

Acknowledgements

The Carbon Management Action Plan has been developed with the assistance of the Carbon Trust and consultants from Energy for Sustainable Development (ESD) and ImpactPlus, a strategic communications consultancy.

The project was organised and executed under 'Prince II', with a project board including the Director for Environment, Head of Policy & Resources (Education), Head of Environmental Health and Trading Standards and Head of Engineering and Transport.

The Project Team was managed by the Property Services Manager and included a team comprising the LA21 Officer, Home Energy Conservation Officer - Strategic Housing (Private Sector), Energy Monitoring Technician, Street Lighting Manager and the Integrated Transport Officer.



© Herefordshire Council 2005

The text in this document may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not used in a misleading context. Requests for such use should be sent in the first instance either by email to the Knowledge Management Team enquiries@herefordshire.gov.uk.

Executive Summary

7.1	MAIN ROLES AND RESPONSIBILITIES	55
7.1.1	CMAP Responsibility Matrix.....	55
7.2	REPORTING AND EVALUATION	56
8	Communications Plan	57
8.1	COMMUNICATION ACTIONS - MARCH 2005 - SEPTEMBER 2005.....	57
9	Carbon Management Action Plan	59
9.1	PHASE 1 CMAP – KEY ACTIONS 2005 TO 2008.....	59
9.2	PHASE 2 CMAP – KEY ACTIONS 2009 TO 2012.....	62
10	Milestones – Phase 1 – 2005 to 2008	63
11	Glossary of Terms	64

List of Tables

Table 3-1	Baseline Emissions - All Property 2002.....	20
Table 3-2	Baseline Emissions - Landfill Gas 2002	22
Table 3-3	Overall Baseline Emissions Inventory	23
Table 4-1	Cost Saving Benchmarks for Typical Maintenance Projects	25
Table 4-2	Energy and Cost Savings - Corporate Buildings and Schools ...	27
Table 4-3	Renewable Electricity Generation at Stretton Sugwas	29
Table 4-4	Emissions Reduction from Landfill Site Restoration.....	30
Table 4-5	Maximum Cost Savings from Streetlight Dimming	32
Table 6-1	Summary Benchmarks - Cost per tonne CO ₂ -e Emissions	38
Table 6-2	Risk Assessment £/ t CO ₂ -e saved - Kirklees.....	39
Table 6-3	Potential Revenue from Emissions Trading	41
Table 6-4	Budget Funding Categories - Potential Qualifying Expenditure .	51
Table 7-1	CMAP - Corporate Responsibility Plan.....	55
Table 8-1	The Nottingham Declaration.....	57

List of Figures

Figure 2-1	UK Emissions Reduction Targets.....	5
Figure 2-2	Public Sector & Waste Management Emissions	6
Figure 3-1	Baseline - Business-as-usual Projection to 2012	18
Figure 3-2	Herefordshire Council Baseline compared to UK Public Sector	18
Figure 3-3	Herefordshire Council Baseline Emissions - Property 2002-2006	19
Figure 3-4	Herefordshire Council Baseline Emissions per Employee - Property.....	20
Figure 4-1	Selected Energy Saving Expenditure - Corporate Buildings	26
Figure 4-2	Selected Energy Saving Expenditure – Schools	26
Figure 5-1	Maximum Carbon Emissions Reduction Potential	33
Figure 5-2	Carbon Emissions Reductions - Excluding Landfill Gas Options	34
Figure 5-3	Maximum Overall Cost Savings	35
Figure 5-4	Relative Cost Savings - Options.....	35
Figure 6-1	General Revolving Invest-to-Save Fund	44
Figure 6-2	Invest-to-Save fund - Reducing Annual Expenditure From Existing Budgets	46
Figure 6-3	Invest-to-Save Fund - Constant Expenditure from Existing Budgets – 2008 Onwards.....	46
Figure 6-4	Invest-to-Save Fund - Showing Total Expenditure	48
Figure 6-5	WMES-Co Billing and Fund Management.....	49
Figure 10-1	CMAP Milestones - Phase 1 - 2005 to 2008	63

1 Introduction

Scientific evidence showing that climate change is happening is more compelling than ever, and this points to the release of greenhouse gases into the atmosphere by human activity as the primary cause. We are seeing a serious change in weather patterns and sea levels, and the energy that we use everyday contributes to this change.

Some degree of further climate change is inevitable, because of emissions that have already taken place, and this will have an impact on our economy, society and environment. We must therefore also focus on adaptation to climate change. However, although adaptation measures may limit the impact of climate change to some extent, the most effective response, and the only sustainable long-term approach, is to substantially reduce emissions of greenhouse gases.

