CAB1438 FOR DECISION WARD(S): GENERAL

CABINET

28 March 2007

"LIVE FOR THE FUTURE: TACKLING CLIMATE CHANGE" CONSULTATION DRAFT

REPORT OF DIRECTOR OF COMMUNITIES

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RECENT REFERENCES:

CAB1316 - Climate Change – 13 September 2006

EXECUTIVE SUMMARY:

Following Cabinet agreement in September, a Climate Change Plan for the Winchester District has been drafted.

During this time, the Government continues to develop its thinking and guidance on the issue of Climate Change, with the publication of reviews, policy documents, inclusion of the topic within the local government white paper and draft Climate Change Bill. Internationally, an up-to-date review of the science of climate change is being published throughout this year. Within this context, the development of a District plan is timely.

The next stage of plan development will be consultation, during which further actions will be gathered from organisations, communities and individuals, to create a district-wide plan.

RECOMMENDATIONS:

That the consultation draft of "Live for the Future: Tackling Climate Change" be approved.

<u>CABINET</u>

28 March 2007

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Report of Director of Communities

DETAIL:

- 1 Introduction
- 1.1 At Cabinet on 13 September 2006, it was agreed to set up a Climate Change Informal Member/Officer Working Group to oversee the process of preparing a Climate Change Plan. The group has met regularly since then, with the resulting consultation draft of "Live for the Future: Tackling Climate Change" attached as Appendix 1.
- 1.2 This document has been developed following the outcomes-based accountability approach, with input from officers, members and partners at the Climate Change Action Planning Event held in November.
- 1.3 This document is intended to cover the Winchester District, and contain actions by the City Council, its partners and the communities of Winchester. The work so far has identified some potential actions, but does not yet capture all the activity taking place around the district. The consultation period will be used to both check the relevance of the framework around which the document is based, and to gather information about other actions being taken by organisations, communities and individuals. It is hoped that this will result in a truly District-wide plan.

2 Update on Drivers

- 2.1 CAB 1316 identified many of the drivers for undertaking a Climate Change plan. Since this time, further government guidance and an international scientific report have been published.
- 2.2 Government publications since September include:
 - a) The Stern Review, which gave a clear indication that the costs of tackling climate change now are far less that coping with its effects later;
 - b) The Code for Sustainable Homes, which will progressively improve the environmental standards of our homes, including energy use and carbon dioxide emissions; and
 - c) The consultation draft of the supplement to Planning Policy Statement 1: Planning and Climate Change, which sets a clear direction for the role of planning in addressing the climate change issue.
- 2.3 The role of local government in relation to climate change action was also laid down in the local government white paper 'Strong and Prosperous Communities'. It gives local government "new opportunities to drive local action on climate change mitigation and adaptation through:

- strong and visible leadership;
- leading by example through its own practices and the services it delivers;
- responding to calls for action and the priority local people place on tackling these issues; and
- co-ordinating innovative partnerships which can deliver real changes."
- 2.4 The Government's draft Climate Change Bill was published on 13th March. This sets out a series of clear targets for reducing carbon emissions, including the UK's target for a 60% reduction by 2050 and a 26 to 32% reduction by 2020 legally binding. The Bill also includes:
 - the creation of an independent body, the 'Committee on Climate Change', to provide independent expert advice and guidance to Government on achieving its targets;
 - new powers to enable the Government to more easily implement policies to cut emissions;
 - A new system of annual and open reporting to Parliament; and
 - A requirement for Government to report at least every five years on current and predicted impacts of climate change and on its proposals and policy for adapting to climate change.
- 2.5 Most recently the Intergovernmental Panel on Climate Change (IPCC) began publication of its fourth assessment report. This panel was established to assess the scientific, technical and socio-economic information relevant for the understanding of Climate Change and this report brings together research from across the world. The final Synthesis Report is not due until November, but the summary of the first volume has been published and cites evidence that climate change is already underway and it is very likely (90% certainty) to have been caused by greenhouse gases released from human activity.

