

Lewes District Council  
**climate change**



**ADAPTION AND MITIGATION PLAN**

*2009-2016*



## foreword

by Councillor Edward Collict

Climate Change is happening and the immediate concern of local authorities and other providers of services must be to adapt to this change. We also need to start seeking to reduce or stop the human induced element of this change.

It is not a hopeless situation: *“The human species is remarkably adept at both creating and solving problems. A green and sustainable world is not an unachievable goal: all the solutions are there in front of us and within our grasp, given the personal and political commitment of individuals.”*

(Source: Living Planet Report 2008, published WWF)

Whilst it is not a hopeless situation in the long term, the delay in taking effective action to reduce the impact of human activities on climate change, means adaption has become a necessity to cope with the expected increase in temperatures over the next 30 to 40 years. This will mean extreme weather events.

It is perhaps very fitting that this year we are celebrating the work of Charles Darwin, particularly in regard to the importance of adaption to change for survival. For me it is relevant to also look at the current “credit crunch”, how it happened and created devastation across the world, with the efforts of governments and banks seemingly ineffectual.

As the Stern Review indicated, taking measures to adapt to climate change is essential so that the Council and other providers of services can continue to provide services. This means taking steps now to build resilience which will also minimise costs.

The Mitigation Plan will need to be updated and amended over time in response to changing circumstances. We cannot forecast the future accurately, but we can try to anticipate the most likely scenario and plan accordingly.

## introduction

### 1. What is climate change?

*“The climate of the Earth is always changing. In the past it has altered as a result of natural causes... the term climate change is generally used when referring to changes in our climate which have been identified since the early part of the 1900s. The changes we’ve seen over recent years and those which are predicted over the next 80 years are thought to be mainly as a result of human behaviour rather than due to natural changes in the atmosphere.”*

### 2. What is adaption?

*“Adaption to climate change – that is, taking steps to build resilience and minimise costs – is essential. It is no longer possible to prevent the climate change that will take place over the next two to three decades, but it is possible to protect our societies and economies from its impacts to some extent.”*



### 3. Why we need to act?

**3.1** In December 2007, the Local Government Association (LGA) Climate Change Commission published a report calling for local Councils to take a lead on Climate change. The report states “Tackling climate change must be at the centre of local government’s vision for their communities. It is not another priority amongst the many that compete for local government leaders’ attention. It is now clear from the scientific evidence that climate change is the single priority which overrides all others now and for the foreseeable future”. The Commission’s report set out a number of key recommendations for Local Authorities saying that if these are not taken up voluntarily, it will be pressing central government to make them statutory obligations in the next two years.



**3.2** The government has made climate change a national priority with relevant policy developing quickly. The government has recognised the role of local authorities in delivering policies on climate change and is planning increasingly higher expectations on councils to engage and perform in this area of work.

**3.3** Specifically it has:

- Introduced a **Climate Change Act** which sets a new national framework for tackling our climate change goals, sets carbon reduction targets and introduces a new carbon trading scheme from 2009.

- Introduced four new **national indicators** for local government to measure performance on climate change action. Two relate to carbon reduction targets (NI 185, NI 186), one to climate adaption measures (NI 188) and one to tackling fuel poverty (NI 187).
- Introduced the **Climate Change and Sustainable Energy Act 2006** – this requires the Secretary of State to publish an Energy Measures Report (2007), which requires local authorities to “have regard to” information on energy measures.
- Responded to the recommendations in the **Pitt Review** into the Flooding of 2007.
- Revised the Building Regulations and introduced requirements for more sustainable homes.
- Introduced the **Planning and Energy Act 2008** – enabling council’ to set requirements for energy use and energy efficiency in Local Development Frameworks
- Introduced a new **Local Area Agreement (LAA)** in 2008 which includes climate change targets
- Introduced a supplement to **Planning Policy Statement PPS1** which puts climate change at the heart of the planning system

**3.4** In addition, there are a wide range of reports, strategies and white papers bearing on climate change issues which have been produced in the last 24 months, including the Stern Report 2006, the Energy Review 2006, The UK Sustainable Development Strategy 2006, Climate Change Programme 2006, the Energy White Paper 2007, Planning White Paper 2007, Waste Strategy 2007 and the Energy Measures Report 2007.

