AGENDA

Meeting: Environment Select Committee

Place: Committee Room III, County Hall, Trowbridge

Date: Tuesday 7 September 2010

Time: <u>10.30 am</u>

Please direct any enquiries on this Agenda to Sharon Smith, of Democratic and Members' Services, County Hall, Trowbridge, direct line (01225) 718378 or email sharonl.smith@wiltshire.gov.uk

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This Agenda and all the documents referred to within it are available on the Council's website at www.wiltshire.gov.uk

Membership:

Cllr Chuck Berry Cllr Alan Hill

Cllr Rosemary Brown
Cllr Nigel Carter
Cllr Brian Dalton
Cllr Peter Doyle
Cllr Jose Green
Cllr Chris Humphries
Cllr Tom James MBE
Cllr Ian McLennan
Cllr Stephen Oldrieve
Cllr Leo Randall

Cllr Mollie Groom

Substitutes:

Cllr Chris Caswill
Cllr Peter Colmer
Cllr Nick Fogg
Cllr Howard Marshall
Cllr Russell Hawker
Cllr Anthony Trotman

Cllr Charles Howard

PART I

Items to be considered while the meeting is opened to the public

1. Apologies and Substitutions

2. Minutes of the Previous Meeting (Pages 1 - 8)

To confirm and sign the minutes of the Environment Select Committee held on 6 July 2010.

3. **Declarations of Interests**

To receive any declarations of personal or prejudicial interests or dispensations granted by the Standards Committee.

4. **Chairman's Announcements**

5. **Public Participation**

The Council welcomes contributions from members of the public.

If you would like to make a statement at this meeting on any item on this agenda, please register to do so at least 10 minutes prior to the meeting. Up to 3 speakers are permitted to speak for up to 3 minutes each on any agenda item. The Chairman will, however, exercise his discretion in order to ensure that members of the public have the opportunity to contribute.

Members of the public wishing to ask a question should give written notice (including details of any question) to the officer named above by **12:00 noon on Friday 3 September 2010**.

6. Climate Change Strategy/Carbon Management Plan (Pages 9 - 52)

In July, the Head of Climate Change agreed to return to the Committee with an update on the development of the authority's Climate Change Strategy and Carbon Management Plan.

The draft Climate Change Strategy and covering report are attached for consideration by the Committee prior to the Strategy's submission to the Climate Change Board on 20 September 2010.

The Carbon Management Plan will be considered by Cabinet on 16 November 2010. Accordingly the Head of Climate Change will provide the Committee with a presentation detailing the status of the Plan to date.

Recommendation:

The Committee is asked to:

- 1) note the report on the Climate Change Strategy and make recommendations as appropriate.
- 2) note the update provided on the Carbon Management Plan and to provide recommendations as appropriate; and
- 3) decide whether to make arrangements to scrutinise a copy of the Carbon Management Plan prior to it's submission to Cabinet on 16 November 2010.

7. Real Time Passenger Information (RTPI) (Pages 53 - 64)

A report from the Service Director – Strategic Services, was received by the Committee at its meeting in July 2010 which provided an update on the delivery of the RTPI system.

The Committee noted the update and requested that a further report was submitted to the Committee at it's next meeting outlining in more detail the financial implications of converting the system to GPRS.

Recommendation:

The Committee is asked to consider the report and assess whether any recommendations should be made to the Cabinet member responsible for transport in relation to the future of RTPI in Wiltshire.

8. Forward Work Programme (Pages 65 - 68)

A copy of the draft Forward Work Programme is attached for consideration.

9. **Date of next Meeting**

2 November 2010.

10. Urgent Items

Any other items of business which the Chairman agrees to consider as a matter of urgency.

<u>PART II</u>

Items during whose consideration it is recommended that the public should be excluded because of the likelihood that exempt information would be disclosed

NONE

ENVIRONMENT SELECT COMMITTEE

DRAFT MINUTES OF THE ENVIRONMENT SELECT COMMITTEE MEETING HELD ON 6 JULY 2010 AT COMMITTEE ROOM III, COUNTY HALL, TROWBRIDGE.

Present:

Cllr Trevor Carbin (Substitute), Cllr Nigel Carter, Cllr Peter Doyle, Cllr Jose Green, Cllr Mollie Groom, Cllr Alan Hill, Cllr Chris Humphries, Cllr Tom James MBE, Cllr Ian McLennan, Cllr Stephen Oldrieve and Cllr Leo Randall

Also Present:

Cllr Tony Deane, Cllr Jon Hubbard, Cllr Richard Gamble, Cllr Keith Humphries, Cllr Jeff Osborn and Cllr Linda Conley

76. **Election of Chairman**

Cllr Mollie Groom was appointed Chairman of the Committee.

77. Election of Vice-Chairman

Cllr Nigel Carter was appointed Vice-Chairman of the Committee.

78. **Apologies and Substitutions**

Apologies were received from Cllr Chuck Berry and Cllr Peter Colmer. Cllr Trevor Carbin substituted for Cllr Peter Colmer.

79. Minutes of the Previous Meeting

The minutes of the previous meeting held on 11 May 2010 were signed and approved as a correct record.

80. **Declarations of Interests**

Cllr Peter Doyle declared a personal interest in Item 8 – Housing PFI Scheme - as a non Executive director of Sarsen Housing Association.

Cllr Rosemary Brown declared a personal interest in Item 9 – Real Time Passenger Information - as an employee of BLB solicitors who represented Trapeze.

81. Chairman's Announcements

The recruitment of the Empty Homes Officer had moved forward with the job now regraded to a more attractive salary and the post advertised on the intranet.

The Council was consulting on the future waste collection service. A request for an update on the outcomes of the consultation exercise would be requested for the next meeting of the Committee.

82. Public Participation

There was no public participation at the meeting.

83. Housing PFI Scheme

At its previous meeting held May 2010 the Committee was informed that contractual negotiations with Silbury Housing Limited had been extended and were anticipated to be finalised in July 2010. The Committee duly requested an update on progress made towards finalising the PFI contract at it's next meeting. The Housing PFI Project Manager, Chris Trowell, attended the meeting to provide the update and answer any questions.

Clarification was provided that negotiations had been completed, with Cabinet approval granted on 17 June 2010 to enter into the PFI.

Although the project had received Cabinet approval, the Project Manager had recently attended a meeting in London with Homes for Community Agency and CLG which indicated that value for money of the project would be coming under much heavier scrutiny by central government. As a result the PFI project could again be delayed although it was understood that there was a desire to drive the project through. The Project Manager would be seeking further clarity on funding deadlines within the next couple of days and welcomed any support the Committee could provide.

Cllr John Brady – Cabinet member for Housing, and Cllr Howard Greenman – Portfolio Holder for Housing, had confirmed their support in progressing the Scheme.

Resolved:

To ask the Leader and Cabinet Member to reaffirm their commitment to the PFI Project and to work with ministers in central government to ensure delivery.

84. Real Time Passenger Information

A report from the Corporate Director – Transport, Environment and Leisure, was received by the Committee at its meeting in November 2009 and provided an overview of the delivery of Real Time Passenger Information. The Committee resolved to request a further 6 month progress update. Accordingly a report was submitted to this Committee from the Corporate Director - Neighbourhood and Planning.

Cllr Richard Gamble, Ian White – Passenger Transport Co-Ordination Manager and Liz Douglas – Real Time Passenger Information Manager were in attendance to present the report and answer questions.

The RTPI Manager confirmed that the real time system was underperforming but that work continued with the supplier to resolve the issues; this included converting a key bus route to GPRS which was being monitored and was working effectively.

Information gathering was still taking place but initial indications showed a likely save of £125k over a 5 year period. Continued negotiating with the supplier was expected to reduce the price further, although an initial estimated capital investment of £42k would be required to further implement the GPRS system fully.

Wiltshire Council had a 15 year contract with Trapeze Group (UK) Ltd (who supplied and maintained the system), which would run until 2018.

Cllr Richard Gamble confirmed that original costs of the project were in the region of £2.5m, which included substantial grant funding from central government to encourage use of public transport. No contingency funding was currently in place, although the officers would continue to bid for any available funding.

[The meeting was temporarily adjourned for approximately 15 minutes due to a fire drill]

Ensuing discussion by members of the Committee on the ongoing effectiveness of the system included, concern over the length of time taken to rectify the system problems, and that further spend would be required by the Council to remedy the problems. Members also discussed the contract with Trapeze Group (UK) Ltd and were informed that a summary of the contract was available for consideration.

Members also requested clarification on why a target of 83% had been set on new GPRS routes and requested further clarification on the costs for converting the Warminster to Salisbury route to GPRS.

Resolved:

- 1) To note the progress made towards improving the performance of the RTPI.
- 2) To request a further report to the September meeting of the committee outlining in more detail the financial analysis/context to enable councillors to decide if they support the proposal to switch to GPRS.

85. Air Quality Strategy

The Committee was asked to consider the Air Quality Strategy ahead of its submission to Cabinet in September 2010. The Cabinet member for Health and Wellbeing submitted a summary report providing an overview on progress to date.

Cllr Keith Humphries – Cabinet member for Health and Wellbeing, Mandy Bradley – Service Director Public Protection and Gary Tomsett – Specialist Environmental Protection Manager attended the meeting to present the report and answer questions.

Clarification was provided that the Strategy was one of a series of harmonisations taking place which had proven difficult to pull together as the previous district councils each had different strategies in place pre Unitary. A Strategic Framework was now being developed for Wiltshire Council and was designed to be open and provide clear guidance on air quality.

The authority had a duty to monitor air quality as set by central government policy and the EU. The Air Quality team was working with the Climate Change team to investigate ways of working together in future to maximise resources available.

The Air Quality team currently consisted of 4 staff who were working to influence policies and procedures and tackling problems highlighted in known areas, such as Bradford on Avon and Salisbury.

The figures detailed within the report were provided by the Central Government Environment Select Committee, which were not specific to Wiltshire and therefore difficult to break down further.

Ensuing discussion included what work, if any, had taken place following historic recommendations made by former district councillors previously and the need for a greater emphasis on planning management, which was likely to be the only areas to which Wiltshire Council could assist in the reduction of pollutants. Sight of the deliverables, objectives and commitment to targets was also requested for inclusion within the report.

Resolved:

To note the report and request that the Cabinet member consider the comments made by the Committee when finalising the strategy.

86. Climate Change Strategy

The Committee considered a report at its meeting in March 2010. The report provided an update on the developments of the authority's Climate Change Strategy. The Committee resolved that a further update would be presented to the Committee's meeting in July.

A report by the Service Director, Economy and Enterprise, which was also submitted to Cabinet on 22 June 2010, was duly circulated to members for consideration.

Ariane Crampton – Head of Climate Change, attended the meeting to present the report and answer questions. The Senior Climate Change Officers, recently appointed, were also in attendance.

The Cabinet member for Environment was unable to attend the meeting.

The following points were raised:

- In advance of reporting to cabinet all reports were now screened for environmental implications and carbon footprint impact.
- Research had been undertaken on best practice nationally. The London Borough of Merton Climate Change Strategy was highlighted as a good example.
- A draft strategy was planned for consultation September/October with a planned adoption date of December.
- The Climate Change Strategy would include the framework strategy and full action plan and which would consider the carbon management plan (inc carbon trading strategy), adaptation plan, county carbon reduction plan and renewable energy action plan.
- The aim of the Strategy was to highlight, inform and articulate details of the environment policy frameworks, how the Council dealt with carbon change and how it could change carbon emission levels.
- The Climate Change Adaptation Plan was expected to be in place for February 2011 (in line with LAA target).

 The framework strategy and climate change plans would be submitted to the Committee in September prior to being submitted to the Climate Change Board.

Thanks were given to the Head of Climate Change and her team for the work undertaken although members of the Committee wished for the minutes to reflect their disappointment that the strategy had not been completed to date, whilst noting that the staffing structure had just been populated because of the delays in finalising the budget.

Ensuing discussion included the need for a strong message from Cabinet in support of and financial commitment to deliver the strategy on carbon change. Consideration should be given by the Portfolio Holder - Environment on where the environmental strategy and policy sat within the current structure.

The Committee also felt that the strategy should be a risk based strategy which should highlight the main areas to be addressed with a list of prioritisation rather than range of activities as currently provided. This should include details of the issues the Council could influence.

