Merseyside Waste Disposal Authority

Headline Sustainability Strategy

2008 – 2010

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Executive summary

Today, the Government defines sustainable development as

"To enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations".

It is not just a case of how we should live our lives today but it also about future generations and their moral right to expect forbearers to protect the planet from lasting harm. Sustainable development aims to ensure that decision makers take into consideration the economy, people and the environment with equal parity

To achieve a sustainable economy, it will be necessary to have sustainable growth and employment. We need to move away from the disposable society and businesses need to support sustainable production and consumption of goods and services. To achieve social equity, everyone should share in the benefits of positive and transparent decision-making. Environmental sustainability means reducing the intensive use of energy and water, and the effective use of natural resources whilst preventing waste wherever possible. The key priorities for this strategy reflect the Government's sustainable development priorities.

Since 1986, Merseyside Waste Disposal Authority has managed the disposal of household waste collected by the constituent District Councils of Merseyside. In the past, the simple answer was to dispose of waste in a hole in the ground. Today, the Authority is striving to find the best practicable solutions for the recovery and treatment of more than 800,000 tonnes of resources in a sustainable manner rather than sending them to landfill.

The Authority understands and respects the ethos of sustainable development and accepts it has a duty and a responsibility to its stakeholders including the residents of Merseyside and the global community to ensure that all its operations and activities are undertaken with due care and consideration of the balance between the social, economic and environmental aspects of sustainability.

In 2006, the Authority reviewed and amended its corporate plan to make the activities of the organisation more sustainable. The Authority's new vision is

'To improve people's quality of life by ensuring that waste is sustainably managed to bring about the best

combination of environmental, economic and social benefits'

The Authority ratified sustainable development, sustainable procurement and environmental policies in 2007. This new headline sustainability strategy provides the context for the delivery of these policies together with the existing corporate social responsibility policy.

SUSTAINABILITY STRATEGY

This document acts as a Headline Sustainability Strategy with a set of principles and key priorities for sustainable development.

The overarching aim of this strategy is to:

> **Guide the Authority in integrating and coordinating the principles and priorities of sustainable development across strategies, policies, projects, plans, budgets and activities in order to attain sustainable waste management and ultimately achieve sustainability in all that it does.**

Our priorities will focus on four key areas each of which has a supporting Supplementary Strategy:

- **Climate Change;**
- **Sustainable Procurement;**
- **Corporate Social Responsibility; and**
- **Environmental Management.**

The understanding of MWDA employees and members has been improving over the last few years, but sustainability can be a complex subject and difficult to incorporate into everyday activities and decision making. An early element to the delivery of this strategy will be to raise awareness levels of staff and establish effective guidance and performance systems within the organisation.

Over the next 25 years, the Authority will be responsible for procuring contracts and projects worth in excess of 3.5 billion pounds. It is essential that public money contributes towards safeguarding the environment, supports local communities and creates local jobs and provides value for money on a whole life cost basis. A thorough understanding of the cross cutting nature of sustainability is required so that over time, the Authority will be able to define and quantify its actions as sustainable in a way that is transparent to its stakeholders. Although there are many quick wins, the road to delivering and demonstrating sustainable

development is a long one with many opportunities for improvement along the way.

The action plan to deliver this strategy will be reviewed and reported on through the Authority's Annual Report.

CLIMATE CHANGE

Scientifically, there is little doubt that climate change is now the greatest challenge faced by society. Climate change has increased significantly in the last hundred years due to the burning of fossil fuels and human activities that have altered the chemical composition of the Earth's atmosphere through increased levels of greenhouse gases, particularly carbon dioxide (CO_2) and methane (CH_4). The Stern Report (2006) estimates that 3% of the UK's greenhouse gas emissions can be attributed to waste and its management. The Authority will take steps to lessen the scale of its contributions to climate change in the future through the activities over which it has direct influence, particularly in its day to day operations and the impact of our contracts.

SUSTAINABLE PROCUREMENT

The Government aims to be the leading sustainable procurement nation in the EU by 2009 with the public sector seen as a key participant to achieve this stated aim. The Authority has begun the process of procuring contracts and projects to deliver the Joint Municipal Waste Management Strategy (JMWMS) for Merseyside , which is worth in excess of 3.5 billion pounds.

Sustainable procurement is about making decisions to purchase products and services which take account of environmental and social factors. This includes considering where products come from, materials used, how they are made and by whom. It is even about whether a purchase or service is necessary!

The Authority will implement its sustainable procurement activities with the aid of the National Sustainable Procurement Flexible Framework and aims to be practising sustainable procurement across its activities by April 2009.

CORPORATE SOCIAL RESPONSIBILITY

Organisations are coming under increasing pressure from stakeholders or shareholders to take responsibility for issues that have traditionally been considered outside their normal activities.

Corporate Social Responsibility (CSR) is a process whereby businesses and organisations take responsibility across their entire supply chain for the social, environmental and economic consequences of its activities. They then report on these consequences and constructively engage with stakeholders including its staff.

Corporate principles

The Authority has the following set of corporate principles:

- Human rights
- Integrity
- Openness and accountability
- Sustainability
- Diversity

- Shared responsibility
- Training and development
- Environment
- Community and
- Volunteering

The Authority will use its annual report as a vehicle to report on corporate social responsibility issues.

ENVIRONMENTAL MANAGEMENT

MWDA will proactively manage and minimise its environmental impacts through the implementation of an environmental management system. It is our policy to ensure that we meet environmental and legal requirements as a minimum and demonstrate best practice in environmental management wherever practicable. We are committed to continually monitor environmental risks and to deliver continuous environmental improvements.

It is the intention of the Authority to convey the need for best practice in environmental management to others who provided services to or on our behalf. We will report on our environmental management through the Authority's annual report.

Headline Sustainability Strategy 2008 - 2010

1.   INTRODUCTION

Merseyside is a predominantly metropolitan area in the North West of England and has a population of about 1.4 million and approximately 600,000 households. In 1986, Merseyside Waste Disposal Authority (the Authority) was formed and assumed responsibility for managing the recycling, treatment and disposal of household waste collected by the five constituent Local Authorities of Merseyside. In partnership with its contractor – Mersey Waste Holdings, approximately 800,000 tonnes of waste was managed in 2006/07 with 14 Household Waste Recycling Centres, 4 Waste Transfer Stations and 1 Materials Reclamation Facility in operation as part of the current contract.

The Authority leads the Merseyside Waste Partnership, which is represented by the constituent District Councils of Merseyside and our neighbouring Unitary Authority – Halton Borough Council. The Joint Municipal Waste Management Strategy for Merseyside (JMWMS) was published in 2005 and guides the Partnership over the next 25 years. The Authority will be responsible for expenditure in excess of 3.5 billion pounds during the procurement process to deliver the JMWMS. The challenge for the present and the future is to tackle the social, environmental and economic issues of waste using a joint working approach to provide innovative, cost effective and sustainably acceptable solutions to waste management.

The Authority understands and respects the ethos of sustainable development and accepts it has a duty and a responsibility to its stakeholders, including the residents of Merseyside and the global community to ensure that all of its operations and activities are undertaken with due care and consideration of the balance between the social, economic and environmental aspects of sustainability. The Authority is committed to playing its part for the greater good.

In 2006, the Authority reviewed and made amendments to its Corporate Plan to make the activities of the organisation more sustainable. The Authority's new vision is:

> **'To improve people's quality of life by ensuring
> that waste is sustainably managed to bring about
> the best combination of environmental, economic
> and social benefits'**

This document acts at the Headline Sustainability Strategy for the Authority with a set of principles and four key priority areas each of which has a supporting Supplementary Strategy:

- **Climate Change;**
- **Sustainable Procurement;**
- **Corporate Social Responsibility; and**
- **Environmental Management.**

1.1 What is Sustainable Development?

The most recognised international definition of sustainable development is:

> **"Development that meets the needs of the present without compromising the ability of future generations to meet their needs".** [1]

The World Conference on Environment and Development (1987) stated that sustainable development had a fundamental interdependence between the economy, society and the environment (see diagram below). Where all three elements interact at the centre is sustainable development.

Figure 1: Sustainable development (WCED, 1987)
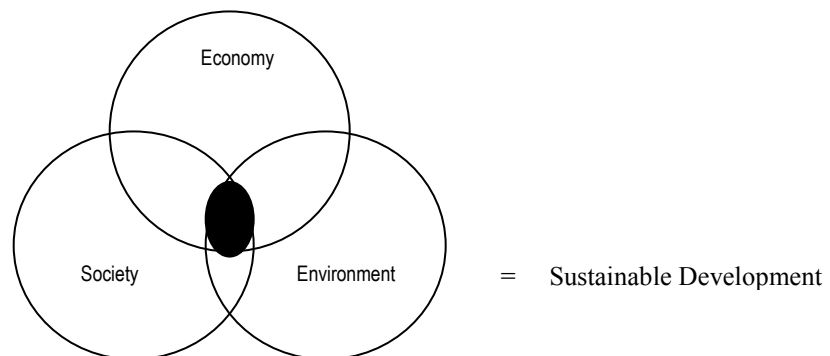
The Earth Summits in 1992 and 2002 sought to help Governments rethink economic development and find ways to halt the destruction of irreplaceable natural resources and pollution of the planet, through a strategy for the Twenty First century called Agenda 21.

European and national legislation is requiring us to be more sustainable. The UK Government published a national Sustainable Development Strategy 'Securing the Future' (2005) which contains five principles and four main priorities.

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[1] World Commission on Environment and Development (WCED 1987)

Principles

- **Living within environmental limits;**
- **Ensuring a strong, healthy and just society;**
- **Achieving a sustainable economy;**
- **Promoting good governance; and**
- **Using sound science responsibly.**

Priorities

- **Sustainable consumption and production;**
- **Climate change and Energy;**
- **Natural resource protection and environmental enhancement; and**
- **Sustainable communities**.

