises. Fluorescent tubes from the offices and St Helens schools can be deposited in containers at the Town Hall and Hardshaw Brook depot for recycling. Two major highways schemes (Blackbrook Diversion and the Town Centre Focal Point) were let with a zero waste policy. Both achieved impressive results in sustainability, re-use and recycling. For example, all the old town centre block paving has been re-used elsewhere.

*Wirral – Sustainable procurement policy*

Wirral is committed to green purchasing and as such has developed a policy which aims to: minimise the consumption of non renewable resources; eliminate waste and maximise reuse and recycling; use goods and services which are least harmful to the environment and human development; achieve and promote best practice with respect to purchasing and sustainable development. In order to achieve these, the authority is committed to a range of measures including reducing purchasing of new products by cutting down on waste and repairing or reusing existing products. In addition product specifications focus on recycled content and the ability to recycle or reuse the product. Good practice guidance has been developed and Wirral are proactive in sharing their experiences with others.

The Partnership makes the following Key Recommendations for all partners:-

**KEY RECOMMENDATION 26:** All Partners shall undertake an audit of waste arisings in their main premises to determine the nature and quantity of wastes arisings by 2009

**KEY RECOMMENDATION 27:** All Partners shall establish practices and systems to reduce waste arisings and re-use / recycle / compost increasing proportions of the remaining waste by 2009

**KEY RECOMMENDATION 28:** All Partners shall seek to reduce and sustainably manage the hazardous elements of the waste stream.

**KEY RECOMMENDATION 29:** All Partners shall implement green procurement alternatives for all local authority purchasing, and implement more environmentally friendly alternatives wherever practicable and economic to do so. A green procurement guidance or policy should be developed and implemented by 2009

## 15 Monitoring & Review of the Strategy

### Overview:

This section explains when and how the JMWMS is reviewed and monitored, both during implementation and in terms of review of the headline strategy, targets etc.

The JMWMS is supported by Action Plans (i.e. District Council Action Plans, Waste Prevention Action Plans, and a Procurement Plan<sup>30</sup>); these are documents which are designed to set out actions to facilitate the delivery of the JMWMS targets. Headline targets are usually broken down within action plans into annual targets to enable monitoring and clear reporting of achievement of the JMWMS ambitions. Progress towards targets and recommendations are reported through a variety of mechanisms including Government and locally agreed annual indicators (for example recycling and composting achievements), partner websites, council magazines and press releases. More regular reporting takes place between the Partners through MWP meetings and Local Strategic Partnerships.

This update of the JMWMS retains the aims, objectives and key targets of the original (2005) strategy but brings it into line with the latest developments to retain its relevance in the rapidly changing area of municipal waste management. A major review of the Strategy will take place in 2009/10 and will consider all aspects of the strategy including key targets and the strategy direction. This review will require a Strategic Environmental Assessment (SEA) of the Strategy and would be an opportunity to bring the JMWMS and Halton Municipal Waste Management Strategy into a common document to strengthen partnership working across the Liverpool City Region.

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<sup>30</sup> For key procurement activity see Box 2, section 10

## Annex 1: List of Recommendations

**KEY RECOMMENDATION 1:** All partners shall continue to develop the Waste Partnership, share best practice and seek to gain efficiency and improved service delivery where deliverable through joint working

**KEY RECOMMENDATION 2:** All partners shall build upon existing relationships, and foster new ones, with the research, business, voluntary, community and academic sectors across the partnership to ensure involvement where appropriate and practicable in delivering sustainable waste management solutions for Merseyside

**KEY RECOMMENDATION 3:** The Merseyside Waste Partnership will develop, agree and implement a Joint Communications Strategy by 2008

**KEY RECOMMENDATION 4:** Communications and education messages delivered by the Partnership should focus on waste prevention and recycling but make a clear link with climate change and energy / resource issues as driving forces behind the waste strategy

**KEY RECOMMENDATION 5:** The Merseyside Waste Partnership will develop, agree and implement an Education and Awareness Plan to support the Joint Communications Strategy by 2008

**KEY RECOMMENDATION 6:** MWDA will implement enforcement controls at all HWRCs by 2009, linked to awareness raising publicity and support to businesses for alternative methods to dispose of their waste correctly

**KEY RECOMMENDATION 7:** The Merseyside Waste Partnership will develop and implement a co-ordinated and resourced action plan for enforcement and education to tackle environmental crime and nuisances issues by 2009.