Further consideration should be given on ways to encourage climate change responsibility following the Committee's recommendation to Cabinet to include climate change responsibilities within job descriptions although acknowledgement was made that work was being undertaken to recruit 'green champions' as a way to encourage climate change awareness with staff across the organisation.

The increase in carbon emissions for 2010/11 was higher as estimated figures were included in 2009/10 and took into account the likely increase in transport emissions. A Green Fleet review was underway on ways in which to reduce transport emissions with a report expected at the end of October. Wiltshire Wildlife Trust were being considered to undertake this additional work, although it may be more cost effective for the work to be undertaken in-house.

Vantage Point software would be used to build a baseline of carbon emissions within the county as the current information was based on 2007 data. Vantage Point would enable the authority to consider property build, its impact and how the authority could achieve targets for Wiltshire in the future. This would benefit the Council in calculating and addressing it's carbon emissions taking into consideration that it was understood that a carbon emissions levy would be charged at £12 per tonne with a potential rise to £25 per tonne.

Smart meters continued to be rolled out with a drive for old meters upgraded and replaced with smart meters.

Resolved:

- 1) To ask the Cabinet member to confirm his supports towards the capital investment required to enable the fully staffed climate change team to achieve goals and to ensure the authority meets the minimum statutory requirements in respect of climate change.
- 2) That the Head of Climate Change and Cabinet Member would attend the next meeting of the Committee in September to present the draft strategy, plan and renewable energy study/Carbon Management Strategy.

87. Housing Commission

Cllr lan McLennan as an appointed member of the scrutiny committee on the Salisbury Housing Commission provided an update on the scrutiny work undertaken to date.

Two meetings had been held, the first of which Cllr McLennan was unable to attend due to his recent appointment as representative. The second meeting followed a visit to Salisbury to consider the housing stock and receive details on the processes undertaken from someone vacating a property to what needed to be done thereafter to make the property habitable.

The Board's main objective was to move into the top quartile of housing providers by 2012 and therefore the Service Director for Housing was now spending approximately 60% of his time in Salisbury in order to ensure this was achieved.

The Committee considered whether the results of the Audit Commission review on the Council's management of the Salisbury housing stock, would be affected due to the cessation of the Audit Committee and what work had been done with the management of housing stock to date.

Resolved:

That recognising the inspection regime that the Housing Commission was responding to was no longer in place; the Scrutiny Officer would investigate any repercussions.

88. Forward Work Programme

Resolved:

To note the updates provided.

89. **Date of next Meeting**

7 September 2010. Members requested a special meeting to allow the committee to consider the Climate Change Strategies in detail.

90. Urgent Items

Cllr Alan Hill raised a planning concern based on the directive from Minister Eric Pickles to delete the Regional Spatial Strategy and whether this could be used as planning legislation. There was concern that the chief inspector had directed his appeals inspectors that the RSS was enshrined in primary legislation and without new laws passed it could not be deleted from statute.

Resoved:

That the scrutiny officer would contact the Service Director - Development to provide clarity on legislation surrounding the Regional Spatial Strategy and update the Committee.

(Duration of meeting: 10:30am - 1:20pm)

The Officer who has produced these minutes is Sharon Smith, of Democratic & Members' Services, direct line (01225) 718378, e-mail sharonl.smith@wiltshire.gov.uk

Press enquiries to Communications, direct line (01225) 713114/713115

Agenda Item 6

Wiltshire Council

Agenda Item No.

Environment Select Committee 7 September 2010

Climate Change Strategy

Executive Summary

This report sets out the initial draft of the first Climate Change Strategy for Wiltshire following the report presented in July 2010 outlining the Council's approach.

Proposal

That the Committee:

Comments on the draft Climate Change Strategy prior to consideration by the Climate Change Board on 20 September 2010.

Reason for Proposal

The Committee requested in July 2010 that a draft Climate Change Strategy be developed following a discussion of the approach to be taken.

ALISTAIR CUNNINGHAM

Service Director, Economy and Enterprise

Climate Change Strategy

Purpose of Report

1. That the Committee comments on the draft Climate Change Strategy prior to consideration by the Climate Change Board on 20 September 2010.

Background

- 2. Briefings on progress against the Council's climate change objectives were provided to Members of the Select Committee on 3 November 2009, 2 March 2010 and 6 July 2010. Members requested that a draft strategy be developed for discussion at their meeting of 7 September 2010.
- 3. This is the first draft of the Climate Change Strategy which will need to be subject to further refinement, consultation and development. The Climate Change Board will consider the strategy at its meeting on 20 September 2010 before consultation is carried out with stakeholders in the autumn through the Wiltshire Environmental Alliance. The strategy will be presented to Cabinet by the end of 2010.

Main Considerations for the Committee

- 4. The scope of the draft strategy includes both council services and Wiltshire as a whole in relation to those aspects of Wiltshire life that the council can influence (e.g. planning, transport, flood management, community engagement).
- 5. The strategy sets out:
 - where we are now in 2010,
 - where we want to get to,
 - our general approach for how we are going to get there.
- 6. The strategy, as set out at **Appendix 1**, is a framework document which will be linked to related council strategies to ensure climate change objectives are embedded across the entire organisation. It will be supplemented by detailed action plans to set out more specifically how we are going to deliver our climate change ambitions. As this is the first time that a Climate Change Strategy has been prepared, it is expected that the strategy will be reviewed and refined as further work is carried out on the action plans.

- 7. As a minimum we will produce the following four action plans by the end of 2012:
 - Carbon Management Plan for the Council's emissions
 - Climate Change Adaptation Plan for Wiltshire
 - Low Carbon Transition Plan for Wiltshire
 - Renewable Energy Action Plan for Wiltshire
- 8. The Committee will be aware that the Council worked with the Carbon Trust during 2009/10 to develop a Carbon Management Plan. A draft plan was considered by the Climate Change Board in March 2010. The Board considered that accurate carbon emissions data for the first year of the Council's operations needed to be included before the Plan could be adopted and accurate targets set. The plan is therefore being updated with the baseline data for 2009/10 and a presentation will be delivered to the Select Committee on 7 September 2010 setting out progress in developing the plan.
- 9. Work on the Climate Change Adaptation Plan is currently on-going and the Council will have a final action plan by end of March 2011.
- 10. The Council is working with the Energy Saving Trust (EST) through the 'one to one' programme on a Low Carbon Transition Plan for the county.
- 11. The Committee will be aware that the Council has commissioned a climate change and renewable energy evidence base study. This is designed to principally fulfil the requirements of the Climate Change Supplement to PPS 1 or its successor. The study is collecting data on current and future energy use in the county; assessing the supply of low carbon and zero carbon sources of energy; and making policy and target recommendations for incorporating in the Local Development Framework. This study will inform the development of a Renewable Energy Strategy for Wiltshire.

Environmental Impact of the Proposal

12. Implementation of the strategy will have a positive impact on the environment as it aims to reduce carbon emissions and prepare for climate change.

Equality and Diversity Impact of the Proposal

13. The Council's climate change programme will have a positive impact on equalities and diversity as the implications of climate change will be disproportionate for those that are disadvantaged.

Risk Assessment

- 14. Meeting the Council's obligations in relation to climate change requires the delivery of a complex programme of work which has a range of risks attached to it:
- 15. Organisational buy-in:
 - Resistance to behaviour and policy changes required for successful carbon reduction.

16. Financial:

- Insufficient investment available for energy efficiency measures to ensure achievement of the Council's carbon reduction target, meaning that efficiencies in energy and transport costs (total spend £15 million in 2009/10) are not realised.
- Failure to perform well under the Carbon Reduction Commitment (CRC), for example, by lack of investment in smart meters and energy efficiency projects, which could lead to financial penalties.
- Carbon trading strategy unsuccessful leading to increased costs of purchasing carbon allowances on the secondary market.

17. Legal:

• Failure to demonstrate compliance with environmental legislation if an environmental management system is not implemented in high risk areas.

18. Service delivery:

 Climate change impacts in Wiltshire (e.g. increasing temperatures and flooding) will have an impact on the Council's ability to deliver services and could adversely affect Wiltshire residents unless appropriate measures are put in place.

19. Performance:

- Failure to achieve NI 188 target in the Wiltshire Local Area Agreement.
- Failure to achieve good performance against the other three national performance indicators that measure to what extent the Council has reduced its own carbon footprint (NI 185) and the carbon footprint of its local area (NI 186) as well as fuel poverty in its local area (NI 187).

20. Reputation:

- Residents expect the Council to lead by example in reducing carbon emissions and preparing for unavoidable climate change. The November 2007 People's Voice Survey responses show that panellists want Wiltshire Council to take the lead in addressing climate change and support them individually to tackle climate change.
- The Wiltshire Assembly has identified climate change as being one of three top priorities to be addressed.
- Should the Council's trading strategy for purchasing carbon allowances under CRC not be successful, it could be in a position where it needs to purchase allowances from private sector competitors.

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Financial Implications

21. The financial implications of implementing the climate change programme were set out in the report to Cabinet of 22 June 2010. The accompanying Carbon Management Plan sets out the financial implications of participation in the Carbon Reduction Commitment carbon trading scheme.

Legal Implications

22. Section 1.5 of the draft strategy sets out the legal and policy framework for the Council's climate change obligations. The report to Cabinet dated 22 June 2010 set these out in more detail.

Options Considered

23. Doing nothing is not an option as the Council is obliged to comply with legal and performance requirements relating to the environment and climate change.

Conclusions

24. Through the implementation of the Climate Change Strategy and its associated action plans, the Council will have a comprehensive programme to ensure it meets its climate change responsibilities.

ALISTAIR CUNNINGHAM

Service Director, Economy and Enterprise

Report Author: **Ariane Crampton**Head of Climate Change

The following unpublished documents have been relied on in the preparation of this Report:

None

Appendices

Appendix 1 - Draft Climate Change Strategy

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Wiltshire Council

Climate Change Strategy

2010 - 2026

Draft V 1.5

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Foreword

Foreword by Cabinet member Cllr Toby Sturgis

To be completed

Executive Summary

To be completed

1. Introduction

1.1 Why do we need a strategy?

The science is clear that climate change is a reality and it is imperative to act now. Tackling the causes and managing the effects of climate change is one of the greatest challenges that we face as a society. The environmental, social and economic impacts of climate change are already being felt and they will continue to grow in severity.

This is recognised within Wiltshire and the (draft) Community Plan 2011-26 which identifies tackling climate change as one of its top three priorities.

Wiltshire Council's Corporate Plan 2010-14 holds as its core vision 'stronger more resilient communities'. The plan makes the link between resilience, the economy and the environment by setting 'reducing our environmental impact' and 'supporting the local economy' within its priorities and outcomes. Amongst other things, the plan sets ambitious targets for reducing the council's carbon emissions and identifies the potential for growth in environmental technologies in Wiltshire.

In considering climate change, community resilience and economic issues together, we are able to understand how different groups in our community may be more vulnerable than others and therefore we are better able to target resources and action. For example, low-income households may be more vulnerable to fuel poverty; the elderly, the very young and remote rural communities may be more vulnerable to the extreme weather events that will become more frequent in the future; skills gaps in the workforce can be addressed by supporting growth in environmental technologies in Wiltshire.

In this way, the umbrella of 'climate change' brings together disparate issues that affect our community's resilience. These include flood management, energy security, fuel poverty, economic growth and resource efficiency (in particular energy efficiency).

Addressing energy efficiency also enables the council to make savings, which will help make the council more financially resilient.

As a signatory to the Nottingham Declaration on climate change, the council acknowledges it has a key role to play in tackling climate change at a local level as:

- A community leader
- A service provider
- An estate manager

1.2 Our approach

This strategy sets out how Wiltshire as a council and a community can take action on climate change. Climate change requires everyone to work together

to make adjustments to their lives, businesses or communities in order to secure a better future for all.

The scope of the draft strategy includes both council services and Wiltshire as a whole in relation to those aspects of Wiltshire life that the council can influence (e.g. planning, transport, flood management, community engagement).

This strategy sets out:

- where we are now in 2010,
- where we want to get to,
- our general approach for how we are going to get there.