In 2003, the Herefordshire Partnership was charged with the task of developing a Herefordshire Climate Change Strategy. The Environment Ambition Group (EAG) formed the Climate Change Working Group (CCWG) to progress this work. The CCWG includes representatives from the Herefordshire Partnership, Herefordshire Council, the Marches Energy Agency, The Bulmer Foundation and English Nature.

Greenhouse gas reduction targets are a central part of the Herefordshire Climate Change Strategy, however, detailed targets for emissions reduction will not be agreed until autumn 2005 following public consultation. Nevertheless, from the stakeholder consultation that has already been undertaken¹, it has become clear that as a minimum, the reduction targets must be aligned with the UK 'Kyoto Protocol' targets. These are the targets, which have already been adopted by the government for the Public Sector Estate, the West Midlands Regional Energy Strategy published in 2004,² and the Draft Energy End Use Efficiency and Energy Services Directive³, amongst others.

The purpose of the Carbon Management Action Plan (CMAP) is to define the steps that Herefordshire Council will take to secure its contribution to the carbon dioxide reduction targets as part of the Herefordshire Partnership Climate Change Strategy. This forms part of the valuable process of leading through example.

The CMAP, therefore, specifies the credible, adequately resourced actions that Herefordshire Council will undertake over the period to 2012, and sets down the clear responsibilities for implementation and monitoring the outcomes of those actions.

¹ The Herefordshire Partnership Climate Change Strategy is currently undergoing stakeholder consultation using a specially developed Climate Change challenge based on the Democs gaming methodology developed by the New Economics Foundation (nef).

² The West Midlands Regional Energy Strategy

³ COM (2003) 739

Introduction

The CMAP is not limited to specific technical interventions by Herefordshire Council leading directly to reductions in carbon dioxide equivalent (CO_{2-e})⁴ emissions - it also includes management, policy enabling and communications actions required to integrate the habit and practice of Carbon Management into the existing management policies and practices of Herefordshire Council.

A key monitoring action defined by the CMAP is the integration of Carbon Management within the Good Environmental Management (GEM) process, accredited to ISO14001. The CMAP is therefore intended to provide both a formal and practical basis for carrying out carbon emission reduction actions, policy and enabling actions, over the period from 2005 to 2012.

During the development of the CMAP it was decided to adopt 2002 as the baseline year. This has allowed Herefordshire Council's progress to date to be recorded. 2002 was also chosen because it synchronises the CMAP baseline emissions year with the Herefordshire Partnership Climate Change Strategy baseline emissions year and with latest quality accredited national emissions inventory data published by Defra annually, two years in arrears.⁵

⁴ CO_{2-e} emissions in the CMAP relate explicitly to carbon dioxide gas (CO₂) and methane (CH₄) added together in their carbon dioxide equivalents as defined by the UN Framework Convention on Climate Change (UNFCCC). In particular emissions of CH₄ are multiplied by a factor of 21 so they may be added to emissions of carbon dioxide.

⁵ Annual Report for submission under the Framework Convention on Climate Change, ISBN - 0-9547136-2-1, 2004

Strategic Options

- Providing targets, mechanisms, incentives and institutional, financial and legal frameworks that remove existing barriers and imperfections for the efficient end use of energy. Specifically the directive includes the objective of “re-connecting” the separate responsibilities for the provision of capital equipment (in particular Local authorities) with the users of the equipment (most notably schools who pay for the energy).
- Developing a market for energy services and for the delivery of energy efficiency programmes and other energy efficiency measures to end-users.

The directive will oblige Member States to adopt and meet an annual energy saving target and would require the Commission, having reviewed and reported on progress against the first annual target, to examine further whether it is appropriate to come forward with a proposal for a Directive to develop further the market approach to energy efficiency by means of “white certificates” for energy saved – in this respect it is expected that the Directive will in many respects emulate the EU landfill directive.

Perhaps the most important aspect of the draft directive is that it will place an obligation on public sector bodies to deliver energy efficiency savings that are 50% more than the private sector, nominally 1.5% per annum cumulative. So over a 10-year period, 15% energy efficiency savings would be required. This is generally because the public sector is charged with leading by example and encouraging lasting community change.

The introduction of “White certificates” is currently the lead proposal behind the creation of an energy efficiency obligation market, and it would operate in a similar way to the UK and EU ETS and landfill-trading directive.

6.4 West Mercia Supplies – Energy Services

A detailed assessment has been undertaken into the feasibility of West Mercia Supplies becoming an Energy Services Consortium (ESCO). The underlying reasons are associated with the fact that WMS currently supply (as a 2nd tier energy supplier) the vast majority of the electricity, gas and other fuels used by Herefordshire Council, Worcestershire County Council, Shropshire County Council and Telford & Wrekin.