3 Consultation and Next Steps

- 3.1 In line with the 'One Compact for Hampshire', consultation for this document will run for three months. An early task will be to gather actions from our partners for inclusion in the plan. The draft will then be circulated more widely.
- 3.2 A consultation plan will be drawn up, with the aim of achieving the most involvement possible with the resources available. The consultation will make use of council publications and the website. It will also involve council members, LSP partners and parish councils in disseminating the information and gathering responses from the community. An information pack will be prepared to help with this.
- 3.3 In addition to comments on the draft, the consultation will seek to gather projects and actions for inclusion in this document; from organisations, community groups and individuals. Throughout the consultation process, we will be informing people about climate change and the actions they can take.

- 3.4 A detailed action plan will be drawn up after consultation, to take account of the responses and contributions made.
- 3.5 It is anticipated that the programme for plan preparation is as follows:

| "Live for the Future: Tackling Climate Change" consultation draft approved by Cabinet | 28 th March 2007 |
|---|------------------------------------|
| Information Pack prepared | April 2007 |
| Consultation period | May – July 2007 |
| "Live for the Future: Tackling Climate Change" formally approved by Cabinet | 19 th September 2007 |
| City Council actions feed into business planning process | August 2007 onwards |

OTHER CONSIDERATIONS:

4 <u>CORPORATE STRATEGY (RELEVANCE TO)</u>:

- 4.1 By tackling the Climate Change issue, this plan will help to meet the priority "safeguarding our high quality environment for the future" and within the "Working Better" will help us in "ensuring we act in a sustainable manner in all that we do".
- 4.2 The plan will also help the Council in "seeking to promote sustainable communities through all its actions" one of the corporate values.

5 <u>RESOURCE IMPLICATIONS</u>:

5.1 It is intended that the eventual plan will be implemented using existing resources.

BACKGROUND DOCUMENTS:

Agendas, minutes and papers relating to the Climate Change Informal Member/Officer Group held by City Secretary and Solicitor.

REFERENCES:

In addition to the references and links section in Appendix A, the following have been used in this report.

Code for Sustainable Homes: http://www.planningportal.gov.uk/uploads/code_for_sust_homes.pdf

Planning Policy Statement: Planning and Climate Change - Supplement to Planning Policy Statement 1, Consultation: http://www.communities.gov.uk/index.asp?id=1505140 Strong and prosperous communities - The Local Government White Paper (Climate Change details in volume 2): http://www.communities.gov.uk/index.asp?id=1503999

Queen's speech 2006: http://www.pm.gov.uk/output/Page10419.asp

APPENDICES:

Appendix A: Winchester District Climate Change Plan, Consultation Draft

Live for the Future: Tackling Climate Change

Consultation Draft

Foreword

Welcome to this consultation draft of our plan to tackle climate change in the Winchester District.

The earth's climate has always been changing but the rapidity of change and its effects is now becoming one of the most serious environmental challenges for us to address.

Climate Change has accelerated over the last two hundred and fifty years and both meteorologists and climatologists have become increasingly conscious that these changes have become significant. This draft plan sets out what the local community, through the Winchester District Strategic Partnership (WDSP), can do in delivering action on this urgent issue.

The theories around weather and climate have been rigorously debated by the scientific community for years. Most recently the Intergovernmental Panel on Climate Change (IPCC) established to assess the scientific, technical and socioeconomic information relevant for the understanding of the current problem produced its Fourth Assessment Report. The IPCC view has evolved since its third report in 2001 and it has concluded that the sorts of phenomena that we have all witnessed locally in recent years, warmer days and nights, fewer cold days, greater variety in rainfall, are all part of a trend set to continue.

This draft plan for the district is a local response to this issue and sets out what we want to achieve, but this is just a starting point. All parts of the community, the public sector, private sector, organisations or individuals can contribute: these contributions are vital as it is the many small actions that will add up to make the difference. Please let us know about projects and actions you are taking, these are a valuable part of this plan.

The draft plan provides a framework of the key impacts as they affect the Winchester district. At the end of the chapters there are a number of consultation questions which hopefully touch upon the key issues and around which you can frame a response. However, we do not want you to feel constrained and are interested in all of your views, ideas and contributions.

Cllr Frank R. Pearson

Consultation

The closing date for consultation responses will be July 31st

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What is Climate Change?