This is a framework document which will be linked to related council strategies to ensure our objectives are embedded across the entire organisation. It will be supplemented by detailed **action plans** to set out more specifically how we are going to deliver our climate change ambitions. As this is the first time that a Climate Change Strategy has been prepared, it is expected that the strategy will be reviewed and refined as further work is carried out on the action plans.

As a minimum we will produce the following four action plans by the end of 2012:

- Carbon Management Plan for the council's emissions
- Climate Change Adaptation Plan for Wiltshire
- Low Carbon Transition Plan for Wiltshire
- Renewable Energy Action Plan for Wiltshire

The timescale for developing each of these action plans differs depending on the resource already allocated to these areas of work. As a general principle, the council is concentrating on getting its own house in order first, but is carrying out some work in parallel to meet the wider carbon reduction and climate change adaptation requirements for Wiltshire.

1.3 What is climate change?

The earth's climate is changing predominately because of an increase in greenhouse gases, in particular methane and carbon dioxide (CO₂), caused by human activity.

The greenhouse effect is a natural occurrence trapping heat that originates from the sun, and then radiating it back to the earth. Human activity is upsetting this balance causing an 'enhanced' greenhouse effect.

It is predicted that we must stabilise concentrations of atmospheric CO_2 at 450 parts per million (ppm). Failure to do so will tip the planet over into catastrophic climate change events. Atmospheric concentrations in 2009 were at 387 ppm (compared with 315 ppm 50 years earlier) and rising at 2 ppm each year.

As a result of cumulative emissions, the climate is predicted to change, although the degree to which it will is uncertain. Consequently, we must make adaptations to counter some of the possible effects outlined below.

Adaptation/Mitigation

It is now widely accepted that a certain amount of climate change is inevitable even under the most optimistic carbon reduction scenarios. Wiltshire's climate change strategy must therefore incorporate two types of response:

Mitigation: those responses that seek to reduce the impact of our behaviour on the natural systems of our planet – ie reducing greenhouse gas emissions.

Adaptation: those responses that seek to better prepare us for the challenges likely to arise from climate change.

1.4 What will be the effects of climate change?

The direct effects of climate change will vary depending on geographic location; nonetheless, Wiltshire's emissions will contribute to the effects both locally, nationally and internationally.

Research from the Hadley Centre suggests the following impacts **nationally** (key impacts for Wiltshire are set out in section 2.2):

- Higher temperatures all year: more heat waves in summer; possible disappearance of snow and freezing weather from all but the highest mountains.
- More extreme weather events including hurricanes, flash floods, droughts and heat waves.
- Less rain overall, especially in the south and east in summer (i.e. where water shortages are already the biggest potential problem), although there may be more in the west and in winter (i.e. where excess rain is already a problem).
- More coastal and river flooding. Flood plains and other low-lying areas are at an increased risk.
- More frequent disruption to transport and other infrastructure.
- Increased risk of infrastructure operating beyond the conditions it was designed for, potentially causing it to fail (e.g. roads melting, rails buckling in extreme high temperatures; drains overwhelmed by rate of rainfall).
- Fewer winter deaths and illnesses as a result of cold, but more heatrelated summer deaths and stresses.
- Invasion of pests and diseases currently prevented by cold weather.
- Loss of wildlife, especially species near the southern end of their ranges.
- Dense urban areas likely to suffer worse extremes of summer heat because unshaded buildings, roads and paved areas absorb and retain solar heat.
- Agriculture will change as we are unlikely to be able to sustain traditional English crops, habitats and landscapes. More irrigation will be required.

These points outline the wide-ranging impact of climate change and that almost every department within the council and every local community will have to respond in some way.

1.5 Legal and Policy context

Every tier of government has made a commitment to take action on climate change and it is important that this strategy is set in the context of these overarching policies.

The Climate Change Act 2008 has taken on board the latest scientific evidence and set an ambitious target of a 34% reduction in CO_2 on 1990 levels by 2020, rising to an 80% reduction by 2050. The Act also requires a UK wide climate risk assessment to be carried out every 5 years; a National Adaptation Programme to be established and reviewed every 5 years; and it gives government the power to require public authorities and statutory undertakers (including water and energy companies) to report on how they have assessed and will respond to climate change risks.

The UK **Low Carbon Transition Plan** sets an approach to delivering the climate change act targets up to 2020. The document describes a wide range of initiatives which include carbon emission cuts, the increased use of renewable energy, making homes greener and helping vulnerable people. Of particular note are a range of incentives designed to stimulate the uptake of Renewable Energy.

The Government's 2010 **Household Energy Management Strategy** sets out plan for meeting the target of a reduction of 29 % in carbon emissions from the existing household sector by 2020. The interim target is to install loft and cavity wall insulation in all households where it is practical to do so by 2015. This will not only result in carbon savings but will assist in tackling fuel poverty and improving household finances.

The 2009 UK **Renewable Strategy** sets out how the UK will meet the legally-binding target to ensure 15 % of our energy comes from renewable sources by 2020. The strategy suggests that 30 % of electricity should be generated from renewable sources by 2020 (up from approximately 5.5 % in 2010), whilst 12 % of heat and 10 % of transport fuels should be generated from renewable sources.

Wiltshire will need to meet these targets and determine the most effective approach for its low carbon transition which will be detailed in our Low Carbon Transition Action Plan.

Changes to the national **Building Regulations**, will mean that from 2016 all new-build homes must be 'zero carbon'. This will be achieved in part through energy efficiency but will also require onsite renewable energy generation. Carbon reductions through the building regulations from commercial development will also follow in later years.

The Flood and Water Management Act (2010) introduces measures to address the threat of flooding and water scarcity, both of which are predicted to increase with climate change. In particular, it:

- requires the Environment Agency to create a National Flood and Coastal Erosion Risk Management Strategy, which a number of organisations will have to follow
- requires leading local flood authorities including Wiltshire Council to create local flood risk management strategies
- enables the Environment Agency and local authorities including Wiltshire Council - more easily to carry out flood risk management works

1.6 Benefits of introducing a strategy

Climate change must be addressed now. A definite commitment and a clear approach will contribute to this global priority and help Wiltshire take forward the objective in the community plan. The **Stern Report** of 2006 presented a persuasive case for the economics of tackling climate change, highlighting that action taken now will be more cost effective than action taken later.

The council is already doing a great deal of work to combat climate change and reduce CO₂ emissions. This document collates this activity to provide an overview and present a way forward.

The benefits of the climate change strategy include:

Supporting stronger and resilient communities:

- Climate change action will, for example, address fuel poverty, and ensure that vulnerable groups are protected against the extreme weather events that are predicted to be more frequent as a result of climate change.
- Through our low carbon transition plan, for example, the council as strategic planner and facilitator of grassroots action, will encourage local communities to deliver renewable energy alternatives to respond to the issue of energy security.

Reducing our environmental impact:

 Each of the eight themes in section 3 (waste, transport, water, purchasing and procurement, biodiversity, planning, energy and communications campaigns) identify actions for the council to reduce its impact on the environment.

Preparing the council for climate change adaptation:

- Through the council's responsibilities of strategic planning and service delivery, this strategy will ensure the council is well placed to respond to the predicted climate changes in Wiltshire.
- Increased resource efficiency:

 Through implementing a carbon management plan and the low carbon transition plan, the council has the opportunity to deliver greater resource efficiency and as a result savings, which in turn will make the council more financially resilient.

1.7 Who will be responsible?

Everyone has a responsibility for tackling climate change and it is important to recognise the need for the whole community to work together; everyone should understand the role they can play in addressing this challenge.

The actions presented in the strategy are not mutually exclusive and will require joint working across council departments, across the local strategic partnership and also regionally and nationally.

1.8 How the strategy is structured

Section 2 sets out the Wiltshire context regarding carbon emissions and climate change impacts.

Section 3 explains our strategy through the eight themes of the council's environmental policy:

- Waste
- Transport
- Water
- Purchasing and procurement
- Biodiversity and natural environment
- Energy
- Planning
- Communicating environmental issues

For each theme, we outline where we are now, where we want to get to and our approach for getting there. We also clarify whether this is something that the council is doing for its own services or for Wiltshire as a whole. Where relevant, we reference related strategies which contain more detailed information on this theme.

Finally, Section 4 sets out how we will deliver, monitor and review our Climate Change Strategy.

2. The Wiltshire context

2.1 Wiltshire's carbon footprint

Wiltshire's CO_2 emissions are directly related to the amount of energy consumed by heating, lighting, transport and manufacture. Each fuel type, such as natural gas, coal or oil has a different carbon intensity meaning that it generates a different amount of CO_2 when burned. In 2007 the county's total carbon footprint was 4758 Kilo tonnes which is about 12% of the South West's carbon emissions and approximately 1% of the total UK emissions.

Industrial and commercial CO_2 emissions accounted for 45% of the Wiltshire total, domestic housing 24%, transport 28% and 2% from land use, land use change and forestry, as illustrated in Figure 2.1. The term 'land use, land use change and forestry' includes estimates of the carbon impact of forestation, reforestation and deforestation but does not include cropland management, grazing land management or revegetation. This sector differs from other sectors in the Greenhouse Gas Inventory in that it contains both sources and sinks of greenhouse gases. The sources, or emissions *to* the atmosphere, are given as positive values; the sinks, or removals *from* the atmosphere, are given as negative values.

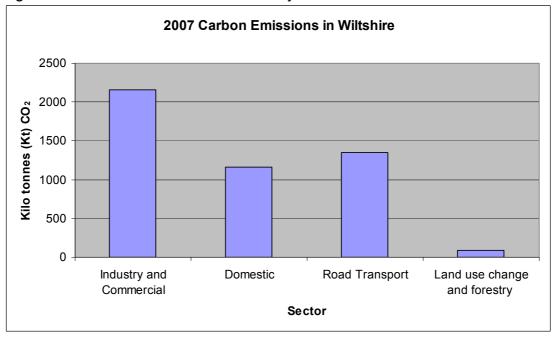


Figure 2.1: Wiltshire carbon emissions by source

Local authorities are required to report on per capita emissions for the local authority area (national indicator 186). This data is calculated annually by Defra and is a subset of the full carbon emissions quoted above, adjusted to exclude elements that the local authority has no control over. Most notable of

these is the exclusion of diesel railways, motorway emissions and any operations that fall within the European Emissions Trading Scheme (ETS). The result of these exclusions is that Wilshire's carbon footprint and per capita emissions appear lower than they actually are when only NI186 data is used. The differences between the emissions captured under NI186 and the full data set is illustrated in Figure 2.2. This shows that Wiltshire has a much higher proportion of carbon emissions that are outside the control of the local authority than the regional or national average.

For the purposes of this strategy, we have used the 'full data set' including all CO₂ emissions rather than NI186 data in order to give a complete picture of the current situation.

Between 2005 and 2007, emissions reduced by 2% nationally (see Figure 2.2). In the South West, emissions went down by 2.1% and in Wiltshire they went up by 3.1% over the same period. Wiltshire is therefore lagging behind the rest of the country in cutting its carbon emissions.

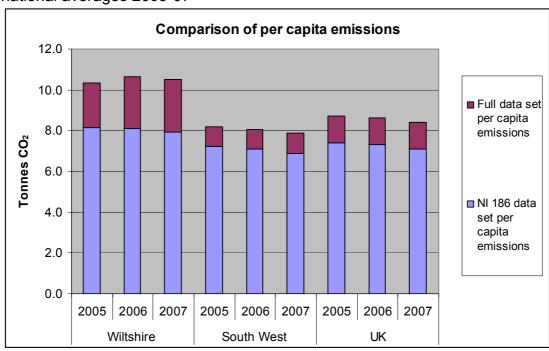


Figure 2.2: per capita emissions for Wiltshire compared with the regional and national averages 2005-07

Table 1 shows the comparison between the NI186 and full data set split by former local authority districts. This shows that under the full data set, the per capita emissions of the former the North Wiltshire and West Wiltshire District Council areas are much higher than the other districts. It is speculated that this is discrepancy is principally due to the inclusion of the M4 in the north of the county and the cement works at Westbury in the west.