Presently, most authorities purchase renewable electricity on annual contracts negotiated by WMS. WMS issues invoices to each user, resolves any disputes and transacts payments. The service extends to over 540 schools throughout the four authorities and hundred of other corporate buildings. The necessary steps for WMS to become a fully operational ESCO are covered in this section. For the purposes of the CMAP, the WMS ESCO is termed WMES-Co.

WMES-Co can be represented as either an Energy Services Consortium or Energy Services Company, and each form is considered below.

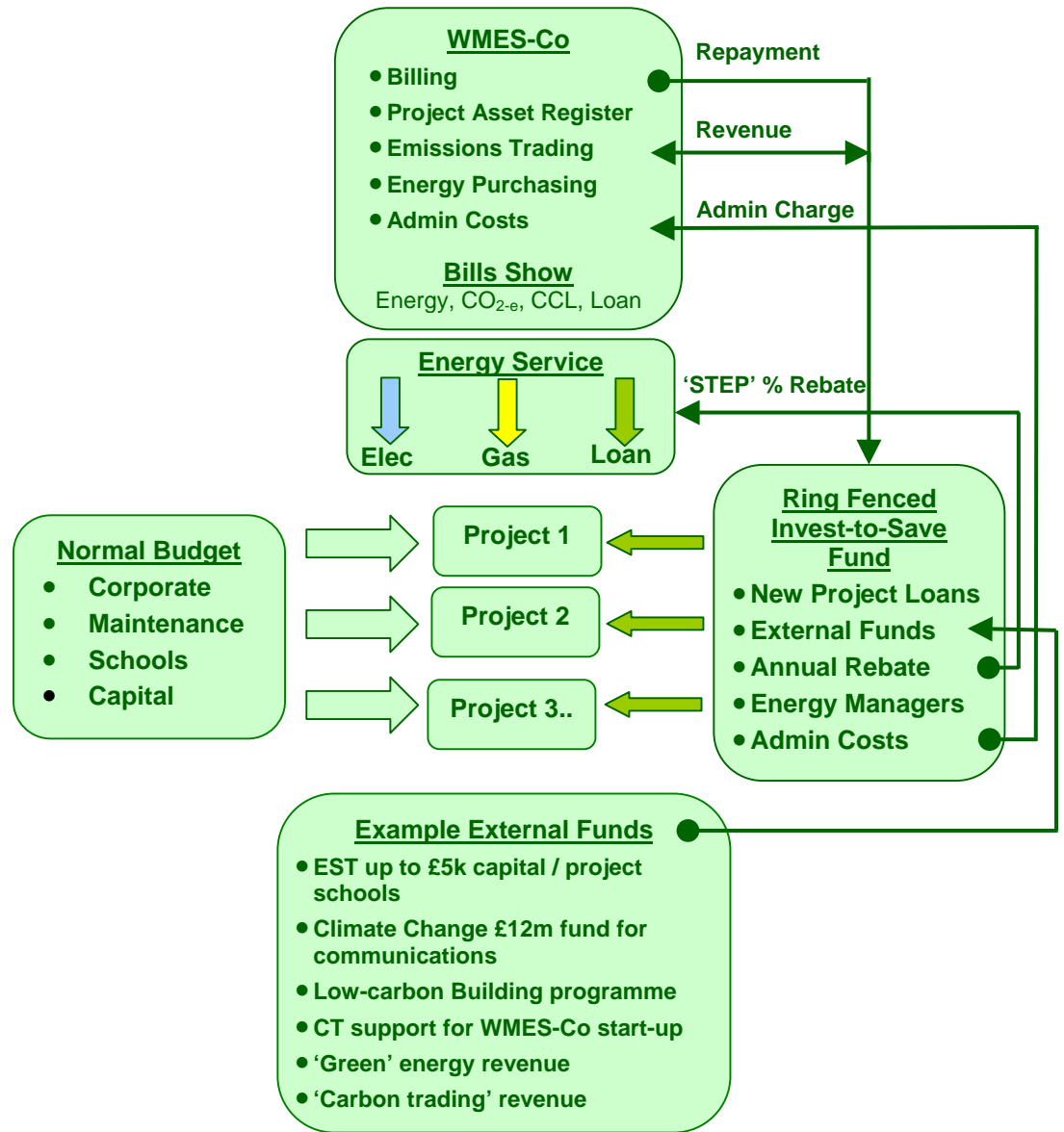


Figure 6-5 WMES-Co Billing and Fund Management

There are a number of practical issues that have been explored. These will be firmed-up during the first trial period to run from April 2005 to end March 2006. The issues are summarised as:

- The Invest-to-save fund will be operated through WMES-Co. Each individual project will be allocated with a dedicated customer account number. The allocation will use the same internal billing processes that are currently employed for energy. Therefore, energy and the Invest-to-save fund

Strategic Options

components will be aligned together on each bill. This process will result in:

- The establishment of an asset register related to the capital and installation cost of individual projects to track the repayment schedule.
 - Energy and fund repayments clearly shown along with CO_{2-e} and CCL savings. This will be important for monitored and verification.
- The Invest-to-save fund will be ring-fenced for each partner organisation of the WMS Central Purchasing Group. Therefore, each partner authority will be free to manage and develop its own Invest-to-save fund independent of each other organisation.
 - The Invest-to-save fund will provide the administrative resources to support the following activities:
 - Project selection and analysis – to be undertaken by a dedicated energy manager, located within the authority.
 - Education and communication – to be undertaken by a support team, located within the authority. This work will link to a variety of schools programmes including STEP, ECO-schools etc., and HECA activities.