Climate change is potentially the most serious environmental challenge facing us in the 21st century. There is now strong scientific agreement that the evidence¹ currently available shows that the activities of humans are making a significant contribution to climate change. This evidence is accepted by most Governments, including the UK Government.

The temperature of the earth's atmosphere is directly affected by the concentrations of certain gases in the atmosphere trapping heat that would otherwise escape into space. It works in a similar way to a greenhouse, and so has been termed 'the greenhouse effect'. This is a natural process and has operated for billions of years. Without it the earth would be about 30 °C cooler and would not be habitable. Emissions from human activities, in particular from increased use of 'fossil fuels' to fuel industry and transport and warm homes, have caused these greenhouse gas concentrations to rise significantly over the last 100 years, causing additional warming and changing the climate of the earth.

The most up-to-date predictions and monitoring tell us:

- Global average temperatures are expected to rise between 1.1 and 6.4°C by the end of the century
- Global temperatures have risen by some 0.75°C over the last century
- Globally, eleven of the last 12 years (1995-2006) rank among the 12 warmest years on record

This predicted level of climate change could increase the frequency and intensity of heat-waves, floods, droughts and storms. Sea level rise could engulf heavily populated coastal areas and some entire island states. Globally, climate change threatens agriculture and water resources and creates the conditions for disease to spread. The economic costs could be significant and the potential impact on human communities enormous. Wildlife habitats will be lost and more species will face extinction.

Carbon dioxide (CO_2) is the most significant greenhouse gas, given its properties, its lifetime in the atmosphere and the level of emissions. Action to control climate change will therefore focus largely on reducing CO_2 emissions. Other greenhouse gases include Nitrous Oxide (N_2O) and Methane (CH_4) and sources of these emissions are also worth controlling.

It is critical that we reduce greenhouse gas emissions in order to avoid the worst impacts of climate change. However, some changes will happen, and the greenhouse gases we have already emitted will influence the climate for at least the next few decades. There is therefore also a need to adapt to these climatic changes.

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¹ Intergovernmental Panel on Climate Change, Fourth Assessment Report 2007

What does Climate Change mean for the Winchester District?

No detailed research has been carried out to determine the likely implications of climate change specifically for Winchester. However, work has been undertaken to look at the impacts in south-east England², which includes Winchester. This predicts that by the 2080s:

- Summers will be hotter by 2 6°C and will have 20 60% less rainfall
- Winters will be warmer by 1.5 3.5°C and have 1 30% more rainfall

Consequently:

- It could be warm enough for 40 100 extra days of plant growth per year (currently about 250 days per year)
- There will be greater frequency of extreme events storms, floods and drought – and these will be more severe

These effects create many challenges and opportunities, including:

Agriculture

Changing heat, rainfall & soil conditions all affect what crops can be grown & their yields, as well as crop & animal diseases.

Utilities & Infrastructure

Climate affects both the supply of and demand for water & energy. Storms and floods pose risks to transport, buildings and drainage.

Tourism

Warmer climates could stimulate tourism in the traditionally colder months from October to March. However, hotter spring and summer temperatures could have the opposite effect of diverting visitors away from the city and out to the coast as has happened during previous heatwaves. Additional visitors could increase demand on water supplies and generate emissions from transport. Finally, the visitor population will also need to be considered in planning for extreme weather events

Buildings

We will need to design for resilience to harsher average & extreme conditions while protecting and adapting historic areas and buildings. Higher average temperatures and extreme weather conditions will influence design, location and adaptation of buildings.

Emergencies

Contingency plans will need to cater for more extreme & complex incidents.

Biodiversity

Many valuable species & habitats will be affected by coastal erosion or by changes to temperature, water & soils.

Business

Climate affects insurance, markets, consumer demand and supplies. It will also create a challenge in maintaining acceptable working conditions.

² WS Atkins, The Met Office and ADAS on behalf of the South East Climate Change Partnership, "Rising to the Challenge – Impacts of Climate Change in the South East in the 21st Century" 1999

Health

Higher temperatures could help the spread of disease, increase cases of food poisoning and affect air quality. They could also result in fewer cold-related deaths, but heat-waves create the risk of increasing heat-related deaths.

