



# **Carbon Management Strategy and Implementation Plan**

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## Summary

This climate change strategy and Implementation Plan sets out what East Staffordshire Borough Council (ESBC) is doing to mitigate the effects of future climate change. It also considers how we will adapt and prepare for climate change.

ESBC accepts that climate change is occurring and that local government is seen as being central to reducing greenhouse gas emissions (in particular carbon dioxide) at a local level.

We have signed up to the Staffordshire Declaration and are committed to tackling climate change.

This strategy sets in place a number of aims and objectives to ensure that the actions we take are coordinated and effective.

In addition to reducing carbon emissions, there are often other associated benefits to having a strategy, such as helping to reduce fuel poverty, improving air quality and lowering costs both for our organisation and for the wider community through the promotion of more sustainable practices.

There are a significant number of policies and legislative drivers behind having a strategy. Of particular note is the Climate Change Act 2008, from which we base many of our targets.

The climate in Staffordshire is set to change over future decades, with a number of predicted changes including: increased annual temperatures; changes in seasonal precipitation; a cloud and relative humidity decline; soil moisture changes and an increased frequency of extreme weather events.

The changing climate will have a number of potentially negative effects locally, including increased water demand; energy demand changes; health effects and an increased flood risk. There are also some positive impacts which we can aim to capitalise on, namely increased tourism and agricultural benefits.

This strategy focuses on our own 'carbon footprint' and also the reduction of per capita carbon emissions in East Staffordshire.

ESBC has set a target for an annual carbon emission reduction of at least 2% for our own organisation to meet National Indicator 185 (NI 185) “Percentage carbon dioxide reduction from Local Authority operations”.

A ‘Value at Stake’ exercise demonstrates that by aiming for a 2% emission reduction, cost savings for the Organisation will be measured in the £1000’s each year.

The latest emissions for East Staffordshire were 9.2t of carbon per capita for 2007.

The Staffordshire Local Area Agreement has adopted NI 186 “Per capita emissions in the local authority area” and has set an annual carbon reduction target of 1.5% set against a 2005 baseline.

ESBC undertook the Energy Saving Trust’s ‘one-to-one’ support programme and as a part of this process underwent a benchmarking exercise that considered strategy; services; community leadership and our own estate.

The Energy Saving Trust completed a Recommendations Report which detailed a series of carbon reduction measures that we could implement and have been adopted into the Implementation Plan.

Proposals have been assessed for carbon reduction benefits, cost, feasibility, wider impacts, timescale, indicators and responsibility.

A series of performance indicators and targets will be set to measure progress.

This strategy and Implementation Plan also considers adaptation to climate change, which is measured by National Indicator (NI 188) “Planning to Adapt to Climate Change”.

# 1. Introduction

This strategy document sets out ESBC's response to climate change.

It is now generally acknowledged that climate change is occurring and local government has been identified as having an important role in tackling its effects, and reducing the contribution of carbon emissions locally. We are seen as community leaders on this issue.

It is important to have a strategy and Implementation Plan to tackle climate change for many reasons. ESBC has signed up to the Staffordshire Declaration which provides a framework for addressing carbon emissions. In signing this Declaration, ESBC acknowledge the reality of climate change and commits to taking action. This strategy details how we will do this, by describing:

- What we will do to reduce our greenhouse gas emissions resulting from the organisations own activities;
- How we will support residents and businesses in East Staffordshire to reduce greenhouse gas emissions and tackle the effects of climate change.
- How we will adapt as an organisation to climate change and the services we provide.

The measures we have proposed in relation to this strategy have been set out in the form of an Implementation Plan, which covers a number of key areas, containing actions that will be undertaken over varying timescales.

The Energy Saving Trust identifies that in addition to the direct climate change mitigation benefits, having a strategy in place can help have other benefits for ourselves and the wider community, such as:

- Better housing, resulting in social and health benefits.
- Financial savings for the Organisation.
- Lower fuel bills, helping tackle fuel poverty and achieve better standard of living.
- Lower costs for businesses, making them more competitive.
- More efficient use of resources in public services.
- New employment and training opportunities locally.



- A better transport system, improving access for local residents and businesses.
- Improved local air quality.
- Increased resilience to the effects of climate change, leading to greater protection and a better quality of life for people living and working in the local area.

## **2. East Staffordshire Borough Council's vision.**

*'East Staffordshire Borough Council believes strongly in the need to tackle climate change on a local level as well as nationally. We acknowledge that we have a crucial role to play in tackling climate change and we must lead by example through our own actions.'*

*'Our decisions and actions taken today will have important implications for the future'*

### **3. Aims and Objectives of the strategy**

#### **Aims:**

- 1) To reduce the Organisation's own 'carbon footprint' and East Staffordshire's per capita carbon emissions in general.
- 2) To plan how we will 'adapt' to climate change.
- 3) To create a behaviour change in relation to climate change.
- 4) To highlight the economic, social and environmental benefits of taking action on climate change.

#### **Objectives:**

- 1) To reduce greenhouse gas emissions from our functions and services, in line with national targets as described in the Kyoto Protocol 1997 and the Climate Change Act 2008.
- 2) To effectively record our energy use and transport information to enable carbon dioxide emission reductions to be identified.
- 3) To reduce fossil fuel reliance by improving energy efficiency, moving towards renewable and decentralised energy sources.
- 4) To raise awareness of greenhouse gas reduction across the Organisation to encourage behavioral change.
- 5) To embed carbon management and climate change adaptation into corporate policy, strategies and management practice.
- 6) To lead by example and encourage our partners and the community to reduce their greenhouse gas emissions.
- 7) To produce an "adaptation" framework and plans within ESBC.

By meeting the above Aims and Objectives it is hoped we will also achieve indirect benefits such as improved air quality, reduced fuel poverty and improved health and wellbeing of the residents within East Staffordshire.

When considering the implementation plan proposals it is important to consider the hierarchy that exists in relation to the various options available. We will always seek to *reduce* energy consumption as the preferred option, followed by the *replacement* of fossil fuels with low/non-carbon alternatives.

## 4. Description of East Staffordshire

The Borough of East Staffordshire is situated in the central eastern area of the county of Staffordshire, with its eastern boundary bordering South Derbyshire.

The Borough covers an area of 96,000 acres and had an estimated population of 107,700 in 2006. East Staffordshire is largely rural with ancient woodlands in part, and the Weaver Hills adjoining the Derbyshire Dales, in the North. The two main towns where industrial and commercial activities are concentrated are Burton upon Trent and Uttoxeter.

Burton is the principal town with the greatest concentration of population, providing approximately 70% of the Borough's employment.

A map showing the extent of the East Staffordshire Borough is shown in Figure 4.1 (below).

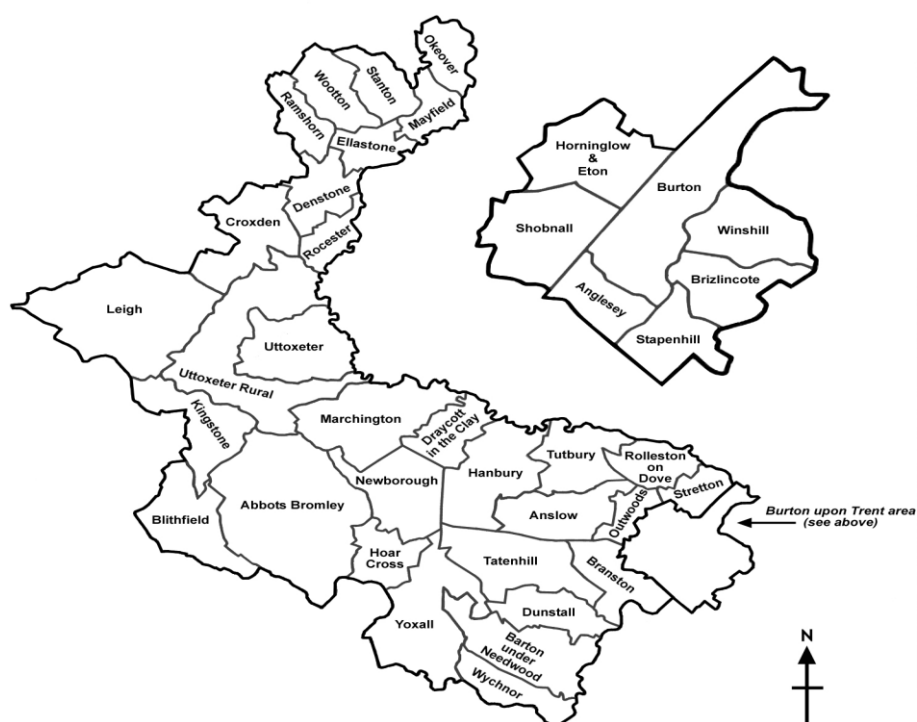


Figure 4.1: Map of East Staffordshire.

## 5. Strategy; Policy and Legislation

It is important to be aware of the backdrop for this strategy by acknowledging the various key drivers that influence what we do in terms of climate change.

These drivers are numerous and come from international, national, regional and local levels.

What is the latest evidence?

- **Climate Change 2007: IPCC Fourth Assessment Report**

Completed by The International Panel of Climate Change (IPCC), this document confirms there is clear evidence of climate change due to the influence of humans, which will continue rapidly without intervention, leading to large-scale irreversible change.

### International Strategy

- The Copenhagen Accord 2009
- The Kyoto Protocol 1997

### National strategy, policy and legislation

- The Energy Acts 2008 & 2010
- Low Carbon Transition Plan 2009
- The Climate Change Act 2008
- “Meeting the Energy Challenge”: A White Paper on Energy. 2007
- The Climate Change Programme 2006
- Climate Change and Sustainable Energy Act 2006
- “Strong and prosperous communities”: The Local Government white paper 2006
- “Securing the future-delivering UK sustainable development”

### Other National Legislation and policy

Other legislation and policy worth mentioning in this section relates to housing, planning and building control.

- The Planning Act 2008
- ‘Building a greener future’ 2007
- The Planning White Paper 2007 ‘Planning for a sustainable future’

- Planning Policy Statement 1 “Planning and Climate Change” 2006
- The Housing Act 2004
- Planning Policy Statement 22 “Renewable Energy” 2004

### **Regional policy**

- The Staffordshire Declaration
- Sustainable Community Strategy for Staffordshire
- Local Area Agreement for Staffordshire (LAA)
- Local Transport Plan for Staffordshire

### **Local Policy**

- Sustainable Community Strategy (East Staffordshire)
- East Staffordshire Borough Council’s Local Development Framework Strategies
- BUATMS (Burton Urban Area Transport Management Study)
- ESBC’s Air Quality Action Plan
- East Staffordshire’s Housing Strategy
- East Staffordshire Borough Council’s Corporate Plan
- Environment Services Service Plan

## **6. What is the greenhouse effect and climate change?**

### **6.1 The Greenhouse Effect**

The “Greenhouse Effect”, is in very simple terms the atmosphere absorbing the sun’s energy as it is reflected/radiated back from the Earth’s surface.

Gases that absorb this energy from the sun are known as “greenhouse” gases, of which there are a large number. Carbon dioxide is the most common and most well known of these, accounting for 85% of greenhouse gases in 2007. (DECC 2009).

Whilst some of these greenhouse gases naturally occur, others are anthropogenic or increased by human activity. Human intervention has significantly increased these gases, since the industrial revolution, which in turn has increased the greenhouse effect.

### **6.2 Climate change**

The climate is the average weather over a long period of time, typically 30 years or more.

The Earth’s climate has always changed between glacial and interglacial periods every 100,000 years or so. These periods are also interspersed by shorter fluctuations in climate. Interglacial periods vary from glacial, with sea levels rising by some 100m and global temperatures increasing by 4-5<sup>o</sup>C.

The problem we are faced with now however is the rapid rate of these changes, which are over significantly shorter periods to those historically.