6.5 Budget Funding Categories

[Table 6.4](#) shows the estimated budget expenditure that could qualify for being transacted through WMES-Co.

[Table 6-4](#) indicates the maximum expenditure that would qualify for assessment as suitable projects for consideration under energy services to be £2.358 Million. However, it is unlikely that sufficient projects with pay-back periods of less than 3 years, could be identified in the first instance, and the maximum expenditure through this mechanism is considered to be £1 million per annum, as shown in Figure 6-4. By the fifth year of the Invest-to-save scheme the budget expenditure through the scheme would be stabilised at £0.5 million per year, with the additional funds being delivered from the fund.

Additional special project expenditure could be managed through the Invest-to-save scheme, for example, part or all of the capital cost of a landfill gas generator installation at Stretton Sugwas. If this were done, then the revenue stream from sales of “green” electricity would be credited back to the fund until the capital has been repaid.

Strategic Options

Schools Capital			
Schools Devolved Budgets	3.000	0.750	Each project approved by LEA
<ul style="list-style-type: none"> • General Improvements • Maintenance 			
Schools Revenue			
Schools Revenue Budget	1.200	1.200	Purchase of Energy through WMS
<ul style="list-style-type: none"> • Energy 			
Schools Maintenance			
Schools Maintenance	1.200	0.633	Funds from DfES to LEA then to LA
<ul style="list-style-type: none"> • Based on condition report 			
Schools Targeted Schemes			
New / replacement schemes	2.500	0.125	Special schemes direct funded
<ul style="list-style-type: none"> • Sports Halls • New small schools 			
	7.900	2.708	
Corporate Buildings			
<ul style="list-style-type: none"> • Revenue • Energy • Energy Controls 	1.160 0.750 0.200	1.160 0.750 0.200	
Highways Depots	0.180	0.025	
Small Holdings	0.125	0.025	
Maintenance Pool	1.000	0.250	
Sub Total Non-school Sector	3.415	2.410	
	11.315	4.308	
	1.950		45.2%
	9.365		54.7%

Table 6-4 Budget Funding Categories - Potential Qualifying Expenditure

6.5.1 Project Completion

All capital loans paid from the Invest-to-save fund will carry zero interest and will be repaid to the fund based on a detailed assessment of the annual units of energy saved. This will be valued at the prevailing energy contract price at the time of project expenditure. This is a fixed starting condition, irrespective of the escalating price of energy. If the price of energy increases in real terms, the payback will shorten, or vice-versa.

All installed projects allocated an account/metering code will remain on the WMES-Co billing system for the length of time it takes to repay the loan to the fund. Each quarter, payments will be made which reflect a reduction in energy cost and a fund repayment. This process is at worst cost-neutral to the end user and at best will result in reduced total bills.

Strategic Options

In general the repayment period will not exceed 3 years in the first instance. Once the loan is repaid, the asset will be removed from the asset register held by WMES-Co whereupon they will be transferred to the end-user. The energy bills issued to the user will then revert to showing the number of units of energy consumed, the cost, the CO_{2-e} emitted and the CCL if applicable.

At the end of the repayment period the end-user will receive the full energy saving benefit into the future for the life of the asset. Since by definition the installed equipment has a lifetime greater than the payback period, the installation yields a positive life-cycle financial benefit that accrues to the end-user.

6.5.2 External Sources of Funding – Schools

The Energy Saving Trust (EST) runs the Energy Certification for Schools scheme, which aims to promote energy management and efficiency in schools, and also to provide rewards for schools achieving results and making progress towards reducing carbon dioxide emissions. This scheme is part of the School Energy Programme funded by DEFRA and the DfES and provides grant funding for ESCOs and local authorities to establish energy service contracts with schools. The measures implemented under this scheme aim to reduce energy consumption and maintain the profile of energy efficiency within schools.

This programme can be linked through WMES-Co with funding from Defra's recently announced⁷⁵ support for education and communication of climate change issues. This funding amounts to £12 million over 3 years.

The Eco-schools programme is a similar accreditation scheme and also establishes links between education and energy efficiency, and will be a central driver initiating schools involvement with the above two programmes. Currently, more than 50% of Herefordshire schools are Eco-Schools.