Consultation Questions

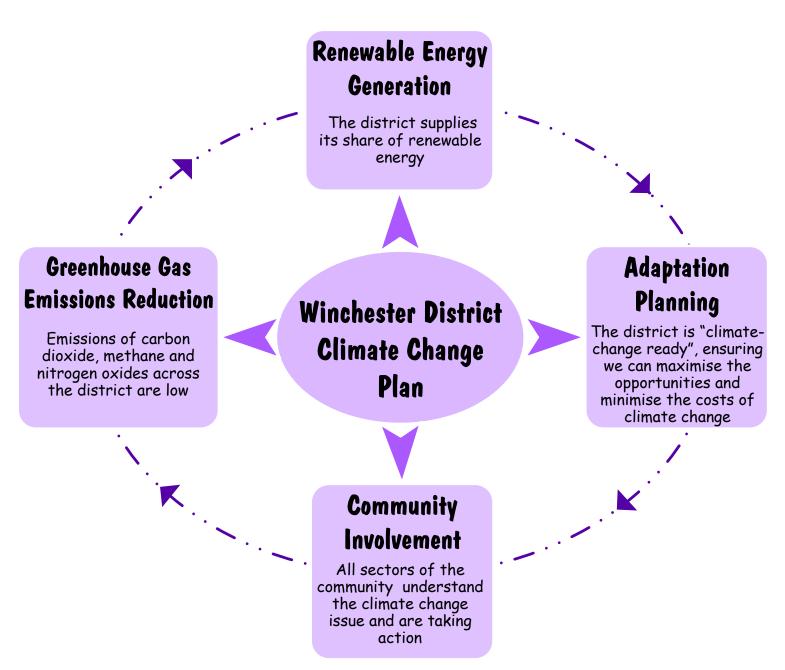
1. Does this give a good overview of the issue of climate change?

2. Is there other information you would wish to see included or questions that are not answered?

The Outcomes we want for Winchester

Our response to the climate change issue must include action to tackle the causes of climate change, and actions that prepare us for the effects. For this plan we have identified four outcomes we want to see for the Winchester district. Together, they cover the range of climate change issues. The following chapters take each in turn but they are not mutually exclusive and it can be seen that some actions will work towards more than one outcome.

Climate Change is one of the issues highlighted in the Winchester District Community Strategy. In working towards the outcomes here, we will also be working on two of the priorities of the Community Strategy: to reduce carbon emissions and increase renewable energy generation.



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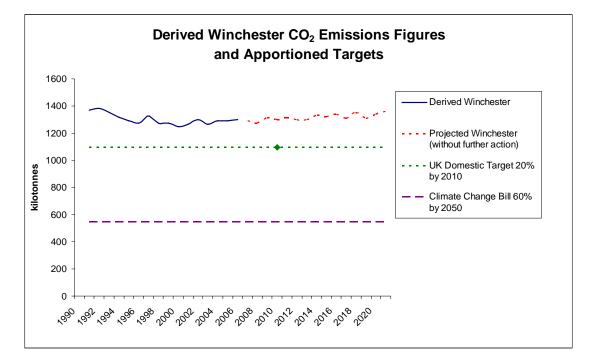
Greenhouse Gas Emissions Reduction Emissions of carbon dioxide, methane and nitrogen oxides across the district are low.

What changes will we notice when this outcome becomes a reality?

- More energy-efficient homes, businesses and public sector buildings
- More cycling, walking, public transport use and car sharing
- Better and integrated transport infrastructure: more cycle routes, bike storage, bus lanes
- Improved health and better air quality (additional benefits of the actions taken)

The Indicators we will use to measure our progress

Data collection for emissions at a district level is still relatively new and is in experimental stages. However, 'Local and Regional CO_2 Emissions Estimates for 2004', produced by AEA Energy & Environment for DEFRA, gives us district-level figures. The graph below shows indicative emissions over time, assuming Winchester contributed the same proportion each year to national CO_2 emissions figures.