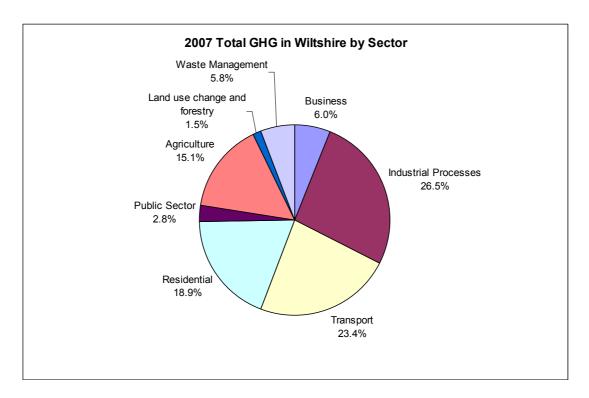
Local Authority Area	Year	Full Data Set Per Capita Emissions (t)	NI 186 data set Per Capita Emissions (t)
	2005	8.69	7.72
Former Kennet	2006	8.67	7.64
	2007	8.61	7.60
Camas an Namila	2005	10.47	7.49
Former North Wiltshire	2006	10.26	7.53
VVIII.G	2007	10.01	7.30
	2005	8.34	8.16
Former Salisbury	2006	8.44	8.18
	2007	8.14	7.86
Farman Mast	2005	13.00	9.14
Former West Wiltshire	2006	14.28	8.92
	2007	14.43	8.83
	2005	10.32	8.16
Wiltshire Total	2006	10.63	8.10
	2007	10.51	7.92

Table 1: Comparison of per capita emissions under different data sets and former districts

 CO_2 is just one of a number of greenhouse gases that contribute to the greenhouse effect. Other gases, such as methane (CH₄) and nitrous oxide (N₂O) are the most powerful greenhouse gases. The principle sources of these gases are not the burning of fossil fuels but landfill in the case of methane and agricultural fertilisers in the case of nitrous oxide. Experimental data, compiled by the Centre for Energy and Climate Change at the University of Exeter, has combined data for CO_2 , CH_4 and N_2O at the local authority level. This combined data, expressed as Greenhouse Gas Equivalents (GHGe) highlights a very different picture of Wiltshire's emissions compared with only considering CO_2 . The data also includes a finer grained breakdown of emissions by sector as apposed to the standard commercial, transport and domestic. The experimental data set includes emissions from the public sector, agriculture, businesses, larger industrial processes (those under the ETS), waste, domestic, transport and land use change. This data is shown in Figure 2.3.

This experimental data is a useful starting point, however a better understanding of Wiltshire's emissions and baseline is required in order to target the council's efforts to tackle GHG in Wiltshire, particularly with regard to emissions from agriculture.

Figure 2.3: total emissions in Wiltshire by sector (Greenhouse Gas Equivalents)



2.2 Climate change impacts in Wiltshire

The long term climate change predictions suggest the following changes to Wiltshire's climate:

Long-term/seasonal changes	Extreme events
Increase in annual average temperature Hotter, drier summers Milder, wetter winters	More hot days Fewer frost days More dry spells Increase in temperature of warmest day Increase in precipitation on wettest day

Table 2: Predicted changes in Wiltshire's climate

Our Local Climate Impacts Profile (LCLIP) provides a snapshot of the impacts on the council of some of the most significant climate/weather events in the past decade in Wiltshire. The profile identifies the most frequent weather events and those services most affected by recent weather events directly and indirectly. Frequent impacts of these events were infrastructure disruption which had direct impact on frontline service delivery as well as indirectly impacting all service through access to the workplace.

Specific examples from our Local Climate Impacts Profile include:

During high temperatures and heat waves in August 2003 and again in July 2006, heat placed vulnerable groups at significant risk. NHS statistics indicate an increase in excess seasonal deaths as a result of high temperatures during heat waves. Evidence also shows that heat wave events lead to an increase in noise and air pollution as well as an increase in opportunistic crime.

Excess rainfall and flooding in July 2007 resulted in significant highway and infrastructure disruption in all areas across the county.

How will we adapt to the unavoidable effects of climate change?

The council is currently developing an action plan to respond to the unavoidable consequences of climate change. This Action Plan will set out detailed adaptation measures that the council will take. Adaptation issues have also been flagged up in the relevant section of this strategy. The advantages for the council in completing a comprehensive Climate Change Adaptation Plan include:

- Allowing the council to prioritise decisions that have long-term benefits, for example investment in new transport, water, energy and communications infrastructure that will have a long life span;
- Taking action early where the benefits clearly outweigh the costs. For example, designing new buildings or refurbishing old ones to make them more resilient to climate change is likely to be more cost-effective than making changes later; and
- Ensuring a fair deal for communities and in particular the vulnerable, by helping people now, as well as in the future by ensuring that service delivery is prepared for unavoidable climate change.

The council expects to complete a comprehensive risk assessment of its vulnerabilities to climate change by November 2010 and have drafted an Adaptation Action Plan for council services by end of March 2011.

The council is engaging with other public service organisations to ensure that adaptation approaches and responses are coordinated across the public sector.

3. Our Strategy

3.1 Waste

To combat climate change it is essential that the amount of waste we produce decreases and that sustainable disposal and transport methods are used to minimise environmental impacts.

Land is currently being lost through landfill so we need to mitigate this by reducing, reusing, recycling and recovering more. Also, as landfill sites are still a main source for the most potent greenhouse gas, methane, alternative disposal methods need to be found. Currently methane is captured at large sites in Westbury, Calne and Swindon to generate energy.

Where we are now

Most of the waste collected by the council is household waste (214,542 tonnes in 2009/10). Although the council does collect waste from a large number of commercial premises (15,000 tonnes in 2009/10), private contractors service the rest so an accurate total picture of waste production in the county is not currently available. Estimates suggest that it could be as much as 600,000 tonnes. Table 3.1 below sets out what happens to the waste that the council collects.

A key objective for the authority is to reduce the amount of waste sent to landfill and maximise recycling rates. Alongside a 7.4% reduction in the amount of waste collected since its peak in 2004/05, there has been a drive to increase recycling services and establish alternatives to disposing of waste in landfills.

Table 3.1 – Wiltshire Council's waste performance

	2005/06	2009/10
Landfill	66%	47%
Energy from waste	0%	14%
Recycling & composting	34%	39%

National indicator 191 can be used to compare local authorities throughout the country on the level of residual waste produced per household. The latest comparative figures refer to 2009/10 and Wiltshire's figure was 647.6kg per household, which is almost exactly the median level for comparable authorities.

Wiltshire's Municipal Waste Strategy sets out our current performance and future projections. Wiltshire has a largely effective kerbside-recycling scheme in place which it plans to expand further. The council funds an education programme which is delivered by the Wiltshire Wildlife Trust. This joint venture works to a business plan covering key priorities relating to waste

prevention, the promotion of waste facilities, schools education, research and evidence based action.

The adopted Wiltshire and Swindon Waste Core Strategy (2009) has a flexible policy framework for the long term management of all types of waste. The document sets out clear guidance in terms of where new facilities should be promoted and strategy to promote more sustainable methods for dealing with waste.

Where we want to get to and how

Of the waste the council collects, we want to recycle or compost at least 45% and landfill less than 25% by 2014. This will be achieved by:

- Improving recycling facilities throughout the county
- Investing in alternatives to landfill
- Promoting the waste hierarchy of reduce, reuse and recycle in homes, schools and businesses
- Working with the Chambers of Commerce to increase levels of commercial recycling

The council will support private or public investments in generating energy from waste, in particular through anaerobic digestion, by providing positive planning responses and working with neighbouring communities to highlight the opportunities it brings (see section 3.7).

3.2 Transport

It is estimated that 40 per cent of an average UK citizen's contribution to CO₂ comes from transport. Almost three quarters of this can be attributed to car use, with almost a quarter coming from flying. Consequently, changes that will do most to reduce individuals' transport emissions include cycling, walking, using public transport, buying lower-carbon cars, and driving more efficiently, for example by braking more gently ('eco-driving').

As a rural county, one of the key ways to reduce reliance on transport is through ensuring that new developments are located in the right place to improve accessibility and reduce the need to travel, and through improving the communication infrastructure that enables communities to become more sustainable, namely the provision of broadband connections.

Where we are now

Transport is a key element in the fight against climate change and the council has already taken action as both a provider and facilitator. Through its role as the Planning authority, the council is seeking to ensure that new developments are located in the right place to improve accessibility and reduce the need to travel (see section 3.7).

There are many actual (eg a lack of comprehensive services and facilities) and perceived (eg 'public transport is slow and unreliable', 'cycling is dangerous', etc) deterrents to using sustainable transport. The council is already undertaking a wide range of road safety initiatives and network enhancements to encourage people to walk or cycle. Additionally the council spends £5.4m subsidising bus routes in Wiltshire and also provides free bus passes for the over 60s.

To date 86% of schools have prepared and implemented travel plans, and all children are encouraged to travel to school using safe, sustainable methods.

The Local Transport Plan is a document which sets out how each local authority will deliver transport provision in its area. Constrained finances will be a key barrier to delivering our local transport plan in future as the coalition Government is likely to reduce funding for transport. To mitigate the financial position, other sources of funding need to be sought, for example from developer contributions or bidding for alternative sources of external funding.

Internally the council is reviewing its own travel policies that will act as a good start in changing travel behaviour. It has already developed an ongoing travel awareness campaign to promote walking, cycling (through interest free loans to purchase a bicycle), public transport season ticket loan and car sharing.

Improving broadband connectivity is one way of reducing the need to travel. Following the Digital Britain report (July 2009), intelligence, consultation and discussion with Government and industry on public / private investments in

telecoms infrastructure indicates that a strategic business case should be made to ensure that all communities and businesses have good access to goods, services and digital content on-line. To this end, a mapping project to identify the areas most in need of investment, and a high-level Digital Inclusion group have started. A Broadband Deployment Programme is required in order to ensure the county has next generation access into all but the very most isolated premises. To date a route-map for investment has been set out in draft form.

Where we want to get to and how

Minimise CO₂ emissions from transport by:

- Looking at ways to promote car clubs and alternative fuelled vehicles such as electric cars and hybrids.
- Promoting 'smarter driving' in partnership with the Energy Saving Trust to save fuel
- Promoting developments in highly accessible locations (some car-free) and opportunities to reduce car use such as car-pooling
- Increasing the amount of secure cycle storage at major shopping areas and transport hubs

The council needs to lead by example in trying to reduce emissions from its own fleet by:

- Trialling the use of alternative fuels for council vehicles
- Reducing mileage
- Improving cycle storage and installing changing facilities in all main council buildings to encourage running and cycling to work
- Identifying and securing sources of funding to implement sustainable procurement projects.

Work with schools to reduce emissions and congestion from the school run by:

- Introducing and promoting more "walking buses" for school children
- Working with schools to ensure that every one has a SMART travel plan

Improve communication infrastructure in rural parts of Wiltshire by:

- Ensuring that the Digital Inclusion group considers environmental and sustainability issues.
- Highlighting the environmental and sustainability benefits of extending the broadband network to all communities and businesses in the strategic business case for investment within the county to encourage the government and industry bodies to improve provision.

3.3 Water

Scientific evidence shows that global warming is likely to intensify the water cycle, reinforcing existing patterns of water scarcity and abundance. In the South West, we are set for wetter winters and drier summers, which will have significant implications for our water infrastructure.

Where we are now

The council already understands that water is a precious resource that must be managed sustainably. As such, we have undertaken detailed work to identify opportunities to sustainably manage water across the county. We have effective emergency planning procedures in place to ensure services continue if there are floods and we have started to quantify the consumption of all council services to prioritise savings from the most water intensive services.

A requirement of the Flood and Water Management Act is that Wiltshire Council prepares a Preliminary Flood Risk Assessment identifying areas at risk from surface and groundwater flooding. As an adjunct to this, the council will also be preparing flood hazard maps to highlight areas of risk from flooding and direct involvement in alleviation schemes. The council has already prepared a county-wide Strategic Flood Risk Assessment and this is being used as a tool to inform strategic and local planning decisions when allocating land for development or determining applications. Further detailed work will need to be undertaken to support decision making and used to develop sustainable mitigation and water management schemes.