The Carbon Trust's School Turnkey Energy Programme (STEP) also links with this range of programmes, as well as the Energy Saving Trust's Energy Services in Schools Programme. Herefordshire has already produced software to allow pupils to undertake energy assessments, of schools and homes.

Additional sources of funding are available to Energy Services programmes through the Energy Efficiency Commitment. EDF Energy provides EEC grants to Council Buildings, as do Npower and Opus Energy and PowerGen.

These and other sources of funding have been leveraged by Kirklees at the rate of 39%. If this were emulated by the WMES-Co, additional funds of £200,000 per annum could be obtained on an annual expenditure of £500,000 from the fund by 2008.

⁷⁵ January 2005

6.6 Affordable Warmth – Private Sector Housing

Established as part of the HECA⁷⁶ responsibilities of Herefordshire Council, a Housing Renewal Policy has been established for the period 2003/06.

The authority encounters a number of problems in trying to develop policies to tackle fuel poverty, these include:

- No accurate baseline of households that are in fuel poverty, and therefore there is no way of assessing or monitoring the impact of our blanket schemes designed to tackle this.
- In Herefordshire's 'Tackling Fuel Poverty Report 1999 –2000' for Government, the statistics were taken from the national UK figures at that time, that is, at least 15,000 householders in Herefordshire were suffering Fuel Poverty. This is believed to be an underestimation of the true picture.
- Herefordshire has a very high percentage of dwellings which can be classed as 'hard to treat' / 'hard to heat', as there is no access to mains gas outside the six main conurbations i.e. approximately 52% of all dwellings fall into this category.
- Herefordshire has 77,200 dwellings and a population of 174,900, 25% of which are aged 60 or over compared to 21% regionally and nationally.
- 60% of all disabled facilities adaptations applications (to enable a person to reside safely in their home) have been for the 65's and over. This highlights the situation of the growing ageing population.
- Herefordshire has a population that is fiercely independent whilst not vulnerable and therefore do not accept the cultural change of receiving 'handouts'.
- The lack of available financial resources makes it particularly difficult to reach isolated communities.

In order to address these issues, a Fuel Poverty Strategy will be developed jointly between the HECA service of the authority and the NEA so that fuel poverty can be incorporated into the Private Sector Housing Renewal Strategy. NEA⁷⁷ develops and promotes energy efficiency services to tackle the heating and insulation problems of low-income households. Working in partnership with central and local government; with fuel utilities, housing providers and health services; and with consumer organisations, NEA aims to eradicate fuel poverty and campaigns for greater investment in energy efficiency to help those who are poor or vulnerable.

⁷⁶ Home Energy Conservation Act

⁷⁷ http://www.nea.org.uk/About_us

Strategic Options

This project will enable Herefordshire to focus on the objectives, tasks, targets and timescales to provide a structured guide for:

- Identifying the current situation
- Formalising current practices
- Developing methods of targeting householders
- Monitoring the impact of our schemes and initiatives

Funding support has been obtained, and an action aimed at completing the Fuel Poverty Strategy by September 2005 is included in the CMAP. The project will be the responsibility of the HECA Officer.

7 CMAP Governance and Ownership

7.1 Main roles and responsibilities

Central to successful implementation of the CMAP is the need for clear ownership of the overall plan, and for groups of activities necessary to keep the plan operational. Key officers responsible and accountable for the carbon management action plan are shown in [Table 7-1](#).

7.1.1 CMAP Responsibility Matrix

CMAP Responsibility Matrix										
Activity	Finance	Corporate Buildings	Schools	Private Sector Housing	Street lighting	Transport	Landfill Gas	Purchasing	Annual Monitoring	Responsible Officer
CMAP – Origination & Review, under Price II board										Head Eng & Transport
	Finance									Property Services Manager
	Corporate Buildings									Energy Monitoring Technician
	Schools									
	Private Sector Housing									
	Street lighting									
	Transport									Integrated Transport Officer
	Landfill Gas									
	Purchasing									LA21 Officer
	Annual Monitoring									HECA Officer

Table 7-1 CMAP - Corporate Responsibility Plan

⁷⁸ Environmental Health and Trading Standards

7.2 Reporting and evaluation

The reporting procedures for tracking progress on implementation of the CMAP are as follows:

- Reporting on progress will be through the 6-monthly GEM⁷⁹ reporting process.
 - The first reporting period is April to September each year and will be reported in October of each year.
 - The second reporting period is October to March each year. The second period will include an annual progress report that will be used to evaluate progress relative to the agreed targets.
- Additional reporting and monitoring will be through the annual HECA report specifically in relation to the fuel poverty action in private sector housing.
- The CMAP progress report will be incorporated as a GEM programme objective. The CMAP targets will be embedded in the GEM objective.
- The reporting process will be through the 6-monthly GEM report to Cabinet Member for Environment.
- The reporting process will include 6-monthly report to Environment Scrutiny Committee.
- The reporting process will include external auditor review as part of the annual ISO14001 accreditation process.
- The CMAP targets will be reviewed in line with the Corporate Planning process in 2008/9 and again in 2011/12.
- The procedure for updating the CMAP targets will be based on the full reassessment of the change in baseline emissions over the period of the review and will include the setting of new targets if appropriate.