The 1291,000 tonnes of CO_2 emitted in 2004 equates to 12 tonnes per Winchester resident. This compares with a Hampshire average of 8.4 tonnes, and a national average of 9.4 tonnes per person. Both road transport and domestic energy use appear to account for the higher figure.

Proposed Actions

Leadership: All partners involved in the Winchester District Strategic Partnership will set an example by reducing carbon dioxide emissions from their buildings,

reducing emissions from staff travel, and ensuring procurement favours lower emissions options.

Buildings:

Winchester City Council will reduce CO₂ emissions from its housing stock and make the most of opportunities available to ensure low carbon development on its own land. This includes the potential live/work development on Moorside, Winnall.

Homeowners, businesses and communities will be encouraged to reduce CO₂ emissions from their own buildings (See Community Involvement section).

Grants: We will ensure access to up-to-date information on grants for energy efficiency through the Environment Centre helpline (0800 512 012).

We will review our Community Capital Grants Scheme criteria to encourage lower CO_2 emissions from projects, and investigate how other funding streams may also contribute to this aim.

Transport: Through the Air Quality Action Plan, the Hampshire Local Transport Plan, the Tourism Strategy and the forthcoming Winchester Town Access Plan, we will encourage the use of more sustainable modes of travel such as walking, cycling and public transport. Where there are limited viable alternatives to the private car we will encourage the use of the cleanest fuels and lowest emission vehicles available.

Waste: We will reduce emissions from landfill by waste minimisation and recycling initiatives, including implementation of the Alternate Bin Collection scheme, through future Project Integra initiatives and encouraging business recycling through the Winchester Business Improvement District programme.

Planning policies: Through the Local Development Framework and national building regulations, we will ensure new buildings generate low carbon emissions in line with national policies. This will include a Sustainable Development policy in the LDF Core Strategy, due for production in 2007, and more detailed policies on sustainable building in the Development Control Policies document, due for production in 2009.

Consultation Questions

- 3. Are there other actions you think should be included?
- 4. What actions are you taking that could contribute to this plan?

Renewable Energy Generation The district supplies its share of renewable energy

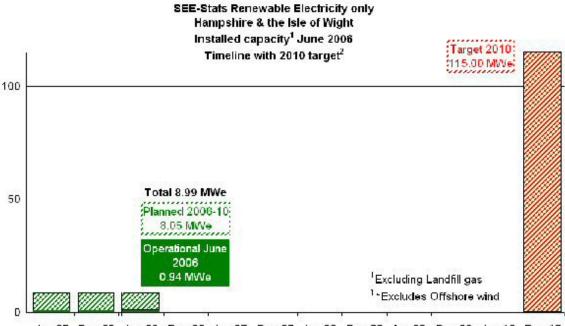
What changes will we notice when this outcome becomes a reality?

- Renewable energy installations both domestic and commercial will be seen around the district
- More energy used in the District will come from renewable sources
- There will be better public understanding and take-up of renewable energy
- People who have installed their own renewable energy generators will pay lower fuel bills

The Indicators we will use to measure our progress

Current data on renewable energy is collected at county level. There are also gaps in data collection for small domestic installations such as solar water heating systems. Work is ongoing to create better and more local data.

The current Hampshire data shows a significant gap between current installed capacity and the target set for Hampshire and the Isle of Wight.



Jun-05 Dec-05 Jun-06 Dec-06 Jun-07 Dec-07 Jun-08 Dec-08 Jun-09 Dec-09 Jun-10 Dec-10

Proposed Actions

Leadership: All partners involved in the Winchester District Strategic Partnership will set an example by incorporating appropriate renewable technologies in new buildings and refurbishments. This includes the new Park and Ride building and the proposed new Winchester City Council offices.

Planning policies: Through the Local Development Framework we will promote the installation of renewable energy. This will be through the Sustainable Development policy in the Core Strategy, due for production in 2007, and more detailed policies on renewables and sustainable building in the Development Control Policies document, due for production in 2009.

Research: We will continue to update our understanding of the most appropriate renewable technologies to use. This research will range from investigating resources at district level, to feasibility studies for specific locations.

Encourage Installation: We will encourage business and the community to install renewable energy technologies (see Community Involvement Section).

