

Worcestershire County Council: Tackling Climate Change

2.1 Introduction

Worcestershire County Council has approached the challenge of Climate Change by making it the focus of its aim to mainstream sustainable development throughout the authority. The Council has been at the forefront of progressing work on sustainable development for many years. Its status as an excellent four-star authority illustrates the mechanisms that are in place to support this work.

Worcestershire County Council (WCC) has taken a long term and broad approach to tackling the challenge of Climate Change. Like many places in the UK the County has experienced the impact of Climate Change in recent years from severe flooding to drought. In the main a more affluent County it includes within its area a district with one of the highest per capita CO2 emissions in the Country. The Council is developing and promoting work on Climate Change within its own operations and across the County and also seeks to influence other organisations. It's achievements to date have in major part been down to the Council's long term commitment to Sustainability; enabling the establishment of expertise in key areas, its policy of allowing staff freedom to innovate, the promotion of a 'can do' culture across the council, and a willingness to work in partnership with and learn from other organisations in order to further its aims.

The Council is addressing the challenge of Climate Change in a number of ways;

- Leading the development of one of the first Local Strategic Partnership Climate Change Strategies in the Country. From this a range of plans, strategies and policies promoting the reduction of greenhouse gas emissions and adaptation responses has arisen.
- The operation of an internationally respected building design service that focuses on low carbon sustainable design.
- The piloting of the use of UK Climate Impact Programme (UKCIP) Climate Change adaptation tools in Council construction projects; the first of which, Red Hill School, was recently awarded the national Green Apple award. One of the first schools in the Country to be 'climate proofed' in this way, it was opened by the Minister for Climate Change in June 2007.
- A corporate energy management service and systems that have achieved improvement in energy efficiency.
- The first Council in the UK to utilise wood energy on a large scale
- The Council operates a corporate carbon management programme that has led to the reduction of CO2 emissions of 18.2% from 2001/02 levels.
- The first Council in the UK to establish an Education for Sustainable Development service. A service that is focusing on engaging people in the challenge of Climate Change and includes the operation of a network of 206 ecoschools.
- Concentrated work on household waste minimisation and sustainable transport by the Council has secured a decline in household waste production and increased bus usage in the County. A targeted campaign has also decreased car use in the City of Worcester.

2.2 Leadership, Vision & Strategy

High Level Commitment to Tackling Climate Change

The Council has signed the Nottingham Declaration on Climate Change. In its 2005-2009 Corporate Plan, Building on Success, WCC made further commitment to; *'...contribute to the global and national aim of mitigating the effects of Climate Change'*.

The Council has a cabinet member with responsibility for Climate Change within their portfolio as well as member sustainability champions from each political group.

Chief Officers and Cabinet have adopted a Sustainability Policy & Action Plan that identifies Climate Change as a key issue for the council's own operations and in the wider community. The plan sets out actions and responsibilities and sets performance indicators & targets. The council reports on a number of corporate sustainability indicators including carbon emissions. Progress is reported to the Chief Officers Management Board (COMB) and each Directorate Management Team (DMT). The plan, reviewed annually, is monitored by the Corporate Sustainability Stewards Group, which includes councillors and senior officers.

A paper on the council's role in tackling Climate Change is to be included as part of Chief Officers' and Cabinet members' corporate strategy planning week later in the year.

Community Leadership

In 2004 the Council led the development of a Countywide Climate Change Strategy under the umbrella of the Worcestershire Partnership (Local Strategic Partnership).

The Partnership's 2003 –2013 Community Strategy with its vision of *'a county with safe, cohesive, healthy and inclusive communities, a strong and diverse economy and a valued and cherished environment'* included a commitment to produce a Climate Change plan to reduce emissions and enable adaptation.

The County Climate Change strategy informs other key policy areas such as Local Development Frameworks, the Local Transport Plan, the Waste Core Strategy and Sustainable Community Strategies. Its development was based on consultation detailed in 2.5 below. Part of the evidence for the strategy was compiled by Marches Energy Agency who provided advice on many of the mitigation elements of the strategy. Evidence for Climate Change impact came from the Partnership commissioned Worcestershire Climate Impacts Study by the University of Birmingham. The partnership was advised on adaptation by the UK Climate Impacts Programme (UKCIP).

The strategy focuses on raising awareness, reducing carbon emissions by improving energy efficiency and encouraging use of renewables, and enabling adaptation. In line with the regional energy strategy, it sets targets for carbon reduction by sector, and highlights key factors that will enable the County to tackle the challenges that Climate Change poses. It stresses the need for partners to lead by example, ensure Climate Change is addressed by all relevant policies and plans and to share experience and expertise.

The strategy led to the adoption of the Worcestershire Climate Change Pledge by the Partnership, which requires member organisations to take action on reducing emissions and adaptation and report progress to the Partnership Board.

The strategy raised the profile of Climate Change at an early stage of Partnership development. Climate Change outcomes have been included in the Local Area Agreement, (LAA).

Progress is reported to the Worcestershire Partnership Environment Group(WPEG) and the Worcestershire Partnership Board. County carbon emissions are reported via the County's State of the Environment report.