⁷⁹ GEM – Good Environmental Management – ISO14001.

8 Communications Plan

The communications plan is a timetable of communication events, which describe the key elements to be communicated to council staff and the wider public in line with the strategy. The communications plan is pro-active and designed to maintain the profile of the council's actions. The communications plan covers major events, at this stage, but moving forward every effort should be made to communicate the "good news" from the implementation of the CMAP. The communications plan will be reviewed at the interval of the GEM review process.

8.1 Communication Actions - March 2005 - September 2005

- Formal adoption of the CMAP by Cabinet - March 2005
- Once adopted, the Leader and Chief Executive will sign the Nottingham Declaration⁸⁰ on Climate Change on behalf of the Herefordshire Council. The adoption of the CMAP is, to a large extent, de-facto adoption of the Nottingham Declaration.
- Once signed, Herefordshire Council will notify the Carbon Trust and Energy Saving Trust who will publicise nationally on their websites.

Nottingham Declaration...

Herefordshire council will pledge its commitment to:

- ▶ *Work with central government in delivering the UK climate change programme*
- ▶ *Encourage the reduction of greenhouse gas emissions in the local community*
- ▶ *Provide opportunities for renewable energy generation within the local area*

Table 8-1 The Nottingham Declaration

- Herefordshire Council will issue press release on the adoption of the CMAP and the signing of the Nottingham Declaration.
- The press release will form the first in a series that will link with the Herefordshire Partnership climate change strategy, highlighting the contribution from Herefordshire Council to the overall targets.

⁸⁰ 74 local authorities out of 410 in England have now signed the Nottingham Declaration. The Nottingham Declaration is a public statement of a Local Authority's recognition of the importance of Climate Change issues, and their commitment to addressing climate change by implementing a sustainable strategy. Full details can be found at <http://www.nottinghamcity.gov.uk/ngp/downloads/Nottmdeclimate.doc>.

CMAP Governance and Ownership

- Project press releases will be issued at regular intervals.
- A separate communications action plan will be developed to manage awareness in each of the CMAP areas in [Table 7-1](#). This will take forward the CMAP from September 2005 on an annual basis.

9 Carbon Management Action Plan

9.1 Phase 1 CMAP – Key Actions 2005 to 2008

				Complete By Date
Adoption and Communications	<ul style="list-style-type: none"> Approval of CMAP Adoption by Cabinet Signing of Nottingham Agreement 	N/a	Prince II Project Board	March 2005
Corporate Buildings	<ul style="list-style-type: none"> Installation of remote monitoring meter readers in sample of corporate building. Data capture linked to STARK software providing half-hourly energy recording data. To be developed by end of Phase 1 to majority of “large” energy use buildings. 	Leased from STARK software. Estimated cost £25 per year per installation.	Property Services Manager - Energy Monitoring Technician	2005/06 2007/08
School Buildings	<ul style="list-style-type: none"> Installation of remote monitoring meter readers in sample of corporate building. Data capture linked to STARK software providing half-hourly energy recording data. To be developed by end of Phase 1 to majority of “large” energy use schools. 	Leased from STARK software. Estimated cost £25 per year per installation.	Property Services manager - Energy Monitoring Technician	2005/06 2007/08
Landfill Gas	<ul style="list-style-type: none"> Installation of enclosed flare upgrade to more environmentally efficient model. Necessary to allow Landfill gas generator to be accommodated. Minimum repayment over 3 years, £8.33k per year. 	Subject to capital Bid. Estimated cost £50,000. £25k funded from Invest-to-save fund.	Head of EHTS - EH officer – Closed Landfill sites	2006/07