Consultation Questions

5. Are there other actions you think should be included?

6. What actions are you taking that could contribute to this plan?

7. Is there particular research on renewables you think should be undertaken in this district?

Adaptation Planning

The district is "climate change ready", ensuring we can maximise the opportunities and minimise the costs of climate change.

What changes will we notice when this outcome becomes a reality?

- Water is used more efficiently
- There are fewer problems caused by flooding
- The impact of any emergency arising from climate change would be minimised, with a rapid and appropriate response
- People are not unnecessarily adversely affected by the increase in temperature
- Different crops and other plants grow that are adapted to the climate
- There is less impact we cope with the changes

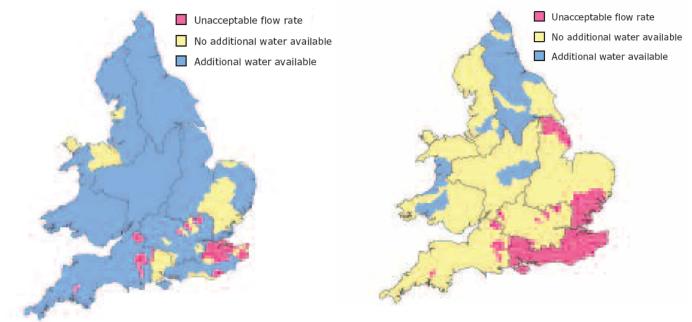
The Indicators we will use to measure our progress

We believe a useful indicator for this section would be the cost of extreme weather events. This data is not captured at present so work is needed in order to develop this indicator.

Currently data exists on specific elements of this section. One such indicator is Water Stress, produced for England by the Environment Agency.

Assessments of water availability: Winter surface water

Assessments of water availability: Summer surface water



These maps show that abstractions from surface water are already at their limit in the summer for much of England and Wales and also in the winter for parts of the south and east.

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Proposed Actions

Leadership: All partners involved in the Winchester District Strategic Partnership will set an example by minimising water use in their buildings and operations.

Planning policies: Through the Local Development Framework we will ensure new developments take account of future climatic changes. This will be through the Sustainable Development policy in the Core Strategy, due for production in 2007, and more detailed policies on climate adaptation in the Development Control Policies document due for production 2009. We are also undertaking a 'strategic flood risk assessment'.

Emergency Planning: We will ensure that emergency plans will deal effectively with extreme climatic events, such as heat waves, flooding or storms.

Agriculture: We will work with the National Farmers' Union and other relevant bodies to encourage adaptive farming methods.

Tourism: We will support tourism businesses with practical information, best practice and training opportunities to ensure that they are themselves climate change ready, and that they understand the importance of these preparations in contributing to the well-being of the district as a whole.

Consultation Questions

- 5. Are there other actions you think should be included?
- 6. What actions are you taking that could contribute to this plan?

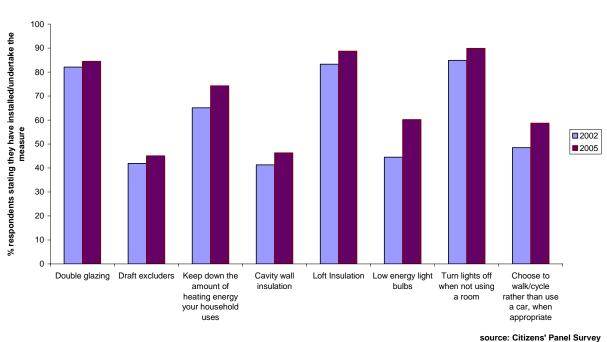
Community Involvement All sectors of the community understand the climate change issue and are taking action.

What changes will we notice when this outcome becomes a reality?

- People are aware of their responsibilities and know their own carbon footprint
- People are actively reducing their carbon footprint
- Businesses and organisations know their contribution to emissions, and are taking action to reduce it

The Indicators we will use to measure our progress

We are looking at how we might use the carbon footprint calculators to create an indicator, but currently this data is not collected. We do, however, have information on actions taken by residents to reduce CO_2 emissions, based on survey data, which show an increase in all of the actions.