The Intergovernmental Panel on Climate Change (IPPC) highlights that most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in human induced greenhouse gas concentrations. The global temperature has risen by 0.74<sup>o</sup>C between 1906-2005 (UKCIP 2009). Around 0.4<sup>o</sup>C of this increase has been since the 1970’s (Defra 2009).



## **7. Future Trends- how will the UK's climate be affected?**

The UK Climate Impacts Programme (UKCIP) advisory service, which is funded by Defra (Department for Environment, Farming and Rural Affairs) produces predictions on possible UK climate change scenarios, based on various low to high emissions of carbon dioxide. There is some climate variation, depending on where you are located in the country, although there are a number of general predictions for the UK.

These are:

- an increase in the risk of flooding and erosion
- greater pressure on drainage systems
- increased likelihood of winter storm drainage
- loss of habitat for wildlife
- summer water shortages and low stream flows
- increased risk of subsidence (in areas where subsidence is already a problem)
- increased demand for summer cooling
- buildings becoming uncomfortably hot
- a range of health related issues.

## **8. How will Staffordshire's climate change and what are the potential impacts?**

The UK Climate Projections (UKCP09) compiled by UKCIP gives climate information for the UK up to the end of this century. Projections of future changes to our climate are provided, based on simulations from climate models.

The projections show three different situations representing high, medium and low greenhouse gas scenarios. A low emission scenario would be typical of a situation where the use of renewable energy has replaced fossil fuel consumption almost entirely. A high emission scenario is a situation where there is a high or growing dependency still on fossil fuels (a sort of "do nothing" situation). A medium emission scenario represents an intermediate situation around current emission levels.

The UK Climate Projections 2009 (UKCP09) are the fifth generation of climate information generated for the UK, and is the most comprehensive assessment produced to date. The UK Climate Projections are based on a new methodology designed by the Met Office, which allows a measure of the uncertainty in future climate projections to be included in the information.

UKCP09 reflects advances in the understanding and in modelling of the climate system.

The following graphs are taken from the UK Climate Projections '09 website, funded by DEFRA <http://ukcp09.defra.gov.uk/>

The graphs represent low and high emissions of carbon dioxide and all are based upon an estimation of 50% probability of occurrence. This probability value assigned shows that there is a 50% likelihood that the data will be up to and including that value and a 50% likelihood that it will be over that value. This allows us to appreciate the difference in high and low emissions at a 50% likelihood of occurrence.

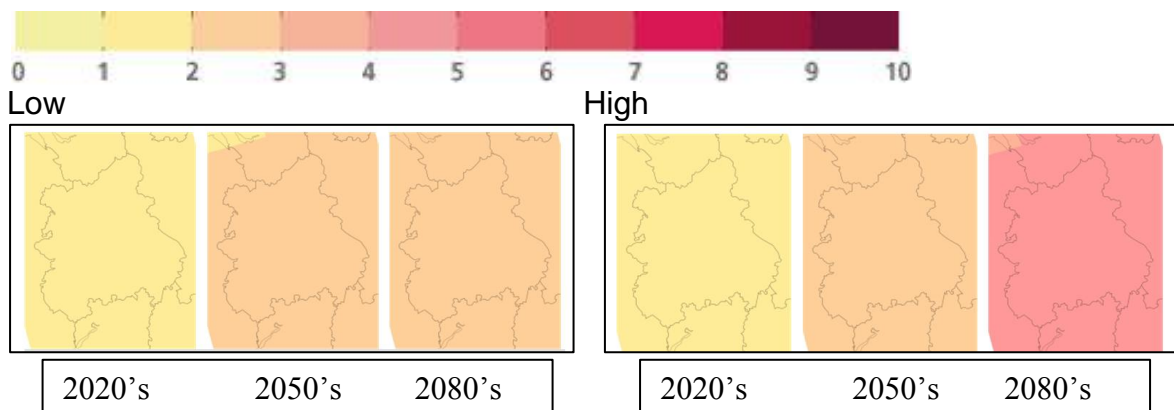


Figure 8.1, Change in Annual Mean Temperature in the West Midlands (°C)

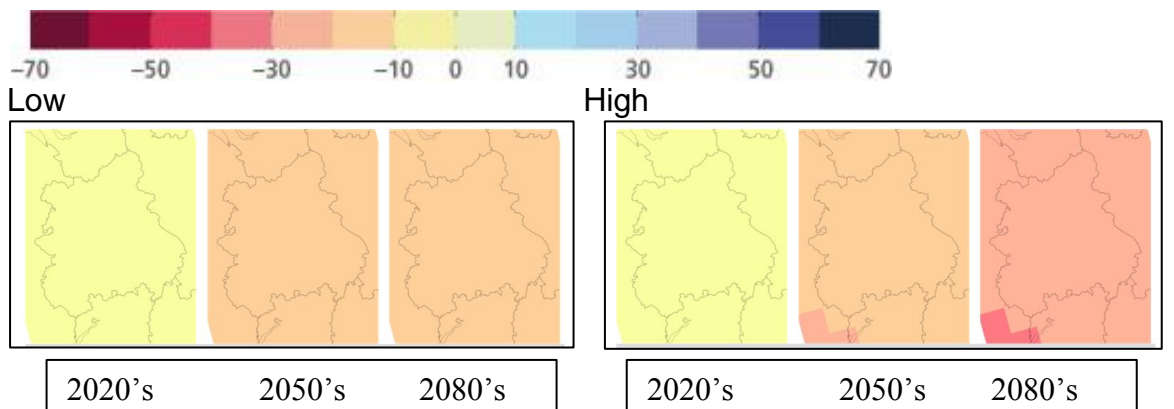


Figure 8.2, Change in Summer Precipitation in the West Midlands (%)

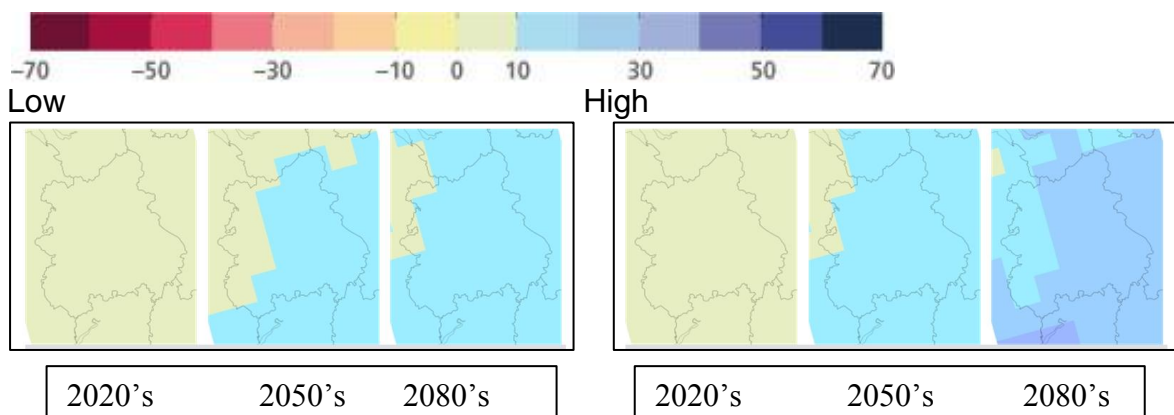


Figure 8.3, Change in Winter Precipitation in the West Midlands (%)

According to these figures, for the West Midlands, we should be expecting; warmer, drier summers and warmer, wetter winters.

These projections summarise that climate change is happening in the West Midlands and highlights through computer modelling, the following future trends: -

- Increases in annual temperatures, predominantly in the summer, but also in the winter.
- There will be a dramatic change in seasonal precipitation.
- Cloud cover is expected to decline slightly overall.
- Relative humidity is expected to decline slightly in the winter and decline much more in the summer
- Average daily wind speed is not expected to change greatly, although the greater increase may be in the winter. Modelling is less certain in relation to this parameter.

The occurrence of extreme weather events is also expected to change. This could be daily extremes or the occurrence of extreme years.

These extreme weather scenarios may be less certain, although they cannot be ignored because of their potential impacts.

In very brief terms there may be future potential negative impacts including: -

- water demand/ availability may cause negative impacts
- change in pattern of energy demand may be a problem
- direct/indirect effects on health e.g. heat exhaustion
- wetter winters may increase the risk of flooding

There also some positive opportunities that can arise, such as: -

- increased opportunity for tourism in the region
- increased opportunity for renewable energy from solar power etc.
- increased opportunity for people to spend time outdoors, providing health benefits

Whilst the occurrence of some of the negative impacts may be unavoidable, the magnitude of the impacts can be mitigated by effective planning and adaptation, which will be discussed further in this strategy.

## 9. Current East Staffordshire Borough Council Carbon Dioxide Emissions

This section details the carbon emissions from ESBC.

### 9.1 National Indicator 185 (NI 185) “Percentage carbon dioxide reduction from Local Authority operations”

At the end of the financial year 2008/2009, NI 185 required local authorities to have produced a “carbon footprint” baseline, based on a particular spreadsheet tool written on behalf of Defra.

This process will be repeated every year to identify the carbon savings of the organisation annually.

Table 9.1 Total carbon emissions for ESBC in 2008/09

Use	Carbon emissions (kg)
Buildings	2,904,609
Transport	1,180,148

In line with the target of an 80% carbon emission reduction from 1990’s carbon levels by 2050 as set out in the Climate Change Act, we will be aiming for an annual average carbon reduction of 2% for this organisation’s own estate and services.

The 2% is the minimum carbon saving we want to achieve and will strive for higher reductions where possible.

The Implementation Plan in Section 18 of this document will set out how we plan to do this.

The information that is required to work out these carbon emission values includes: -

- i) Stationary source data- including building area/energy type/the percentage of renewable energy used/boiler sizes etc.
- ii) Transport source data- including transport type/journey type/distance travelled etc.

As well as reporting our performance against NI 185 each year, this indicator forms part of the wider NI 186 agenda for the whole of Staffordshire, which is discussed further in Section 10.

**9.2 Value at Stake** *(costs are only for indicative purposes only)*

Value at stake is the difference between a ‘business as usual’ approach where no action to reduce carbon emissions is undertaken in the future and a carbon reduction scenario.

The Carbon Trust’s carbon emissions tool for local authorities allows the value at stake to be calculated both in monetary and carbon emission terms.

Assuming that we meet our annual 2% carbon reduction above, there are considerable cost and carbon savings when comparing against the business as usual scenario, which incorporates annual increased fuel and energy costs amongst other things.

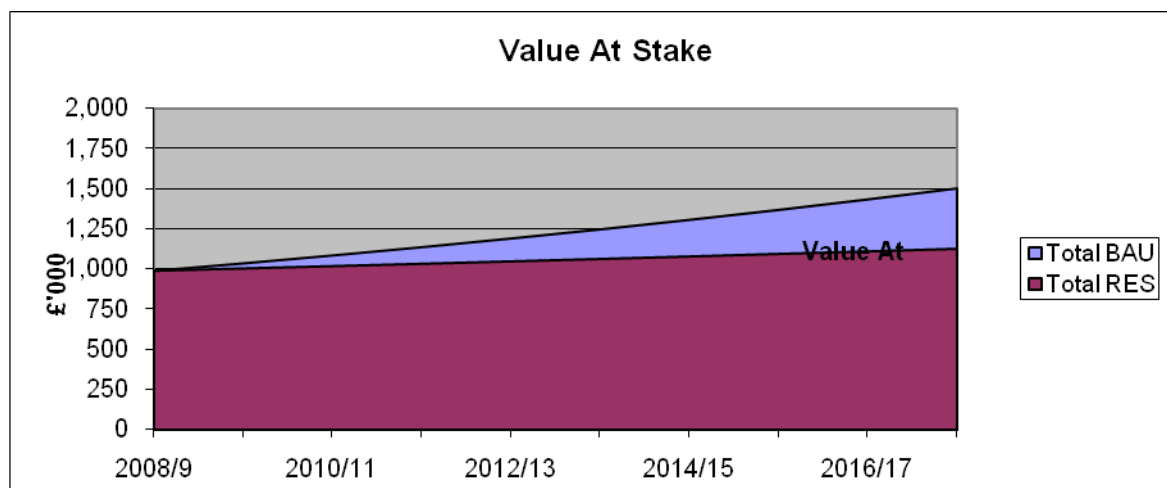


Figure 9.1 Value at Stake- cost

The graph above shows that whilst costs increase year on year for the reduced emission scenario, these are significantly lower than the business as usual scenario.