Securing the Future's definition of sustainable development is;

> **"To enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations".**

All of the Government's sustainable development priorities have a direct impact on how we manage waste and therefore will play a significant role in how we address and achieve economic, social and environmental equity. A key reason behind taking a sustainable approach to waste management is that it will contribute towards and bring us back from the 'tipping point' of climate change. Typically, the Authority, through a sustainable waste management approach, will be able to

- Reduce greenhouse gas emissions – most importantly methane from landfill sites and carbon dioxide from the transportation of waste
- Improve resource efficiency by saving energy and reducing material use through waste prevention, reuse, recycling, composting and renewable energy recovery
- Protect public health through the safe management of potentially hazardous substances
- Protect ecological systems (soils, groundwater and emissions to air)
- Protect social amenities by ensuring household waste is collected thus reducing fly-tipping and limiting local nuisances from waste facilities
- And contribute to the wider objective of sustainable communities

The latter point will permit the Authority to become more strategically aligned on a number of local partnerships.

1.2 Sustainable community strategies

The Government's aim is to create thriving, vibrant, sustainable communities which will improve everyone's quality of life[2].

The Government defines sustainable communities as

> **Places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all.**

The components of a sustainable community embody the principles of sustainable development. They do this by:

- Balancing and integrating the social, economic and environmental components of their community

- Meeting the needs of existing and future generations

- Respecting the needs of other communities in the wider region or internationally to make their own communities sustainable

A Sustainable Community Strategy establishes a solid evidence base so that Local Authority's can develop and drive the effective delivery of their Local Area Agreement.

1.3 Local Area Agreement and Strategic Partnerships

A Local Area Agreement (LAA) is the core element of a Sustainable Community Strategy. The agreement is made between Central Government, through Government Office and a local area, represented by the lead Local Authority and other key partners through Local Strategic

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3. Sustainable Communities: building for the future, 2003.

Partnership (LSP). Under the Local Government and Public Involvement Act 2007, MWDA is now a partner authority who must be consulted by the responsible Local Authorities in determining the local improvement targets which are to be specified in the Local Areas Agreement.

2.   HEADLINE SUSTAINABILITY STRATEGY

The overarching aim of this sustainability strategy is to;

> **Guide the Authority in integrating and coordinating the principles and priorities of sustainable development across strategies, policies, projects, plans, budgets and activities in order to attain sustainable waste management and ultimately achieve sustainability in all that it does.**

Sustainable development is a major cross cutting theme across all the activities of the Authority. In 2006, the Authority reviewed and amended its Corporate Vision to reflect the importance of what the wider benefits of sustainability would achieve for all people's quality of life.

Corporate Vision

> **'To improve people's quality of life by ensuring that waste is sustainably managed to bring about the best combination of environmental, economic and social benefits'**

The aim of our main activity is to sustainably contribute to the successful implementation of the Joint Municipal Waste Management Strategy for Merseyside by

Achieving the maximum level of sustainability in the management of Merseyside's waste by encouraging personal responsibility for waste – through education and awareness; including the prevention, minimisation, reuse and recycling of resources and the recovery of energy from residual waste, reducing pollutants to air, land and water, supporting economic opportunities and being of general benefit to society and the environment. This will be achieved within reasonable financial limitations so as to be sustainable in the long-term.

The challenge is to establish effective methods to practically incorporate sustainability into our policies, programmes, projects, management

systems and decision making so that it becomes a standard part of everyday working for staff and members.

2.1 Current position on sustainability

Following the results of the Best Value Review of Sustainability and Corporate Social Responsibility in 2006, the Authority ratified policies for sustainable development, sustainable procurement and on the environment to sit alongside an existing policy on corporate social responsibility. During 2007, the Update of the JMWMS and the related District Council Action Plans were subject to sustainability appraisals and the outcomes helped to improve the sustainability of the draft JMWMS and determined that overall both the strategy and action plans already contribute significantly to sustainable development.

For the past 2 years office waste has been recycled (paper, cardboard, newspapers/journals, plastic, glass, aluminium and printer cartridges). The Authority has engaged two local social enterprises and a charity for this service. Figure 2 shows that the Authority recycled 1.05 tonnes [64%] (2005/6) and 1.09 tonnes [67%] (2006/07) of office waste respectively, which are within the EU Best Practice guidelines (60/70%) for office waste management.

Figure 2. Office waste recycling rates 2005/06 – 2006/07
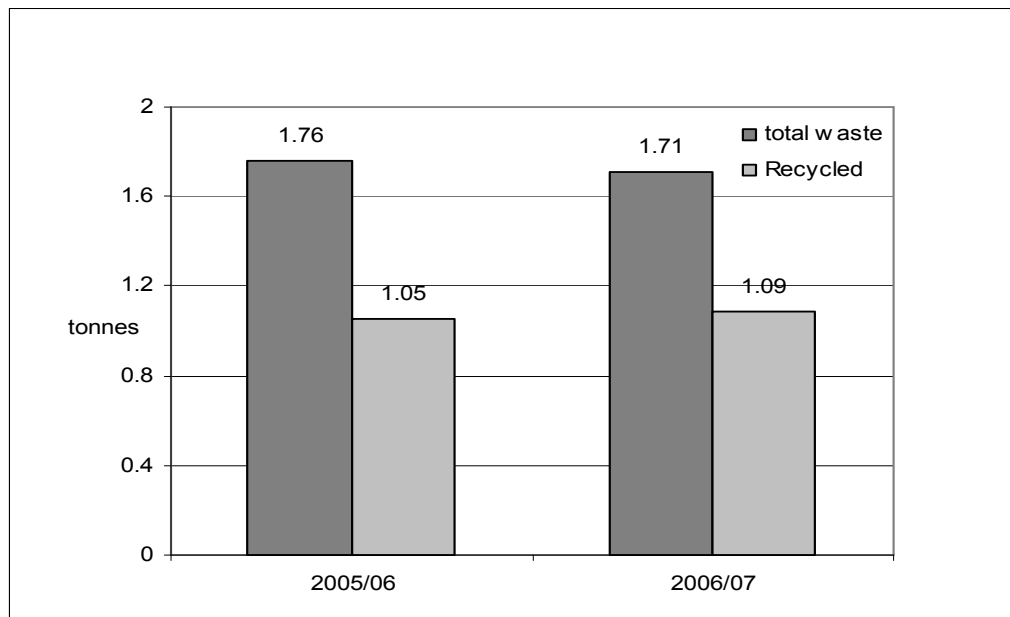
2.2 Action Plan

The focus for the first sustainability action plan will be on activities the Authority is directly responsible for and will promote widespread consideration of sustainability in our partnership working. Initial delivery of the action plan is proposed in three primary areas

- Promoting awareness
- Appraisal, assessment and improvement
- Monitoring, Evaluation, Reviewing and Reporting

Activities in these areas are aimed at meeting our strategic objectives

2.3 Strategic objectives and outcomes

The strategic objectives of this sustainability strategy are to:

- **Support and coordinate Authority activities that deliver sustainable outcomes;**

- **Increase skills for all staff and Members to maximise sustainability activities within their own work and decision making for the Authority;**

- **Build a framework for sustainability objectives across the Authority's strategies, projects, plans, policies, budgets and activities; and**

- **Communicate the Authority's commitment to sustainability to stakeholders.**

The delivery of this strategy will help to ensure that staff and members understand how their work currently supports the delivery of sustainable development and the steps that can be taken to ensure future improvements and sustainable benefits. Management of the strategy and action plans will need to be carried out in a cohesive and structured manner and consideration will be given to establishing an internal steering group and appropriate task groups across the four priority areas of activity

The key outcomes, once these objectives are met, will be a Waste Disposal Authority that will

- **Ensure that economic, social and environmental issues are considered within its decision making;**

- **Mitigate and adapt to the impacts of climate change;**
- **Purchase goods and services that are sustainable;**
- **Raise awareness and understanding of corporate social responsibility and build capacity for social inclusion;**
- **Manage the environmental impacts of its activities and demonstrate continuous improvement;**
- **Protect and enhance biodiversity**
- **Ensure that local social/economic benefits are encouraged and supported**

2.4   Appraisal, Assessment and Improvement

The Authority already has a statutory duty to undertake sustainability appraisals and strategic environmental assessments (SEA) in certain elements of its work. Commitments have already been given to conduct a full SA/SEA on the review of the JMWMS in 2010.

In other areas of our activities we will develop appraisal and assessment systems to embed sustainability into our activities and plans. The Integrated Appraisal Toolkit described earlier will be one of the tools used within a framework to assess the Authority's progress towards sustainable development alongside guidance and training for staff and members.

2.5   Monitoring, Evaluation, Reviewing and Reporting

The Authority moves forward on the basis of managing and improving its performance on a continual basis (see fig 3). This approach is systematic, and takes the form of identifying its priorities, establishing measures and targets, followed by implementation. Progress of projects are regularly evaluated and reviewed.

Figure 3. Managing and improving performance

Priorities

Measures &
Targets

Implementation

Evaluation &
Review
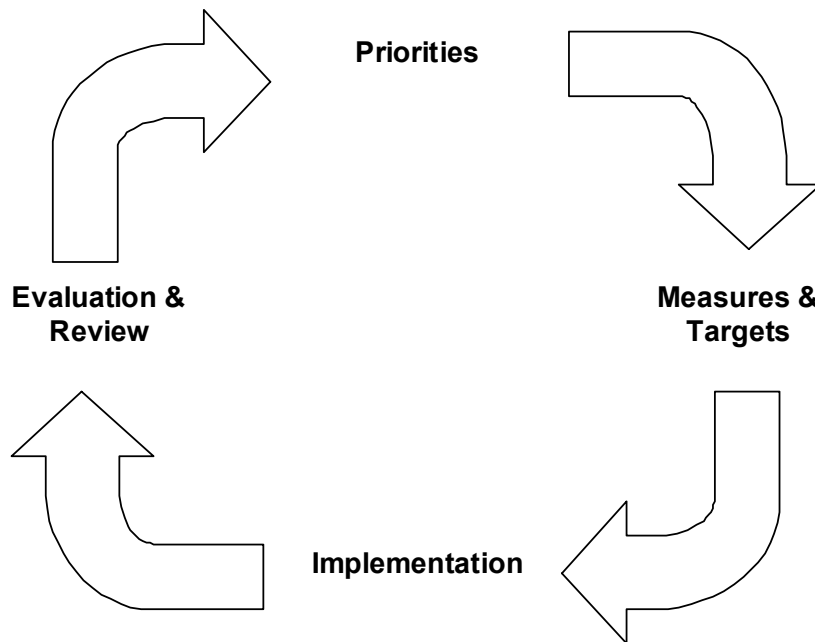
Monitoring and reporting are fundamental to maintaining momentum. Major impacts of key areas should be monitored annually using relevant sustainability indicators. Performance will be reported as an annual sustainability statement as part of the Authority's Annual Report to its stakeholders.