**3.5** The Council produced its first climate change Strategy in 2007. This document clearly sets out why the Council believes action on climate change is so important and why we have committed ourselves to leading the community in this vital work. Our award winning EMAS and sustainability work have helped to implement climate change activities throughout the Council.

**3.6** Examples of actions we have taken, or plan to take, in relation to climate change include:

- Signing the Nottingham Declaration and producing a first Climate Change Strategy

- Highlighting corporate energy issues and procuring from a 'green' electricity tariff
- Promoting climate awareness raising and behavioural change in communities, businesses and schools via LA21 events, programmes, partnerships and projects.
- Facilitating, demonstrating and implementing renewable energy initiatives.
- Local authority pollution control regime
- Coastal, river and surface water flood control
- Waste and Recycling Management Plan
- Energy efficiency in council housing
- Energy efficiency and fuel poverty.
- Planning and Building Control policies
- EMAS
- Community Strategy/LSP work
- Sustainable procurement
- Travel Plan and vehicle fleet (particularly the waste fleet) management

**3.7** In June 2008, the Council signed up to the Local Area Agreement targets NI186 – per capita CO<sub>2</sub> emissions in the District and the NI 188 – Planning to Adapt to Climate Change. Ambitious targets for the next 3 years have been set.

**3.8** The Audit Commission has also produced a range of national indicators relating to climate change: NI 185 – Percentage of CO<sub>2</sub> reductions from the Council's operations; NI 187 – Tackling Fuel Poverty; NI 189 – Flooding and coastal erosion risk management; and NI 194 Air Quality. The Council will be required to report its performance in these areas of work and will form part of the Comprehensive Area Assessment (CAA).

**3.9** We are well aware that the causes of Climate Change are complex and due to a number of factors, including a range of pollutants known as Greenhouse Gases. Carbon dioxide is only one of these gases, but is widely regarded as a major indicator of the effect of human activity on the environment. The International and Central Government have imposed targets on carbon dioxide emissions and this plan, and the indicators mentioned, reflects those targets. We however will not disregard the other factors influencing Climate Change.

**3.10** We are conscious of the need to act urgently and to make tackling Climate Change a high priority. Not only must we try to mitigate our effects on the environment by, amongst other things, reducing our carbon usage, but it is important that the Council adapts to what is now regarded as an inevitable change to our climate. This Plan seeks to balance the actions we need to reduce the damage we are causing alongside actions we need to implement to adapt to changing circumstances.

## 4. What do we want to achieve?

### 4.1 The Council Plan states:

*“Our ambition is to be recognised as a centre of excellence in environmental management and to make sustainable improvements in the quality of life of local communities.”*

**To achieve this aim, and to tackle climate change, we will:**

- **set clear, realistic targets for CO<sub>2</sub> reduction for the Council's own operations**
- **prepare the Council to adapt to climate change**
- **fulfil our Community leadership role and assist our communities to reduce CO<sub>2</sub> and adapt to Climate Change**
- **seek to stabilise the District's ecological footprint levels by 2016, and thereafter progressively reduce it**
- **seek to reduce the District's Carbon Footprint (2004 baseline) by 2.2% per year**

# what we need to achieve our aims

## 1. As a service provider (adapting our services)

**1.1** The Council has already undertaken a comprehensive assessment exercise in achieving its EMAS accreditation. To achieve this accreditation, the Council needed to assess all its activities, and assess those which were environmentally significant, and then develop a management system to control these activities.

**1.2** A similar process will be necessary to meet the requirements of NI 188. By utilising the Council's existing EMAS process, and its performance management and risk assessment framework and adopting them to incorporate climate change assessments it would be possible to align all our services to meeting our climate change commitments and progress NI 188.

**1.3** This could be achieved with the existing Environmental Steering Group (ESG) and working with Service Heads responsible for the production of service plans and risk assessments.