Where we want to get to and how

Reduce the amount of water we use by:

- Supporting Wessex Water in their promotion of water saving equipment
- Raising environmental standards, eg by incorporating water saving equipment in new building developments and renovation work
- Installing water meters on council properties
- Encouraging the installation of water meters in homes and businesses

Establish a Flood Risk Management Group that:

- Agrees, communicates and monitors the Wiltshire flood and drainage strategy
- Oversees readiness for a flood emergency response
- Identifies flood risks, proposing how they can be mitigated

Improve resilience to flooding in vulnerable areas by:

- Working in partnership with the Environment Agency to enhance the capability of the flood warden network and flood working groups
- Promoting self help within the community

- Ensuring new developments address flood mitigation appropriately, eg by including sustainable urban drainage systems
- Linking information received from parish and town councils and highways engineer records to map flood affected areas
- Using porous hard surfaces to aid natural drainage and alleviate urban flash flooding
- Mapping water usage and drainage so as to better understand how to deal with flood and drought.

3.4 Purchasing and procurement

Where we are now

The Council has recently adopted a "Fairly Traded Products" policy that aims to ensure suppliers receive a fair price for their goods and that the local environment is managed in a sustainable way.

To ensure sustainability issues are considered during the procurement of goods and services, a project team has been established to provide service managers with technical advice.

The council requires companies who successfully win tenders with the authority for goods or services that could impact on the environment to operate an environmental management system. We also require contractors to report annually on their CO₂ emissions from delivering services on our behalf.

Financial efficiencies obtained through procurement will be a key way for the authority to reduce expenditure in the coming years. Work to achieve these savings should include sustainable procurement measures, looking at the whole life cycle costs.

Where we want to get to and how

The Council's sustainable procurement project team will use Defra's flexible framework matrix to develop improvement targets.

Promote the use of local products and materials through:

- A range of activity to support Wiltshire's food and drink sector, as set out in the council's Economic Development Strategy
- Exploring with the Local Economic Partnerships ways in which the capabilities of local businesses can be promoted to encourage local purchasing
- Working with parish and town councils to encourage the use of allotments for food production
- Working with the MOD on developing sustainable food chains for the public sector
- Promoting the Buy Wiltshire scheme that aims to increase the opportunity for local companies to tender for council contracts.

The council wants its contractors and suppliers to take sustainability seriously and will do this by:

- Requiring sub-contractors and suppliers to adhere to key sustainable development principles
- Understanding the full life cycle costs of products and services

3.5 Biodiversity and natural environment

Wiltshire is rich in wildlife and has many internationally important sites, priority habitats and key populations of rare and endangered species. It is acknowledged that climate change poses a serious threat to our natural environment, working cumulatively with existing pressures such as habitat fragmentation, spread of invasive species, land use change and pollution.

An example of the threats posed by hotter drier summers in Wiltshire will be serious impacts on key watercourses and waterways within Wiltshire such as the internationally designated River Avon, and the canal network which currently provides significant economic and recreational benefits for Wiltshire communities.

There is a vital need to make Wiltshire's natural environment more resilient in order to combat the threats that climate change poses by protecting and enhancing ecosystem functions, enhancing biodiversity, creating wildlife corridors to reduce habitat fragmentation, and enabling Wiltshire's communities to become involved in local nature conservation activity.

The UK's natural environment and its networks of green infrastructure are vital in the fight against climate change. Vegetation, particularly trees, will become increasingly important as climate change progresses, converting CO₂ to oxygen and having the potential to replace some of our fossil fuel consumption as a source of energy (burning wood from fast growing tree species is classed as a carbon neutral source of energy).

Well planned green infrastructure can provide climate change mitigation and adaptation by:

- Reducing carbon emissions by encouraging more people to travel by foot or bicycle more frequently (provision of footpaths and cycle ways);
- Reducing heat island effect and heat stress during the summer months by providing direct shade and cooling, particularly from trees;
- Helping to alleviate flood surge events;
- Providing additional habitat for key species;
- Providing ecological connectivity.

An increase in the number and total area of high quality green spaces in and around urban areas, an increase in the number of street trees, and the expansion of woodland in Wiltshire could, therefore, significantly contribute to efforts to adapt to climate change.

Where we are now

The Wiltshire green infrastructure strategy, currently in preparation, and an important component of Wiltshire's emerging development plan (see section 3.7), will provide a long-term vision and strategic framework for the delivery of a planned, multifunctional network of green infrastructure across Wiltshire.

The Wiltshire Biodiversity Action Plan sets out a strategic framework for the maintenance and enhancement of Wiltshire's key habitats and species. We need to improve our understanding of the ecology of Wiltshire, due to a fragmented biological record and an incomplete coverage of habitat survey.

The Wiltshire Landscape Character Assessments provide a useful description of Wiltshire's landscape and an indication of its sensitivities and vulnerabilities to change.

We need to improve our understanding of the specific effects that changing climatic conditions and more extreme weather events will have on Wiltshire's natural environment and the pressures that habitats, species and landscape character will face.

Where we want to get to and how

Increase our understanding of the likely impacts of predicted climate change on Wiltshire's natural environment by undertaking work on:

- Biodiversity vulnerability;
- Landscape vulnerability.

Increase our environmental intelligence, by:

- Completing green infrastructure asset and opportunities auditing and mapping as part of the preparation of the Green Infrastructure Strategy;
- Establishing baseline environmental data and the completion of an annual report on the State of Wiltshire's Environment.

Help to mitigate and adapt to climate change through the preparation and implementation of a:

- Wiltshire Green Infrastructure Strategy
- Biodiversity adaptation strategy (to cover parts not addressed through Green Infrastructure Strategy);
- Wiltshire-wide Landscape strategy;
- Invasive species strategy.

3.6 Energy

In 2009 approximately three quarters of the UK's energy needs were met from fossil fuels (coal, oil, gas) which emit high levels of CO_2 , a fifth from medium CO_2 emitting nuclear power, and only 3% from low and zero carbon sustainable sources. This is unsustainable, not only due to high CO_2 emissions but also because fossil fuels are being depleted and therefore increasing in price.

Since 2004, the UK's domestic energy production has not been able to keep up with demand and it continues to be a net importer of fuel. The security of the UK's energy supply is therefore vulnerable to geopolitical issues beyond its borders. Further if we continue to use energy produced by fossil fuels at the present rate, we will reach a point where our demand for oil will outstrip supply. Once this point is reached the price of oil will escalate and become increasingly volatile. As such we must find new ways at a local level to reduce our consumption and look for alternative sources to prevent a future energy crisis and reduce carbon emissions.

Where we are now

Wiltshire

In 2007, Wiltshire used approximately 14,419 Gigawatt hours (GWh) of energy. This represents approximately 11% of the South West's total energy consumption and 0.6% of the UK's energy consumption.

Around 37% of the energy in Wiltshire was consumed by the industrial and commercial sector while the domestic sector consumed 28% and the transport sector 35% (see Figure 3.6).

Various actions have been undertaken by the council to promote domestic energy efficiency across the county which includes loft and wall insulation schemes and the provision of energy cost monitors in the county libraries.

The council also subsidises public transport routes (see section 3.2).

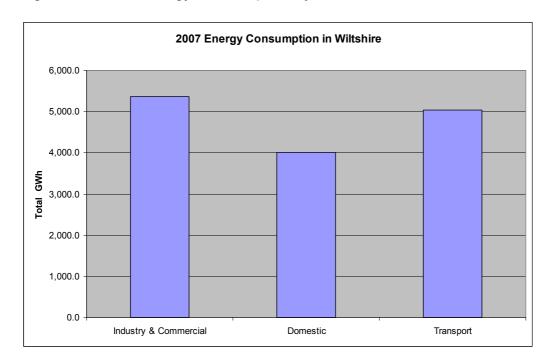


Figure 3.6: 2007 Energy Consumption by sector in Wiltshire

Wiltshire has one of the lowest installed renewable energy capacities in the South West Region. In 2010, Wiltshire had just 10.4 MW of installed renewable electricity and 2.3 MW of installed renewable heat. Most of the renewable electricity potential comes from the utilisation of landfill gas while most of the heat comes from biomass.

It is difficult to assess how much energy these renewable sources generate as a proportion of Wiltshire's total consumption due to the variability of the different systems and weather-related performance factors (wind or sun). However, if it is assumed that the installed renewable systems in Wiltshire operate at 100% capacity for half of the year they would generate just 0.3% of Wiltshire's energy needs (using 2007 data). This is compared to the national target of 15% of energy to come from renewable sources by 2020 (see section 1.5).

The council recently commissioned a study to identify the potential for a range of renewable energy technologies in Wiltshire. This assessment suggests that once all landscape and physical constraints are taken into account, 29% of Wiltshire's energy needs could be met by taking advantage of all of the wind, hydro electric, biomass and solar opportunities in the county.

The Council

In delivering its services and through its day to day operations, Wiltshire Council consumes a large amount of energy – for example, through heating and energy use in buildings, through transport, and street lighting – and as a result is responsible for a large quantity of carbon emissions. In 2009/10 the carbon emissions from Wiltshire Council operations were 66,137 tonnes of CO_2 associated with an annual expenditure on energy and transport of £15m

million. Overall, Wiltshire council contributes just over 1.2% of the carbon emissions in the county¹.

The council has improved the energy efficiency of its own housing stock which it operates in the south of the county. The energy efficiency of these homes is assessed using the Standard Assessment Procedure (SAP); the council is currently in the second quartile of local authorities nationally for SAP ratings, and aims to be in the top quartile by March 2012. Council housing has already been double glazed and fitted with loft insulation wherever appropriate. Future improvements will now concentrate on the scope for using renewable energy such as solar panels or heat pumps.

Where we want to get to and how

Action to tackle carbon emissions, whether Wiltshire council's or the county's as a whole, will be centred on three common actions:

- 1. Behaviour change
- 2. Energy efficiency
- 3. Renewable energy

Wiltshire

Within the council's corporate plan there is a target to pilot energy efficiency and renewable energy projects by 2014 in each of our community areas.

To ensure that the target is met, a Low Carbon Transition Plan for Wiltshire will be produced as one of the action plans to deliver this strategy (see section 1.2).

The Low Carbon Transition Plan will focus on:

- Carbon reduction scenarios: A greater understanding of the county's carbon footprint and the sources of emissions is needed. Once a baseline is established, carbon reduction scenarios and a carbon budget for the county can be generated. The carbon budget and carbon reduction scenarios will be identified through the use of modeling software called Vantage Point.
- Influencing Policy: Many of the plans and policies (such as planning and transport) that are developed by the council and other public sector partners (eg MOD) have a direct influence on people's lives and carbon emissions. Ensuring that these policies are fit to deliver the low carbon transition in Wiltshire will be essential. The plan will provide an evidence-based approach to ensure policy adequately takes account of carbon reduction and energy and does not hinder the low carbon transition.
- Engagement with Community Groups: There are a number of community-based action groups in Wiltshire that have an interest in

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¹ Based on estimates of council emissions in 2007 as the council was not in existence at this time.

climate change. These groups range in size from a few individuals to larger groups that cover entire community areas and are best placed to take local action at the grass roots level (see section 10).

• The Low Carbon Economy: The low carbon transition can benefit the economy in Wiltshire in two ways. The council will support businesses in Wiltshire to improve their energy efficiency and promote the uptake of renewable energy. The council will also promote 'green jobs' by establishing a network of installers and suppliers of energy efficiency and renewable energy technology within the county and looking at opportunities for the green knowledge economy in Wiltshire. The council and its partners will work with businesses through the Wiltshire 100 programme to identify opportunities for businesses to improve their energy efficiency and act as ambassadors for the rest of the business community.

The Council

The council's Carbon Management Plan constitutes the action plan setting out how the council is going to reduce its carbon emissions. The Plan sets out the following vision:

Wiltshire Council will embed carbon management into the delivery of all services to reduce our carbon emissions and set an example to the business sector and communities of Wiltshire. We will use the experience gained to influence and support others to reduce their carbon emissions, thereby mitigating the effects of climate change.

Our corporate plan 2010-14 contains the following target:
Wiltshire Council will cut CO₂ emissions by 20% of our 2008/09
baseline by the end of 2013/14. (This equates to 11,823 t CO₂).