3.   CLIMATE CHANGE

The Climate Change aim is

Reduce the Authority's contributions to greenhouse gas emissions and to adapt as necessary to climate change.

Our objectives are to

- **Make a commitment to address climate change issues;**

- **Raise awareness of climate change amongst Members, staff and the wider community of Merseyside;**

- **Give consideration to climate change issues (reduction of emissions and potential positive and negative impacts) in the development and review of relevant Authority strategies, plans, policies activities and contracts;**

- **Reduce the emission of greenhouse gases associated with all of the authority activities.**

Scientifically, there is little doubt that climate change is now the greatest challenge faced by society. The impacts of climate change will continue and will become more apparent over the coming years. Climate change has increased significantly in the last hundred years due to the burning of fossil fuels.

The Authority has taken its lead on climate change from the Government and will make it our main driver for achieving sustainable waste management. Both climate change and sustainable waste management are intrinsically linked in that the activities involved in managing waste (transportation and landfill emissions), contributes some 3% of the total UK greenhouse gases emitted. [3]

The Government has recently issued two new National Indicators for climate change:

- Percentage CO_2 reduction in local authority's own operations;
- Percentage CO_2 reduction per capita in the community

These reflect the direct role of local authorities in reducing carbon emissions from their own operations and being exemplars in the community. At this early stage in the development of the Authority's approach to climate change, the objectives of the strategy will be focused on activities over which the Authority has direct influence.

See also Supplementary Strategy 1: Climate Change

4. SUSTAINABLE PROCUREMENT

The sustainable procurement aim is to:

Ensure that social, economic and environmental well-being is considered as part of Best Value when the Authority purchases its goods and services.

Using the National Sustainable Procurement Flexible Framework (the Framework), our objectives are to

- **Benchmark progress against other JWDAs and public and private bodies/organisations;**

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[3] The Stern Review (2006)

- **Reach level 3 (Practice) of the flexible framework in all areas; and**

- **Practice sustainable procurement across all our activities**

4.1   National sustainable procurement strategy

Sustainable procurement is about making decisions to purchase products and services in line with sustainable principles; in other words procurement that takes into account economic, environmental and social factors. Sustainable procurement is about looking at what products are made of, where they have come from and by whom and how they are made. Fundamentally, it is about whether a purchase or service is even necessary!

In its 2005 Sustainable Development Strategy, the Government stated that it aims to be the leading EU nation on sustainable procurement by 2009. To achieve this, the Government recognises that there would be the need for a step change in thought and performance by businesses and the public sector.

The Authority will implement its sustainable procurement activities with the aid of the National Sustainable Procurement Flexible Framework and aim to be practicing sustainable procurement across its activities by April 2009.

See also Supplementary Strategy 2: Sustainable Procurement

5   CORPORATE SOCIAL RESPONSIBILITY (CSR)

The CSR aim is to

> **Broaden the Authority's vision by actively seeking opportunities to improve our social, economic and environmental contributions to the well-being of the communities in which we operate.**

The CSR Objectives are to

- **Assess the Authority's present impacts on its stakeholders, the environment and the communities in which it operates;**

- **Ensure the Authority's staff to agree a set of CRS principles; and**

- **Establish appropriate methods of disseminating information to different stakeholder groups.**

Organisations are coming under increasing pressure from stakeholders and//or shareholders to take responsibility for issues that have traditionally been considered outside their normal activities.

Corporate Social Responsibility (CSR) is a process whereby businesses and organisations take responsibility across their entire supply chain for the social, environmental and economic consequences of its activities. It then reports on these consequences and constructively engages with stakeholders including its staff.

The central concept of CSR is that individuals and groups have a stake directly or indirectly in an organisation and its activities. In the case of the Authority, direct stakeholders include Members, employees, waste collection authorities and residents of Merseyside as customers of our service. Our indirect stakeholders are wider communities beyond Merseyside, suppliers, public, private and voluntary sectors organisations, Government, Non-Governmental Organisations (NGOs) and other affected parties. Engagement with interested parties can provide insights that can be valuable to an organisation to improve their services and meet their obligations and responsibilities.

To guide the Authority, a set of corporate principles to which it will abide have been established. The principles are:

o Human rights	o Shared responsibility
o Integrity	o Training and development
o Openness and accountability	o Environment
o Sustainability	o Community and
o Diversity	o Volunteering

See also Supplementary Strategy 3: Corporate Social Responsibility

6. ENVIRONMENTAL MANAGEMENT

The environmental management aim is to

Minimise or eliminate negative environmental impacts from the activities of the Authority and its contractors on the environment.

The environmental management objectives are to;

- **Develop and implement an Environmental Management System for the Authority;**

- **Report annually to stakeholders on the environmental impacts of the Authority's activities.**

The environment, both locally and globally is the most valuable and precious asset we possess. We are dependent on it for our quality of life. Today, more than ever, the evidence to address environmental issues is compelling from major global concerns such as climate change, resource depletion and loss of biodiversity to local issues such as poor air quality through pollution and congestion to graffiti, flytipping and methods of waste disposal. As with any business or public service provider, environmental impacts are a continuous by-product of daily activities. The level of impact on the environment is down to the way activities are managed. MWDA has a duty of care and legislative responsibilities but we should also demonstrate best practice to stakeholders and lead by example.

See also Supplementary Strategy 4: Environmental Management

Annex 1. Supplementary Strategy Climate Change

1. Introduction

According to the Intergovernmental Panel on Climate Change (2007), scientifically, there is little doubt that climate change is now the greatest challenge faced by society. Climate change has increased significantly in the last hundred years due to the burning of fossil fuels and human activities that have altered the chemical composition of the Earth's atmosphere through increased levels of greenhouse gases, primarily carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).The ten warmest years of the twentieth century all occurred in the last fifteen years of the century and 1998 was the warmest year on record.

This section of the sustainability strategy will look at the whole issue of climate change, how it will impact on the Authority and what we are able to do about it.

1.1 Waste and climate change – the connection

The Authority has taken its lead on climate change from the Government and will make it the main driver for achieving sustainable waste management. Both climate change and sustainable waste management are intrinsically linked in that the activities involved in managing waste (transportation and landfill emissions) contribute some 3% of the total UK greenhouse gases emitted (The Stern Report 2006). Globally, it is estimated that methane will contribute some 24% of greenhouse gases over the next 100 years

Each stage of a product's life cycle – mineral extraction, transportation, manufacturing, distribution, use and disposal, contributes in some way to the concentrations of greenhouse gases in the atmosphere. Emissions are even greater if you take account of the Whole Life Cost (WLC) [4] of a product.

1.2 National policies for climate change

The Government believes in the importance of taking domestic action to cut greenhouse gas emissions. Since the Kyoto conference in 1997, the UK has been pressing ahead and introducing innovative policies, which will have a significant impact on reducing UK emissions. An integral part of

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[4] Whole Life Costs can include the delivery of goods, the distribution of products, the installation costs and consumables used in installation, packaging and the disposal of packaging, the associated transport cost of disposal, the actual cost of disposal and finally landfill emissions

managing for climate change is managing energy use, the resources required to generate it and to seek alternative forms of energy that are renewable within one generation.

1.3   Climate Change and Sustainable Energy Act 2006

From heating and lighting to transport, industry and communications, energy is fundamental to almost everything we do. We expect it to be available whenever we want it, to be affordable, safe and environmentally sustainable. The UK's indigenous energy reserves of oil, gas and coal will run out over time, some sooner than others e.g. UK gas supply peaked in 2000 and because of the supply gap; the UK became a net gas importer in 2004.

The medium to long-term continuous supply of energy for the UK is at risk; and importantly in the hands of other countries. The Government has set four goals for its energy policy:

- To put ourselves on a path to cut the UK's carbon dioxide emissions - the main contributor to global warming - by some 60% by about 2050 with real progress by 2020;
- To maintain the reliability of energy supplies;
- To promote competitive markets in the UK and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and
- To ensure that every home is adequately and affordably heated.

The Act also aims to boost the number of heat and electricity micro generation installations in the UK, in order to cut carbon emissions, reduce fuel poverty and the impacts of climate change. In 2006, each person in the UK produced the equivalent of 11 tonnes of carbon dioxide. Micro generation technologies are seen as having considerable potential and involve the local production of electricity by homes and businesses from low-energy sources including small scale wind turbines, ground source heat pumps and solar electricity installations. The Government published a new Planning Policy Statement in December 2007 regarding the provision for on-site renewable energy and local community energy schemes to help cut carbon emissions from new developments.

1.5   Regional action plan

'Rising to the Challenge' is the Climate Change Action Plan for the Northwest (2007-09). The objectives are to reduce greenhouse gas

emissions and adapting to those effects of climate change that are now unavoidable. The action plan focuses on enabling, encouraging and engaging with individuals, groups, communities, partnerships and businesses so that a low carbon, well adapted region is achieved. The aims and objectives of this strategy should contribute significantly to the regional action plan.

1.6   Forecasting climate change

We do not know what the precise rate of greenhouse gas emissions will be. The UK Climate Impacts Programme (UKCIP) co-ordinates an assessment of the impacts of climate change using four scenarios in terms of global warming rates:

1. Low emissions:

2. Medium – Low emissions

3. Medium – High emissions

4. High emissions

Key points from these scenarios are summarised below

- By the 2080s average temperature may rise between 2 ^{0}C for the low emissions scenario and by 3.5 ^{0}C for the high emissions. There will be greater warming in the south and east of the UK than in the north and west.

- High summer temperatures will become more frequent and very cold winters will become increasingly rare. Very hot summers may occur as often as one in five years.

- Winters will become wetter and summers may become drier everywhere.