Communication is via the Worcestershire Partnership, (WP) and County Council website & newsletters and the Worcestershire Climate Change newsletter.

Worcestershire's Community Strategy is currently under review with the intention to make Climate Change one of its key priorities. Part of this process will include a complete review of the Climate Change strategy.

Leading by Example

A significant part of the Council's Sustainability Action Programme is its carbon management plan, (CMP). The Council took part in a pilot of the Carbon Trust's Local Authority Carbon Management Programme in 2004 and employed an energy manager to lead the pilot. Emissions have been reduced by 18.2% against 2001/2 levels. The establishment of the CMP has led to a number of projects aimed at reducing emissions in the County. Some are detailed in 2.4 below.

Work on adaptation within the Council stemmed from the County Climate Impact study and has included a focus on building design. WCC was the one of the first councils in the country to use the UKCIP adaptation wizard, which it employed in the design of Red Hill School, Worcester. This has encouraged consideration of Climate Change in a variety of projects described below. The Council contributed a case study on the project for the UKCIP website. Climate adaptation is now to be factored into all new build and refurbishment and Council Directorates are being requested to consider adaptation to Climate Change as part of performance planning.

Consideration of Climate Change in Policy & Strategy Development.

The council has made a commitment to ensure sustainability, including Climate Change, is considered in policy and decision making throughout the council.

All directorate performance plans are required by COMB to consider sustainability and have been requested to include reporting on their contributions to corporate sustainability performance indicators and show how the directorate is taking action on Climate Change.

The Local Transport Plan 2 reports on transport related carbon emissions and includes a low carbon fuel strategy. This has translated into a number of initiatives e.g. the safer routes to school programme incorporates education on the links between transport and Climate Change and reports on carbon emissions through parent/teacher surveys.

The Council's response to the Regional Spatial Strategy consultation considered both Climate Change mitigation and adaptation. It included an assessment of the impact that extra housing would bring to the County in terms of carbon emissions and made recommendation for impact reduction.

To facilitate the incorporation of Climate Change in the production of local development frameworks by district councils WCC is embarking on the production of a natural resource strategy to include guidance on renewable energy, water management & flood control.

2.3 Community and Customer Engagement and Empowerment

Raising the Profile of Climate Change

The November 2003 Worcestershire Citizens' Panel, which helped inform the Climate Change Strategy, showed three quarters of residents thought Climate Change was an issue everyone could do something about. What they wanted was more support and guidance on what to do. With a higher than average ecofootprint of 5.53gha (UK average 5.4gha) and a district with one of the highest CO₂ emissions per head in the country, the Partnership has a challenge on its hands. Its Climate strategy recognises that to cut emissions and create a well adapted area, engaging and empowering people to take action on Climate Change is paramount.

WCC has made use of its corporate consultation strategy and web based consultation toolkit to evolve various levels of engagement with the community on Climate Change and has made use of media accessible to the whole community.

Engaging The Wider Community

WCC worked with Warwickshire and Coventry Councils and the energy efficiency advice centre (WEEAC) to run an effective 'Switch it off' campaign in November 2006. The aim was to show that everyone can contribute to reducing carbon emissions. The campaign included a schools poster competition, receiving 1300 entries, a family challenge, involving families from a range of backgrounds in energy saving activities, a 'secret' school audit, roadshows, campaign packs for businesses, press releases, radio adverts and stories on local television, all culminating in a two hour 'Big Switch Off' where everyone was asked to turn off unnecessary electrical items. The campaign will be expanded this year to cover more of the region.

Waste Minimisation

The Mission Impossible household waste minimization campaign run by WCC for Worcestershire & Herefordshire has been instrumental in reducing carbon emissions in both counties. The campaign's information pack on waste reduction achieved the Green Award for environmental promotion in 2006. Sent to 322,000 households in Herefordshire & Worcestershire, it was commended for its clear call for action, use of colour, empathy and "we can do it!" attitude. The Council was the only local authority to be short-listed.

WCC also encouraged 18000 Worcestershire households to start composting last year, selling more compost bins than any other council and running composting clinics and a master composter scheme to empower local residents to mentor their peers on composting

Reducing Transport Emissions

Worcestershire is one of three councils piloting the Department of Transport's Sustainable Travel Town project. The 'Worcester - Choose how you Move' project successfully demonstrates the effect a sustained package of measures to promote walking, cycling, car share and public transport can have when coupled with infrastructure improvements. Based on detailed market research, the project aims to tackle traffic congestion, improve air quality and reduce carbon emissions.

The project has included a range of innovations:

- Individualised travel marketing
- Bike loan schemes enabling teachers & parents to borrow a bike for free to travel to and from school
- The placing of recycled bikes around Worcester available for anyone to use.

As well as improving bus services through the new Integrated Passenger Transport Strategy, and running reduced fare promotions there has also been a concentrated focus on school and employee travel planning in the City.

Elements of the project are to be replicated elsewhere in the County. Across Worcestershire 65% of all schools have travel plans and employer travel plans have been set up. Lessons have been shared via Travelwise groups and national conferences, including one this May organised by the County Council.