Carbon Management Action Plan

Landfill Gas	<ul style="list-style-type: none"> Assessment and design completed by end 2005/6 Installation of Landfill gas generator. Saves 21,000 tonnes of CO₂-e per year. Generates revenue stream of £206k per year. Minimum repayment to the Invest-to-save fund of £350k, for years 1 and 2 of operation. 	Subject to capital funding. Estimated £650k capital plus £350k from Invest-to-save fund. Includes £200k installation and site work.	Head of EHTS - EH officer – Closed Landfill sites	2005/06 2006/08
Private Sector Housing	Development of Fuel Poverty Strategy as part of the Private Sector Housing Renewal Strategy.	Funded via NEA – 10 days consultancy.	HECA Officer	Sept 2005
Transport	Integration of Transport data into the CMAP by July 2005, for <ul style="list-style-type: none"> Contracted transport – Education Contracted transport – Social Services Transport Fleet - HJS 	N/a	Integrated Transport Officer	July 2005
Corporate Buildings	Continued Property Rationalisation. 14 additional buildings by July 2005.	N/a	Property Services Manager	July 2005
Purchasing	Complete and adopt formal proposal for the creation of an Invest-to-save fund linked to WMES-Co. This to include: <ul style="list-style-type: none"> Development of billing and administrative procedures. Development of project assessment procedures. Development of support funding options. 	N/a	Purchasing manager - LA21 Officer and - MD West Mercia Supplies	May 2005
Communications	<ul style="list-style-type: none"> Communications – Initial Actions Communications Action Plan 	N/a	Prince II Project Board	April 2005 Sept 2005

Carbon Management Action Plan

Purchasing	<ul style="list-style-type: none"> • Initiate Invest-to-save projects • Project Selection and ranking <ul style="list-style-type: none"> ○ Zero Cost options ○ Low Cost options ○ Less than 3 yr return projects 	N/a	Property Services Manager - LA21 Officer	June 2005 July 2005 to Mar 2006
Purchasing	<ul style="list-style-type: none"> • Project Selection and ranking – target expenditure <ul style="list-style-type: none"> ○ £800,000 – 2006 ○ £600,000 – 2007 ○ £500,000 – 2008 • Total expenditure from Fund <ul style="list-style-type: none"> ○ £1,000,000 – 2006 ○ £1,150,000 – 2007 ○ £1,400,000 – 2008 	Part funded from Administration Charge on Invest-to-save Fund <ul style="list-style-type: none"> • £180,000 – 2006 • £190,000 – 2007 • £193,000 – 2008 	Property Services Manager - Head Maintenance - Energy Monitoring Technician	Jan – Feb each year 2006/09
Monitoring Report	<ul style="list-style-type: none"> • October Monitoring Report through GEM for April to September period • May Monitoring Report through GEM for October to March period 	N/a	Environmental Sustainability Officer - LA 21 Officer	Oct 2005 Thereafter 6-monthly each year

Carbon Management Action Plan

9.2 Phase 2 CMAP – Key Actions 2009 to 2012

				Complete By Date
Review of CMAP	<ul style="list-style-type: none"> Approval of CMAP Review Adoption by Cabinet 	N/a	Prince II Project Board	March 2008
Purchasing	Convert Invest-to-save fund linked to WMES-Co – incorporated and limited by Guarantee. <ul style="list-style-type: none"> Include Emissions trading under UK ETS Include “White Certificates” Trading Include “Enhanced” capital allowances 	N/a	Purchasing manager - LA21 Officer and - MD West Mercia Supplies	April 2008
Purchasing	<ul style="list-style-type: none"> Project Selection and ranking – target expenditure <ul style="list-style-type: none"> £500,000 – 2009 £500,000 – 2010 £500,000 – 2011 Total expenditure from Fund <ul style="list-style-type: none"> £1,800,000 – 2009 £1,900,000 – 2010 £2,000,000 – 2011 	Part funded from Administration Charge on Invest-to-save Fund <ul style="list-style-type: none"> £195,000 – 2009 £200,000 – 2010 £200,000 – 2011 	Property Services Manager - Head Maintenance - Energy Monitoring Technician	Jan – Feb each year 2009/12
Monitoring Report	<ul style="list-style-type: none"> October Monitoring Report through GEM for April to September period May Monitoring Report through GEM for October to March period 	N/a	Environmental Sustainability Officer - LA 21 Officer	Oct 2008 Thereafter 6-monthly each year