- Snowfall amounts will decrease throughout the UK

- Heavy winter rain will become more frequent

- Relative sea levels will continue to rise around most of the UK's shoreline including Merseyside (see regional projections below)

- Extreme sea levels (storm surges) will be experienced more frequently

It is unknown how humans will respond to climate change and what rapid change will take place if unknown thresholds are quickly surpassed? This has recently been referred to as the 'tipping point.' In its most recent report

(Aug 2007), the Meteorological Office has predicted that at least half of the years after 2009 will exceed the warmest year on record, which was 1998.

1.7 Regional and Local projections

Climate change impacts in the North West would affect the region in a number of areas.

- Flooding
- Water supply
- Agriculture
- Biodiversity
- Tourism and leisure
- Manufacturing

The 430 km coastline of North West England is generally low-lying, and much of its southern length is urbanised, with around 95,000 people located in the coastal floodplain, along with major sites of manufacturing (25% of the UK's chemical industry), and primary tourist destinations. The threat of sea level rise, and coastal inundation, is therefore considered to be an important threat for manufacturing in general, warmer weather will mean lower energy bills in winter, but higher bills for cooling in summer.

In order for the North West to mitigate and adapt to future climate change, the region has developed and produced a Greenhouse Gas Inventory. [5] Waste treatment and disposal is highlighted in the report, as all methods have associated greenhouse gas impacts, which can be positive or negative depending on the option chosen. Greenhouse gas emissions from the treatment and disposal of waste in the North West accounted for 2.1million tonnes of carbon dioxide equivalent in 2000 or 13.6% of national waste emissions.

Current models on climate change are not yet able to develop scenarios specific to local areas such as Merseyside but the majority of Local Authorities have signed up to the Nottingham Declaration on Climate Change, with some preparing carbon management plans.

2. Carbon footprints

As reported in the Stern review, the carbon impact of waste management is to be taken seriously by the Government and as a result of the review it

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[5] GRIP - Greenhouse Gas Inventory Programme. Baseline year 2000

intends to introduce new waste indicators, which are linked to carbon emissions.

The most commonly used phrase for expressing carbon is the term *Carbon Footprint.* A Carbon Footprint is a measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide. A Carbon Footprint is made up of the sum of two parts, the direct / primary footprint and the indirect / secondary footprint.

- The primary footprint is a measure of our direct emissions of CO_2 from the burning of fossil fuels including domestic energy consumption and transportation (e.g. car and plane).
- The secondary footprint is a measure of the indirect CO_2 emissions from the whole lifecycle of products we use - those associated with their manufacture and eventual breakdown and disposal.

2.1 Carbon linked indicators

New national indicators will be introduced in April 2008 including two climate change mitigation indicators;

- Percentage CO_2 reduction in local authority's own operations; and
- Percentage CO_2 reduction per capita in the community.

This reflects the role of local authorities in reducing carbon emissions from their own operations e.g. through more efficient energy use, installing renewable energy systems and improving vehicle efficiency and by being exemplars in the community by reducing carbon emissions through their service provision.

It is clear that waste management, climate change and energy are strategically linked. This provides the Authority with a number of opportunities, which can contribute to sustainable waste management and to sustainable communities. Encouraging waste prevention, reuse and recycling will help to mitigate against climate change through the need for additional finite resources. In addition, recycling preserves the embodied energy required to make a product in the first place and preventing further resources, energy and carbon dioxide emissions from being extracted and emitted. Furthermore, the Authority has the scope, through landfill gas extraction to prevent methane from being released into the atmosphere. The Authority should also give consideration to the energy requirements of facilities and the benefits from micro generation technologies to reduce

carbon emissions and maintain the reliability of energy supplies (self sufficiency).

2.3   Waste management footprints

The only study to date that has investigated waste 'footprints' is the '*Ecological, Carbon EcoCarb and Footprints of waste management in the North West'*, 2007; which measured the ecological, carbon and ecocarb footprints of waste for both the Authority and Sefton MBC. This project was devised and managed by the Authority and was the first study of its kind in the UK. The results for the Authority show that current waste management practices reduce all three footprints by 36%, 13% and 16% respectively.

3.   What can Merseyside Waste Disposal Authority do?

At this early stage in the development of the Authority's approach to climate change, the objectives of the strategy will be focused on activities over which the Authority has direct influence and identify mitigation options in a range of activities including energy use, transport and waste. A prudent response, at this moment in time would be to adopt a portfolio of actions aimed at:

- Mitigation – reducing emissions;
- Adaptation – adjustment to changes over time;
- Research – improvement and utilisation of information and innovation; and
- Education and awareness of climate change issues in relation to waste management.

3.1   Climate Change Aim and Objectives

The Climate Change aim is

- **To reduce the Authority's contributions to greenhouse gas emissions and to adapt as necessary to climate change.**

The objectives are to:

- **Make a commitment to address climate change issues;**

- **Raise awareness of climate change amongst Members, staff and the wider community of Merseyside;**

- **Give consideration to climate change issues (reduction of emissions and potential positive and negative impacts) in the development and review of relevant Authority strategies, plans, policies activities and contracts;**

- **Reduce the emission of greenhouse gases associated with all of the authority activities.**

## 4.	Review and Monitoring

The information within this section is based on the best data and predictions currently available. It is not possible to be completely confident in data and predictions as there are uncertainties about future emissions of greenhouse gases with respect to population, economies, energy technologies and other social factors. Effectiveness must be monitored, in terms of how it reduces greenhouse gas emissions and improves our ability to manage the impacts of climate change. There are two ways the Authority will do this:

1. Monitor whether the actions in the action plan have been completed satisfactorily and to schedule.

2. Monitor levels of greenhouse gas emissions. This can be achieved using a range of indicators including energy use in Authority buildings and facilities, staff mileage and energy efficiency statistics.

Annex 2 Supplementary Strategy Sustainable Procurement

1. Introduction

In its 2005 Sustainable Development Strategy, the Government stated that it aims to be the leading EU nation on sustainable procurement by 2009. To achieve this, the Government recognises that there would be the need for a step change in thought and performance by businesses and the public sector and in 2007, agreed a National Sustainable Procurement Action Plan. The Government stated that it would begin the process of sustainable procurement within the Government Estate.

As this strategy was developed, the Authority was in the process of undertaking a major procurement programme with a value of more than 3.5 billion pounds. The Authority took the positive decision to include sustainability criteria in the requirements for the submission of Outline and Detailed Solutions for contracts.

1.2 What is sustainable procurement?

Sustainable procurement is about purchasing products and services in line with sustainable principles i.e. procurement that takes into account environmental and social factors as well as costs when making decisions. It is about looking at what products are made of, where they have come from and by whom, how they are made and working conditions. Fundamentally, it is about whether a purchase is even necessary! Sustainable procurement can be defined as

> **A management process used to secure an acquisition of goods or services in a way that ensures there is the least impact on society, resources and the environment through the full life cycle and the whole life cost of the product.**

Sustainable procurement is essential in the move towards a more sustainable society. From both public and private sector organisations there are needs to reduce costs, secure long-term supply chain partnerships, and to manage risk and reputations. Organisations are finding that the introduction of sustainable procurement measures can help them make progress in all areas.

1.3 Sustainable Procurement Aim

The aim of this strategy is to;

- **Ensure that social, economic and environmental well being is considered as part of Best Value which the Authority purchases its goods and services.**

Using the National Sustainable Procurement Flexible Framework, our objectives are to:

- **Benchmark progress against other JWDAs and public and private bodies/organisations;**

- **Reach level 3 (Practice) of the flexible framework in all areas; and**

- **Practice sustainable procurement across all our activities**

1.4   National Sustainable Procurement Action Plan

The Sustainable Procurement Task Force in presenting their plan, set specific target years and objectives for local authorities to achieve. The years and objectives are as follows

- **Target Years**

   o **April 2007**   All public sector organisations to reach **level 1** of the flexible framework;
   o **April 2008**   Benchmarking of progress nationally and internationally; and
   o **April 2009**   all public sector organisations to reach level 3 (or above) of the flexible framework with leadership (level 5) in at least one area by December 2009.

The Task Force believes that the public sector in general, can start immediately on the process of integrating sustainable procurement into current working practices. The flexible framework contains 5 levels that increase in compliance and relate to 5 key areas

- People
- Policy, Strategy & Communications
- Procurement process
- Engaging suppliers and
- Measurements & results

It is not a pre-requisite that all key areas of each of the levels are attained at the same time. This flexibility enables certain areas to be targeted and prioritised.

Annex 3 Supplementary Strategy Corporate Social Responsibility

1.   Introduction

Since 1997, businesses have increasingly reported their Corporate Social Responsibility (CSR). CSR is a process whereby businesses and organisations take responsibility across their entire supply chain for the social, environmental and economic consequences of its activities. It then reports on these consequences and constructively engages with stakeholders including its staff. CSR is increasingly being recognised as an important link in the approach to sustainability,

As the agenda for sustainability develops, organisations will be under increasing pressure to take responsibility for issues that have traditionally been outside of their normal activities. Not only do we see this in regulation, responsibility will also be expected by a civil society.

The central concept of CSR is that individuals and groups have a stake directly or indirectly in an organisation and its activities. In the case of the Authority, direct stakeholders include Members, employees, waste collection authorities and residents of Merseyside as customers of our service. Our indirect stakeholders are wider communities beyond Merseyside, suppliers, public, private and voluntary sector organisations, Government, Non-Governmental Organisations (NGOs) and other affected parties.

Engagement with interested parties can provide insights that can be valuable to an organisation to improve their services and meet their obligations and responsibilities.

In 2000, the UK was the first EU country to appoint a Minister for CSR. The Government's aim is to work with all stakeholders to achieve its sustainable development goals by

- o Raising awareness and creating an environment in which CSR can thrive;
- o Taking a lead role internationally;
- o Mainstream CSR into general business practice;
- o Reaching a wider audience; and
- o Tackling key sectors.

The drivers and benefits of CSR are highlighted below.

Drivers
- o The need to communicate and engage with the public, policy makers and key decision makers;
- o Reporting on sustainable performance due to pressures from many different sources; and

o Once a sustainability strategy is in place, pressures will increase for requests to publish progress reports.