Delivery of these targets will follow a hierarchical approach:

- 1) Raising awareness and encouraging behaviour change to ensure that wasteful practices are stopped.
- 2) Implementing energy efficiency measures this will range from installing energy efficiency technology in buildings and ICT, to implementing policies that will result in greater energy efficiency. For example, there are several building portfolio transformation work programmes underway currently that have the potential to deliver considerable energy savings:
 - Office and workplace transformation
 - Service Operational Campuses
 - Leisure review
 - Libraries review
 - Low carbon standards for new council buildings
 - Depot review

3) Investing in alternatives to fossil fuel. As well as reducing the council's carbon emissions this offers the opportunity to generate revenue for the authority. Currently there is work underway to identify opportunities for some significant pilot projects in this area.

3.7 Planning

The planning system offers significant opportunities to help build sustainable communities that are resilient to the anticipated consequences of climate change and to reduce greenhouse gas emissions. The council's planning powers include setting policy through spatial planning (how, where and when buildings are built or reused) and through the development management process (assessing planning applications).

Where we are now

Work is under way to prepare a new development plan for Wiltshire, to be referred to as the Wiltshire Core Strategy. This document will set out a strategic policy framework to guide growth in Wiltshire up to 2026. Detailed evidence is being prepared to ensure new policies help to deliver sustainable and resilient communities and by maximising opportunities to deliver low-carbon and decentralised energy.

In October 2009, a consultation document 'Wiltshire 2026 – Planning for Wiltshire's Future' was published. This document identified climate change as a key priority for policy. The first of ten draft strategic objectives referred to climate change and is summarised below:

"A sustainable pattern of development, including the self-containment of settlements and a reduction in the need to travel, will have contributed towards meeting the council's climate change obligations".

Key Outcomes include:

- The supply of energy and heat from renewable sources will have met national and regional targets
- New development will have incorporated sustainable building practices and where possible will have contributed to improving the existing building stock
- High energy efficiency will have been incorporated into new buildings and development
- New developments will have incorporated appropriate adaptation and mitigation for climate change
- New development will support sustainable waste management
- The sourcing and use of local food will have helped to reduce Wiltshire's ecological footprint

Other planning policy documents are also in preparation and these include a draft Waste Site Allocations development plan. This document identifies specific sites in the County and aims to reduce the distances waste needs to be transported. Opportunities for waste to contribute towards renewable energy targets are also being explored.

Where we want to get to and how

When meeting future housing and employment needs within the county, ensure that the carbon footprint is minimised by:

- Maximising the opportunities for delivering decentralised and low carbon energy on large scale development.
- Developing positive policies that support large scale renewable energy installations where appropriate, which will be informed by the current exercise to map potential opportunities for renewable technologies within Wiltshire (see section 3.6).
- Ensuring that new developments achieve carbon neutral standards by 2016 (for residential property) and by 2019 (for commercial buildings).
- Using the Building for Life checklist as a tool for designing sustainable settlements.

Maximise the positive impacts of new developments on local jobs, shops, biodiversity and the transport network by:

- Providing a mixed range of building uses on sites, such as housing, places to work and shops.
- Write planning policies that strongly promote a wide range of sustainability issues
- Define and implement a set of biodiversity criteria that must be met by all new developments
- Requiring new developments to be well located and highly accessible, with good transport infrastructure. This could, for example, include charging points for alternative fuelled vehicles.

Promote innovative solutions to generating green energy in Wiltshire by:

- Working with the Centre for Sustainable Energy to pilot a resource pack for community groups on community-based renewable energy
- Using the Salisbury, Trowbridge and Chippenham Vision programmes as opportunities to identify urban renewable and low carbon solutions

Influencing the design of new developments so that they incorporate climate change adaptation principles making communities more sustainable by:

- Encouraging the use of passive design to reduce energy demand or soft landscaping to provide shading during the summer
- Retaining existing green spaces and encouraging provision within new developments. Vegetation and biodiversity can help address climate change by providing natural shading and cooling.

3.8 Communicating environmental issues

More than ever before people are concerned for the future of the planet and the well-being of people in all countries. The effects of climate change are motivating people to change their lifestyles and there is pressure on all tiers of government to respond and facilitate a shift in awareness. Wiltshire Council understands that it cannot fix things for people - we can only try to fix things with people. The council can facilitate and sometimes provide the means for action but residents must help their local environment by supporting new initiatives, championing 'green-activity' within their communities, and ensuring they reduce their impact by adapting their lifestyles to use less energy.

Where we are now

Communicating climate change issues is vital. The council has developed a strong relationship with the local press, which understands these issues and is committed to running regular 'green' stories and competitions. It is important for the private sector to play its part, and we work with partners such as the chamber of commerce to help companies 'green' their businesses.

Internally, there is already a strong message promoting sustainability at work and recycling facilities are provided throughout council offices. The council signed the Nottingham Declaration in 2009, underlining our commitment to tackling climate change.

Getting our own house in order: Green Champions

Climate change champions are being identified within teams across the council and given a day-to-day responsibility to promote sustainability in the areas in which they work. Commitments include being a link to disseminate climate change initiatives, sharing best practice with other teams, attending a forum meeting every 6 months and importantly implementing practical climate change initiatives such as encouraging people to switch off lights/computer monitors and ensuring recycling takes place.

Using Wiltshire's Area Boards to engage the community on Climate Change issues

Wiltshire Council has divided the county into community areas with a total of 18 Area Boards serving each area. The role of the Area Board is to act as a local arm of the council, a direct link so local people know what happens in their community area and have influence over decisions and can hold decision makers accountable.

Within each area the Area Board consists of local unitary elected councillors, elected representatives from each town and parish council and a member of the council's cabinet.

By using the Area Boards we can inform and educate the local community on climate change issues, promote positive community action and provide the opportunity to influence change towards a more resilient and greener future.

Making Wiltshire businesses greener

The existing economic partnerships, chambers of commerce and the Wiltshire Strategic Economic Partnership are well connected to the Wiltshire business community. The Wiltshire Environmental Business Network (WEBN) is a key organisation which currently promotes environmental issues to the business community.

Engaging with community groups

Many Wiltshire community areas have well established and active environmental groups, such as Climate Friendly Bradford on Avon, Chippenham And Villages Environmentalists, Transition Community Corsham. These groups can work with residents to undertake practical actions and promote environmental issues throughout the county and play an active role in helping us fight climate change. The principle mechanism for directly supporting, assisting and facilitating community engagement on environmental issues is the Wiltshire World Changers Network - a knowledge and information-sharing resource supported by the council. Membership is made up of community groups and interested individuals.

Where we want to get to and how

Within the Council's corporate plan there is a target to pilot energy efficiency and renewable energy projects by 2014 in each of our community areas. We will achieve this, and communicate climate change issues by:

Improving public understanding of climate change and what they can do to help by:

- Working closely with each Area Board to provide general and local information on climate change issues, consequences and practical action.
- Increasing the membership and impact of the Wiltshire World Changers Network to widen the reach of climate change information, resources and practical advice.
- Supporting existing environmental groups within Wiltshire and encouraging new groups to establish in each of the community areas.
- Developing the Wiltshire World Changers Network website to include networking opportunities to bring together groups and interested individuals together to inspire and swap ideas.
- Working closely with the local and national newspapers to convey the climate change message.
- Developing the climate change section on the council's website (www.wiltshire.gov.uk/climatechange)
- Continuing to engage with local groups to establish collaborative projects.
- Continuing to work with partner agencies through the Wiltshire World Changers Network to develop and promote support, training and funding opportunities to increase the capacity of community groups.

The council needs to show leadership by getting its own house in order and communicating this through:

- Area Boards owning the issues outlined in this strategy for their local area and leading on taking positive action, including screening local funding applications against their ability to deliver against this agenda.
- An annual update report on climate change strategy actions and progress against CO₂ reduction targets.
- Incorporating sustainability actions into departmental and planning processes.
- Ensuring that appropriate council staff have the ability to enforce sustainability measures across the organisation.
- Working on projects with partners in other counties and parts of the European Union and try to create replicable ideas and projects.

The council needs to engage more effectively with children and inform their choices as they grow up by:

- Expanding the Eco-Schools programme and other environmental education programmes.
- Supporting the Wiltshire Assembly of Youth with their ENGUAGE campaign.

4. How we will deliver, monitor and review this strategy

This strategy is ambitious, comprehensive and complex in the range of services affected by and responsible for its delivery. It is therefore important to set out how this strategy will be delivered, monitored and reviewed from the outset. Climate change is a cross-cutting issue: it is not the responsibility of a single team or section of the council to implement the council's strategy.

This section of the strategy recognises the need to ensure that accountability, responsibility and ownership are embedded throughout the council for the successful development and delivery of the climate change strategy.

The council's Climate Change Board will have primary accountability for monitoring and reviewing this strategy. The Board is chaired by the Cabinet member for the Environment. Other stakeholders will also be involved in monitoring and review through receiving an **annual progress report** on the action plans, namely:

- The Environment Select Committee of the council (papers published online)
- The Wiltshire Environmental Alliance (thematic partnership of the Wiltshire Assembly, our local strategic partnership)

The council's Climate Change Team will be responsible for coordinating delivery of the action plans, with assistance from the relevant parts of the council and other stakeholders. The table below identifies the lead service areas of the council responsible for delivering relevant parts of the strategy as well as external partners where appropriate.

NB this table still needs to be consulted on and responsibilities allocated in agreement with lead delivery partners

Strategy	Delivered through:			
Objective	Council Function	External partners		
Waste	Waste Management ServicesStrategic Property Services	Chambers of CommerceWiltshire Wildlife Trust		
Transport	 Transport Planning Passenger Transport Transport Development Services Fleet Management Highways 	Council contractors, as appropriate		
Water	 Emergency Planning Flood Risk Management Group Strategic Property 	Environment AgencyWessex Water		

Strategy	Delivered through:			
Objective	Council Function	External partners		
	Services • Spatial Planning			
Purchasing and Procurement	 Corporate Procurement Unit All sections of the council, through following corporate procurement policy Economic Development 	 Chambers of Commerce Wiltshire 100 businesses Local Economic Partnerships 		
Biodiversity and natural environment	 Spatial Planning Strategic Property Services (especially Rural Estates) Amenity & Countryside Group 	 Countryside and Land-based Group Landowners Owners of Wiltshire's nature reserves (Wiltshire Wildlife Trust, Natural England, RSPB) 		
Energy	 Strategic Property Services Workplace Transformation Programme Climate Change Team Schools Waste Management Service Streetlighting Housing 	Public Service Board		
Planning	Spatial PlanningDevelopment Control	Housing AssociationsDevelopers		
Communicating environmental issues	 Relevant sections, together with Corporate Communications Team Area Boards 	 Wiltshire World Changers Network Wiltshire Assembly of Youth Schools 		

Review

Rarely does a day go by without a new initiative or technology to combat climate change becoming available. Consequently, this document must be a living document in order react and respond accordingly. Sections of this strategy will be reviewed as appropriate, and the entire strategy will be reviewed by 2013 at the latest.

The success of this strategy will be measured in the short term (2-3 years) by the degree to which it has influenced other policies, strategies and work programmes taken forward by the council and other partners. Success in the longer term will be measured by whether the council and Wiltshire as a whole is moving in the right direction in terms of reducing its carbon footprint and adapting to climate change.

5. References

(these will be referenced as end notes in the final version of the strategy)

Wiltshire Community Plan

http://www.wiltshire.gov.uk/communityandliving/communityplan.htm http://www.wiltshire.gov.uk/consultation-wiltshire-community-plan.pdf

Nottingham Declaration on Climate Change

http://www.energysavingtrust.org.uk/nottingham/Nottingham-Declaration/The-Declaration/About-the-Declaration

Climate Change Act 2008

http://www.legislation.gov.uk/ukpga/2008/27/contents

The UK Low Carbon Transition Plan

http://www.decc.gov.uk/publications/basket.aspx?FilePath=White+Papers%5cUK+Low+Carbon+Transition+Plan+WP09%5c1_20090724153238_e_%40%40_lowcarbontransitionplan.pdf &filetype=4

Household Energy Management Strategy

http://www.decc.gov.uk/publications/basket.aspx?FilePath=What+we+do%5cSupporting+consumers%5cHousehold+Energy+Management%5c1_20100331101157_e_%40%40_warmhomesgreenerhomeshemstrategy.pdf&filetype=4&minwidth=true

The UK Renewable Energy Strategy

http://www.decc.gov.uk/publications/basket.aspx?FilePath=What+we+do%5cUK+energy+supply%5cEnergy+mix%5cRenewable+energy%5cRenewable+Energy+Strategy%5c1_2009071_7120647_e_%40%40_TheUKRenewableEnergyStrategy2009.pdf&filetype=4&minwidth=true

National Building Regulations 2000

http://www.legislation.gov.uk/uksi/2000/2531/contents/made

Stern Report 2006

http://www.hm-treasury.gov.uk/stern_review_report.htm

European Emissions Trading Scheme (ETS)

http://ec.europa.eu/environment/climat/emission/index_en.htm

Local Climate Impacts Profile for Wiltshire

To be published on council website soon.