10 Milestones – Phase 1 – 2005 to 2008

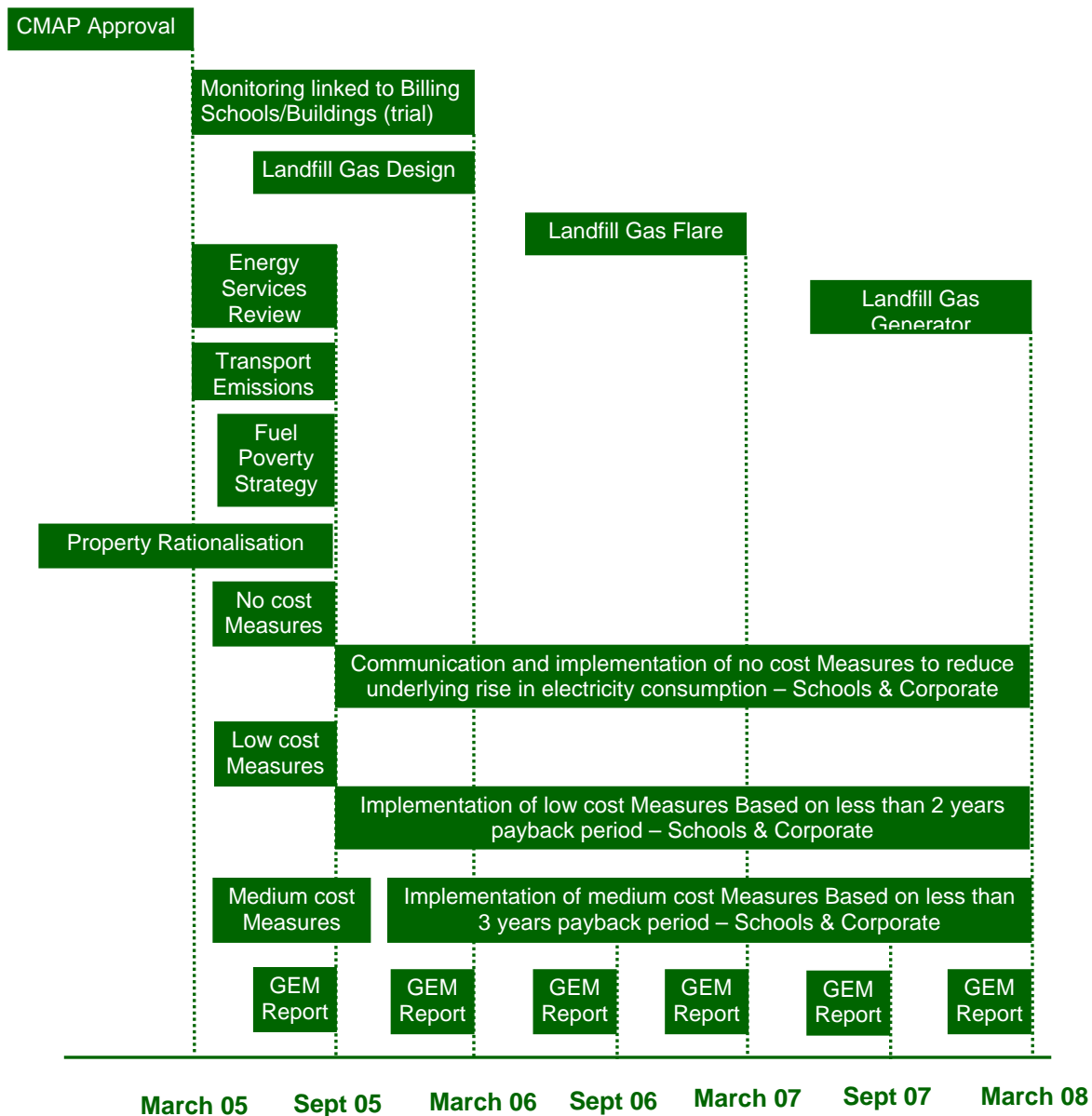


Figure 10-1 CMAP Milestones - Phase 1 - 2005 to 2008

Index

Street Lighting..... 1, 21, 31
streetlight dimming..... 21
Stretton Sugwas5, 1, 2, 22, 23, 28, 29, 32,
33, 41, 42, 50
Structure of Funding 1, 8
Sustainable Development Framework
..... 10
Sustainable Energy Policy Network14
Sustainable Procurement Task Force5
Sustainable transport policies..... 12
Targets..... 1, 2, 5, 15
Telford & Wrekin 36, 43
Tesco 42
Thamesway Ltd 45
The Bulmer Foundation 1
The Nottingham Declaration.. 6, 2, 57
Trading Risk Assessment..... 1, 38
Transport..... 1, 16, 23, 30, 55, 60
Treasury Green Book 8
UDP 11
UK Climate Change Programme4, 12, 17
UK Emissions Trading Scheme. 1, 37
UK ETS..... 1, 37, 38, 39, 41, 62
UK Progress on Reducing Emissions1, 4
UNFCCC..... 2, 4, 6, 63
 United Nations Framework Convention
 on Climate Change..... 2
United Nations Framework Convention on
Climate Change 4, 63
Vision 1, 3
waste disposal authorities..... 37
Waste Management1, 2, 6, 17, 21, 22
West Mercia Supplies5, 1, 14, 36, 43, 60,
62
West Midlands Regional Energy Strategy
..... 1, 14, 15
White certificates 43
WMES-Co2, 43, 48, 49, 50, 51, 52, 60, 62
WMS 5, 31, 36, 43, 45, 48, 50, 51, 55
Woking Model 1, 44
Worcestershire..... 22, 23, 36, 43

Index

Intentionally Blank