Assuming an annual 2% reduction in carbon emissions since the base year of 2007/08 the total value at stake for 2009/10 is over £66,900 at current energy and fuel prices. There would be a cumulative saving of over £99,000 since this base year. This value at stake will increase year on year as fuel and energy costs continue to rise.

Importantly, the value at stake for carbon emissions savings is some 165 tonnes of Carbon dioxide in 2009/2010 against the base year. This value at stake can be found in Figure 9.2

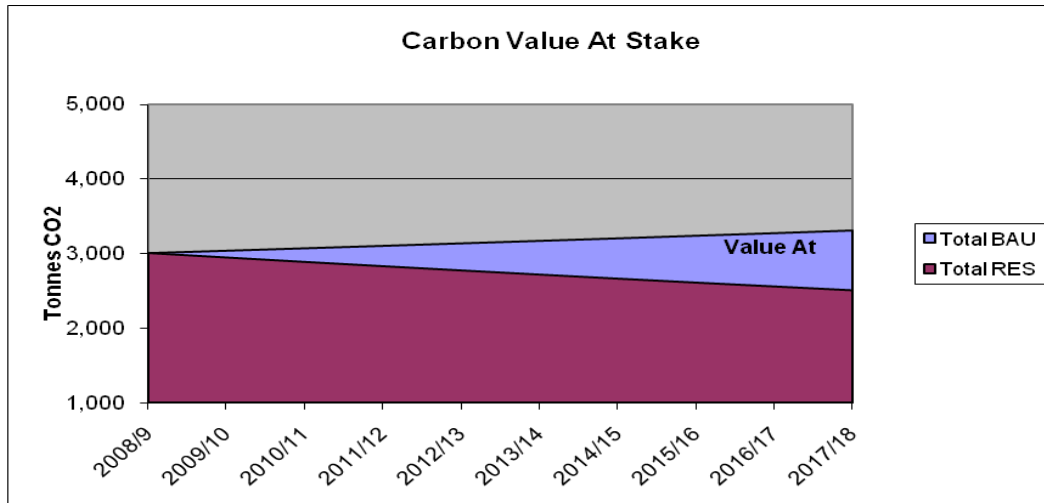


Figure 9.2 Value at stake- carbon savings

The value at stake information shows the large amount of carbon and financial savings that can occur from as little as an annual 2% reduction.

## **10. Current East Staffordshire Carbon Dioxide Emissions**

### **10.1 National Indicator 186 (NI 186) “Per capita emissions in the local authority area”**

This national indicator requires local authorities to reduce carbon dioxide emissions within their area from the community as a whole.

NI 186 has also been selected as one of the key indicators to be adopted by the Local Area Agreement for Staffordshire.

In addition to reducing carbon dioxide emissions from our own Local Authority functions and services, we also need to tackle emissions from East Staffordshire in general.

To measure progress against domestic and international targets The Department of Energy & Climate Change (DECC) currently commissions the consultants AEA to produce ‘Local and Regional Carbon Dioxide Emissions Estimates’.

The aim of this is to provide nationally consistent carbon dioxide emission estimates at local authority and regional levels.

This information utilises published information of local gas, electricity and road transport fuel consumption estimates. The main source of this data is the UK National Atmospheric Emissions Inventory (NAEI), who maintains the information along with the Department for Business Enterprise and Regulatory Reform (BERR).

The data used includes all carbon dioxide emissions with the exception of aviation, shipping and military transport.

The spreadsheet tools breaks down emissions under: -

- Industry/ commerce
- Domestic
- Road transport



This information is useful in identifying the main proportion of carbon dioxide emissions within a local authority area, and therefore helps inform the action planning process.

Table 10.1 Per Capita emissions and changes (AEA 2009)

Region Name	LA Region Name	Year	Industry and Commercial	Domestic	Road Transport	District Totals	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
Staffordshire	Cannock Chase	2005	193.7	230.5	107.9	532.2	94.3	5.6
		2006	199.4	238.3	106.3	544.1	94.3	5.8
		<b>2007</b>	<b>202.2</b>	<b>230.2</b>	<b>104.6</b>	<b>537.0</b>	<b>94.4</b>	<b>5.7</b>
	East Staffordshire	<b>2005</b>	<b>518.9</b>	<b>253.6</b>	<b>241.2</b>	<b>1013.7</b>	<b>107.5</b>	<b>9.4</b>
		<b>2006</b>	<b>541.0</b>	<b>253.3</b>	<b>237.9</b>	<b>1032.1</b>	<b>107.7</b>	<b>9.6</b>
		<b>2007</b>	<b>515.2</b>	<b>246.4</b>	<b>239.3</b>	<b>1000.8</b>	<b>108.3</b>	<b>9.2</b>
	Lichfield	2005	260.1	249.7	272.4	782.1	95.9	8.2
		2006	265.0	257.7	267.4	790.1	96.7	8.2
		<b>2007</b>	<b>266.7</b>	<b>249.9</b>	<b>277.4</b>	<b>794.0</b>	<b>97.5</b>	<b>8.1</b>
	Newcastle-under-Lyme	2005	256.4	296.9	233.8	787.1	123.8	6.4
		2006	264.7	304.4	227.6	796.7	123.8	6.4
		<b>2007</b>	<b>260.6</b>	<b>291.0</b>	<b>233.3</b>	<b>784.8</b>	<b>124.3</b>	<b>6.3</b>
	South Staffordshire	2005	224.4	270.6	210.9	705.9	106.2	6.7
		2006	249.7	276.5	207.6	733.8	106.2	6.9
		<b>2007</b>	<b>240.8</b>	<b>266.1</b>	<b>210.2</b>	<b>717.2</b>	<b>106.3</b>	<b>6.8</b>
	Stafford	2005	342.5	312.4	257.6	912.4	123.2	7.4
		2006	367.1	325.4	253.2	945.7	123.4	7.7
		<b>2007</b>	<b>343.6</b>	<b>312.2</b>	<b>253.3</b>	<b>909.1</b>	<b>124.0</b>	<b>7.3</b>
	Staffordshire Moorlands	2005	320.3	252.8	185.8	759.0	94.9	8.0
		2006	331.6	262.1	182.4	776.1	95.3	8.1
		<b>2007</b>	<b>327.9</b>	<b>250.8</b>	<b>185.5</b>	<b>764.2</b>	<b>95.4</b>	<b>8.0</b>
Tamworth	2005	179.5	170.0	79.0	428.4	75.2	5.7	
	2006	179.6	170.7	78.8	429.0	75.4	5.7	
	<b>2007</b>	<b>163.5</b>	<b>164.0</b>	<b>79.2</b>	<b>406.7</b>	<b>75.6</b>	<b>5.4</b>	
<b>Totals</b>	2005	2295.8	2036.4	1588.6	5920.8	821.0	7.2	
	2006	2398.0	2088.5	1561.1	6047.6	822.8	7.3	
	<b>2007</b>	<b>2320.5</b>	<b>2010.5</b>	<b>1582.7</b>	<b>5913.8</b>	<b>825.8</b>	<b>7.1</b>	

Table 10.2 Per capita carbon emissions percentage changes

Region Name	LA Region Name	Year	Industry and Commercial	Domestic	Road Transport	Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
Staffordshire	Cannock Chase	2005>6 2006>7	2.9 1.4	3.4 -3.4	-1.5 -1.6	2.2 -1.3	0.0 0.1	2.3 -1.4
	East Staffordshire	2005>6 2006>7	4.3 -4.8	-0.1 -2.7	-1.4 0.6	1.8 -3.0	0.2 0.6	1.6 -3.5
	Lichfield	2005>6 2006>7	1.9 0.7	3.2 -3.0	-1.8 3.7	1.0 0.5	0.8 0.8	0.1 -0.4
	Newcastle-under-Lyme	2005>6 2006>7	3.3 -1.6	2.5 -4.4	-2.7 2.5	1.2 -1.5	0.0 0.4	1.3 -2.0
	South Staffordshire	2005>6 2006>7	11.3 -3.5	2.2 -3.8	-1.6 1.3	4.0 -2.3	0.0 0.1	3.9 -2.3
	Stafford	2005>6 2006>7	7.2 -6.4	4.2 -4.1	-1.7 0.0	3.6 -3.9	0.2 0.5	3.4 -4.3
	Staffordshire Moorlands	2005>6 2006>7	3.5 -1.1	3.7 -4.3	-1.9 1.7	2.3 -1.5	0.4 0.1	1.8 -1.6
	Tamworth	2005>6 2006>7	0.0 -8.9	0.4 -3.9	-0.3 0.5	0.1 -5.2	0.3 0.3	-0.2 -5.4
	<b>Totals</b>	2005>6 2006>7	4.5 -3.2	2.6 -3.7	-1.7 1.4	2.1 -2.2	0.2 0.4	1.8 -2.6

Table 10.1 above shows carbon dioxide emissions for East Staffordshire in relation to other local authorities in Staffordshire and against the West Midlands totals.

The per capita average for East Staffordshire is higher in comparison to Staffordshire local authorities, and one noticeable point is the relative contribution of the industrial sector.

Due to the varying nature of local authority areas, a direct comparison of emission values should not be made. The pattern of carbon dioxide emissions is primarily due to the geography and economy of an area. Clearly industry provides us with a potential challenge for the targeting of future carbon dioxide reductions.

Table 10.2 does indicate however that the relative emissions reduction compares well with other local authorities at -3.5%.

Using the 2005 information from the above tables as a 'baseline' it has been agreed that each local authority will be required to produce an annual 1.5% carbon dioxide reduction for its own area. The overall target that has been set is an 11.8% reduction for East Staffordshire, but Government actions are expected to produce a 7.3% contribution, with local authorities contributing the remaining 4.5% over the three-years up until 2011.

Meeting this particular target presents a significant challenge to local authorities, given that we are 'indirectly' encouraging and supporting communities to create reductions.

The direct measurability of any actions is also difficult, due to the diversity of actions that indirectly influence carbon dioxide within the community. Therefore, a series of proxy indicators will be used.

Staffordshire County Council is heading up this particular target, and has drafted a three-year delivery plan up until 2011 to meet these requirements following input from all involved partners.

ESBC has drawn up its own delivery proposals for NI 185 and NI 186, which sits within the overall above NI 186 plan. Many of the identified issues will contribute towards the wider Staffordshire performance against NI 186.

It is considered initially that the housing sector is the area where we have the most influence at this stage, although other sectors will be engaged also.

## 11. The Energy Saving Trust 'one to one' support programme

Towards the end of 2008 ESBC successfully made an application to the Energy Saving Trust for selection on their 'one-to-one' support programme.

This one-to-one support project is a Department for Environment, Food & Rural Affairs (Defra) funded programme to support local authorities to develop a strategic approach to sustainable energy and carbon savings within their own services and activities and also influence the wider community.

The overall aim of the programme is to help the local authority reduce area wide per capita carbon emissions.

The programme was a seven stage process set over two years, with the first year raising corporate awareness and support, benchmarking our current progress regarding sustainable energy and devising an implementation plan.

The second year involved the commencement of the implementation Plan and monitoring progress.