Climate Change Adaptation Plan Level 1

http://www.wiltshire.gov.uk/wiltshire_climate_change_adaptation_plan_-level 1 report_april_2010.pdf

Wiltshire Municipal Waste Strategy

http://www.recycleforwiltshire.com/documents/Strategy2006.pdf

Wiltshire and Swindon Waste Core Strategy (2009)

http://www.wiltshire.gov.uk/waste core strategy july 2009.pdf

Local Transport Plan (LTP2)

 $\frac{http://www.wiltshire.gov.uk/parkingtransportandstreets/roadandtransportplans/local$

Flood and Water Management Act

https://opsi.gov.uk/acts/acts2010/pdf/ukpga_20100029_en.pdf

Wiltshire Strategic Flood Risk Assessment

http://www.wiltshire.gov.uk/environmentandplanning/planninganddevelopment/planningpolicy/planningpolicyevidencebase/strategicfloodriskassessment.htm

Fairly Traded Products policy

http://cms.wiltshire.gov.uk/Data/Council/20090915/Agenda/\$item%20no.%2025%20%20notices%20of%20motions.doc.pdf

Wiltshire Green Infrastructure Strategy

http://www.wiltshire.gov.uk/leisureandculture/parksandopenspaces/greenspaces.htm

Wiltshire's Development Plan

http://www.wiltshire.gov.uk/environmentandplanning/planninganddevelopment/planningpolicy/localplans.htm

Wiltshire Biodiversity Action Plan 2008

http://biodiversitywiltshire.org.uk/images/2009/10/WiltshireBAP200.pdf

Wiltshire Landscape Character Assessments

http://www.wiltshire.gov.uk/environmentandplanning/planninganddevelopment/planningpolicy/landscapeconservation/wiltshireslandscape.htm

Standard Assessment Procedure (SAP)

http://projects.bre.co.uk/sap2005/

Carbon Management Plan

In preparation by council.

Wiltshire Council Corporate Plan 2010 - 2014

http://www.wiltshire.gov.uk/corporate-plan-2010-2014-wiltshire.pdf

Wiltshire 2026 Planning for Wiltshire's Future

http://www.wiltshire.gov.uk/wiltshire 2026 - planning for wiltshire s future october 2009.pdf

UK Climate Change Programme

http://www.decc.gov.uk/en/content/cms/what_we_do/change_energy/tackling_clima/program_me/programme.aspx

Kyoto Protocol

http://unfccc.int/kyoto_protocol/items/2830.php

Digital Britain report 2009

http://www.bis.gov.uk/assets/biscore/corporate/docs/d/digital-britain-final-report.pdf

Economic Development Strategy

In preparation by council.

Appendix 1: Environmental Policy

Wiltshire Council is a unitary authority located in the South West of England and is responsible for many activities which have an environmental impact on the land, water, air, wildlife and residents of the County. The authority is responsible for a wide range of activities including spatial planning, waste management, highways, social care and policies on mineral extraction. In addition, Wiltshire Council is a landowner and a major purchaser of local goods and services.

The Council seeks to mitigate the environmental impacts associated with its services, ensuring that, as a minimum, it conforms to all applicable laws, regulations, codes of practice and corporate standards.

The authority is also committed to reducing its carbon footprint, preparing residents for the unavoidable consequences of climate change, pollution prevention and demonstrating continuous improvement. To achieve this, it will focus on the key environmental objectives outlined below.

- **1. Waste –**Promote and implement sustainable management practices for waste generated by residents and by the Council.
- 2. **Transport** –Reduce the impact of fleet and staff travel on the environment by developing and promoting a range of sustainable transport options and flexible working practices.
- 3. **Water** Ensure that effective monitoring regimes and sustainable practices are put in place to manage water usage across all council sites whilst simultaneously striving to reduce consumption.
- 4. **Purchasing and procurement** Ensure that the principles of sustainable development are integrated into the purchasing and procurement of goods and services
- 5. **Biodiversity and natural environment –** Work with key stakeholders on countryside, ecological and environmental issues to support biodiversity and the natural environment.
- 6. **Energy –** Work to reduce the energy consumption and carbon emissions associated with Council services and to expand renewable energy capacity in Wiltshire.
- 7. **Spatial & transport planning –** Ensure that the planning system helps deliver a reduction in average carbon emissions per resident, whilst establishing communities that are resilient to the future impacts of climate change.
- 8. **Communicating environmental issues –** Raise awareness of environmental issues amongst staff, elected members and the public through the provision of information and training.

Performance against these will be monitored through internal audit, Corporate & Service Delivery Plans, National Indicator datasets and the Use of Resources assessment.

In order to achieve these environmental objectives, the Council will operate an externally audited environmental management system that will:

- Set targets and objectives in order to minimise potentially negative environmental effects, whilst increasing the positive effects of the Council's activities.
- Produce a statement of the Council's environmental performance at regular intervals, but at least annually.

Appendix 2: The Nottingham Declaration on Climate Change

We acknowledge that

- Evidence shows that climate change is occurring.
- Climate change will continue to have far reaching effects on the UK's people and places, economy, society and environment.

We welcome the

- Social, economic and environmental benefits which come from combating climate change.
- Emissions targets agreed by central government and the programme fro delivering change, as set out in the UK Climate Change Programme.
- Opportunity for local government to lead the response at a local level, encouraging and helping local residents, local businesses and other organisation - to reduce their energy costs, to reduce congestion, to adapt to the impacts of climate change, to improve the local environment and to deal with fuel poverty in our communities.
- Endorsement Of this declaration by central government.

We commit our Council from this date 5 May 2009 to

- Work with central government to contribute, at a local level, to the delivery of the UK Climate Change Programme, the Kyoto Protocol and the target for carbon dioxide reduction by 2010.
- Participate in local and regional networks for support.
- Within the next two years develop plans with our partners and local communities to progressively address the causes and the impacts of climate change, according to our local priorities, securing maximum benefit for our communities.
- Publicly declare, within appropriate plans and strategies, the commitment to achieve a significant reduction or greenhouse gas emissions from our own authority's operations, especially energy sourcing and use, travel and transport, waste production and disposal wand the purchasing of goods and services.
- Assess the risk associated with climate change and the implications for our services and our communities of climate change impacts and adapt accordingly.
- Encourage all sectors in our local community to take the opportunity to adapt to the impacts of climate change, to reduce their own greenhouse gas emissions and to make public their commitment to action.
- Monitor the progress of our plans against the actions needed and publish the result

<u>Wiltshire Council</u> acknowledges the increasing impact that climate change will have on our community during the 21st century and commits to tackling the causes and effects of a changing climate on our county.

Agenda Item 7

Wiltshire Council Agenda Item

Environment Select Committee 7 September 2010

Real Time Passenger Information Progress

Executive Summary

This report:

- Reports on the progress of work to improve the performance of the Real Time Passenger Information (RTPI) system.
- Provides more information about the background of RTPI as requested in the Select Committee meeting of 6 July 2010.
- Explains the success of installation of GPRS on a key bus route Salisbury to Warminster - and clarifies queries raised at the last meeting about the reported performance data that compared the performance of GPRS to the existing radio communication method (PMR). It shows that GPRS performs significantly better (detailed GPRS performance information is in **Appendix A**).
- Lists the other options available and compares the costs of the different options (cost information listed in **Appendix B**).
- Concludes that migrating to GPRS is the preferred option on both performance and financial grounds.

Proposal

That the Committee:

Notes the performance and financial reasons for converting the RTPI system from its existing communications platform of Private Mobile Radio to GPRS technology.

Reason for Proposal

The monitoring of the RTPI trial route (Salisbury to Warminster) where GPRS has been installed has shown conclusively that this solution is far more effective than the old radio system (see **Appendix A**). It is capable of providing reliable real time information to the public and does not suffer from the localised radio problems that cause predictive problems at some signs. It offers a cost saving of £124,300 over a five year period and £273,700 over the remaining nine year life of the contract (see **Appendix B** for cost information).

MARK BODEN

CM09202/F

Corporate Director

Real Time Passenger Information Progress

Purpose of Report

1. To update the Committee on the progress made in improving the performance of the Real Time Passenger Information System and to provide further information for consideration as requested at the Committee meeting held on 6 July 2010.

RTPI Background

2. RTPI is a partnership between Wiltshire Council, the Wilts & Dorset Bus Company, First Somerset and Avon and Bodmans Coaches. It forms an integral part of the Intelligent Transport System in the Salisbury area that was designed to meet the following objectives:

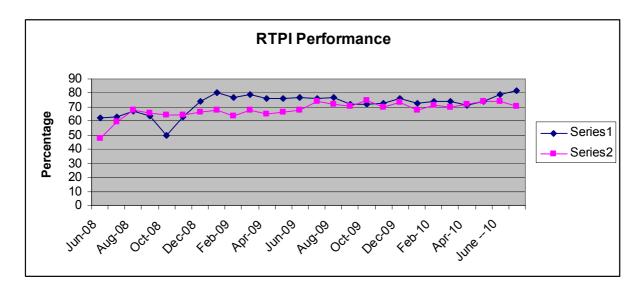
Priority 1:	Improving access to city centre facilities by public transport.
Priority 2:	Reduce safety hazard to pedestrian and cyclists.
Priority 3:	Improve access to and circulation in city centre car parks, particularly for short stay users.
Priority 4:	Manage and reduce traffic movement within the city centre without impeding access to essential services.
Priority 5:	Ease traffic congestion on important radial routes.
Priority 6:	Improve access to travel information to all road users.

- 3. The RTPI system was originally conceived as a joint project between the former district and county councils covering the Salisbury area. By the time it came into use in 2005, it had been extended to cover key routes in other parts of Wiltshire, using a Government grant that was made available at the time for the purpose of expanding intelligent transport schemes. The capital cost of the system was approximately £2million. At the time of its installation, Real Time systems for buses were new and the Wiltshire system was ambitious, the largest of its kind in a rural environment.
- 4. The system was supplied and is maintained by Trapeze Group (UK) Ltd and the RTPI contract runs until 2020. There are also contracts with the Wilts & Dorset and First bus companies and a summary of the contract obligations is set out in **Appendix C**.
- 5. After installation it became clear that the system was under-performing. The Overview and Scrutiny Management Committee reported on 29 March 2007 and noted the following points about RTPI:

- That some developmental problems have been experienced, meaning that the system is not delivering the full range of information that could be available to the general public.
- That the system is complex and sophisticated and relies on interdependencies between buses, signs, the command and control system and data about planned workings. Because of this, the underlying cause of faults can be difficult to ascertain and remedy.
- That there was a need for council and operator staffing resources to (a) upload timetable changes and (b) carry out regular supervision of the system.
- That formalised arrangements for monitoring the system's operation should be put in place and that two new performance indicators should be adopted, dealing with the functioning of signs and the recognition of buses respectively. These represent the two main areas affecting the delivery of information by the system to the public.
- That information about the system has not been widely publicised because of the developmental problems.
- The Committee concluded that the system offers an opportunity to increase public confidence in bus services, but that the existing problems need to be resolved to achieve this objective.