Education

The Council sees education of the next generation on sustainability as crucial and has run an internationally respected Education for Sustainable Development service for many years. It has found that reaching communities through children can be an effective way of spreading awareness and action on Climate Change.

WCC seeks to empower children to take action on Climate Change through a number of means, the most high profile of which is the EcoSchools Programme. WCC operates a network of 206 EcoSchools (28 of which have achieved the top green flag award). The authority provides support to this approach to whole school involvement in environmental management and education. More than 100 schools have run eco days of action within their own communities. Initiatives include a scheme enabling pupils to act as advocates for action on Climate Change in their own communities, the linking of the design and technology curriculum to solutions for Climate Change, helping children create their own awareness raising campaigns to use with their peers and links with schools in countries heavily impacted by Climate Change. Officers involved with the service have presented to national EcoSchools, WWF & Geographical Association conferences, contributed to the DfES Sustainable Schools agenda and been trained by Al Gore to deliver his 'slide show'.

Businesses

The authority supports the Worcestershire Business Environment Group, funding energy efficiency training for businesses and advisors. Through the group WCC has promoted the Climate Change Pledge and run workshops on the UKCIP 'BACLIAT' tool helping companies assess Climate Change impacts and consider adaptation options. Officers have also worked with the Chamber of Commerce and Worcestershire 'Ambassadors' programme to raise awareness.

Public Events

Council campaigns maintain a presence at events in the county. WCC's own 'Skills on Show', which attracted 30000 people last year, included an extensive and very popular green zone themed around Climate Change including alternative vehicles, composting & recycling, solar power, wood power, ecofootprinting and home energy efficiency

The council also supports District councils in awareness raising. Last Autumn it assisted with the Malvern Hills "Homes 4 Now" community weekend which promoted sustainable homes and lifestyles as a way of reducing the district's carbon footprint.

This summer the council is taking part in a series of National Trust Climate Change events

Further communication with the public includes regular articles on council website, Billboard campaigns, mail shots, talks to interest groups, a Climate Change newsletter, support to groups running their own awareness events and the setting up of a County Green Directory.

Climate Change questions are due to go to the Citizen's Panel again this year to ascertain any changes in awareness.

2.4 Actions

Climate Risk Assessment of Council Functions

The Worcestershire Climate Change Impacts study identified risks for some of the council's key functions.

The study led to work on the impact of Climate Change on property and the use of UKCIP tools as mentioned in 2.2 above. Using climate impact assessment alongside BREEAM has led to a wide range of adaptation strategies used in capital spend and PFI projects. The intention is to reduce running costs and the need for damage repair and retrofit.

Environmental Services have included action to assess climate impact on highways as part of their performance plan and can make use of their experience of SUDS schemes associated with projects such as Wyre Piddle bypass and flood alleviation schemes such as the Worcester to Hereford road at Bransford. Installed in March 2003, it was hoped the Bransford scheme would drain excess water, which it did, until unprecedented weather conditions in June proved too much.

Emergency Planning coordinate detailed flood, storm & heat wave plans with the Emergency Services and other partners and the corporate risk management strategy requires the factoring of environmental and physical risk into all Council planning processes.

Work is underway on a Local Climate Impacts Profile for the County to support adaptation strategies. Officers are learning from Oxfordshire Council's experiences of this work.

Reducing the Council's Carbon

As stated in 2.2, the Council has operated a carbon management plan since 2004. Emissions have been quantified and base-lined from activities including buildings and street lighting energy, water use, transport including fleet, business mileage and commuting, municipal and the council's own commercial waste to landfill, as well as estate sequestration. Strategies needed for the Council to achieve its challenging aim of carbon neutrality by 2010 have been laid out. The plan sets a target to reduce emissions by 53% by 2010 from 2002/2003 levels.

Strategies require a business case to be approved prior to implementation. Most are tested on a small scale before wider use.

Approved strategies include;

- All new build and refurbishment to achieve very good BREEAM standard.
- Building Energy Management system (BEMS) remotely controlling energy for 260 sites.
- Energy auditing programme focusing on high-energy users including advice to raise site awareness & plan improvements.
- 'Power Perfector' voltage adjusters to be installed at County Hall & other offices
- Light sensors and waterless urinals installed as standard
- Implementation of a staff travel plan including car club, (with cars warranted for 30% biodiesel), working from home policy, improvement of bus facilities
- Office recycling system including on site composting and removal of individual waste bins
- Use of renewable energy; to date Council has installed; (est. annual generation)
 - woodfuel (5000000MJ)
 - ground source heating (900000MJ)
 - solar thermal (75000MJ)
 - wind power (35000MJ)
 - energy from landfill gas (2.5 MW/72000000MJ)

- Rolling out of a woodfuel heat programme. Since 2002 WCC has run a 700KW wood fuel boiler heating the County Hall complex; the largest public sector woodfuel boiler in country. A smaller wood fuel boiler has been installed in the adjacent Countryside Centre and woodfuel is to be due to be used in four new schools.
- Collection of waste vegetable oil from school canteens to create biofuel
- Carbon Offset Plan - the Council is leading work to establish and invest in a number of biomass and biogas heat & power plants in County

Strategies under investigation;

- Testing burner head enabling 20% biodiesel mix in conventional boilers meaning 20% reduction carbon emissions at no extra cost. Birmingham City Council has been following this work.
- Automated utilities metering system, (gas, water & electricity), linked to BEMS to be trialled in four schools.
- Rainwater harvesting on trial in number of buildings - meters checking savings before spreading across all buildings.