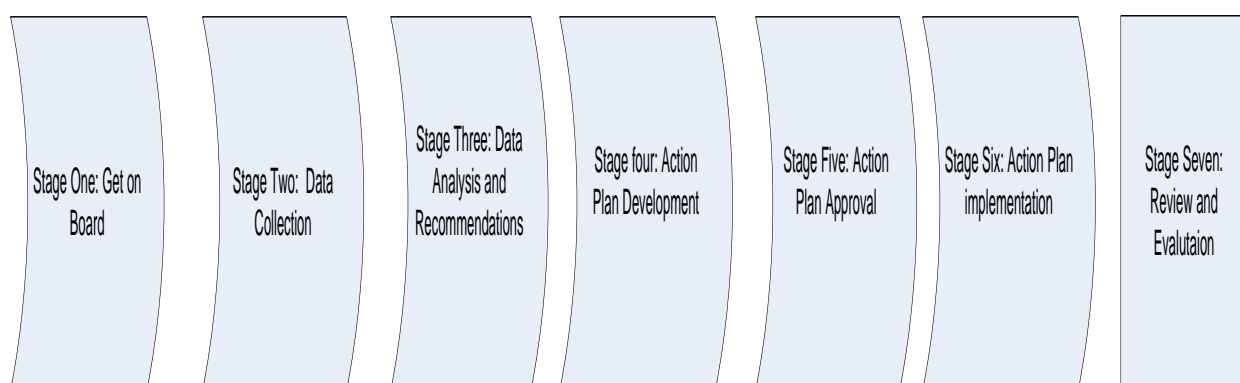


Figure 11.1 The 'one to one programme' (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

Following the benchmarking process, the Energy Saving Trust produced a Local Area Carbon Emissions Reduction Report, which made a series of recommendations on actions we can take to tackle climate change through the sustainable use of energy across the community. The report focused on four specific areas- Strategy; Services; Community Leadership and Own Estate.

These recommendations were incorporated into this document with a series of other measures that have been identified.

## 12 Sustainable Energy Benchmarking

To ensure the action planning process is focussed and specific it was first important to benchmark our current position in terms of sustainable energy.

The benchmarking process involved the consideration of our position in relation to Strategy; Services; Community Leadership and our Own Estate.

The benchmarking included completing a detailed questionnaire and interviewing staff within the organisation to identify what actions we already undertake in relation to energy efficiency and carbon reduction.

The Energy Saving Trust identified the following results.

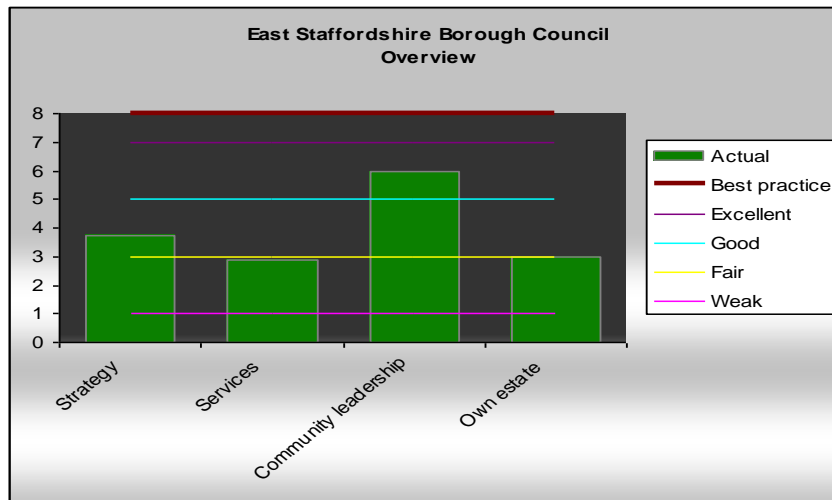


Figure 12.1 Overview of the ESBC benchmarking (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

The above graph shows that we are performing relatively well in terms of our community leadership with a good rating, whereas in other areas we have a fair rating.

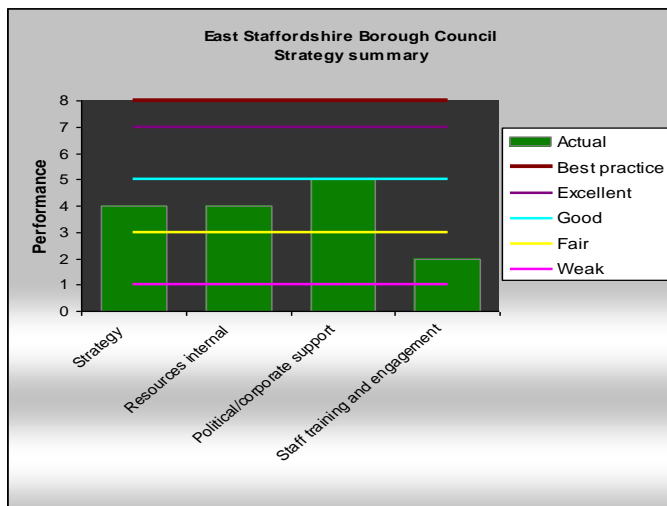


Figure 12.2 Benchmarking Strategy summary (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

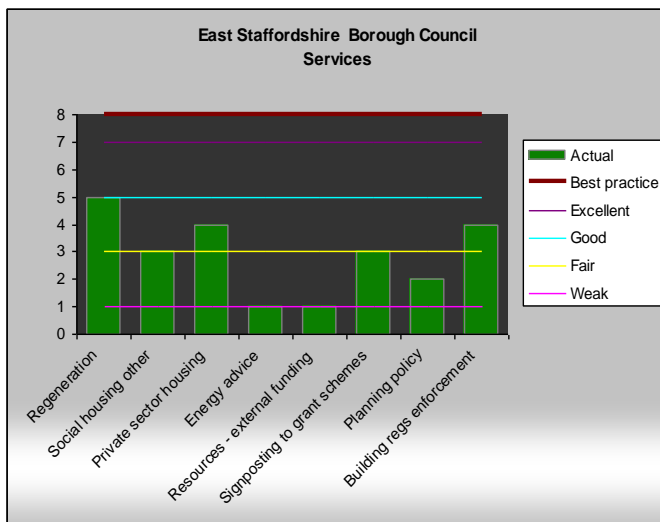


Figure 12.3. Benchmarking Services summary (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

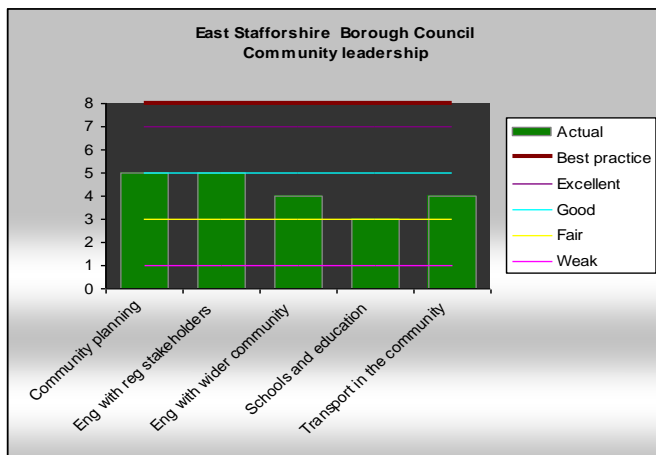


Figure 12.4 Benchmarking Community Leadership summary (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

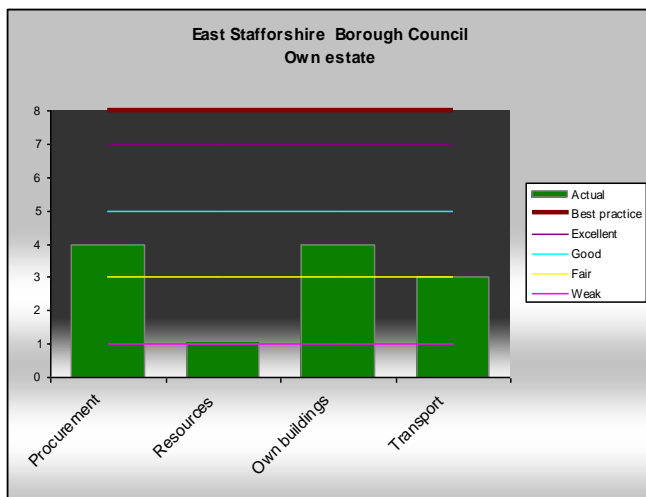


Figure 12.5 Benchmarking Own Estate summary (East Staffordshire Borough Council-Local area carbon emissions report-Energy Saving Trust 2009)

The benchmarking exercise was used by the Energy Saving Trust to help to help inform the contents of the Recommendations Report that was completed on our behalf.



## 13. Our County, Our Climate, Our Choice (OC<sub>3</sub>)

The OC<sub>3</sub> website portal was drawn up by partners in Staffordshire led by Staffordshire County Council. The website was launched in the summer of 2008 as a guide to local residents in Staffordshire on climate change.

The site has a local focus and provides information ranging from the science of climate change, giving practical advice on what people can do, how to assess your carbon footprint and informing what partners in Staffordshire are doing to tackle climate.

The site is interactive, with links to other useful sites and blogs from the public and other interested parties.

This website is the main communication tool for much of the work that we will be undertaking, particularly in relation to engaging the public and other stakeholders.



The site can be accessed at <http://www.staffsoc3.org.uk/>

The ESBC climate change/sustainability website is also now available at [www.eaststaffsbc.gov.uk/services/climatechange](http://www.eaststaffsbc.gov.uk/services/climatechange)

## **14. Performance monitoring of the implementation plan**

It is important to demonstrate progress against this implementation plan and to evaluate its effectiveness.

It is therefore necessary to have a series of performance indicators and targets that are measurable to demonstrate progress towards the actions undertaken.

In this instance, as previously discussed there are three National Indicators directly related to climate change- NIs 185, 186 and 188. These are the Key Outcome Indicators for the Implementation Plan.

For NI 185 it is possible to set quantifiable targets of a 2% annual carbon reduction, which in the most part is measurable.

The overall target of the Climate Change Act is an 80% reduction in carbon emissions from 1990 levels by 2050.

For our own corporate carbon emissions considered under NI 185 for an 80% reduction between 1990-2050 an average carbon reduction of 1.33% would be required each year. It is thought that by aiming for a current carbon reduction of 2% annually that this will give the organisation good early progress towards meeting the ultimate 80% reduction. It is envisaged however that this target will be reviewed regularly and be increased to work towards the national 34% carbon reduction interim target set by the Government for 2020.

In effect however, we are looking for higher than a 2% reduction each year.

For NI 186 the measurability of performance targets is less quantifiable, which is also the case for NI 188. In these cases where performance cannot be quantified, proxy indicators will be used.

This overall target has been considered by partners when setting the NI 186 values within the Local Area Agreement. There will be a 1.5% reduction in each local authority area's per capita carbon emissions each year between 2007/8-2010/11.

To measure against the individual actions contained within the Implementation Plan Outcome Indicators will be identified, and it will be necessary to establish Output Indicators also. For many related measures these Output Indicators and associated targets will not be directly quantifiable and general estimates have to be used or proxy (indirect) indicators.

Where necessary, intermediate indicators will be used to gauge the progress towards achieving the actions. This will enable us to identify whether we are 'on track' to meet the relevant targets.

The measures will be monitored and reported annually through existing frameworks for NI 185, 186 & 188. It is envisaged that specific measures will be undertaken, for the most part, through Service Plans for the appropriate Division/Department.

Finally, the Implementation Plan is not intended to be a 'one off' document and as such, will be reviewed on a regular basis to take account of any changes to local policies that may affect climate either directly or indirectly.

## 15. Adaptation

Even if greenhouse gas emissions were dramatically cut today, the climate would continue to be affected for many years to come. This is because of the lifetime of existing CO<sub>2</sub> in the atmosphere. This is why the Local Authority and residents of East Staffordshire need to be able to respond to these changes through adaptation.

Adaptation is defined by The Intergovernmental Panel on Climate Change (IPCC) as "any adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities".

Although it will be a case of protecting against increased risks, climate change can have some advantages that we can maximise benefit from. We need to be aware of changing climate so that we can adopt behaviour to reduce potential costs and allow us to take advantage of opportunities.

To comply with National Indicator NI 188 "Planning to adapt to climate change" East Staffordshire Borough Council will need to start considering adaptation further. We will assess our vulnerability by looking at the various risks to the services and functions we offer.