**KEY RECOMMENDATION 8:** The Merseyside Waste Partnership will engage in the wider waste debate to support more sustainable waste management and regional self sufficiency

**KEY RECOMMENDATION 9:** All public waste management facilities shall be accessible to all members of the community

**KEY RECOMMENDATION 10:** All new waste management facilities shall be well designed and where practicable be in keeping with local character, and where appropriate have visitor centres / open days as part of the education and awareness raising plan for municipal waste management (and its environmental implications).

**KEY RECOMMENDATION 11:** All operational waste management staff shall be trained to high standards and NVQ level 1 & 2 awards or equivalent offered as a minimum to encourage staff development, and improve and maintain high levels of service delivery.

**KEY RECOMMENDATION 12:** The Merseyside Waste Partnership will maintain a watching brief on waste and resources R&D which may impact on the delivery of the service and protection of the environment, workers and the public, including health impact studies.

**KEY RECOMMENDATION 13:** All partners shall seek more environmentally friendly transport options in all new waste related procurements (e.g. bio-diesel, intermodal transport etc).

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- Maintain the separate collection of dry recyclables, biodegradable waste and residual waste, using kerbside sort, commingled or wheeled bin collection systems;
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**KEY RECOMMENDATION 28:** All Partners shall seek to reduce and sustainably manage the hazardous elements of the waste stream.

**KEY RECOMMENDATION 29:** All Partners shall implement green procurement alternatives for all local authority purchasing, and implement more environmentally friendly alternatives wherever practicable and economic to do so. A green procurement guidance or policy should be developed and implemented by 2009.

## Glossary of Terms and Abbreviations

**Best Value** – places a duty on local authorities to deliver services (including waste collection and waste disposal management) to clear standards – covering both cost and quality – by the most effective, economic and efficient means available

**Bring site** – A localised collection point for recyclates, e.g. glass, paper and cans

**Combined Heat and Power** – a highly fuel efficient technology which produces electricity and heat from a single facility

**Commercial waste** – waste arising from premises which are used wholly or mainly for trade, business, sport, recreation or entertainment, excluding municipal and industrial waste

**Community sector** – including charities, campaign organisations and not-for-profit companies

**Composting** – an aerobic, biological process in which organic wastes, such as garden and kitchen waste are converted into a stable granular material which can be applied to land to improve soil structure and enrich the nutrient content of the soil

**Corporate Social Responsibility** – Operating in a manner that meets or exceeds the ethical, legal, commercial and public expectations that society has of an organisation

**DEFRA** – Department for the Environment, Food and Rural Affairs

**Duty of Care** – applies to anyone who imports, produces, carries, keeps, treats or disposes of waste. Everyone subject to the duty of care has a legal obligation to comply with it and there are severe penalties for failing to do so. The Duty of Care does not apply to waste collection from households

**EC Directive** – a European Community legal instruction, which is binding on all Member States, but must be implemented through the legislation of national governments within a prescribed timescale

**ELV** – End of Life Vehicle: a vehicle which is waste within the meaning of Article 1 of the Waste Framework Directive

**Energy from waste** – includes a number of established and emerging technologies, though most energy recovery is through incineration technologies. Many wastes are combustible, with relatively high calorific values – this energy can be recovered through (for instance) incineration with electricity generation

**Green waste** – Vegetation and plant matter from household gardens, local authority parks and gardens and commercial landscaped gardens

**Home composting** – compost can be made at home using a traditional compost heap, a purpose designed container, or a wormery

**Household waste** – this includes waste from household collection rounds, waste from services such as street sweepings, bulky waste collection, litter collection, hazardous household waste collection and separate garden waste collection, waste from civic amenity sites and wastes separately collected for recycling or composting through bring or drop-off schemes, kerbside schemes and at civic amenity sites

**Incineration** – is the controlled burning of waste, either to reduce its volume, or its toxicity. Energy recovery from incineration can be made by utilising the calorific value of paper, plastic, etc. to produce heat or power. Current flue-gas emission standards are very high. Ash residues still tend to be disposed of to landfill

**Industrial waste** – waste from any factory and from any premises occupied by an industry (excluding mines and quarries)