Staff Empowerment

WCC runs sustainability training for all staff, which focuses on Climate Change and encourages the development of personal sustainability action plans at work and at home. More than 600 staff have taken part as well as staff from partner organisations, such as district councils and the local Learning and Skills Council, and officers from other Councils, e.g. Nottinghamshire and Warwickshire.

Staff awareness campaigns have been run on home and work energy efficiency, waste minimisation, sustainable transport and local food. Regular mini farmers markets are held at County hall and other council offices.

A 'Green Champions' staff network has been developed with advice from Nottinghamshire Council; staff are trained to audit their workplace and help champion energy, water, waste efficiency and sustainable travel

A season of Climate Change and Peak Oil films for staff has led to a programme of shared learning sessions on e.g. home insulation, bike maintenance, living without a supermarket, home rain water recycling systems

Job descriptions for 'Officers in Charge' of Council properties are to include energy, waste & water monitoring

Sustainable Procurement

The Council's procurement code includes a sustainability policy. This has led to the following;

- Environmental questions, including energy efficiency, are included in pre tender questionnaires
- 100% green electricity is procured for buildings and street lighting. The potential extra cost is mitigated by a flexible purchasing policy operated by the Council's purchasing consortium. The Office for Government Commerce (OGC) have shown an interest.
- Woodfuel is procured via an innovative heat purchase contract.
- Whole life costing is included in some construction contracts.
- Energy efficiency is an important part of many procurement decisions - street lighting, IT equipment, construction and fleet

- The office waste collection contract is being changed to a recycling contract
- The Council operates a 100% recycled paper procurement policy.

Air Quality and Greenhouse Gas Reduction

The Local Transport Plan 2 reports on Climate Change gases as well as air quality standards. The Worcester – ‘Choose How You Move’ project aims to improve air quality and reduce carbon emissions.

WCC has tested vehicle fleet emissions when using biodiesel to test the balance of CO2 reductions against increase in NOx and particulate matter.

Plans for biomass & biogas power plants include air quality studies.

BREEAM assessments include balance between reduction in Climate Change gases and air quality standards.

2.5 Partnerships

The Worcestershire Community Strategy is underpinned by the Worcestershire Partnership, which respects and builds on the actions and views of the community

The Worcestershire Partnership Climate Change mitigation and adaptation strategy was developed in consultation with stakeholders including district Local Strategic Partnerships (LSPs), environmental groups, business organisations and statutory bodies and was publicised and made available to the public on the Partnership and Council's website. Stakeholder workshops and meetings were held to develop the strategy. This approach forms part of the development of partnership policies and strategies from the community strategy down.

The Worcestershire Climate Impacts study upon which the adaptation element was based involved research with a wide range of consultees including utilities, emergency services, public agencies, farmers, businesses etc.

The Climate Change Strategy has been shared and shaped by many individuals, groups and organisations and has led to a number of partnership outcomes.

Engaging other Partners in Taking Action on Climate Change

The Worcestershire Climate Change Pledge has been an effective tool for engaging partners in reducing emissions and climate adaptation. Organisations can choose to sign up to all or some of a menu of actions. WCC (a pledge signatory) coordinates & promotes the pledge and arranges seminars and workplace sessions to assist organisations. WCC officers & other Partnership members provide a mentoring service and have assisted signatories in setting up Climate Change plans. Web based and booklet guidance is also provided. The Programme has been further supported by the incorporation of a Climate Change outcome in Local Area Agreement; numbers of organisations with carbon management plans.

Signatories to the Pledge include Partnership members such as District Councils, Colleges, the Learning & Skills Council, the Chamber of Commerce, the Worcester Diocesan office and the Wildlife Trust. In some cases it has meant that organisations have been developing and acting on strategies to tackle Climate Change for a number of years.

The Wildlife Trust has made Climate Change its overarching priority. The Worcester Diocesan Office is coordinating a Climate Change strategy for the whole of the Worcester Diocese. Many Worcestershire district councils have made Climate Change one of the priorities of their corporate plans. Similarly in creating their sustainable community strategies most District LSPs are making Climate Change a priority

WCC is working as part of the Worcestershire Partnership Environment Group to comment and appraise district Community strategies and has developed a Partnership integration tool to help ensure issues such as Climate Change adaptation and mitigation are factored into every relevant aspect of such plans, beyond traditional environment policies

Worcestershire Assemblies, (LSP Conferences), have commonly included Climate Change workshops. This time however the Assembly is to have Climate Change as its theme. It will include a keynote presentation using the 'An Inconvenient Truth' slide show.