Guidance states that adapting to climate change needs to be built in to our normal planning and risk management processes.

### 15.1 National Indicator 188 "Planning to Adapt to Climate Change"

This indicator is designed to measure progress in preparedness in addressing the risks and opportunities of a changing climate.

The aim of the indicator is to embed the management of climate risks and opportunities across all levels of services, plans and estates. It requires us to:

- assess the risks and opportunities comprehensively across the area;
- take action in any identified priority area;
- develop an adaptation strategy and action plan setting out the risk assessment, where the priority areas are- where necessary in consultation and exhibiting leadership of local partners-what action is being taken to address these, and how risks will be continually assessed and monitored in the future; and

-implement, assess and monitor the actions on an ongoing basis.

For this indicator we will need to provide evidence that the local authority has put in place a mechanism for proactively managing climate risks and opportunities in their decisions, plans and measures on the ground.

Defra guidance notes that working with local strategic partnerships to embed climate change adaptation across the local authority area.

## **15.2 Local Climate Change Impacts Profiles**

East Staffordshire Borough Council has completed a profiling exercise to better understand our current exposure to weather and climate in our locality. This Local Climate Impacts Profile (LCLIP) was based on evidence of a locality's vulnerability to severe weather events and in particular how these events affected the local community as well as the Authority's assets and capacity to deliver services.

This involved looking at recent weather events over the last decade to identify what events affected our area and how the local authority responded to it. Undertaking this profile exercise underpins the start of our climate change adaptation work and contributes to the early stages of NI 188, and is a useful tool in raising awareness to this issue.

## 16. Funding

Many of the proposals relating to energy efficiency will be cost effective, save money or cost very little to implement.

Other larger-scale projects may require capital investment, or grants from “invest to save schemes”.

The identification of external funding is one of the measures of the implementation plan.

Where possible, we will seek to work with other partners/stakeholders which will enable costs to be shared or open up new funding only available to joint projects.

The experience of Beacon Authorities is that it is better to concentrate on “quick wins”, which not only demonstrate the benefits of implementing energy efficiency measures, but any money saved could be ring fenced and put towards the funding of future projects.

As Chapter 9 shows, there is certainly a business case for reducing the organisation’s own carbon emissions, as can be seen from the ‘Value at Stake’.

## 17. Implementation Plan Proposals

Following the Energy Saving Trust's approach the measures have been broken down into the four key areas of Strategy; Services; Community Leadership and Own Estate.

This Authority must acknowledge that these measures are predominantly those suggested and identified by the Energy Saving Trust in their "Local Area Carbon Emissions Reduction Report" April 2009 following the benchmarking exercise that we completed with them.

The measures can be found below with a short description of each proposal under the above headings and includes supporting information briefly detailing the anticipated carbon reduction, cost, feasibility and the wider impacts of the measure.

Appendix 1 shows each measure in a 'look up' form with timescales/ targets qualified.

The National Indicators the measures predominantly contribute to are namely:

- NI 185 "Percentage carbon dioxide reduction from local area operations"
- NI 186 "Per capita reduction in carbon dioxide emissions in the local authority area"
- NI 187 "Tackling fuel poverty"
- NI 188 "Adapting to climate change"

Drawing up the implementation plan within this document formed 'Stage 4' of the seven stage 'one-to-one' Energy Saving Trust Programme.

It was decided that we would keep the majority of identified recommendations from the Energy Saving Trust Report, although implementation timescales and prioritisation needed to be decided for inclusion within the Implementation Plan.

A presentation and workshop was hosted by the Energy Saving Trust to engage with ESBC staff to help realise the recommendations into the final implementation plan.

It is envisaged that a number of measures will begin at an early stage and run simultaneously. It must be borne in mind that others are longer-term targets or aspirational. Essentially we are looking for a year on year corporate carbon emission of 2% and 1.5% reduction at a community level across East Staffordshire

## 17.1 Equal opportunities

This strategic document has been the subject of an Equalities Impact Assessment (EIA) and it is envisaged that there will be a number of direct and indirect benefits associated with the strategy across all members of the community. Where appropriate, for larger projects we will ensure that a specific EIA be completed.

We will seek to ensure that communication and activities reach all members of the target communities.

Table 17.1 Implementation Plan proposals

Implementation Measure	Plan Description	Supporting information
<b>STRATEGY</b>		
<b>STRATEGY</b>		
1. Draft a Climate Change Strategy and Implementation Plan  (NIs 185, 186, 187 and 188)	<p>This document is the foundation to climate change mitigation and adaptation work that East Staffordshire Borough Council will be undertaking in the future.</p> <p>This document is designed to be a "living" document, which will be periodically reviewed and annually reported on.</p> <p>This strategic document will cut across all aspects of estate management, service delivery and community leadership, with sustainable energy recognised as a priority.</p>	<p><i>Carbon reduction-</i> in itself is low, but is very important in the bigger picture, underpinning other activity.</p> <p><i>Cost-</i> it is low cost to produce the strategy, but the actions within the Implementation Plan will involve costs. Some measures will however, have long-term energy and cost savings.</p> <p><i>Feasibility-</i>having a strategy and Implementation Plan is the single most important aspect of our climate change work, without which, our approach to tackling climate change would not be coordinated.</p> <p><i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
2. Targets and timescales for energy use reductions in own estate and wider community.  (NIs 185, 186, 187 and 188)	<p>The climate change strategy includes energy reduction targets currently based around NI 185 and NI 186. For our own energy reductions we will look to complete an Energy Efficiency Action Plan (see measure 4.below). In line with the Climate Change Act 2008, we will look towards a 2% year on year reduction for both our own carbon emissions and 1.5% for those of the community. We will however, strive for reductions greater than the targets set.</p>	<p><i>Carbon reduction-</i> potentially significant.</p> <p><i>Cost-</i> setting targets costs nothing, although there will be varying costs associated with the measures required to meet these targets. Long-term savings are likely however.</p> <p><i>Feasibility-</i> very feasible and helps focus and draw together various energy/carbon reduction actions.</p> <p><i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
3. Adaptation Plans for ESBC.  (NIs 188)	<p>As a requirement of National Indicator 188 'Planning to Adapt to Climate Change', a risk assessment matrix will be compiled and an Adaptation Plan written. This indicator is designed to measure progress in preparedness in addressing the risks and opportunities of a changing climate.</p> <p>The aim of the indicator is to embed the</p>	<p><i>Carbon reduction-</i> having a risk matrix and adaptation plan will not necessarily offer reductions, but some adaptation measures may provide carbon savings.</p> <p><i>Cost-</i> to write adaptation plans, other than staff resources, the cost is low. Costs will be associated however with the suite of actions that the adaptation plan will contain. Initial costs on pro-active measures will be lower than the costs of responding to extreme weather events.</p>



	<p>management of climate risks and opportunities across all levels of services, plans and estates. It requires us to assess the risks and opportunities comprehensively across our area. We must show year on year improvement towards adaptation action.</p>	<p><i>Feasibility-</i> the feasibility is high, given that climate change adaptation is a statutory requirement.</p> <p><i>Wider impacts-</i> increased resilience to climate change through adaptation.</p>
<p>4. Energy Efficiency Action Plan <b>(NIs 185 and 188)</b></p>	<p>One of the main principles of climate change mitigation is energy efficiency, which not only saves on greenhouse gas emissions but also on costs. We will write an Energy Efficiency Action Plan initially for the Town Hall, but also extending to other local authority buildings. This will be based on a study previously undertaken by the Carbon Trust, which identified several areas where energy efficiency can be improved.</p>	<p><i>Carbon reduction-</i> this measure has a large potential carbon savings.</p> <p><i>Costs-</i> low cost to draw up the Plan, but there will be costs of implementing the improvements. There is likely to be potential for long-term cost savings however, particularly as energy prices continue to rise in the future.</p> <p><i>Feasibility-</i> this is high, given the potential long-term cost savings. This is also the logical first place to start, when considering lowering the organisation's carbon emissions.</p> <p><i>Wider impacts-</i> financial savings for the organisation; more efficient use of resources in public services;</p>
<p>5. Cross-council data gathering system for energy efficiency. <b>(NIs 185, 186 and 188)</b></p>	<p>To aid in the reporting requirements of NI 185 and to underpin other activities we will set in place a system to record energy use within our own estate and the energy efficiency of public and private housing. This will be in conjunction to the consideration we are currently giving to the use of 'smart metering'.</p> <p>We will also record planning applications relating to sustainable energy.</p>	<p><i>Carbon reduction benefits-</i> no actual direct carbon reduction, although more effective monitoring may help us identify areas for the improvement of potential carbon savings and underpins other activities.</p> <p><i>Cost-</i> the reporting system will be low cost, but resources will be required to maintain it.</p> <p><i>Feasibility-</i> high, providing the various organisational departments get on board.</p> <p><i>Wider impacts-</i> financial savings for the organisation; more efficient use of resources in public services.</p>
<p>6. Evidence base to record activities towards NI 186. <b>(NIs 185, 186 and 188)</b></p>	<p>An evidence base will be established to aid in reporting progress on NI 186. This will be linked to the County Council and other partners in the LAA. We will use the TRACE tool set up by the Energy Saving Trust which would fit in with our 1-2-1 programme and demonstrate evidence of partnership working.</p>	<p><i>Carbon reduction-</i> underpins other activities</p> <p><i>Cost-</i> no cost associated with this measure</p> <p><i>Feasibility-</i> a very high likelihood of occurrence</p> <p><i>Wider impacts-</i> n/a</p>
<p>7. ESBC will promote its leadership role within the Local Strategic Partnership to ensure that other key partners are involved in delivering on NI 186. <b>(NIs 186, 187 and 188)</b></p>	<p>The Energy Saving Trust report highlights that the Local Authority is in a strong position to work with other private and public organisations, in addition to the third sector (voluntary organisations) and the wider community. The main vehicle for this will be the Local Strategic Partnership and an environment group within ESBC.</p>	<p><i>Carbon reduction-</i> involving other organisations and coordinating actions to tackle climate change could have a high overall impact on reducing carbon emissions.</p> <p><i>Cost-</i> difficult to quantify. Does not necessarily have to involve high costs, but some expenditure is likely in support of cross-organisational actions. It is often cost-effective to work with other partners.</p> <p><i>Feasibility-</i> has a high likelihood and will happen.</p> <p><i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
<p>8. ESBC will seek the further support of the Carbon Trust through its Carbon Management Programme and Carbon Trust Standards. <b>(NIs 185 and 188)</b></p>	<p>Over the last few years ESBC has benefitted from the support of the Carbon Trust in identifying what can be done to reduce our own carbon emissions. Some of these measures now need to be implemented and where appropriate we will seek further support. We are also considering the benefit of working towards achieving the Carbon Trust Standard. This is an accreditation scheme that certifies that an organisation has reduced its carbon emissions and is committed to further</p>	<p><i>Carbon reduction-</i> significant in relation to meeting the requirements of NI 185 for reducing our organisation's carbon emissions. Has some modest impact on the wider scale but shows that we are leading by example.</p> <p><i>Cost-</i> cost of participating in the scheme is low, although implementing some of the recommendations will involve costs. There is often a payback associated with energy saving measures however.</p> <p><i>Feasibility-</i> a high likelihood of implementing measures already identified.</p>