Benefits
o Helps address strategic issues;
o Encourages partnership working;
o Sharing of best practice;
o Help identify key challenges;
o Enhances credibility; and
o Improves stakeholder engagement and dialogue

CSR covers all aspects and impacts of the Authority. It does not stop at the factory gate or the office door. It extends back down the supply chain and forward to the consequences in the marketplace for goods and services procured and supplied.

2. **Organisational Benefits**

Good corporate responsibility can provide organisational benefits in seven key areas.

Reputational management: Reputation is critical to the authority's successful implementation of its activities. Reputation tops the list of intangible assets of most Chief Executive Officers.

Risk profile and management: Increasingly, organisations have to be aware of, and or respond to, a widening range of risks. To avoid risks to its reputation, the Authority needs to understand stakeholder concerns about both issues under their direct control, such as employment policies, and under their influence.

Employee recruitment, motivation and retention: The reputation of an organisation as a corporate citizen affects its attractiveness as a prospective employer.

Learning and Innovation: Corporate citizenship objectives for employees such as education, awareness and training, can assist personal self-esteem, worth and value.

Competitiveness and market positioning: The most comprehensive survey of consumer attitudes toward corporate responsibility, which involved 25,000 individuals in 26 countries, found that more consumers form their impressions of an organisation on the basis of its corporate responsibility practices than they do on brand or financial factors.

Operational efficiency: Focusing on corporate responsibility goals can lead to direct improvements of the bottom line – profit. In the case of the Authority, this can lead to better value for public money. For example, reducing waste arisings and not sending waste to landfill can save money, reduce environmental impacts and be of social benefit.

Licence to operate: The perception that stakeholders have of an organisation's corporate responsibility performance can significantly affect an organisations licence to operate. Organisations with a poor reputation in this area (operational matters) can find themselves continually responding to criticism of their environmental and social performance. Conversely, those with a good reputation for corporate responsibility are more likely to be given a second chance in the event of problems.

3.   **The Authority's current CSR status**

The Authority ratified a corporate social responsibility policy in 2005 (see Appendix 3) and appointed a CSR coordinator in 2006. In 2007 sustainable development, sustainable procurement and environmental policies were also approved. Together, these policies have formed the basis of this sustainability strategy. Given that resources are now in place, the Authority is able to move forward on issues of sustainability and CSR, with greater commitment and direction.

To establish the current status of the Authority, desktop research generated a number of themes that are addressed by organisations that have adopted a CSR strategy. The themes are:

- Business Standards:
- Customers:
- Environment:
- Community:
- Employees:
- Suppliers:
- Ethics:
- Human rights: and
- Diversity

A review of the Authority's position in relation to the above themes identified that there are sufficient, relevant policies and activities in place (with some amendments to be made) that would enable the Authority to undertake a strategic realignment so that policies and activities are coordinated within a corporate social responsibility strategy. The Authority's strategic approach to corporate social responsibility will be as follows.

4. Taking responsibility

As a key element of the headline sustainability strategy, it is important to gain commitment to CSR from the Members, Director and staff of the Authority. It will be important to involve all staff to develop and agree principles for corporate governance, aims and objectives in order for the strategy to be fully effective. These will cover areas such as:

4.1 Principles of Corporate Governance

Corporate Governance is defined within the CIPFA/SOLACE framework document as 'the systems and processes, and cultures and values, by which local government bodies are directed and controlled through which they account to, engage with and, where appropriate, lead their communities.' It further defines governance as '…how local government bodies ensure that they are doing the right things, in the right way, for the right people, in a timely, inclusive, open, honest and accountable manner'.

In accordance with the CIPFA/SOLACE framework, the Authority recognises the six core principles of good governance as follows:

(i)   Focusing on the purpose of the authority and on outcomes for the community and creating and implementing a vision for the local area.
(ii)   Members and officers working together to achieve a common purpose with clearly defined functions and roles.
(iii)   Promoting the values for the authority and demonstrating the values of good governance through upholding high standards of conduct and behaviour.
(iv)   Taking informed and transparent decisions which are subject to effective scrutiny and managing risk.
(v)   Developing the capacity and capability of Members and officers to be effective.
(vi)   Engaging with local people and other stakeholders to ensure robust local public accountability.

To achieve the principles of good corporate governance, the Authority recognises the principles contained within the CIPFA/SOLACE Framework, against which it will aim to deliver good governance.

Core Principle (i)

Focusing on the purpose of the authority and on outcomes for the community and creating and implementing a vision for the local area.

Supporting principles:

Exercising strategic leadership by developing and clearly communicating the Authority's purpose and vision and its intended outcome for citizens and service users.

Ensuring that users receive a high quality of service whether directly, or in partnership, or by commissioning.

Ensuring that the Authority makes best use of resources and that tax payers and service users receive excellent value for money.

Core Principle (ii)

Members and officers working together to achieve a common purpose with clearly defined functions and roles.

Supporting principles:

Ensuring effective leadership throughout the Authority and being clear about executive and non-executive functions and of the roles and responsibilities of the scrutiny function.

Ensuring that a constructive working relationship exists between Authority Members and officers and that the responsibilities of Members and officers are carried out to a high standard.

Ensuring relationships between the Authority, its partners and the public are clear so that each knows what to expect of the other.

Core Principle (iii)

Promoting the values for the authority and demonstrating the values of good governance through upholding high standards of conduct and behaviour.

Supporting principles:

Ensuring Authority Members and officers exercise leadership by behaving in ways that exemplify high standards of conduct and effective governance.

Ensuring that organisational values are put into practice and are effective.

Core Principle (iv)

Taking informed and transparent decisions which are subject to effective scrutiny and managing risk.

Supporting principles:

Being rigorous and transparent about how decisions are taken and listening and acting on the outcome of constructive scrutiny.

Having good-quality information, advice and support to ensure that services are delivered effectively and are what the community wants/needs.

Ensuring that an effective risk management system is in place.

Using their legal powers to the full benefit of the citizens and communities in their area.

Core Principle (v)

Developing the capacity and capability of Members and officers to be effective.

Supporting principles:

Making sure that Members and officers have the skills, knowledge, experience and resource they need to perform well in their roles.

Developing the capability of people with governance responsibilities and evaluating their performance, as individuals and as a group.

Encouraging new talent for membership of the Authority so that best use can be made of individuals' skills and resources in balancing continuity and renewal.

Core Principle (vi)

Engaging with local people and other stakeholders to ensure robust local public accountability.

Supporting principles:

Exercising leadership through a robust scrutiny function which effectively engages local people and all local institutional stakeholders, including partnerships, and develops constructive accountability relationships.

Taking an active and planned approach to dialogue with and accountability to the public to ensure effective and appropriate service delivery whether directly by the Authority, in partnership or by commissioning.

Making best use of human resources by taking an active and planned approach to meet responsibility to staff.

4.2   CSR Aim

The CSR aim is to

- **Broaden the Authority's vision by actively seeking opportunities to improve our social, economic and environmental contributions to the well being of the communities in which we operate.**

4.3   CSR Objectives

The CSR objectives are to

- **Assess the Authority's present impacts on its stakeholders, the environment and the communities in which it operates;**

- **The Authority's staff to agree a set of CRS principles; and**

- **Establish appropriate methods of disseminating information to different stakeholder groups.**

4.4   Key Authority elements of CSR

An organisation's CSR priorities will vary, depending on the nature of their impacts and the expectations of particular stakeholders. With respect to the Authority, issues are likely to arise in four key areas:

Workplace: Responsible employment practices have a significant impact on the productivity of the workforce. For example, diversity, work-life

balance and skills development are primary areas where organisations can gain mutual benefits for both employees and the organisation;

Marketplace: Pressure is being exerted from consumer groups and regulators to disclose details about manufacturing processes, product content, source of raw materials and disposal. The product or service an organisation delivers can have significant positive or negative impacts on society. The intangible value of corporate reputation has made CSR an increasingly important aspect of an organisation's marketing, advertising and procurement;

Community: Creating a relationship from which the organisation makes tangible gains through a community investment/support programme can embed a culture of 'making a difference'. The relationship which most is gained is the one from which the community gains too.

Environment: Many environmental issues occur closer to home and can have a significant impact on the local community, local employment and in particular the local ecology through energy, processes, transportation emissions, resources, waste and disposal. Additionally, environmental efficiency can also deliver major cost savings.

5. Principles to practice

Reporting: Each of the Authority's working sections shall report on important aspects of the social impact of their business in accordance with guidelines to be established.

Insight and knowledge: Good CSR management requires knowledge and understanding of societies, communities and cultures. On occasions social knowledge may be required internally, from consultants, authorities and non-governmental organisations. Social knowledge will be made available to relevant staff and training in social understanding shall be provided when appropriate.

Anticipating issues: To ensure that we act in accordance with our CSR principles and manage opportunities and risks, we shall seek to anticipate critical issues. Key stakeholders shall be identified, and when appropriate, be consulted.

Social impact assessment: To ensure the best possible management of long-term social consequences of the Authority's activities or when new projects are considered, evaluation shall take place to the extent social impact assessments should be conducted.

Other businesses: The Authority's CSR principles shall be promoted through business relationships.

Indicators and targets: This part of the section is likely to address existing issues for which widely used indicators are readily available (environmental, social). It must also be remembered that on occasions, new or evolving indicators may be needed or developed. It is essential prior to reporting to identify key impacts before selecting indicators. Targets in effect, demonstrate credibility and accountability.

Annex 4 Supplementary Strategy Environmental Management

1. Introduction

The environment, both locally and globally is the most valuable and precious asset we possess. We are dependent on it for our quality of life, including food and water, resources, energy, and recreation and to receive our wastes and for the success of the economy. Today, more than ever, the need to address environmental issues is compelling from major global concerns such as climate change, resource depletion and loss of biodiversity to local issues such as poor air quality through pollution and congestion, graffiti, fly-tipping and methods of waste disposal. Ultimately, as a leading organisation on Merseyside we have a responsibility to minimise our own impacts on the environment and influence how others can reduce theirs.

Regardless of sector or size; customers, financial institutions, employers, suppliers, purchasers and the general public are showing greater interest in environmental issues especially their impacts and the performance of organisations. As with any business or public service provider, environmental impacts are a continuous by-product of daily activities. The level of impact on the environment is down to the way activities are managed.