Links with the Regional Climate Change Partnership

Work on the adaptation side of the County Climate Change strategy has led to Council involvement with UKCIP and the West Midlands Climate Change Adaptation Partnership (CCAP). This has meant involvement with adaptation projects such as the Environment Agency funded study into the impact of Climate Change on agriculture in the Vale of Evesham. In turn the CCAP & UKCIP have

helped disseminate the Council's work on factoring Climate Change adaptation into construction, publishing a case study of the Red Hill school project.

The Council is actively represented on Sustainability West Midlands, (the regional sustainability partnership), and on the steering group for West Midlands Sustainable Development Officer Network (WMSDON), both of which advise the Regional Assembly on sustainability & Climate Change issues. Staff also take part in the Forum for the Future 'LAPs' network, which assisted in the development of the Worcestershire Partnership Integration Tool

Close working links with other councils in the region, such as Herefordshire & Shropshire, helped the County Council to develop its Climate Change strategy. Taking part in WMSDON has enabled the sharing of knowledge and resources on many issues including environmental management.

WCC's links with the Rural Hub, DEFRA, the Forestry Commission and the environmental technologies cluster of AWM helped lead to formation of Bio-energy West Midlands, enabling the Council to play its part in developing the biomass economy in the County by engaging businesses and farmers in plans to provide biomass and biogas heat and power to businesses through power plants located on industrial estates. The Council is also working with Evesham College to develop the skills base required to develop such a renewables cluster.

A planning application for the first biomass power plant at Tenbury Wells Business Park is currently going forward. As part of this work the authority is working to engage the community of Tenbury Wells in the scheme including projects with the local high school, talks to local businesses and public exhibitions.

The Council recently conducted a feasibility study for employing anaerobic digestion of organic waste to fuel a biogas power plant with funding from NISP/ BREW. Seen as an exemplar project, officers involved were invited to the DEFRA Trailblazers conference at the House of Commons.

WCC's Countryside Services are to organise a conference early next spring for the Countryside Recreation Network, a national partnership of organisations in the countryside recreation sector. The aim is to look at best practice ways of overcoming problems caused by Climate Change highlighting innovative adaptation practices in countryside and urban greenspace management

The Council has also played its part in innovative schemes such as Malvern Hills Science Park Phase 3. The Council provided the design consultancy for a ground source heat system for the development, working closely with Technology Belt partners, Malvern Hills District Council and Malvern Hills Science Park

The Worcester: Choose How You Move project was also the result of a partnership between WCC, Sustrans, the Primary Care Trust and the University of Worcester. Operational partners include bus operators First as well as Peterborough & Darlington councils.

2.6 Equalities and Diversity

The Council's Approach to Equality and Diversity

Worcestershire is a diverse County with a population of 550,000 residents, of whom:

- 2.5% are from a Black or Minority Ethnic Community.
- 16.7% have a limiting long-term illness (includes any longer term illness, health problem or disability which limits daily activity or work).
- 23% are aged under 18 and 8% are aged 75 or over.
- There is a near equal balance of males and females, but differences in their educational and employment opportunities and achievements,
- Broadly a relatively affluent county, 'hot spots' of deprivation exist that rank as some of the most deprived in the Country

Worcestershire County Council's Corporate Equalities Scheme sets out overall commitments and intents in respect of equality and diversity. The council aims to eliminate discrimination, promote equality of opportunity and access, and promote good relations between diverse communities. They have introduced a Race Equality Scheme, Disability Equality Scheme and Gender Equality Scheme.

Addressing Equality and Diversity, like Sustainability and Climate Change, is integrated into the council's work through corporate planning processes. Initiatives for staff include equalities training courses, newsletters and poster campaigns. Mystery Shopper exercises are carried out where men and women, people with disabilities and those from Black and Minority Ethnic Communities test information on and access to Council services.

The council recognises there are some groups of people who have traditionally not been engaged with. The Consultation Toolkit includes advice on effectively consulting with these different groups (e.g. by considering language or dietary requirements and being aware of dates of religious festivals). Consultation events about council services have been organized for some of these specific groups.

Tackling Climate Change; Equalities and Diversity

The location of the Tenbury Biomass Power Plant (2.5) was chosen in part because of its location in the Rural Regeneration zone and its need for economic investment/job and training opportunities. The project includes a proposal to focus on provision of training and job opportunities to under-represented or disadvantaged groups.

Questions on Climate Change and actions to address it have been included in Citizen's Panels surveys. These include monitoring and evaluation of age, disability, ethnicity, employment/education status etc, allowing identification of gaps or issues relating to specific groups of people.

Families that took part in the Switch it off Campaign were chosen from a cross section of the community. Particular effort was made to include a Black/Minority Ethnic family.

In developing the council's new Integrated Passenger Transport Strategy, it was recognised that the previous strategy didn't take certain social factors into account. An Equality Impacts Assessment was carried out in order to address the needs of specific groups. These included the elderly, young people, and those with physical and learning disabilities, many of whom fall within the scope of social services provision, and others such as ethnic minorities. Actions to address their needs include the provision of accessible vehicles, improved infrastructure, bus priority schemes and the production of public transport information that is attractive and accessible to all. The County Council in partnership with the six District Councils operates a county wide

concessionary fare scheme for persons aged 60 and over and registered disabled people which currently allows travel free of charge at all times on buses, and half price on community transport services.