	reductions year on year.	<i>Wider impacts-</i> financial savings for the organisation; more efficient use of resources in public services; improved local air quality and increased resilience to climate change through adaptation.
<b>INTERNAL RESOURCES</b>		
9. We will ensure savings from energy efficiency measures are reinvested into sustainable energy.  (NIs 185 and 188)	To ensure continual improvements in energy efficiency it is important to 'ring fence' a certain amount of capital made from energy savings to re-invest in sustainable energy.	<i>Carbon reduction-</i> some carbon impact relative to NI 185, less so on a wider scale, although this measure does underpin other activities.  <i>Cost-</i> there will be a need for initial expenditure and costs for further energy efficiency improvements although reinvesting savings will help by 'topping up'.  <i>Feasibility-</i> the likelihood of this action occurring is not certain and will depend on other economic factors.  <i>Wider impacts-</i> more efficient use of resources in public services.
<b>POLITICAL/CORPORATE SUPPORT</b>		
10. The establishment of top level commitment for action across both the local authority and the wider community.  (NIs 185, 186 187 and 188)	This measure is critical and underpins all other activities. The work of the Energy Saving Trust has already raised the profile of climate change throughout the local authority and is strongly supported by the Chief Executive, Chief Officers and staff in general, including elected Members. It must be ensured that the profile of climate change is kept high on the agenda. Tackling climate change continues to be a priority of the Corporate Plan.	<i>Carbon reduction-</i> this measure is hugely significant in underpinning all of the activities relating to tackling climate change and meeting the NIs.  <i>Cost-</i> no associated costs  <i>Feasibility-</i> this will occur  <i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.
11. Carbon impact assessment for all major projects/decisions at Committee level.  (NIs 185, 186 187 and 188)	The Energy Saving Trust advocates using a simple scoring system on the front page of all Committee reports relating to the impact on climate change of the proposal.	<i>Carbon reduction-</i> depends on the subject of the Committee reports but could be potentially significant.  <i>Cost-</i> this is a low cost measure  <i>Feasibility-</i> there are no real drawbacks to this option and will be easy to implement.  <i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.
12. Energy Champion at a senior level.  (NIs 185 and 188)	This local authority currently has an elected Member as a nominated Energy Champion. We will ensure the support of this person to help raise awareness and interest in energy efficiency across the organisation.	<i>Carbon reduction-</i> in itself the measure has no direct carbon reduction, although underpins and compliments much of the work we are doing in relation to NI 185.  <i>Cost-</i> no real costs associated with this measure.  <i>Feasibility-</i> already a person nominated.  <i>Wider impacts-</i> financial savings for the organisation, lower costs for businesses and increased resilience to climate change.
13. Scrutiny review of energy use at the Local Authority.  (NIs 185 and 188)	The Energy Saving Trust recommends that it is useful to conduct a scrutiny review of energy use within the organisation to identify where we could improve and anything we are doing well and could build upon. This work could tie in with activities concerned with NI 185.	<i>Carbon reduction-</i> this action underpins other activities and could lead to relatively significant carbon savings within the organisation in relation to NI 185.  <i>Cost-</i> low cost option that could potentially lead to cost savings after an initial period of investment.  <i>Feasibility-</i> this would be a relatively easy measure to implement

		<i>Wider impacts-</i> financial savings for the organisation, lower costs for businesses and increased resilience to climate change.
<b>STAFF TRAINING/ENGAGEMENT</b>		
14. Staff training and induction packs <b>(NIs 185, 186, 187 and 188)</b>	<p>We have already started to undertake staff training, but will continue to broaden this.</p> <p>Planning and Building Control staff will require greater future awareness in relation to climate change, and drivers at the local authority will benefit from 'eco-driving' training.</p> <p>Staff in areas of the Council with significant energy use will receive energy training.</p> <p>It will also be beneficial to ensure that all frontline staff who engage with the public are aware of the various energy efficiency schemes/grants that are available to certain sectors of the community.</p> <p>The new starter pack is being amended to promote carbon/energy saving and the travel plan.</p> <p>This measure includes some kind of e-training on the insight module accessible via the intranet.</p>	<p><i>Carbon reduction-</i> no direct reductions, but underpins activities.</p> <p><i>Cost-</i> training is relatively low cost and simple.</p> <p><i>Feasibility-</i> very likely to occur and will expand in the future.</p> <p><i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
15. Staff awareness campaigns <b>(NI 185)</b>	<p>The local authority has already started to raise awareness, although this will be expanded. The Energy Saving Trust recommends energy costs are assigned to individual departments and reduction targets are set.</p> <p>Staff can also cover domestic and travel advice for staff.</p> <p>Green driving/eco driving training will be undertaken,</p>	<p><i>Carbon reduction-</i> relatively low impact, but underpins NI 185 work. Raising the awareness of climate change amongst people is always a beneficial exercise.</p> <p><i>Cost-</i> this is a further low cost measure.</p> <p><i>Feasibility-</i> no real barriers to undertaking these measures.</p> <p><i>Wider impacts-</i> financial savings for the organisation, lower costs for businesses and increased resilience to climate change.</p>
16. Departmental Energy Champions <b>(NI 185)</b>	<p>As an extension to the overall Energy Champion theme. Each department or building will have an energy champion to look after the practical implications of saving energy and informing staff of energy saving tips etc.</p>	<p><i>Carbon reduction-</i> will be relatively low but still significant in relation to NI 185.</p> <p><i>Cost-</i> low cost with the potential to save on energy use and expenditure.</p> <p><i>Feasibility-</i> easy to implement</p> <p><i>Wider impacts-</i> financial savings for the organisation and lower costs for businesses</p>
<b>SERVICES</b>		
17. Regeneration schemes within East Staffordshire will have specific targets for energy efficiency.  We will ensure that a core focus of economic development activity is to secure high sustainable energy standards in projects and businesses targets.  <b>(NIs 185, 186, 187 and 188)</b>	<p>We will secure high sustainable energy standards in projects and business targets. The opportunity for this may come as part of the Growth Point agenda. We will identify projects as 'showcases' for sustainable energy</p>	<p><i>Carbon reduction-</i> this measure has a medium impact. Shows we are being progressive and can have quite a large effect given the future growth identified in East Staffordshire.</p> <p><i>Cost-</i> projects may initially be more expensive, although they don't always need to be and can have future savings.</p> <p><i>Feasibility-</i> it is down to ESBC to attract and require good quality projects and development in the Borough. Could therefore, be relatively feasible.</p> <p><i>Wider impacts-</i> good quality development enhances East Staffordshire. Better housing, resulting in social and health benefits; new employment and training opportunities locally; a better transport system, improving access for local residents</p>

		and businesses; improved local air quality and increased resilience to climate change through adaptation.
18. ESBC will support and encourage local businesses to become more energy efficient and greener.  <b>(NIs 186 and 188)</b>	Many local authorities run award/environmental champion schemes, which could be developed in East Staffordshire.  We will take a more active role alongside other partners in awareness raising to various organisations or grants that are available to support energy efficiency.	<i>Carbon reduction-</i> medium, but dependent on update locally.  <i>Cost-</i> a relatively low cost option for the Local Authority, higher initial costs for businesses, although there may be long-term payback.  <i>Feasibility-</i> would not be difficult to get off the ground and develop further in the future.  <i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include lower costs for businesses; new employment and training opportunities locally; improved local air quality and increased resilience to climate change through adaptation.
<b>SOCIAL REGISTERED LANDLORDS</b>	<b>HOUSING-SOCIAL</b>	
19. Develop Strategies with Registered Social Landlords (RSLs).  <b>(NIs 186 and 187)</b>	There are a whole host of measures that can be worked on with RSLs in East Staffordshire. This will involve strengthening our relationship with them to help encourage and support energy efficiency and to obtain housing stock information. This includes helping raise energy awareness amongst tenants and help to encourage energy efficiency and home insulation improvement standards with the use of targets. We will also encourage RSLs to consider sustainable/renewable energy and to help secure appropriate funding. There are many other issues that could also be considered such as encouraging RSLs to develop work plans to raise average SAP ratings, prioritising the poorest performing housing and hard to treat properties and to ensure that opportunistic energy work is included in repair and maintenance programmes and void repairs  We will encourage RSLs to ensure they are set up to implement the EU Energy Performance of Buildings Directive by ensuring Energy Performance Certificates are issued each time a dwelling changes tenancy.	<i>Carbon reduction-</i> depending on the scope of activities the benefits will range from small to medium.  <i>Cost-</i> a relatively high cost for some options, lower costs for others.  <i>Feasibility-</i> the County Council is already working with RSLs which we can link into and some activities are already taking place through some RSLs.  <i>Wider impacts-</i> better housing, resulting in social and health benefits, tackles fuel poverty and lower costs for businesses
<b>PRIVATE HOUSING- RENTED AND OWNER OCCUPIED.</b>		
20. ESBC will introduce specific schemes to tackle and promote energy efficiency in privately owned properties. This will also include fuel poverty referral schemes.  <b>(NIs 186 and 187)</b>	We are currently identifying suitable schemes to establish and support in relation to improving energy efficiency/insulation in privately owned homes. We are to support a larger scheme being coordinated by the County Council and Staffordshire Fire Service.	<i>Carbon reduction-</i> high. The domestic sector contributes significantly to carbon emissions. A successful scheme(s) could have a very positive contribution to reductions.  <i>Cost-</i> expensive to supplement energy insulation improvements, although certain cross-sections of the community may be eligible for grants. Can be a cost-effective measure however.  <i>Feasibility-</i> not easy to establish successful schemes, but no reason why this measure is not feasible.  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
21. ESBC support the Housing, Health and Safety Rating System (HHSRS)  <b>(NIs 186 and 187)</b>	By enforcing the HHSRS energy efficiency and importantly fuel poverty can be addressed by ensuring landlords meet the necessary requirements.	<i>Carbon reduction-</i> is high, given the number of rental properties.  <i>Cost-</i> relatively low cost since work is required to be completed by landlords, this measure need not be expensive.  <i>Feasibility-</i> will require sufficient resources within the Private

		Housing Team, but is a relatively feasible option.  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
22. We will consider the financial viability of setting up a Council tax rebate, grant or loan scheme to help persuade East Staffordshire residents invest in sustainable energy.  <b>(NIs 186 and 187)</b>	Various schemes are already operated by a number of local authorities. We will consider the feasibility of such schemes in this borough.	<i>Carbon reduction-</i> has a medium reduction. Dependent on how effective the uptake is.  <i>Cost-</i> would be expensive.  <i>Feasibility-</i> will need to be determined, may be identified as not the most cost-effective option.  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
23. ESBC will work with the regional HECA/Carbon Action Network forum to share best practice.  <b>(NIs 186 and 187)</b>	This will enable us to learn from other organisations with successful schemes.	<i>Carbon reduction-</i> low but underpins much of the private housing sector carbon reduction work.  <i>Cost-</i> very low cost  <i>Feasibility-</i> high feasibility  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
24. We will set up and use a database for private sector dwellings with energy data to monitor progress and to help allocated resources.  <b>(NIs 186 and 187)</b>	This would be done for properties in East Staffordshire and utilise information from amongst other things the Energy Saving Trust's Home Energy Efficiency Database.	<i>Carbon reduction-</i> low but underpins much of the private housing sector carbon reduction work  <i>Cost-</i> low cost  <i>Feasibility-</i> would not be a difficult measure to implement.  <i>Wider impacts-</i> n/a
25. We will consider how to target 'hard to treat homes'  <b>(NIs 186 and 187)</b>	We will consider what options are available for treating 'hard to treat homes'. This may include 'flag ship' examples of what can be done.	<i>Carbon reduction-</i> low but underpins much of the private housing sector carbon reduction work.  <i>Cost-</i> costs may vary depending on options considered, but may be relative expensive.  <i>Feasibility-</i> may be low when considering cost-benefits.  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
<b>ENERGY ADVICE</b>		
26. Energy advice scheme and marketing sustainable energy  <b>(NIs 186 and 187)</b>	We will commit to working with the Energy Saving Trust on energy advice campaigns. This will include supporting front-line staff in energy efficiency advice and referrals to the Energy Saving Trusts' advice Centre. This could include specific advice programmes to certain sectors of the community or certain community areas or hotspot areas.	<i>Carbon reduction-</i> low- potentially significant impact depending on schemes undertaken.  <i>Cost-</i> relatively low cost, dependent on the schemes chosen.  <i>Feasibility-</i> this overall measure would be relatively easy to implement, at least to a certain degree.  <i>Wider impacts-</i> better housing, resulting in social and health benefits and tackles fuel poverty.
27. All ESBC staff will follow the domestic energy efficiency advice code of practice.  <b>(NI 186)</b>	This code of practice ensures that the energy efficiency advice that is given out is accurate and relevant.	<i>Carbon reduction-</i> low but underpins much of the private housing sector carbon reduction work  <i>Cost-</i> low cost  <i>Feasibility-</i> relatively straightforward to implement, although staff would need to be familiar with the Code.  <i>Wider impacts-</i> may help tackle fuel poverty.
<b>RESOURCES- LEVERING IN EXTERNAL FUNDING</b>		
28. We will introduce a proactive programme to secure external funding and access support services.  <b>(NIs 185, 186, 187 and 188)</b>	This will help fund the various measures identified within this strategy.	<i>Carbon reduction-</i> no direct carbon reduction, but the more funding that is available the more measures we can support and the greater the potential reduction benefits.  <i>Cost-</i> low cost  <i>Feasibility-</i> highly feasible  <i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and