MWDA has a duty of care and legislative responsibilities in the performance of its duties but also needs to demonstrate best practice to stakeholders and lead by example especially through achieving sustainable levels of production and consumption on Merseyside and beyond. In 2006/07, we managed more than 800,000 tonnes of waste or in other words 800,00 tonnes of unwanted resources. We need to raise awareness and effect behavioural change by our residents so they recognise there are alternative options other than landfill for dealing with unwanted household items such as, not consuming resources in the first place (prevention), reuse, composting and recycling.

2. Environmental issues

Most organisations spend approximately 4% of turnover generating waste. The cost of waste is not just the cost of disposal but includes wasted energy, water, resources, consumables and labour. The true cost of waste on average is about 10 times the cost of disposal. The less waste that is produced and the fewer resources that are used the smaller the impacts will be on the environment. Environmental issues can be aligned under the four key headings:

2.1 **Energy:** Our current lifestyles are heavily dependent on energy for power, heating and transportation. Most energy consumed in the UK is derived from non-renewable fossil fuels – coal, gas and oil. For today's economy, British coal although plentiful is deemed too expensive to extract whilst indigenous gas and oil reserves are in decline. An unavoidable by-product of burning fossil fuels is the emission of pollutants such as, carbon dioxide, nitrous oxides, sulphur dioxide and particulates, which affect local air quality and contributes to the poor health of residents. Unquestionably, the biggest problem with fossil fuel combustion is its contribution to climate change.

For the Authority, there is a strategic need to seek alternative renewable sources of energy for its activities where appropriate. This will lead to self-sufficiency and to a significant reduction of carbon dioxide emissions. This approach is also likely to offer value for public money in the long term as most renewable energy installations or retrofits pay for themselves over time.

2.2 **Waste:** Landfill is a waste of natural resources and the decomposition of biodegradable waste in landfill releases carbon dioxide and methane into the atmosphere contributing to climate change.

The Authority's primary function is the sustainable management of waste. This includes the waste it produces as an authority. The Authority already recognises the importance of managing its office waste and has reduced its volume by 3% and increased recycling from by 3% from 64 to 67% (2005 – 2007). EU best practice for office recycling is between 60 and 70 per cent.

Our goal to prevent waste whenever possible and reuse, compost and recycle useful materials will assist in the protection of global, natural resources:

Reuse prolongs the life of a product and conserves resources for the future;

Composting reduces the amount of biodegradable waste sent to landfill and reduces the production of methane, which contributes to climate change. Composting also protects the extraction of peat bogs which contain scarce flora and fauna. Compost can also be used in large scale landscaping and gardening as a bulking agent and soil conditioner and assist with the retention of scarce water resources when used as mulch;

Recycling is important for the protection of resources as it retains the embodied energy of unwanted products. Embodied energy is the energy

required to initially make a product, including the fossil fuel used in machines to extract base resources such as oil and aggregates and the transportation of the resources and goods produced and distributed. Taking aluminum as an example: although, it takes energy to turn a drinks can back into aluminum, recycling saves 95% of the embodied energy it took to make the can in the first place.

Water: Water is the most essential natural element for sustaining human life but over 1 billion people world wide do not have access to clean drinking water and many parts of the world suffer from increasing drought conditions. Being office based, the Authority consumes water for its own purposes including washrooms, drinks (hot and cold) and kitchen use. We have recently changed from bottled water for staff consumption to a permanent filtered system using mains water.

Resources: An environmental audit of the state of the planet for the United Nations found that each person in the world requires a third more land to supply their needs than the Earth can supply. Some of the major findings of the report included;

- 2007 – world population is 7.6 billion up 34% in twenty years and will reach 9.1 billion by 2050;

- 2007 - the first year in world history that the majority of people live in towns and cities;

- A threefold increase in global trade;

The undeniable single cause of the planet's decline in recent years is the constant supply of virgin resources for a constantly growing population. For example, the average UK household purchases over 4.5 tonnes of materials each year. It is clear that future generations will not be sustained if we continue with our current consumption patterns. It is up to today's society to ensure that there are sufficient resources remaining for future generations. This is the overall ethos and the logic behind sustainable development.

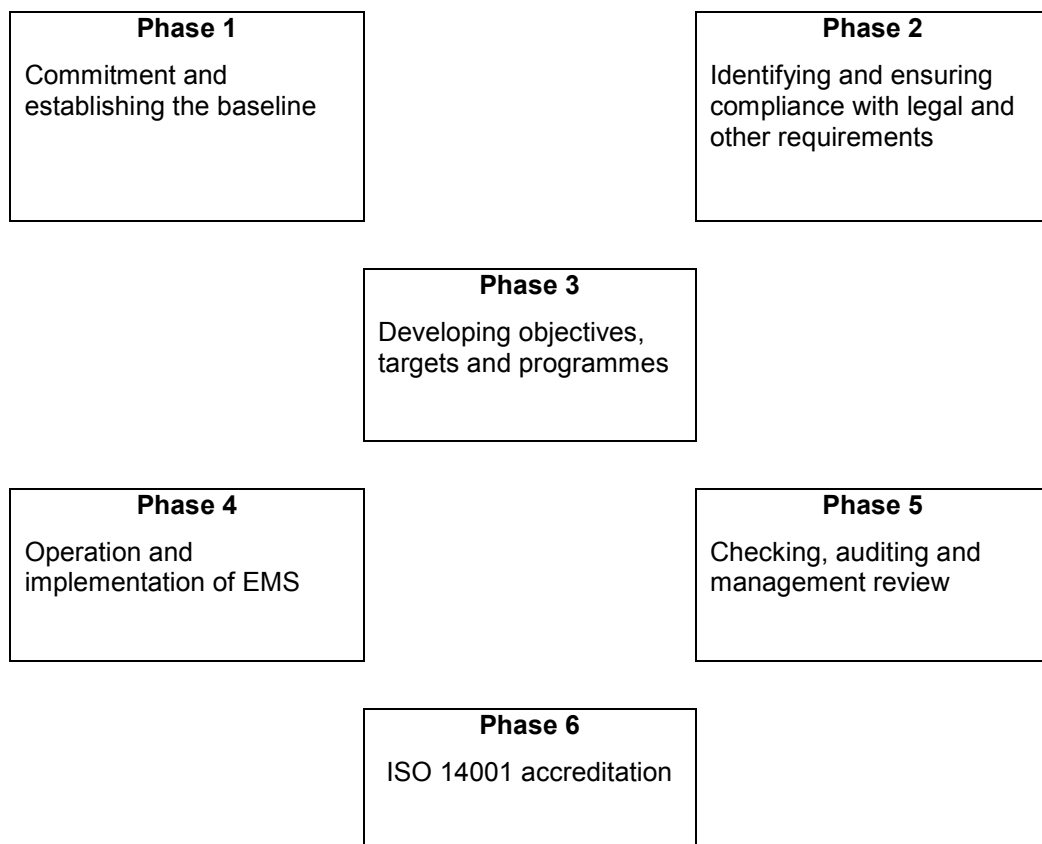3. **Environmental Management System**

As a Waste Disposal Authority and a service provider to stakeholders we must ensure that we proactively manage and minimise our environmental impacts and provide verified evidence of measuring both the positive and negative impacts of our activities. It is our policy to ensure that we meet environmental and legal requirements as a minimum and demonstrate

best practice in environmental management wherever practicable. We are committed to continually monitor environmental risks and deliver environmental improvement. We will also ensure that others who undertake work on our behalf or provide a service to/for us, will also have in place as a minimum, an environmental policy, with an agreement that they will progress to an environmental management system.

The Authority's approach to environmental management is designed to meet the requirements of a staged approach to environmental management (see Fig 4).

Figure 4. An outline of a phased approach to implementing an EMS

Phase 1 Commitment and establishing the baseline		**Phase 2** Identifying and ensuring compliance with legal and other requirements
	Phase 3 Developing objectives, targets and programmes	
Phase 4 Operation and implementation of EMS		**Phase 5** Checking, auditing and management review
	Phase 6 ISO 14001 accreditation	

3.1   Environmental Management Aim and objectives

The environmental management aim is to

- **To minimise or eliminate negative environmental impacts from the activities of the Authority and its contractors on our environment.**

The environmental management objectives are to:

- **Develop and implement an Environmental Management System for the Authority;**

- **Report annually to stakeholders on the environmental impacts of the Authority's activities.**

Appendices

Appendix 1. Sustainable Development policy

The Authority's vision is "To improve people's quality of life by ensuring that waste is sustainably managed to bring about the best combination of environmental, economic and social benefits".

This sustainability policy is prepared to ensure a strategic fit between the Authority's Corporate Plan, core activities, and objectives and the Government's Sustainable Development strategy, goals, principles and priorities. This policy statement will act as the over-arching driver to attain sustainability within the Authority and will be the catalyst that ensures that all current and future policies adopted by the Authority will be sustainable.

Sustainability is a corporate value. It ensures the intelligent use of all resources within an overarching framework in which economic, environmental and social factors are integrated and balanced. This means improving the quality of life both now and for generations to come.

The terms 'sustainability' and 'sustainable development' essentially address the same issue and for the purpose of this policy, we define sustainability as "the ability to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life, without compromising the quality of life of future generations."

We are committed to ensuring that the *principles* and *priorities* of sustainable development, set out in the UK Sustainable Development Strategy, underpin our Corporate Plan.

> **Principles**
> - Living within environmental limits
> - Ensuring a strong, healthy and just society
> - Achieving a sustainable economy
> - Using sound science responsibly
> - Promoting good governance
>
> **Priorities**
> - Sustainable consumption and production
> - Climate change and energy
> - Natural resource protection and environmental enhancement
> - Sustainable communities

We will meet our commitment to sustainability through the services we provide and in the way we operate as an organisation.