**Kerbside collection** – any regular collection of recyclables from premises, including collections from commercial or industrial premises as well as from households. Excludes collection services delivered on demand

**Landfill sites** – are areas of land in which waste is deposited. Landfill sites are often located in disused quarries or mines. In areas where there are limited, or no ready-made voids, the practice of landraising is sometimes carried out, where some or all of the waste is deposited above ground, and the landscape is contoured

**Minimisation** – see prevention

**Municipal waste** – municipal waste includes household waste and any other wastes collected by waste collection authorities (or their agents) such as municipal parks and gardens waste, beach cleansing waste, commercial or industrial waste and waste resulting from the clearance of fly-tipped materials. Collected municipal waste is defined in the Landfill Allowance Trading Scheme (England) Regulations 2004 as 'all waste which comes into the possession or under the control of (a) a waste disposal authority, or (b) a waste collection authority within the area of a waste disposal authority.'

**Prevention** - achieving as much waste prevention as possible is a priority action. Prevention can be accomplished within a manufacturing process involving the review of production processes to optimise utilisation of raw (and secondary) materials and recirculation processes. It can be cost effective, both in terms of lower disposal costs, reduced demand for raw materials and energy costs. It can be carried out by householders through actions such as home composting, reusing products and buying goods with reduced packaging

**Producer responsibility** – is about producers and others involved in the distribution and sale of goods taking greater responsibility for those goods at the end of the product's life

**Proximity principle** – suggests that waste should generally be disposed of as near to its place of production as possible

**Recycling** – involves the reprocessing of wastes, either into the same product or a different one. Many non-hazardous industrial wastes such as paper, glass, cardboard, plastics and scrap metals can be recycled. Special wastes, such as solvents can also be recycled by specialist companies, or by in-house equipment

**Re-use** – can be practised by the commercial sector with the use of products designed to be used a number of times, such as reusable packaging. Householders can purchase products that use refillable containers, or re-use plastic bags. The processes contribute to sustainable development and can save raw materials, energy and transport costs

**Renewables Obligation** – this was introduced in 2002, amended in 2006 & 2007 and creates a market in tradable renewable energy certificates for which each supplier of electricity must demonstrate compliance with increasing government targets for renewable electricity generation

**SEA (Strategic Environmental Assessment)** – this is an assessment procedure that various plans and strategies are subject to and which is designed to ensure that their environmental impact is properly assessed.

**Sustainable development** – development which is sustainable is that which can meet the needs of the present without compromising the ability of future generations to meet their own needs

**Sustainable waste management** – means using material resources efficiently, to cut down on the amount of waste we produce. And where waste is generated, dealing with it in a way that actively contributes to the economic, social and environmental goals of sustainable development

**Treatment** – involves the chemical or biological processing of certain types of waste for the purposes of rendering them harmless, reducing volumes before landfilling, or recycling certain wastes

**Unitary Authority** – a local authority which has the responsibilities of both Waste Collection and Waste Disposal Authorities

**Waste** – is the wide ranging term encompassing most unwanted materials and is defined by the Environmental Protection Act 1990. Waste includes any scrap material, effluent or unwanted surplus substance or article which requires to be disposed of because it is broken, worn out, contaminated or otherwise spoiled. Explosives and radioactive wastes are excluded

**Waste arisings** – the amount of waste generated in a given locality over a given period of time

**Waste Collection Authority** – a local authority charged with the collection of waste from each household in its area on a regular basis. Can also collect, if requested, commercial and industrial wastes from the private sector

**Waste Disposal Authority** – a local authority charged with providing disposal sites to which it directs the Waste Collection Authorities for the disposal of their controlled waste, and with providing civic amenity facilities

**Waste Hierarchy** – suggests that: the most effective environmental solution may often be to reduce the amount of waste generated – *reduction*; where further reduction is not practicable, products and materials can sometimes be used again, either for the same or a different purpose – *re-use*; failing that, value should be recovered from waste, through *recycling*, *composting* or *energy recovery from waste*; only if none of the above offer an appropriate solution should waste be *disposed of*

**Waste management industry** – the businesses (and not-for-profit organisations) involved in the collection, management and disposal of waste

**Waste streams** – Waste generated from different sources

**WEEE** – Waste electrical & electronic equipment

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