The staff sustainability training course (2.4) stresses that ensuring equality and community engagement is vital part of sustainability and tackling Climate Change. Delegates deal with these issues in an integrated way in activities such as a community planning exercise.

The Ethnic Access Link is included in council strategies and literature sent to householders. This includes information to help all residents tackle Climate Change, for example through waste minimisation or sustainable travel.

Green Champions have been identified in a number of Adult and Community Services teams and establishments, including day care centres, homes for older people, homecare and disability support teams. An ongoing series of workshops is being held; these include promotion of assistance available to service users to help them reduce waste and save energy at home. A number of projects involving service users have been established, e.g., at two Worcester day centres people with learning disabilities run a recycling service and make and sell bowls, boxes and other ornaments from recycled materials.

The Council's Countryside Service carries out activities inspiring and empowering people to protect and value the natural environment. Examples include volunteer schemes, open days and parish planning assistance. Guided walks are organised either open to the general public or targeted at under-represented groups (e.g. people with learning difficulties or black and ethnic minority groups). Various other events are held, such as the 'On Your Doorstep' Multicultural Picnic at Waseley Hills Country Park, which brings rural organisations and families from various communities together to celebrate the link between food and the countryside.

One of the key ways the council works with Worcestershire schools on sustainability and Climate Change is through the Ecoschools award scheme (see 2.3). This involves bringing the whole school together with members of the local community to focus on themes including energy, transport, waste and the global perspective. An action group is formed - a crucial part of this is ensuring that representatives from all sectors of the school are included. A diverse range of schools in the County are engaged in the scheme, including 50% of special schools and several with large numbers of pupils from ethnic minorities. Annual Worcestershire Ecoschools conferences are organised by the council and teachers and pupils from the whole range of schools attend.

WCC recognizes that Climate Change can disproportionately affect the most vulnerable & is making efforts to ensure they are reached and supported e.g. through heatwave plans for social care and flood plans. With increasing fuel prices, fuel poverty is rising. For that reason the take up of Warm Front grants has been included in the Local Area Agreement on Climate Change and the Council's Adult & Community Services are putting in place a referral service for those identified as at risk from Fuel Poverty.

2.7 Outcomes

WCC's corporate commitment to '*contribute to the global and national aim of mitigating the effects of Climate Change*' has reaped rewards at many levels.

It has achieved effective communication and partnership working on the issue, embedding Climate Change into its approach to regeneration & sustainability.

Activities have resulted in case studies, guidance and knowledge transfer to benefit others and influence them to take action. They have provided working examples and models of ways to tackle Climate Change.

Innovative approaches have secured funding enabling the Council to undertake feasibility studies, run pilot schemes and procure sustainably, contributing to carbon reduction and benefiting the local community and beyond.

Increase in the Level of Engagement by Councils

Awareness of Climate Change issues within WCC has mushroomed beyond expectations enabling further progress to be made.

As well as Planning, Climate Change issues are influencing economic regeneration and finance policy. A low carbon economy is seen as beneficial to rural regeneration; a major influencing factor in Council policy to invest in biomass energy plants.

All Worcestershire district councils are taking action on Climate Change, some including it as a priority in their corporate plan, some signing up to the Worcestershire Climate Change Pledge &/or Nottingham Declaration, some working on carbon management plans for the LAA.

WCC has secured agreement for them to purchase green energy via WMS and to benefit from WCC energy and water management services as well as support on carbon management planning.

Work towards Climate Adaptation

WCC is supporting all Districts to incorporate Climate Change mitigation and adaptation into Local Development Frameworks.

WCC has included a range of adaptation measures in new buildings; greater use of natural light, consideration of building orientation and profile; solar shading; noise abatement, natural ventilation, SUDS, use of night time cooling, green roofs and rainwater harvesting (including use of large gutters). By considering Climate Change risk at the start of the project cost effective adaptations have been made.

In response to signing the Worcestershire Climate Change Pledge, partners have also taken action, e.g. the Worcester Diocese installed wider guttering on its historic Old Palace offices.

The National Flood forum, based in Bewdley (Worcs), links to the Council's Emergency Planning processes & provides support & advice to those at risk of or experiencing flooding.

Community Awareness of Climate Change and How to take Action

Central Networks monitored the 'Switch it Off' campaign recording a reduction of electricity consumption across Worcestershire, Warwickshire and Coventry of 66MW during the 2hr Big Switch off. Even Worcester Cathedral turned off its floodlights.

The Mission Impossible waste minimisation scheme facilitated the reduction of Worcestershire household waste to 518.23kg/head and increased recycling to 32.31% exceeding targets and meaning fewer emissions from landfill.

Worcester Choose How you Move Phase 2 achieved a 13% drop in single occupancy car journeys, 14% increase in use of public transport, 17% increase in walking and a 32% increase in cycling. Across the County bus use has increased.

WCC is aware many factors impact on travel; however currently traffic levels for the County have stabilised against an increasing national trend (1%).