We will demonstrate this commitment by;

- Continuously improving our environmental, social and economic performance to maximise our positive effects and minimise our adverse impacts
- Complying with all relevant legislation and regulations
- Undertaking Sustainability Appraisals of our Corporate Plan, strategies, policies, services and activities to ensure that they do not have detrimental impacts on today's local and global environmental, economic and social well-being and that of future generations
- Developing our remit of corporate social responsibility
- Ensuring that we manage and monitor our environmental impacts responsibly
- Contributing to the sustainable community strategies and sustainable policies of constituent District Councils
- Setting a basket of performance indicators for sustainablity to measure progress and inform stakeholders
- Encouraging partners to adopt sustainable practices
- Actively encouraging and monitoring responsible environmental, social and economic performances by suppliers of services and contracts to the Authority
- Raising awareness of and encouraging sustainable action amongst staff, Members, partners, the general public and other stakeholders
- Integrating equality of opportunity and respect for diversity into all aspects of the Authority's activities.
- Promoting and supporting local Biodiversity Action Plans
- Carrying out a biennial sustainability appraisal of this policy and subsequent action plan

We aim to lead by example in addressing our operational impacts on the community, the local economy and the environment by continuously improving our performance in the following areas of:

- Promoting waste prevention, reuse, recycling and responsibility
- Resource efficiency – energy, water, materials, supplies and suppliers, assets
- Greenhouse gas emissions
- Car-use for business travel
- Other pollution prevention
- Waste disposal
- The need to purchase in the first place
- The Whole Life Costs of a product or service
- Sustainable products and services
- Supply chain management
- Facility design and build

We aim to promote sustainability throughout Merseyside along with our partners by;

- Working with residents, schools, colleges, businesses and other organisations to develop awareness of and action on sustainability from a waste management perspective
- Helping residents to adopt more sustainable lifestyles
- Influencing the Merseyside Waste Partnership to ensure that strategies, policies and decisions reflect the partnerships sustainability values
- Helping to improve the environmental, economic and social performance of Merseyside and Halton's businesses
- Encouraging the development of a sustainable local economy including the promotion and support of social enterprises, not-for-profit organisations, voluntary groups and individuals based on sustainable services and sustainable operations and technologies, which improve the well-being of Merseyside and the wider North West region.

Appendix 2. Sustainable procurement policy

The Authority's vision is "To improve people's quality of life by ensuring that waste is sustainably managed to bring about the best combination of environmental, economic and social benefits".

Accordingly, we recognise that

- procurement can have a significant impact on the economy, society and the environment, locally and further afield, and therefore that
- we need to procure products and services in a more sustainable way.

For the purpose of this policy, we define sustainable procurement as

"A process whereby we meet our needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment".

Tackling the way in which we sustainably procure products and services, to reflect our vision, will require a corporate and systematic approach towards

- identifying the need to procure in the first place
- taking into consideration the Whole Life Cost ('cradle to grave') of a product or service
- buying sustainable products and services
- demonstrating continuous improvement and
- delivering the benefits to our core business and stakeholders

This policy underpins our sustainability policy therefore we are committed to considering the environmental, social and economic consequences of all aspects of procurement, including the capability of suppliers and contractors to address sustainable procurement through the supply chain for our purchases.

Additionally, we will:

- Promote sustainable procurement awareness amongst all of our stakeholders, including Members, staff, partners, residents and the local community
- Ensure that employees who are responsible for procurement are specifically trained in sustainable procurement
- Set and review our aims, objectives and targets with a view to the continual improvement of our sustainable procurement performance
- Maximise the benefits of this policy through joint working on sustainable procurement initiatives at a Merseyside and regional level.

Appendix 3. Corporate Social Responsibility

Merseyside Waste Disposal Authority (MWDA) recognises that its activities and services have a significant impact on the wider social, environmental and economic well-being of the Merseyside area and further afield. By addressing these impacts we can also improve the quality and performance of our core organisational processes and responsibilities.

Our published vision is "to improve people's quality of life by ensuring that waste is considered as a valuable resource and is managed to deliver the best combination of environmental, social and economic benefits". By embracing Corporate Social Responsibility (CSR) we will broaden our vision by actively looking for opportunities to improve our environment and contribute to the well-being of the communities in which we operate.

Tackling the challenge of addressing our wider impacts and reflecting our vision will require a corporate and systematic approach towards identifying these impacts, demonstrating continuous improvement and delivering wider benefits to our core business, stakeholders and environment.

For the purposes of this policy, CSR is defined as **the integration of social and environmental concerns into the business of the MWDA and the MWDA's interactions with its stakeholders**.

The MWDA is committed to establishing a CSR system which is guided by the following principles:

- **Shared responsibility** – CSR involves everyone in our organisation, which means sharing the responsibilities of ownership as well as its rewards.

- **Openness and accountability** – We will communicate our CSR policies, objectives and performance openly and honestly to our people, partners and other stakeholders. We will also seek their views and encourage them to communicate with us.

- **Continuous improvement** – In line with our Best Value approach, we are committed to measuring and improving our CSR performance. We will develop and implement specific environmental and social policies and procedures, monitor our performance, set targets for improvement and report our progress.

- **Demonstrate compliance** – As a minimum we will meet or exceed all relevant legislation. Where no legislation exists we will seek to develop and implement our own appropriate standards.

Policies and programmes will be developed in the following thematic areas of CSR, which reflect the nature of our day to day business activities and wider involvement with society:

- **Environment** – To recognise the need to deliver services in an environmentally sustainable way and to include concern for the environment in all our activities. To address impacts arising from the energy, water and resource use, transport needs and waste generation, of our services and activities.

- **Relationships** – To deliver our vision through developing strong relationships with our partners, other external organisations and individuals, which are conducted with integrity and courtesy, and by ensuring that we honour our commitments. To work with our contractors and suppliers to implement 'green' procurement and to develop a partnership approach for the delivery of our strategies and services.

- **Communities** – To build relationships with our service users, and the local communities which we serve, and to support local social businesses who share our aims. To encourage our people, and those acting on our behalf, to consider the needs of others in our day to day business. To encourage feedback from the local community on our CSR policies and programmes.

- **People** – To respect our staff and encourage their development and training. To promote and maintain equality and to have constant regard to the happiness of our people as a whole, including their welfare, health and safety, empowerment and communication. To encourage and promote team-working and the sharing of skills and knowledge, whilst recognising outstanding individual contribution and rewarding our people fairly.

1.   ORGANISATION

In line with this policy, CSR processes will be incorporated into the MWDA's Service Planning process. This will include provision for monitoring and reviewing the effectiveness of CSR measures and will identify the resources required for implementation.

The Director of Waste Disposal will have ultimate responsibility for CSR management within the MWDA.

Senior management will be responsible for identifying and analysing CSR aspects arising from their service activities and will champion CSR in these areas. In conjunction with an identified CSR co-ordinator, managers will also identify and implement an ongoing programme for embedding CSR into the MWDA's mainstream activities.

The CSR Co-ordinator will be responsible for the provision of advice and guidance on all CSR matters.

The internal auditor will be responsible for monitoring the compliance and effectiveness of CSR measures, as part of their ongoing audit programme.

2.   ARRANGEMENTS

The CSR Co-ordinator will provide an annual report to the MWDA and summarise progress towards CSR targets and objectives in the previous year and a proposed action plan for the following year. On approval, the report will be published and made widely available to staff and stakeholders.

CSR training will be provided to the management team and all staff via a number of facilitated sessions, with the aim of ensuring that they have the skills necessary to identify, evaluate and manage the CSR aspects associated with the services they provide.

This policy will be clearly communicated to staff and subject to review on an annual basis.

Appendix 4. Environmental policy

Since its creation in 1986, MWDA has been responsible for providing Household Waste Recycling Centres and waste disposal services for the district councils and residents of Knowsley, Liverpool, Sefton, St Helens and Wirral, via its contractors. The Authority manages its activities from two floors within a Liverpool city centre office block.

Our vision is to 'improve people's quality of life by ensuring that waste is sustainably managed to bring about the best combination of environmental, economic and social benefits'. Accordingly, we recognise that:

- Our buildings, sites, activities, services, contracts and anything we procure can have an impact on the environment both, locally and further afield; and that
- We need to deliver services in an environmentally sustainable way and ensure that the impacts on the
  environment are considered in decision-making and subsequent actions.

Tackling our environmental impacts, to reflect our vision, will require a corporate and systematic approach towards:
- Complying with applicable legal requirements and with other requirements to which we subscribe that relate to our environmental aspects;
- Seek continually to reduce negative environmental impacts;
- Setting and reviewing our aims, objectives and targets and measuring our environmental performance;
- Ensuring that the environmental management system is documented, implemented and maintained;
- Communicating to all persons working for or on behalf of Merseyside Waste Disposal Authority;
- Making our significant environmental impacts available to stakeholders.

This policy underpins our sustainability policy and we are therefore committed to reducing our environmental impact through the way in which we plan, procure and operate our services, including:

- Using the waste hierarchy to prioritise sustainable waste management;
- Promoting waste prevention and resource efficiency, including energy and water conservation;
- Mitigating the impact of climate change by reducing greenhouse gas emissions associated with our services and activities;

- Increasing the generation of low carbon and renewable energy from our waste resources in line with the waste hierarchy, and from other sources such as, solar or wind power at our facilities where appropriate;
- Sustainable purchasing of products and services;
- Conservation and promotion of biodiversity at our sites;
- Promoting environmental awareness amongst our stakeholders, including members, staff, partners, customers, suppliers, residents and the local community;
- Ensuring that the appropriate environmental awareness training is made available to all persons working for or on behalf of Merseyside Waste Disposal Authority;
- Maximise the benefits of this policy for the residents of Merseyside and the wider global community, through joint working on environmental initiatives at a Merseyside and regional level.

This policy statement is issued with my authority and has been communicated to all staff and is available to our members and the public through our website. The policies and procedures cannot be changed without my authority.

Appendix 5. Climate Change policy

Merseyside Waste Disposal Authority acknowledges
- The most crucial threat from exceeding environmental limits is from dangerous climate change;

- That climate change is occurring and will continue to have far reaching effects on the UK's people and places, economy, society and environment; and

- That we, as a service provider, must understand our climate change risks.

We welcome
- The social, economic and environmental benefits, which come from addressing climate change issues;

- The setting of national greenhouse gas emission targets;

- The opportunity to lead the field of sustainable waste management and its

- The notion of encouraging and helping residents, communities, businesses and other organisations in Merseyside and the North West to mitigate and adapt to the impacts of climate change.