**1.4** Coordination of this process can be achieved by the Environment Officer working closely with the HECA/Sustainability Officer).

**1.5** Planning policies can have a major impact on tackling climate change. New policies will need to be considered in the Local Development Framework (LDF) currently being formulated. Future decisions on planning applications will be strongly influenced by the LDF policies now in preparation.

## 2. As an organisation using resources (reducing our carbon use)

**2.1** The EMAS programme and Environmental Policy in place at LDC has recently been brought into line with new national indicators to include two corporate objectives:

- EW1- Implement actions to reduce the carbon footprint of Council operations
- EW2- Reduce the Council's consumption of gas, electricity and water

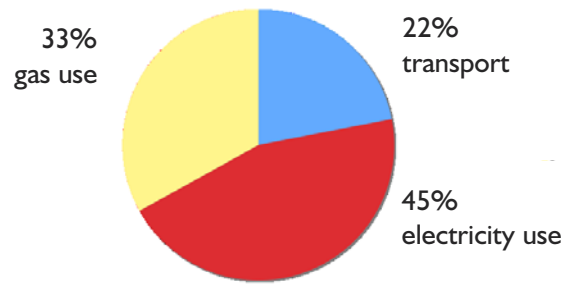
EW1 is concerned with emissions as a whole and, for example, requires investigation into the self generation of renewable forms of energy and the development of a new staff travel plan. EW2 is related to the economic concerns surrounding consumption of resources, and requires the implementation of better monitoring and targeting to improve energy efficiency.

**2.2** NI 185 requires a year on year reduction in carbon dioxide emissions. LDC's energy policy is in the process of being rewritten. A target of a 3% reduction per year has been set in line with the delivery plan for NI 186 and the Home Energy Conservation Act (HECA). The energy policy will form the basis of the action plan to implement the carbon reductions.

### 2.3 Carbon Baseline

The Council's carbon baseline is based upon Defra's NI 185 methodology. It is the total amount of carbon dioxide produced by transport undertaken on Council business and our use of electricity and gas. The Council's carbon baseline is 3,134 tonnes of carbon dioxide. The graph on the next page details the make-up of this 'footprint'.

**Figure 1 % Carbon Dioxide Emissions by type**



- 2.4** In order to achieve our carbon targets, we will:
- (a) implement an effective travel plan which includes CO<sub>2</sub> targets;
  - (b) revise the Council’s energy policy to incorporate effective energy management and CO<sub>2</sub> targets for the organisation;
  - (c) manage our organisations procurement process to include carbon/sustainability assessment within the decision making framework.

### 3. As a community leader

**3.1** The 2007 LDC Climate Change Strategy focussed particularly on practical solutions the community (including businesses and schools) could take to reduce carbon emission. NI 188 places a strong emphasis on encouraging this approach and working in partnership with the LSP and community representatives to promote climate-resilient actions as well as facilitating behaviour change. Level 1 guidance on NI 188 states the Council ‘should be aiming to establish a leadership role on climate change amongst the local community and members of the Local Strategic Partnership.’

**3.2** LDC has been at the forefront of community engagement on climate issues for sometime and its work in this area has been recognised at national and european levels as shown in Figure 2 below.

**Figure 2 (see chart on right)**  
Examples of Climate Related Activity in Specific Areas

Climate Issue	Example Activities
Communication and raising awareness on Climate Change Issues.	Making Things Happen Talks, Workshops Events: Isn’t It Bonkers?, Sustainable Communities Fair, Working with Transition Town Lewes and Climate Concern, LSP Tackling Climate Change Together Event, LSP Environment Group, Smarter Living Roadshow.
Energy	Energy efficiency promotion, Renewable energy (RE) grants, Initiating RE installations in schools, workshops on RE, energy advice to low carbon community initiatives such as Ringmer, Newick, Barcombe, Rodmell and Transition Town Lewes. Also to local businesses as part of resource management advice.
Food	Initiating community orchard project in Ringmer, Lewes Organic Allotment Project, Seedy Saturday. Working with community initiatives such as Common Cause and Eat Sussex event.
Transport	Sustainable Travel Event, Fume Free Friday, Cycle Map with Cycle Lewes
Buildings	Sustainability Checklist, advice on eco-build and low-carbon retrofitting.
Water	Water Auditing of local pubs, rainwater-harvesting advice, promotions of water-saving devices and development of water calculator.
Waste	“Smarter Shopping” Campaign, community scrap store, composting.