Latest available figures for the County show total carbon emissions fell slightly from 2001/2-2004/5.

Demand for bio-diesel from the company that collects schools' vegetable oil has increased.

Engagement in Climate Change by Communities

Evaluation of WCC staff sustainability training shows that staff have made changes to their home and work life as a result.

There has been a vast increase in interest from all sectors of the community with officers involved experiencing increasing demand for information and assistance for various initiatives, for example:

- Community groups are asking for support in running their own awareness raising events, e.g. Evesham Climate Change Group. Some Parent Teacher Associations such as Clent PTA are setting up community groups through the ecoSchools programme.
- A village hall programme to reduce emissions and adapt has begun through the County's community development association, Community First
- A number of churches in the area have worked towards and achieved eco-congregation status as well as taking part in the 'Operation Noah' church Climate Change programme and the Climate Chaos campaign.

Council Carbon Outcomes

WCC's carbon management programme recorded a decrease in CO₂ emissions of 18.2% from 2001/02. This is due to the purchase of green energy, energy efficiency improvements and the increasing use of renewables. Emissions from landfill also have had a big impact, (they make up more than 70% of the council's carbon footprint), declining in line with the exceeding of targets on household waste minimisation.

There has been an overall 2% decrease in energy use since beginning of programme. Due to the council's ongoing energy efficiency and renewables strategy, the use of fossil fuel energy for heating has declined, (the Council is benchmarked better than average for local authorities), but recent increases in IT use have been matched by an increase in electricity consumption with the consequence that the Council is benchmarked higher than average for electricity use. This has served to focus officers on ensuring procurement of the most energy efficient electrical equipment and the continuing purchase of green electricity. The employment of BREEAM standards has helped, for example their use in the refurbishment of County Hall led to an average 30% reduction in energy use from lighting, saving approx £7000 a year.

Other factors include the Council's Building Energy Management system, (BEMS), which has enabled energy consumption reductions of 10-15% at the sites where it has been installed.

The County Hall Woodfuel burner reduces WCC's CO2 emissions by 200 tonnes a year. As woodfuel heat is now significantly cheaper than gas it saved the Council £22,000 last year.

Owing to its long term energy efficiency drive, since 1980 WCC has consistently been using 15% less energy in schools than the UK average.

In response to staff travel plan measures, single occupancy car use for trips to County Hall reduced from 82% in August 2006 to 70% in April 2007.

In order to better coordinate action on Climate Change and environmental management issues in general the Council is researching an ISO 14001 system.

The County's ecoSchools programme has shown actual reductions; one school halved its energy use, another is saving 500l water a day and another has cut £1000 from its water bill.

3 Case Study

Preparing the Next Generation for Climate Change

Worcestershire County Council (WCC) sees the education of the next generation on sustainability as crucial and has run an internationally respected Education for Sustainable Development (ESD) service for many years with strong links to the Council's architecture unit.

The authority seeks to empower children to take action on Climate Change through a number of means, the most high profile of which is the EcoSchools Programme. WCC operates a network of 206 EcoSchools, (28 of which have achieved the top green flag award). The authority provides support to this approach to whole school involvement in environmental management and education. More than 100 schools have run eco days of action within their own communities.

To support teachers eco meetings are held in districts every term, with 70-80 teachers looking at issues such as energy, waste and transport under the heading of Climate Change.

Working with Peace Child International, a Climate Change advocacy scheme has been set up training high school students to become Climate Change advocates within their own communities. Through this programme children have run evening events on Climate Change for their local communities and have engaged with other schools within their cluster groups, as well as parents, primary head teachers and other year groups.

ESD staff, teachers and pupils have worked with the Birmingham based Teachers in Development Education (TiDE) on a number of Climate Change programmes – including the development of 'Creative Responses to Climate Change'. Using the Design & Technology curriculum pupils are encouraged to develop D&T solutions to challenges that Climate Change poses. This programme was run in seven high schools in the County and is to be used as a programme for the rest of the region. Worcestershire teachers & pupils have also contributed to TiDE education tools on Climate Change including making international links with the Gambia, which have focused on Climate Change impact.

As part of its involvement in the West Midlands Broadband project on Climate Change, which has received DfES and DEFRA 'Climate Challenge' funding, the Council hosted a regional young people's 'Messages about Climate Change' conference where Worcestershire schools worked with media & marketing experts to develop campaigns to raise awareness among their peers. The project also developed the Worcestershire Climate Change Pledge into a regional schools pledge.

Staff from the ESD service contributed to the DfES's Sustainable Schools agenda and led the dissemination of it across the region, arranging a regional event with GOWM to take it out to local authorities.

Staff also ran a Sustainable Schools conference for head teachers from Worcestershire, Herefordshire & Gloucestershire, focusing on Climate Change with contributions from leading Climate Change thinkers such as Stephen Harding, (Schumaker Foundation).

Worcestershire High School pupils helped to develop & trial the New Economics Foundation Democs Climate Change card game.