Merseyside Waste Disposal Authority is committed to:
- Sign the Nottingham Declaration on Climate Change;

- Make climate change a driver to achieve sustainable waste management;

- Publicly declare, within appropriate plans and strategies, the commitment to address climate change issues and significantly reduce greenhouse gas emissions from our own operations;

- Work with central government and organisations to assist at the local level, to deliver the UK Climate Change Programme;

- Participate in local and regional networks on climate change;

- Address with our partners, the causes and the impacts of climate change, according to our local priorities;

- Mitigate and adapt to climate change and produce a carbon management plan for the Authority;

- Build new facilities that meet the Building Research Establishment Environmental Assessment Method (BREEAM) Excellent standard and

refurbish existing facilities to meet BREEAM Very Good standard subject to a Value for Money assessment;

- Raise awareness of climate change amongst stakeholders in the community we serve;

- Appraise and review the Authority's strategies, plans, policies and activities in relation to climate change issues;

- Assess the risk associated with climate change and the implications for our services;

- Encourage other partner organisations, suppliers and contractors to take action to reduce greenhouse gas emissions; and

- Monitor the progress of our plans against the actions needed and publish the result in our annual sustainability report.

Appendix 6: Sustainability Strategy Management

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                    ┌─────────────────────────────┐
                    │      Project Sponsor        │
                    │    Carl Beer - Director     │
                    └─────────────────────────────┘
                    ┌─────────────────────────────┐
                    │      Project Director       │
                    │     Assistant Director      │
                    └─────────────────────────────┘
                    ┌─────────────────────────────┐
                    │      Project Manager        │
                    │   Waste Strategy manager    │
                    └─────────────────────────────┘
                    ┌─────────────────────────────┐
                    │     Project Coordinator     │
                    │    Sustainability officer   │
                    └─────────────────────────────┘
                    ┌─────────────────────────────┐
                    │     Team Sustainability     │
                    │      (Steering Group)       │
                    │      to be identified       │
                    └─────────────────────────────┘
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Climate change	Sustainable Procurement	Corporate Social Responsibility	Environmental Management
Action plan	Action Plan	Action Plan	Action Plan

Appendix 7: Sustainable Procurement Flexible Framework

Level 1

	Foundation - Level 1
People	Sustainable procurement champion identified. Key procurement staff has received basic training in sustainable procurement principles. Sustainable procurement is included as part of a key employee induction programme
Policy, strategy & communications	Agree overarching sustainability objectives. Simple procurement policy in placed endorsed by CEO. Communicate to staff and key suppliers.
Procurement process	Expenditure analysis undertaken and key sustainability impacts identified. Key contracts start to include general sustainability criteria. Contracts awarded on the basis of value-for-money, not lowest price. Procurers adopt quick wins.
Engaging suppliers	Key supplier-spend analysis undertaken and high sustainability impact suppliers identified. Key suppliers targeted for engagement and views on procurement policy sought.
Measurements & results	Key sustainability impacts of procurement activity have been identified.

Level 2

	Embed - Level 2
People	All procurement staff to have received basic training in sustainable procurement principles. Key staff has received advanced training in sustainable procurement principles.
Policy, strategy & communications	Review and enhance sustainable procurement policy, in particular, consider supplier engagement. Ensure that it is part of a wider sustainable development strategy. Communicate to staff, suppliers and key stakeholders.
Procurement process	Detailed expenditure analysis undertaken, key sustainability risks assessed and used for prioritisation. Sustainability is considered at an early stage in the procurement process of most contracts. Whole-life-cost analysis adopted.
Engaging suppliers	Detailed supplier-spend analysis undertaken. General programme of supplier engagement initiated with senior management involvement (Meet the buyer day).
Measurements & results	Detailed appraisal of the sustainability impacts of the procurement activity has been undertaken. Measures implemented to manage the identified high-risk impact areas.

Level 3

	Practice - Level 3
People	Targeted refresher training on latest sustainable procurement principles. Performance objectives and appraisal include sustainable procurement factors. Simple incentive programme in place.
Policy, strategy & communications	Augment the sustainable procurement policy into a strategy covering risk, process integration, marketing, supplier engagement, measurement and review process. Strategy endorsed by CEO.
Procurement process	All contracts are assessed for general sustainability risks and management actions identified. Risks managed throughout all stages of the procurement process. Targets to improve sustainability are agreed with key suppliers.
Engaging suppliers	Targeted supplier engagement programme in place, promoting continual sustainable improvement. Two-way communication between procurer and supplier exists with incentives. Supply chains for key spend areas have been mapped.
Measurements & results	Sustainability measures refined from general departmental measures to include individual procures and are linked to development objectives.

Appendix 8. Climate change mitigation options

Influence	Activity
Energy use Energy reduction	• Improve energy efficiency of authority facilities and assets, in particular IT, lighting and heating. • Enhance energy efficiency of both refurbishment and rebuild to reduce greenhouse gas emissions. • Use energy efficient appliances in replacement and new build programmes. • Use sustainable construction criteria for new build and refurbishment to minimise use of new resources thereby reducing greenhouse gas emissions during the harvesting and manufacturing of raw materials for construction. • Increase insulation of Authority properties and assets. • Make best use of natural light in new development buildings • Use low carbon technologies and local heat generation processes in refurbishment and new build • Replace inefficient IT equipment with efficiency rated machines and best available technology (lap-tops instead of PCs, flat screen monitors, duplex printers and photocopiers with the capability to use recycled paper. • Change procurement policy to include higher percentage of recycled products or products from less environmentally damaging processes across all purchasing – e.g. vegetable based dyes for printing, non-bleached paper, carpets from recyclates. • Ensure high recycling rate for all waste streams within the authority – reducing first resource use and manufacture of new products thereby reducing greenhouse gases at source. • Support programmes for alternative energy production plant in inward investment and business opportunities across the region
Transport	• Change engine fuels to cleaner alternatives, such as LPG, reducing fossil fuel use and emissions of greenhouse gases • Change fleets to smaller engine capacity where practicable • Investigate alternative transport modes for waste e.g. water, rail • Change cars and short haulage vehicle fleets to innovative technology/design where practicable – e.g. fuel cell/compressed air technologies • Supply driver training to improve efficiency of vehicle use. • Compile and implement green travel plan for the Authority • Create and implement Staff Travel Plans • Promote cycle schemes, provide opportunities for cycle training/maintenance for staff • Improve/provide good facilities for staff choosing to cycle/run or walk to work. • Provide support for multi vehicle occupancy schemes and disincentives for single person carriage. • Create travel card scheme for those using public transport • Promote flexible working hours/home working • Use influence to change behaviour of providers across the region

Waste	• Instigate waste management strategies • Develop prevention/re-use/recycling/composting schemes as high priority • Encourage inward investment/attract business development in plant capable of specialist waste recycling and recovery to increase the authority's ability to reduce waste to landfill and to support management strategies • Support research and design into innovative technologies for bioremediation/biodegradation of wastes, particularly organic waste. • Create robust procurement strategy to reduce 'buying waste' across the authority in the form of plastics, wrapping and other packaging surrounding products, and increase purchase of recycled products. • Create stringent criteria in tenders for contractual work for management and reduction of waste • Insist upon suppliers having own Environmental Management System and operating within stringent environmental standards • Support innovative technologies with longer financial pay-back periods with a view to long term improvements over time • Support voluntary, community and social enterprises to assist waste management.
Water	• Minimise water use in properties and facilities, e.g. use water efficient appliances, grey water recycling, etc – where feasible • Increase employee awareness of issues surrounding water use to facilitate greater efficiencies in times of drought and flood. • Use refurbishment and maintenance systems to upgrade facilities to more environmentally sound energy and water systems • Working closely with the Water Authority and the EA to use proactive forms of mitigation for water supply and use, to best utilise the resource in flexible ways in relation to drought and flood increase • Apply innovative Sustainable Urban Drainage Systems and roofing designs to minimise flash flooding and allow slow permeation to below ground aquifers.
Planning and construction	• Encourage development that reduces the need to travel • Discourage developments within flood plain areas and close to vulnerable coasts • Encourage innovative sustainable design for new build or refurbishment to limit greenhouse gas emissions both in construction and during use. • Encourage innovative sustainable design for new build or refurbishment to slow water run off and enhance proactive water management • Promote and support Sustainable Urban Drainage Systems • Support alternative energy production e.g. wind/solar or biomass energy schemes. • Support new developments aimed at providing waste minimisation in close proximity to source of generation.

	• Enforce legislation relating to protection of habitats/biodiversity • Ensure effective EIAs, SEAs and SAs are carried out for major capital projects as appropriate • Drought (soil moisture reduction) is likely to have a significant impact on the stabilisation of the land for example, subsidence and/or building movement
Land use planning	• Increasing flood risk is likely to be a significant impact of climate change. • Land use policies can identify land for development in areas where flood risk is lower and where there is adequate protection.
Economic development	• Climate change will create business opportunities. • Increased tourism linked to the city of Liverpool's birthday in 2007 and its role as capital of culture in 2008 for example, is likely to increase waste arisings. • Demand for goods may alter for example, more garden furniture and fewer hot water bottles. • Stormier/windier conditions may make transporting waste and goods (e.g. construction materials) more difficult. • Wetter winters may impact on the construction industry (e.g. build delays). It will become more difficult to work on some types of land during the wetter periods of the year. • Business support for social/voluntary enterprises can assist the wider business community to think about the impacts of climate change. •
Emergency planning	• Increased flood risk and more severe weather events are likely to result in more emergency situations such as fire. • There are likely to be problems associated with increased rainfall and rising leachate levels. • Ensure that Authority has an emergency planning procedure in place
Health	• The Authority will need to adapt to changes in the patterns and types of ailments (staff) linked to the weather • Site access and development could also be hindered for health and safety reasons for example, waterlogging.
Agriculture	• Increased average daily temperatures, reduced soil moisture in summer, wetter conditions in the winter and spring will all affect how land can be farmed. • This may include implications for applying IVC garden/kitchen waste to land?