		health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.
<b>SIGNPOSTING TO EXTERNAL SCHEMES</b>	<b>TO GRANT</b>	
29. Signposting to grants and schemes. <b>(NI 186)</b>	In addition to the schemes suggested in Action 21, we will set up a partnership with the Energy Saving Trust to promote the uptake of grants and various national schemes to industry, commerce and the public.	<i>Carbon reduction</i> -successfully promoting the uptake of grants and schemes will provide a medium level of carbon reduction.  <i>Cost</i> - low cost option.  <i>Feasibility</i> - will involve the use of resources, but is entirely feasible.  <i>Wider impacts</i> - lower costs for businesses; new employment and training opportunities locally.
30. Our own grant schemes <b>(NI 186)</b>	We will consider the feasibility of setting up our own grant scheme to fill gaps in national funding.	<i>Carbon reduction</i> -will depend on what is offered and marketing success.  <i>Cost</i> - higher cost option.  <i>Feasibility</i> - may not be viable due to cost so feasibility may be low.  <i>Wider impacts</i> - lower costs for businesses; new employment and training opportunities locally; better housing, resulting in social and health benefits and tackles fuel poverty.
<b>Planning Policy</b>		
31. Planning and building policy through the Local Development Framework (LDF) to encourage energy efficiency and renewable energy. <b>(NIs 186 and 188)</b>	ESBC is currently undertaking work on the Core Strategy and other key policy documents under the Local Development Framework (LDF). A supplement to Planning Policy Statement 1 "Planning and climate change" helps identify and strengthen the role of the planning system in tackling climate change  We will also ensure that we require new developments to go beyond the minimum requirements of the current Building Regulations and ensuring at least level 3 (and where possible level 4) of the Code for Sustainable Homes for new development. The Government's ultimate goal is that all new homes will be 'carbon neutral by 2016.  We will use the planning system to drive higher standards in existing dwellings.  Finally, we will look to encourage and incentivise 'exemplar/ carbon neutral developments'  A Staffordshire wide study is already underway to identify the opportunities for renewable energy generation in the area.	<i>Carbon reduction</i> - This will be significant. East Staffordshire, in particular Burton has been identified as a 'growth point' and as such there will be a requirement for a significant number of new homes in forthcoming years. With effective planning and building control policies, there is a good opportunity for reducing per capita carbon reduction.  <i>Cost</i> - need not be significantly more than they will be anyway under the LDF. Our policies will be in line with best practice nationally, and therefore should not be seen as a barrier to development.  <i>Feasibility</i> - a very high feasibility, with the exact extent of the policies to yet be finalised.  <i>Wider impacts</i> - socio-economic and environmental impacts are all positive and include; better housing; lower costs for businesses; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.
32. Reduce car dependency through the planning system. <b>(NI 186)</b>	Through the planning system we will seek to encourage sustainable transport such as walking and cycling and also good links to public transport. The Growth Point status of Burton will give us a significant opportunity for developing some of these ideas further.	<i>Carbon reduction</i> - potentially significant, particularly with the growth point agenda in Burton.  <i>Cost</i> - need not be significant in the whole scale of things, given the large amount of development that is planning in forthcoming years.  <i>Feasibility</i> - a high feasibility, as this will happen as part of the growth point work.

		<i>Wider impacts-</i> a better transport system, improving access for local residents and businesses; improved local air quality.
33. The establishment of a cross-departmental working group.  <b>(NI 186)</b>	By linking up the Planning, Planning Policy and Building Control Departments this will help put policies into practice.	<i>Carbon reduction-</i> helps underpin the various processes.  <i>Cost-</i> no cost associated with this measure.  <i>Feasibility-</i> there should be no barriers to establishing a working group and therefore the feasibility is high.  <i>Wider impacts-</i> n/a
34. Planning and Building Control information on energy efficiency and renewable energy  <b>(NI 186)</b>	The Planning and Building Control Teams will develop simple information packs for enquiries from the public and as part of the planning application process.	<i>Carbon reduction-</i> small impact, but underpins the various processes.  <i>Cost-</i> very little cost associated with this action.  <i>Feasibility-</i> this measure would be straightforward to implement and therefore have a high feasibility.  <i>Wider impacts-</i> n/a
<b>BUILDING REGULATIONS ENFORCEMENT</b>		
35. Enforcement of Part L of the Building Regulations.  <b>(NI 186)</b>	This ensures the buildings meet the minimum energy efficiency requirements of Part L of the regulations.	<i>Carbon reduction-</i> has a medium impact.  <i>Cost-</i> will hopefully be achievable within existing resources.  <i>Feasibility-</i> relatively straightforward to implement.  <i>Wider impacts-</i> increased resilience to climate change through adaptation.
<b>Community Leadership</b>		
<b>COMMUNITY PLANNING</b>		
36. Strengthen the link with the Sustainable Community Strategy and NI 186.  <b>(NI 186)</b>	The Sustainable Community Strategy already mirrors the NI 186 requirement for reducing per capita carbon emissions. We will ensure however that the link between the two is strengthened, as the Local Strategic Partnership is in a prime situation to help in the delivery of many of the actions around this National Indicator.	<i>Carbon reduction-</i> the specific action has no significant carbon reduction also though this will be critical in underpinning much of the work on the delivery of NI 186.  <i>Cost-</i> little cost involved and in fact could help secure funding towards some of the NI 186 delivery.  <i>Feasibility-</i> likely to happen.  <i>Wider impacts-</i> socio-economic and environmental impacts are all positive and include; better housing, resulting in social and health benefits; financial savings for the organisation; tackles fuel poverty; lower costs for businesses; more efficient use of resources in public services; new employment and training opportunities locally; a better transport system, improving access for local residents and businesses; improved local air quality and increased resilience to climate change through adaptation.
<b>Engagement /awareness raising with wider community</b>		
37. Engagement and awareness raising within the wider community.  <b>(NI 186)</b>	In addition to engaging with regional stakeholders we will raise awareness with the community in general. This may involve work with the Energy Saving Trust and other organisations with specialist experience in this area. In its simplest terms this may be mail shots or events, but is likely to also involve work with community groups.	<i>Carbon reduction-</i> successful campaigns will potentially help deliver significant carbon savings.  <i>Cost-</i> costs may be significant, depending on the type of campaign work completed. In some instances, partner organisations can help secure or signpost to available funding.  <i>Feasibility-</i> engagement with the wider community is certain to occur.  <i>Wider impacts-</i> really depends on the type of campaign, but can support the public in many ways.
38. We are to support community centres within East Staffordshire to undertake feasibility studies into renewable energy and encourage energy efficiency improvements.  <b>(NI 186)</b>	Community centres are often the focal point of some communities and we feel that by auditing these buildings for energy efficiency and the potential for renewable energy they are setting an example within the community, which a large number of people can benefit from.	<i>Carbon Savings-</i> there are only a handful of Community Centres so the reduction may only be small, although this action will benefit a relatively large number of members of the community.  <i>Cost-</i> there will be costs associated with this measure, although there may be grants to help support expenditure.

		<p><i>Feasibility-</i> this measure may be an ongoing project, with not all centres being dealt with simultaneously, and may lead on to further work as identified by the feasibility studies.</p> <p><i>Wider impacts-</i> lower costs for businesses.</p>
<p>39. Carbon Crush programme in East Staffordshire.</p> <p><b>(NI 186)</b></p>	<p>ESBC are hoping to extend the Carbon Crush programme that was run by the Newcastle (under Lyme) Countryside Project which is part of the Staffordshire County Council in January 2008. Marches Energy Agency (MEA) were commissioned to deliver the first round of the project but this included capacity building, they are now doing in-house training.</p> <p>The project incorporated a series of energy workshops with project planning and support. The workshops covered issues such as understanding climate change, peak oil, renewable energy and ways to use less energy and fuel. The workshops cumulated in a project at Apedale Country Park for a solar powered irrigation system for a community organic vegetable garden.</p> <p>We will look to establish other community energy efficiency initiatives and community renewable schemes (where we can aid communities in the installation of renewable energy technologies). These will take place in other local communities-looking to tie this work in with other related activities already taking place.</p>	<p><i>Carbon savings-</i> depends on the project(s) identified. Impact on carbon savings may only be small although if successful and extended could have a medium impact. Whilst some impacts may be modest, they are still significant to the community involved in the projects.</p> <p><i>Cost-</i> there will be varying costs associated with the projects, but again some external funding may be available.</p> <p><i>Feasibility-</i> some type of project work is likely to occur.</p> <p><i>Wider impacts-</i> tackles fuel poverty; lower costs for businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
<p>40. Partnership working with local community groups.</p> <p><b>(NI 186)</b></p>	<p>We will support community groups on local energy-based projects. We will utilise the Energy Saving Trust's Green Communities programme, which helps provide information, support, advice and training to local authorities and community groups on project work.</p>	<p><i>Carbon savings-</i> depends on the project(s) but could have a medium reduction impact.</p> <p><i>Cost-</i> will vary, but some funding will need to be identified, but not necessarily through the Local Authority.</p> <p><i>Feasibility-</i> some type of project work is likely to occur.</p> <p><i>Wider impacts-</i> tackles fuel poverty; lower costs for businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
<p>41. Low Carbon communities</p> <p><b>(NI 186)</b></p>	<p>There is already a successful Community in Whittington and Fisherwick near Lichfield with others planned in South Staffordshire.</p> <p>ESBC will look to establish Low Carbon Communities within our area.</p> <p>The concept of these Communities is to engage with households and businesses to draw up tailored energy saving plans, which also includes community buildings. These projects include the installation of energy efficiency measures and small-scale renewable energy.</p>	<p><i>Carbon savings-</i> over time there will be a medium impact in terms of carbon savings. Projects become self sustaining over time.</p> <p><i>Cost-</i> there are costs involved in establishing the communities, but there can be grants available.</p> <p><i>Feasibility-</i> the establishment of at least one low carbon community is likely.</p> <p><i>Wider impacts-</i> tackles fuel poverty; lower costs for businesses; improved local air quality and increased resilience to climate change through adaptation.</p>
<p>42. We will encourage the local community to develop community renewable schemes.</p> <p><b>(NI 186)</b></p>	<p>There are already a few examples nationally, and we will seek to promote and engage with community groups/ organisations wishing to establish such schemes.</p>	<p><i>Carbon savings-</i> over time there will be a medium impact in terms of carbon savings. Projects become self sustaining over time.</p> <p><i>Cost-</i> there are costs involved in establishing the communities, but there can be grants available.</p> <p><i>Feasibility-</i> low to medium likelihood of a project taking place.</p> <p><i>Wider impacts-</i> tackles fuel poverty; lower costs for businesses; improved local air quality and increased resilience</p>