RTPI Improvement Project

- 6. An RTPI System Manager was appointed and a project was started in 2008 to identify the cause of the system problems and deliver improvements. Following detailed investigative work the main weakness was found to be the radio communication element of RTPI: it was not performing at a level that enabled real time to be providing reliable information to the public, particularly in the areas outside Salisbury.
- 7. Major radio remedial work (at the supplier's expense) was undertaken and performance of the system improved to some extent but areas of non-existent or patchy radio coverage were too extensive to enable reliable real time information to be displayed. These radio blackspots result in vehicles being poorly tracked and lead to incorrect predictions of delays at the bus stop displays and lack of real time information in general.
- 8. Performance of RTPI has been measured against two performance indicators (PIs) that between them represent the main areas affecting the delivery of information by the system to the public. The performance increased significantly in 2008, due to the commencement of the improvement project, but improvement has been only modest since then. No further major improvement is expected with the current radio technology.
- 9. In the chart below, Series 1 shows the improvement in ESD063 -% sign clears acknowledged and Series 2 shows the improvement in ESD064 -% active buses. Note that there are a number of technical and operational reasons why the figures for both targets would not normally be 100%, but targets of 85-90% could be achievable.



10. Information from other Real Time System users around the country suggested that PMR systems were generally under-performing. GPRS technology was emerging as a far more effective solution and the running costs of this technology were falling (GPRS was far more expensive than the existing radio system at the time of this contract award). In order to assess GPRS performance, a trial was set up on the route between Salisbury and Warminster that involved the Bodmans buses and a number of the display signs that had previously been out of radio signal range. The performance data is detailed in **Appendix A**.

Main Considerations for the Committee

- 11. GPRS works well and is a great deal more effective at tracking buses in real time than PMR radio, meaning that reliable information can be displayed at signs. Unless the system is converted to GPRS, performance is unlikely to improve without considerable financial investment in additional radio masts. GPRS has been shown to work in other parts of the country and the bus operating companies who are partners in this project are keen to go ahead with the conversion and benefit from the improvements. The conversion project could be completed within 4-5 months and performance improvement would be expected as this project progresses.
- 12. The Wiltshire system has already been set up to allow passengers to receive real time via mobile text messages. This has proved to be a popular service in other areas, for example in Poole where 25,000 real time information text messages were sent last year at a cost to the bus user of 25p each. The system can also allow buses priority at junctions, enabling services such as Park & Ride to travel in and out of Salisbury more quickly. These functions could be activated as soon as the system has been converted and the expected performance improvements have been realised.

Options Considered

13. <u>Business as usual</u> – Maintaining the system in its current configuration was rejected because performance will not improve significantly and costs are likely to be high due to (a) expected increases in the costs of radio at mast sites and (b) the need to convert the system to a different radio frequency, as required by Ofcom.

- 14. Continuing with the existing technology and improving the radio coverage by using additional mast sites. This option was rejected because it is prohibitively expensive.
- 15. Only converting the parts of the system that are in the poorest areas of radio coverage and creating a hybrid GPRS/PMR system. This was also rejected as being too costly the costs of the existing system apply, plus GPRS costs.
- 16. <u>Abandoning the system</u>. Also rejected on grounds of cost and the loss of a potentially valuable resource to the travelling public. It would result in very substantial financial costs to the Council as a result of its contractual obligations to the bus companies who are partners in the system.
- 17. <u>Seeking an alternative supplier</u>. This would result in contractual legal issues and is not favoured by the bus operating companies. Trapeze have indicated that they would consider taking legal action against the Council if this option was taken up.
- 18. <u>Complete conversion to GPRS.</u> This is the preferred option on performance grounds and also because it is the most cost effective solution. (See **Appendix B**).

Environmental Impact of the Proposal

19. Maintaining public confidence in the system is important in order to encourage people to make journeys by bus instead of car as envisaged in the Salisbury Transport Plan. Extended uses of the system, such as bus priority at junctions and real time delivered to mobile phones and the web, would be possible after performance improvements and these could lead to increases in bus usage.

Conclusion

20. The RTPI system should be migrated to GPRS because this technology has been shown to work more effectively than the current radio technology and now represents the best value for money.

MARK BODEN

Corporate Director

Report Author
Liz Douglas
Real Time Information Manager

The following unpublished documents have been relied on in the preparation of this Report:

Trapeze Group Report "Cost saving options for Salisbury"
Quotation for GPRS upgrade
Quotation for migration of Wiltshire Radio System as per Ofcom licence
Quotation for remote hosting

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GPRS Performance

The information below shows a **comparison of the percentage of time that buses could be tracked in real time** in June this year.

PMR Radio	PMR Radio	GPRS Radio
Wilts & Dorset Buses (main fleet, most routes)	First Buses (Warminster to Bath route)	Bodmans Buses (Salisbury to Warminster route)
53%	45%	83%

The percentage figures are derived by calculating the maximum number of tracking polls that could be received from all buses in the fleet over a 24 hour period and this is the usual method for comparison of what is normal operation for the fleet in question. However, this figure does **not** indicate that 17% of the polls were lost between Warminster and Salisbury as within the calculation one or more buses could be off road for repair or powered off over night, which is fine for comparing a fleets 'normal' percentage.

Figures for **working buses only** and those that show only operational buses cannot easily be calculated as it is not possible for us to know when a bus is going to be switched on or off. However, looking at the tracking data we have available, four of the GPRS trial buses were powered on all day on Tuesday 20 July and **returned 95 to 97 percent of the polls possible**, i.e. one every 30 seconds for 24 hours or 2880 polls.

Surrey County Council also operate a GPRS fleet that is maintained by Trapeze and their tracking data shows similar results, i.e. around 95 percent of all polls are being received for buses that are active (switched on) throughout a monitored 24 hour period.

So all operational buses in both Surrey and Wiltshire return 95 to 97 percent of all possible polls. The shortfall is due to buses swapping between cells just as a mobile phone does when moving and polls are lost during the re-registration. GPRS coverage in Wiltshire is very good (coverage maps are available on the web) but a bus will very occasionally travel through a small areas of no coverage. The GPRS system tries to establish a connection automatically to minimise outages and this typically takes one to three minutes, after which normal real time is re-established.

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Investment case

- 1. The real time system was commissioned in 2005.at a capital cost of approx £2 million funded by the Local Transport Plan and special Government grant. It is run in partnership with the Wilts & Dorset Bus Co. and First Bus Co. Wiltshire Council has contractual agreements with them that guarantee our financial support to the project until April 2020.
- The system provides information to bus passengers showing the expected time
 of arrival of buses. This gives passengers more confidence in the service and
 increased bus usage. Since 2005, the number of passengers on Wilts & Dorset
 buses has grown by 21% whereas on other buses across Wiltshire it has only
 grown by 5%.
- 3. There have been difficulties with the system due to poor signal strengths in some parts of the county. Performance has been improved but the barrier to further improvement is the radio communication system (Private Mobile Radio). Additionally the PMR system requires substantial investment because of a decision by OFCOM that we have to use a different radio frequency by 2012.
- 4. The contractual life of the system with bus companies and the supplier is 9 full years.
- 5. By replacing PMR with GPRS the system will be more reliable, annual costs will be lower and it will overcome the implications of the OFCOM decision. The annual cost savings are in radio mast rentals, mast operating costs and dedicated telephone lines. The annual cost of the maintenance contract is the same for both options so is excluded from the comparison. The bus operators support the conversion but will not contribute financially because all the cost savings accrue directly to the Council.
- 6. The investment of £127,400 gives a 5 year return;

	PMR	GPRS	Saving
5 years running costs	£339,900	£215,600	£124,300

7. Over the contractual life there will be a saving of £223,800;

	PMR	GPRS	Saving
9 years running costs	£611,800	£388,000	£223,800

8. Any decision after April 2020 will depend on the willingness of the supplier to continue to support the system or another supplier taking this on.

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Summary of the RTPI Contract and Variation Agreements

Please note that the following is not a legal interpretation of the contract documents.

- 1. The RTPI contract is between the Council and Trapeze Group. There are additional variation agreements between the Council and both the Wilts & Dorset Bus Co. (W&D) and First Somerset & Avon Ltd (First). All of these documents run from 12 April 2005 for 15 years.
- 2. The contract defines the maintenance payments and the fault reporting arrangements.
- 3. There is a rebate regime for non-performance of maintenance against reported faults that has to be specifically invoked and is only to be used in exceptional circumstances.
- 4. W&D made contributions towards the cost of the system and make annual payments to the Council from year 6 to year 15.
- 5. First made initial contributions to the cost of the system and will make an annual payment to the Council from year 6 to year 14.
- 6. All the RTPI equipment belongs to the Council.
- 7. W&D and First will keep the on-bus and depot equipment, use it in the proper manner, look after it and insure it.
- 8. The Council will keep the system properly maintained and working.
- 9. The Council can terminate all the agreements by giving notice. However, If it does so there is a very large financial penalty as it must hand over all the RTPI equipment to the bus companies at no cost and pay all the outstanding maintenance charges up to the termination date of the agreement (2020). The maintenance charges alone would exceed £700,000, depending on the termination date and inflation factors.
- 10. There is no provision in the agreement for termination by W&D or First but if either company ceases trading or completely fails to carry out its obligations the Council can re-possess all the RTPI equipment.

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Agenda Item 8

Environment Select Committee Rolling Work Plan from September 2010

SUBJECTS	COMMITTEE/ TASK GROUP	PROJECT START DATE	NEXT DATE TO O & S COMMITTEE	SPECIFIC ISSUES FOR DISCUSSION	WHO REPORTS TO BE SUBMITTED TO	SUBMISSION DATE
Major Contracts (Standing)	Task Group		Ongoing	To provide an update where one is available.	e e e e e e e e e e e e e e e e e e e	
Neighbourhood & Planning Delivery Plan	Committee		November 2010	To receive an update on the content of the delivery plan.		
Review of Local Transport – Parking Plan	Committee		November 2010			
Road Safety	Committee		November 2010	To receive an update on road safety as raised through the CAA.		
Flood Risk Management	Committee		November 2010	To receive an update on progress following the amalgamation of TEL and EDPH.		
Passenger Transport	Committee		January 2011			

<u>Draft Cabinet Forward Work Plan</u> <u>September 2010 – December 2010</u>

Items that may be of interest to the Environment Select Committee

SUBJECTS	DATE TO CABINET	SPECIFIC ISSUES FOR DISCUSSION	RESPONSIBLE CABINET MEMBER	Officer Contact
Annual Report to Tenants	14 September 2010	To seek approval of the Annual Report.	Cllr John Brady	John Pearce
Wiltshire Air Quality Strategy	19 October 2010	To seek adoption of the Wiltshire Air Quality Strategy.	Cllr Keith Humphries	John Carter
South Wiltshire Core Strategy – Review of Housing and Employment Figures	19 October 2010	To discuss the Review of the South Wiltshire Core Strategy and refer the report/review to Full Council for possible approval.	Cllr John Brady	Alistair Cunningham
Review of Development Control Service	19 October 2010	To seek member agreement to changes to the manner in which Wiltshire Council's Development Service operates following a review of the service.	Cllr John Brady	Brad Fleet

SUBJECTS	DATE TO CABINET	SPECIFIC ISSUES FOR DISCUSSION	RESPONSIBLE CABINET MEMBER	OFFICER CONTACT
Proposed New Waste and Recycling Collection Services for Wiltshire	19 October 2010	Obtain Cabinet approval to implement new, harmonised waste and recycling collection services across the country.	Cllr Toby Sturgis	Tracy Carter
Salisbury Conservation Area	19 October 2010	To seek Cabinet's approval for the de-designation of the Salisbury Conservation Area and its redesignation as four separate conservation areas, including some changes to the boundaries.	Cllr John Brady	Ms Elaine Milton
Waste Site Allocations Development Plan Document	16 November 2010	To seek approval to consult on the formal Regulation 27 Waste Site Allocations Document.	Cllr John Brady	Alistair Cunningham
Carbon Management Plan for Wiltshire Council	16 November 2010	To agree a five year carbon reduction plan.	Cllr Toby Sturgis	Alistair Cunningham

SUBJECTS	DATE TO CABINET	SPECIFIC ISSUES FOR DISCUSSION	RESPONSIBLE CABINET MEMBER	Officer Contact
Leisure Facility Review	14 December 2010	To provide an overview of the consultation carried out and to make relevant recommendations. The report will also provide an overview of the progress that has been made to extend the DC Leisure contract extension.	Cllr Stuart Wheeler	Mark Smith