The service's strong links with the Council's architecture unit has influenced the design of schools in the County, a wonderful example of which is Red Hill first school in Worcester. Designed by WCC as a Climate Change ready school, it was one of the first in the UK to use the UKCIP Adaptation Wizard as part of the design process, leading to a low profile, wide guttering, overhangs, SUDS scheme and solar powered ventilation stacks. It was opened by Ian Pearson –

Minister for Climate Change – on 18th June and acts as a test bed for technologies to be used elsewhere in the County.

The building has a variety of features, which aim to make it 'carbon-neutral'. It is the first school in the County with ground source heating and hot water systems. The school also uses rainwater harvesting for flushing toilets and has mechanical extract ventilation using small photovoltaic panels. Classroom ventilation uses an assisted stack ventilation system, which uses air tempered in the winter using the groundsource system. The ICT suite is cooled in summer using a groundsource heat pump in reverse mode. A sustainable drainage system provides habitat enhancements on the site using swales and ponds.

The building makes extensive use of timber framed external and internal walls; and the project has been used as a case study by WRAP for increasing the recycled content of materials used in the building. A target of 26% by value of materials has been set. Insulation, hardcore and block work are all examples of materials with high-recycled content used on the project.

The holistic approach to Climate Change education by WCC, incorporating it into the curriculum, schools management and the design of school buildings is enabling children to take the messages home with them, out into the community and into their own lives.

4.1 Factors that Underpin our Success

- The Worcestershire Partnership's strategy & vision
- The support of senior officers & political leadership
- Strategic level working
- Integration into relevant policy areas
- Effective internal & external communications
- Innovative approaches communicated to partners and wider community
- Culture of interdirectorate, local & regional partnership working
- Culture – 'Sustainability: it's what we do in Worcestershire'
- Basing policy on what works and is cost effective
- Success breeds success – use of small-scale pilots to test new techniques and technologies, for example, WCC makes use of our own buildings and plant as a test bed on a small scale before making larger scale commitment.
- Being able to quantify the Council's carbon emissions was crucial to gaining corporate agreement to taking measures to reduce them. Allocating carbon emissions to directorates has helped facilitate directorate action.
- Making the business case and implementing the most cost effective solutions first
- The Council gives its officers 'freedom within boundaries' and encourages dissemination, mentoring and learning from others. This has engendered a culture of innovation.

4.2 Successful Initiatives

- Corporate Sustainability and Carbon Management programme
- Sustainable Building programme
- Education for Sustainable Development service
- County Hall complex wood fuel heating
- School waste oil to biofuel project
- Domestic waste minimisation initiatives; Mission Impossible campaign
- Sustainable Travel Town: Worcester: "Choose How You Move "
- Redhill School Climate Adaptation Strategy
- 'Switch it Off' campaign
- Staff sustainability awareness programme
- Worcestershire Climate Change Pledge
- Local Area Agreement on carbon management

4.3 The Audiences that Would benefit from Hearing our Key Messages

Local Authorities: Property, Education, Transport, Waste, Sustainability

LSP/LAA leads, LSP members, Third Sector, other Public Sector, Regional Groups

Architects, engineering firms, environmental consultancies, developers, householders, businesses

4.4 How the Council Might Work with other Beacons within the Theme to Maximise the Impact of Learning Activities

- Build on existing practice of working with pro-active authorities and liaison to share best practice
- Produce joint guidance/information, website, CD /DVD production;
- Joint delivery of conferences, seminars, workshops, exhibitions, tours, communications etc

- Joint delegations to overseas events and projects
- Test other Beacon's best practice & share lessons
- Offer Peer reviews, shadowing
- Use of existing channels (websites, regional groups etc)
- Use of work placements with employees / directorates;

4.5 Experience of Sharing Lessons with Others & Supporting Others to Improve

WCC has track record of openness & cooperation with all wishing to share best practice. Its buildings are regularly used as examples of best practice in sustainable design, renewable energy and energy management. Staff mentor and train other organisations and contribute to regional & national groups & policies, contributing to guidance and case studies.

Staff have visited, hosted, shadowed and been shadowed by other authorities to assist in the development of work on carbon management, mainstreaming sustainability and Climate Change Strategies. Staff are currently helping local district and neighbouring county councils, Worcester Wildlife Trust and the University of Worcester with Climate Change & carbon management programmes.

WCC provides advice and support to organisations interested in wood energy. Presentations are given to professional bodies and national woodfuel seminars. The Council have supported DEFRA and many organisations to implement wood fuel heating systems and introduce BEMs systems. WCC has also hosted many conferences & seminars such as the launch of the West Midlands Woodfuel Strategy. Numerous interested organisations continue to visit WCC.

Education for Sustainable Development (ESD) staff present nationally & internationally sharing best practice on ESD and have hosted many visits from educators from Europe and beyond. They have also shared expertise abroad e.g. Russia, Gambia, Portugal and visited other councils to help them set up their own ESD services and share learning, e.g. Bristol, Reading, Windsor & Maidenhead, Telford & Wrekin, Warwickshire.

Worcester: "Choose How You Move" – Sustainable Travel Town is intended as a demonstration project. WCC recently organised a national Sustainable Travel conference to disseminate learning. The project has also facilitated joint learning with Peterborough City Council and Darlington Borough Council.