Winchester District Residents' CO_2 reduction actions

Proposed Actions

Information: We will make information available on Climate Change, renewable energy and what action can be taken. Other sources of information will be signposted.

Promotion: We will undertake promotional activity to raise awareness of the Climate Change issue and how people can continue to enjoy a good quality of life in the changing conditions.

We will use the City Council website, house magazine (Perspectives) and other appropriate media to encourage local communities, businesses and organisations to contact us with their stories about the positive actions they are taking in line with this Action Plan. We will use the same media to congratulate and praise them, and to inspire others to do the same.

Checklists: We will provide information on the checklists available to calculate personal carbon emissions and encourage individuals to use them to calculate and set targets to reduce their own carbon emissions.

Removing Barriers: Where barriers exist that prevent action on climate change we will work to remove them.

Working with Business: We will continue to work with the Hampshire Sustainable Business Forum to encourage businesses to develop greener ways of working, and to provide advice, information and signposting for those who need it. Through the Sustainable Business Awards we will publicly acknowledge those businesses who take significant steps to tackle the climate change agenda.

Work with other specific sectors: We will look to work with people and groups across all communities to raise awareness, and help them take action on climate change. Groups may include schools, towns and parishes, council tenants, businesses and management committees running community buildings.

Consultation Questions

- 10. Are there other actions you think should be included?
- 11. What actions are you taking that could contribute to this plan?
- 12. What information or promotional activity do you think we should provide?
- 13. Which sectors do you think we should focus on?

How will we ensure progress?

The actions that Winchester City Council is responsible for will be included in business plans and managed through corporate systems. Progress on the actions and monitoring of the indicators will be reported annually through the Council's Annual Report and the Annual Monitoring Report.

A detailed action plan will be drawn up after consultation, to take account of the responses and contributions made.

Further details on the actions and projects being undertaken will be available on the Winchester City Council website.

Appendix 1: Glossary

Carbon footprint is a measure of the amount of carbon dioxide or CO_2 emitted through the combustion of fossil fuels; in the case of an individual or household, as part of their daily lives; or in the case of an organization, business or enterprise, as part of their everyday operations.

Fossil fuel is a general term for buried deposits of organic materials, formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.

Greenhouse gases are components of the atmosphere that contribute to the greenhouse effect. Some greenhouse gases occur naturally in the atmosphere, while others result from human activities. Naturally occurring greenhouse gases include carbon dioxide, methane, and nitrous oxide. Certain human activities, however, add to the levels of these naturally occurring gases.

Renewable energy is energy derived from resources that are regenerative or for all practical purposes can not be depleted. These sources include solar, wind, water, biomass and geothermal energy.

Sustainable development is about creating a system of human activity that enhances and maintains quality of life now and for future generations. Our role in this locally is to create sustainable communities: great places to live, work, and do business, but also take care of the environment and leave a good legacy for future generations.

Appendix 2: References and Links

Intergovernmental Panel on Climate Change, Fourth Assessment Report 2007: details can be found at <u>www.ipcc.ch</u>

WS Atkins, The Met Office and ADAS on behalf of the South East Climate Change Partnership, "Rising to the Challenge – Impacts of Climate Change in the South East in the 21st Century" 1999: report is available from <u>www.climatesoutheast.org.uk</u>

Winchester City Council, Air Quality Action Plan, April 2006: document is available from http://www.winchester.gov.uk/General.asp?id=SX9452-A781AED7

the Environment Centre: <u>http://www.environmentcentre.com/</u> Hampshire County Council, Local Transport Plan 2006-2011: can be found at <u>http://www3.hants.gov.uk/local-transport-plan.htm</u>

Winchester City Council, Local Development Framework: comprises a number of documents, latest details can be found at http://www.winchester.gov.uk/EnvironmentAndPlanning/Planning/LocalDevelopmentFramework/

Project Integra: http://www.integra.org.uk/

Winchester Business Improvement District: further information can be found at: http://www.winchester.gov.uk/General.asp?id=SX9452-A782FA54

HM Treasury, Stern Review on the Economics of Climate Change, 2006: can be found at: <u>http://www.hm-</u> <u>treasury.gov.uk/independent reviews/stern review economics climate change/ster</u> n review report.cfm