LDC’s Local Sustainability Team has spent the last five years raising awareness and engaging on climate change issues. The Sustainability Resource Centre at the Recycling Centre can be used in expanding this area of work.

**3.1** NI 186 (Per capita CO<sub>2</sub> Emissions in the LA area) is primarily concerned with HECA activities; increasing energy efficiency and renewable energy as the Council’s contribution to ‘local effort’. This equates to a 10% saving in CO<sub>2</sub> by 2011.

To achieve this target under the LAA will require adequate funding and resource to be allocated to the delivery plan for NI 186. A comprehensive collection and analysis methodology which may be in the form of a software package, needs to be implemented for the accurate collection of NI 186 data. This may be able to be reconciled with NI 185 software, but this needs to be explored further.

**3.4** Despite the title of this indicator, NI 186 does not give the whole story about per capita CO<sub>2</sub> emissions and, in fact, only describes the production of CO<sub>2</sub> from direct emissions, and then only those to do with energy, transport and buildings. Whilst we are required to report on this indicator to Defra, this indicator is limited, and there are many other factors the community will be able to act upon to reduce carbon use.

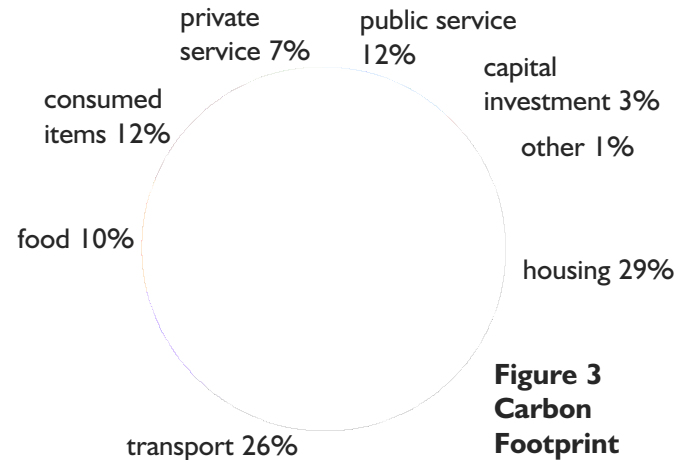
**3.5** The ecological footprint is an indicator of the total environmental burden we place on the planet. It represents the area of land needed to provide raw materials, energy and food, and to absorb pollution and waste created – in this case by the population of each local authority. It is measured in global hectares (gha per capita).

The ecological footprint does take account of CO<sub>2</sub> associated with UK consumption activities and expresses them as an area of land. The CO<sub>2</sub> component of the ecological footprint provides us with the most comprehensive picture of carbon emissions in the District whilst also relating it to specific carbon emitting areas.

**3.6** Using software (REAP) provided by the Stockholm Environment Institute, we have been able to calculate both the per capita carbon and ecological footprints for Lewes District as shown in Figure 3.

Carbon Footprint	Ecological Footprint
CO <sub>2</sub> (tonnes/person)	Global hectares (gha)/ person
12.68	5.61

This is made up of the following proportional components.



**Figure 3 Carbon Footprint**

The ecological and carbon footprint have an important role to play in the communication of climate issues. It deals with consumption and is a concept that can be grasped on a number of levels. It also provides a convenient comparator of the District performance against other areas whether at a local, regional, national or even global level.

**3.7** A draft Community Climate Action Plan is in the early stages of development and includes all the relevant carbon baseline data for the District. We are in the process of developing sector leaflets for each of the areas: energy, food, water, waste, transport and materials consumption, reflecting the themes shown in the carbon footprint graph (Fig 3 above). These leaflets are designed to engage the community (including business and schools) and cover the ecological and carbon footprint for that particular component as well as practical ways of reducing these footprints.

**3.8** Community climate related activity by the Council has been both reactive and pro-active but without any integrated programme other than the remit to engage, facilitate and empower under its sustainability remit. A delivery plan of engagement activities will be produced as part of this over arching action plan.

In order to achieve these targets, we will:

- (i) lead the LSP Environment Theme Group and work with LSP Partners and Area Groups;
- (ii) promote and encourage renewable energy provision within the district;
- (iii) promote and encourage energy efficiency throughout the district; and
- (iv) develop a delivery plan of engagement activities, including Smarter Living Road shows, area Footprinting, and Annual Climate events.
- (v) develop planning policies to mitigate, and adapt to climate change, as opportunities arise through new development proposals.



#### 4 Key Routes for Delivery

**The following Council documents/programmes will be used to deliver our aims:**

- EMAS programme - will assist in mainstreaming our actions of delivering targets for NI 185 and 188
- Corporate risk register – will reflect our risk assessments for NI 188
- The Local Development Framework – will reflect our targets for energy and carbon use in new developments
- The Housing Strategy and Private Sector Housing Strategy – will reflect our targets for energy and carbon use and fuel poverty
- The Travel Plan – will reflect our targets for CO<sub>2</sub> for NI 185
- The Energy Policy – will reflect our targets for CO<sub>2</sub> for NI 185
- The Local Strategic Partnership/Sustainable Community Strategy – will reflect our aspirations and targets for the community in relation to NI 186 and 188
- Community Climate Change Action Plan – will reflect our aspirations and targets for the community in relation to NI 186 and 188 and ecological and carbon footprints

## monitoring and review

The Climate Change Plan sets out the Council's aim to stabilise the district's ecological footprint of 5.61 gha per capita (based on 2004 Figs) We will report progress on this target annually.

We also aim to reduce the District's carbon footprint of 12.68 tonnes CO<sub>2</sub> per capita by 2.2% pa. We will report progress on this target annually.

As part of achieving the above targets, the Council must report on:

current position	target level
(a) NI 188 Present Level 0 2008 Baseline	3 by 2011
(b) NI 186 6.5 tonnes per capita 2007/08 baseline (NB 2005 data)	5.9 tonnes per capita by 2011
(c) NI 185 3134 tonnes - 2007/08 (To be reviewed in 08/09 to incorporate Wave Leisure figures)	3% reduction pa by 2011

These will be reported and progress and work programme will be reviewed annually.



# action plan

## I. To adapt the Council's services to climate change

	Action	Target	Outcome	Timescale	Responsibility	Resource
I.1	Undertake Climate Impact Profile	NI 188 Level 1	Climate Profile complete and reported to CMT	April 2009	PEHO (Env) CCO (EO)	£1,000
I.2	Carry out risk-based assessment of all Council services NI 188	Level 1	Assessment complete	Dec 2009	EO	Officer time throughout Council
I.3	Prepare adaption plan for Council services NI 188 Level 2		Plan complete and implementation started	June 2010	PEHO (Env)	Officer time throughout Council
I.4	Engage LSP to develop district-wide Climate Change adaption Plan NI 188	Level 2	Plan developed	June 2010	HEH	Officer time throughout Council
I.5	Training for service heads on climate change risk assessment	NI 188 Level 1	Training session for Service Heads	May 2009	HEH	Officer time
I.6	Member briefing session held		CLlrs briefed on Climate Change Plan	July 2009	HEH	Officer/ member time

	Action	Target	Outcome	Timescale	Responsibility	Resource
1.7	Climate change target introduced into Council's performance framework, including service plan	All Service Plans include Climate Change measures	Coordinated approach to delivery targets Council-wide	April 2010	HEH/Sue Harvey	Officer time throughout Council
1.8	Ensure planning policies in LDF developed to support climate change adaption  LDF	adopted	Deliver policies throughout the District	Linked to LDF	Assistant Director of Planning Policy	Officer time & potential consultants
1.9	Produce supplementary Planning document on Sustainable Construction	To provide % CO <sub>2</sub>	Deliver policies throughout the District	Linked to LDF timetable	Assistant Director of Planning Policy	Officer time
1.10	Incorporate climate risk into corporate risk register and in business continuity planning	Register updated	Risk Register updated to incorporate risks arising from climate change	April 2010	DPES	Officer time
1.11	Implement biodiversity action plans with partners, and develop coordinated approach to climate change and habitat management. Work with SWT & NE to develop strategy	Co-ordinated approach to Habitat Management and climate change	Multi-agency approach to climate change and habitat management following best practice guidelines currently being developed	Long term	LDC Parks and Planning	TBC - estimate staff time from different organisations

## I. To adapt the Council's services to climate change (continued)

	Action	Target	Outcome	Timescale	Responsibility	Resource
I.12	Develop site management plans which take into account above, and implement habitat management programme on nature reserves and several "open spaces" managed by LDC	New and updated Management Plans for all LDC managed nature reserve areas	Habitat management adapts to climate change e.g. increased management of wetlands habitats such as reedbeds and ponds. Consider managed retreat options on flood plain grazing meadows	Plans written and to be implemented by 2011	LDC Ranger Team	£3,500
I.13	Provide interpretation and education programme aimed at increasing understanding of the impacts of climate change on biodiversity at a local level	Themed events, interpretation materials and activities taking place on reserves	Increased knowledge of climate change and impact on biodiversity within local area	Ongoing	LDC Parks, Ranger and other departments	£2,000

## 2. To adapt the organisation to climate change

	Action	Target Outcome	Timescale	Responsibility	Resource	
2.1	Prepare and present new Travel Plan incorporating CO <sub>2</sub> targets	NI 185	3% reduction on CO <sub>2</sub> pa arising from travel & transport operation	3% reduction on CO <sub>2</sub> pa arising from travel & transport operation	DPES PEHO	Any costs arising from this proposal to be considered by CMT and reported to Cabinet
2.2	Revise energy policy to incorporate CO <sub>2</sub> targets	NI 185	3% CO <sub>2</sub> saving pa	June 2009	HEH/PEHO/ EO	Any costs arising from this proposal to be considered by CMT and reported to Cabinet
2.3	Introduce automated meter reading to building served by monthly supplies	NI 185	Automated Energy Management System in Plan	June 2009	HEH/PEHO/ EO	Any costs arising from this proposal to be considered by CMT and reported to Cabinet
2.4	Revised procurement policy to incorporate carbon/sustainability decision making framework NI 185	Policy adopted by Cabinet	Sept 2009	PEHO/EO	Any costs arising from this proposal to be considered by CMT and reported to Cabinet	

### 3. To provide community leadership and adaption to climate change

	Action	Target	Outcome	Timescale	Responsibility	Resource
3.1	To engage the LSP on Climate Change issues	5.61 gha by 2016	Stabilise the District's Ecological & Carbon Footprints	Ongoing	HEH/TW & PEHO (CCO)	Officer time
3.2	To develop a Community Climate Change Action Plan	Plan in place	Local communities engaged in Climate Change adaption Sept 09	Sept 09	AHWRC PEHO EO/CCO	Officer time plus £5,000
3.3	To install and promote renewable technologies on own buildings and estates where feasible to provide example of good/best proactive One installation pa	NI 185 & 186	Council move towards carbon-free buildings	Ongoing	HEH PEHO EO/CCO	Capital costs-each project to require a business case which will be reported to Cabinet
3.4	Promote recognised local organisations and companies who are using/selling energy efficient and renewable technology	Set up best practice website	Raise awareness across community of available technology	Ongoing	PEHO EO	Officer time
3.5	Target 'Hard to Reach' Groups to promote Climate Change adaption	NI 187	Reduce Fuel Poverty	June 2010	PEHO (Housing) (CCO)	Survey £1,500 pa energy efficiency to be delivered within Housing Capital programme