		to climate change through adaptation.
43. Promotional film montage for OC3 website. <b>(NI 186)</b>	As part of a wider waste management project we are commissioning a short climate change film montage of things we can do to tackle climate change that we will put on our website and Staffordshire County Council's dedicated OC3 climate change portal.	<i>Carbon savings-</i> minimal although helps undertake and raise the profile of our climate change work. <i>Cost-</i> there are costs involved although this measure is linked to a wider Environment Services project. <i>Feasibility-</i> early preparation work is already underway. <i>Wider impacts-</i> n/a
44. Engaging local small/medium-sized businesses. <b>(NI 186)</b>	Whilst larger companies are required to consider energy efficiency and climate change either through the Climate Change Agreement trading scheme or the soon to be implemented Carbon Reduction Commitment, smaller companies are less engaged at present, with less support available.  ESBC will be considering ways of engaging and giving support to these businesses in relation to general climate change information including where they can get funding for carbon reduction projects.	<i>Carbon savings-</i> could be large for individual organisations and have a medium overall impact on the community. <i>Cost-</i> there are grants and other funding streams available for feasibility studies into energy efficiencies/renewable projects. Although it will involve capital costs for organisations, there may be long-term savings. <i>Feasibility-</i> the local authority already has links with local organisations and should be relatively easy to engage with them. <i>Wider impacts-</i> lower costs for businesses; new employment and training opportunities locally; improved local air quality and increased resilience to climate change through adaptation.
<b>SCHOOLS AND EDUCATION</b>		
45. Support environmental education in schools. <b>(NI 186)</b>	Although much of the education work is coordinated by the County Council, we will engage with schools using our Education Officers. We are also running a schools film competition around the theme.  We are considering joint work with the Staffordshire County Council to have input into schools	<i>Carbon savings-</i> only small but education is an important way of bringing about long-term improvements. <i>Cost-</i> low cost measure. <i>Feasibility-</i> some limited work is already about to commence. <i>Wider impacts-</i> n/a
<b>TRANSPORT IN THE COMMUNITY and WITHIN THE ORGANISATION</b>		
46. Work to reduce car dependency and encourage a modal shift towards public transport and sustainable transport. <b>(NI 186)</b>	Although ESBC does not have a great deal of influence with regard to the infrastructure network in the Borough, the County Council's Local Transport Plan details the delivery of sustainable transport measures. Specifically there is a Burton Urban Area Transport Study (BUATMS) for the town, with specific targets for reducing congestion which we fully support.	<i>Carbon savings-</i> potentially there could be a high amount of carbon saved through this measure. <i>Cost-</i> this is an expensive measure, although there are many benefits of the BUATMS work. <i>Feasibility-</i> measures are already timetabled. <i>Wider impacts-</i> a better transport system, improving access for local residents and businesses and improved local air quality
47. Promote and raise awareness regarding efficient driving. <b>(NIs 185 and 186)</b>	This will be done both internally to our own staff, but also to the community in general.	<i>Carbon savings-</i> could be high, but realistically more likely to be relatively low. This may change if fuel becomes more expensive. <i>Cost-</i> relatively low cost and can save on fuel costs to organisations and individuals. <i>Feasibility-</i> highly feasible measure. <i>Wider impacts-</i> improved local air quality and financial savings for the organisation
48. Adopt planning conditions to help reduce traffic growth. <b>(NI 186)</b>	We will utilise the Beacon Authorities' Low Emissions Strategies Group draft good practice guidance on using the planning system to reduce transport emissions.	<i>Carbon savings-</i> could be high with development growth earmarked for the future. <i>Cost-</i> a low cost option. <i>Feasibility-</i> relatively feasible, at least to some extent. <i>Wider impacts-</i> a better transport system, improving access for local residents and businesses and improved local air quality
49. Partnership work with the County Council to promote travel plans in local businesses.	The County Council already undertakes work to encourage Travel Plans. We will identify areas where we can support in this.	<i>Carbon savings-</i> could be high. <i>Cost-</i> costs involved are low.

<b>(NI 186)</b>		<i>Feasibility-</i> need to identify where we can support.  <i>Wider impacts-</i> a better transport system, improving access for local residents and businesses, lower costs for businesses and improved local air quality
50. We will revise our own Travel Plan <b>(NI 185)</b>	This is already underway and ESBC believes in leading by example. We have reviewed both commuter vehicle use and also our vehicle fleet.	<i>Carbon savings-</i> low, but acts as a positive message to other organisations.  <i>Cost-</i> some costs to help improve the sustainable transport infrastructure. Potentially significant cost savings from a more efficient fleet.  <i>Feasibility-</i> already happening  <i>Wider impacts-</i> financial savings for the organisation; lower costs for businesses; a better transport system, improving access for local residents and businesses; improved local air quality.
51. We will promote the Energy Saving Trust's Green Fleet review to local businesses. <b>(NI 186)</b>	This is a free service to companies over a certain size. We will undertake the process ourselves to again lead by example. The Green Fleet Review helps identify where company vehicles could be used more efficiently.	<i>Carbon savings-</i> will have a medium impact on carbon savings. High savings from our own emissions.  <i>Cost-</i> the service is free although there may be some costs involved with the review's recommendations. Ultimately there should be cost savings from the recommendations.  <i>Feasibility-</i> this measure has a high likelihood of occurrence.  <i>Wider impacts-</i> financial savings for the organisation; lower costs for businesses; a better transport system, improving access for local residents and businesses; improved local air quality.
52. Vehicle purchase/leasing policy <b>(NI 185)</b>	We will write a policy in relation to vehicle leasing and purchasing to favour more environmentally friendly vehicles.	<i>Carbon reduction benefits-</i> some positive effect on emission reductions.  <i>Cost-</i> there will be associated costs with this policy, although leasing and replacement are necessary requirements anyway.  <i>Feasibility-</i> policy will be feasible; scope of it will depend on extra cost versus benefits.  <i>Wider Impacts-</i> financial savings for the organisation and improved local air quality.
<b>OWN ESTATE</b>		
53. Establish a 'Green procurement policy' <b>(NI 185)</b>	The current procurement policy will be reviewed to favour sustainable products.	<i>Carbon reduction benefits-</i> some carbon reduction, although not as direct as some of the other energy/fuel related measures.  <i>Cost-</i> low cost to review, although costs will be incurred when changing to 'greener' products.  <i>Feasibility-</i> likely to occur, with the extent of changes dependent on cost versus benefit.  <i>Wider impacts-</i> supporting local economy.
54. The encouragement of sustainability amongst contractors. <b>(NIs 185 and 186)</b>	We will encourage sustainability by including environmental criteria when selecting suppliers.  There may be occasions where regional procurement may be an option.	<i>Carbon reductions-</i> low to medium emission reductions.  <i>Cost-</i> should not be significant costs associated with this measure.  <i>Feasibility-</i> relatively feasible, providing costs are still competitive.  <i>Wider impacts-</i> supporting local economy.
<b>OWN BUILDINGS</b>		
55. Consider the viability of ring fencing a proportion of the expenditure saved from energy efficiency to reinvest into further energy saving. <b>(NI 185)</b>	As we gradually make savings from reduced energy usage and efficiencies, consideration will be made to reinvesting some of the financial savings into further energy reducing projects.	<i>Carbon reduction-</i> low overall, but significant for the local authority.  <i>Costs-</i> costs vary, but would encourage continued energy savings.  <i>Feasibility-</i> feasible, although possibly not under the present economic climate.

		<p><i>Wider impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>56. Feasibility study for renewable energy generation</p> <p><b>(NI 185)</b></p>	<p>ESBC will consider the feasibility for the various options of renewable energy on our own estate. This will include considering solar, wind and biomass energy.</p>	<p><i>Carbon reduction-</i> a relatively large carbon reduction potential for our own Local Authority emissions.</p> <p><i>Cost-</i> feasibility studies are inexpensive, although outlay costs for the installation of renewable energy and the associated infrastructure will be relatively high. There may be some longer-term cost savings if fossil fuel costs rise in the future. The Feed in Tariff now makes this a more financially attractive option however.</p> <p><i>Feasibility-</i> high likelihood of the study taking place. Feasibility of renewable technology be installed will depend on outcome of the study.</p> <p><i>Wider impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>57. Smart meters</p> <p><b>(NI 185)</b></p>	<p>This measure is one of the main priority actions for NI185 and is increasingly being taken up by local authorities and other businesses. This is an effective way to monitor energy consumption across an estate as it is the most accurate way of measuring areas of high consumption. This will make savings in itself by picking up anomalies and will enable focussed energy efficiency measures.</p>	<p><i>Carbon reduction</i> - no reduction directly, but underpins our energy efficiency work.</p> <p><i>Cost-</i> costs for the metering set-up, although this will save some money in the longer-term.</p> <p><i>Feasibility-</i> very feasible</p> <p><i>Wider impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>58. Replacement of ESBC car park lighting</p> <p><b>(NI 185)</b></p>	<p>We will adopt a policy to replace existing local authority car park street lighting with more energy efficient bulbs.</p>	<p><i>Carbon reduction benefit-</i> there are only a limited number of street lights, so the carbon reduction will also be relatively low.</p> <p><i>Cost-</i> relatively low cost option.</p> <p><i>Feasibility-</i> high providing the energy efficiency bulb replacement costs are not prohibitive.</p> <p><i>Wider impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>59. Energy efficient lighting for new car parks.</p> <p><b>(NI 185)</b></p>	<p>As part of the Burton Growth Point Strategy there will be new car parking in the town. We will ensure that any local authority lighting will use the most energy efficient lighting possible.</p>	<p><i>Carbon reduction potential-</i> relative to amount of car parking lighting, but may be significant.</p> <p><i>Cost-</i> higher capital costs, but lower running costs.</p> <p><i>Feasibility-</i> Likely to occur as part of the Growth Point Strategy.</p> <p><i>Wider Impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>60. Setting energy targets for Departments</p> <p><b>(NI 185)</b></p>	<p>As recommended by the Energy Saving Trust, we will assign energy costs to departments or buildings, based on actual use. Targets will then be set for energy reduction. This raises staff awareness and can be supported by training.</p>	<p><i>Carbon reduction-</i> low overall, but significant for the local authority.</p> <p><i>Cost-</i> low cost and may save money</p> <p><i>Feasibility-</i> highly feasible</p> <p><i>Wider impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<p>61. We will consider developing an exemplar project to demonstrate carbon savings.</p> <p><b>(NIs 185 and 186)</b></p>	<p>This may be supported by funding and demonstrates that we are leading by example.</p>	<p><i>Carbon reduction-</i> may be small in itself, although leads by example.</p> <p><i>Cost-</i> would be costly, but depends on the project</p> <p><i>Feasibility-</i> relatively feasible, depending on the scale of the project. The growth point work may give rise to an appropriate opportunity.</p> <p><i>Wider impacts-</i> dependent on project.</p>
<p>62. Working from home</p> <p><b>(NI 185)</b></p>	<p>The working from home policy will be made more flexible to reduce commuting at the Local Authority</p>	<p><i>Carbon reduction benefit-</i> could be significant in some instances.</p> <p><i>Cost-</i> costs involved in supporting the home working infrastructure.</p> <p><i>Feasibility-</i> may be practical reasons why some staff cannot</p>

		<p>work from home, although may be welcomed by some employees.</p> <p><i>Wider Impacts-</i> financial savings for the organisation and more efficient use of resources in public services.</p>
<b>TRANSPORT</b>		
<p>63. Appoint a full time travel coordinator.</p> <p><b>(NI 185)</b></p>	<p>In addition to reviewing the Travel Plan, the Energy Saving Trust recommends that we appoint a full time travel coordinator.</p>	<p><i>Carbon reduction benefit-</i> underpins the Travel Plan work.</p> <p><i>Cost-</i> medium level of cost through appointment of a member of staff.</p> <p><i>Feasibility-</i> A possibility, although part-time resourcing may suffice for an Authority this size</p> <p><i>Wider Impacts-</i> financial savings for the organisation ; more efficient use of resources in public services and improved local air quality</p>

## 18. Conclusion

This Strategy includes a comprehensive list of measures that ESBC is striving to achieve in relation to sustainability and climate change. The numerous measures are designed to be ongoing and as such, many are long-term aspirations whilst others have already started.

Following the formal sign-off of this strategy and Implementation Plan, further implementation work will begin with the various measures identified, beginning with those that 'underpin' the overall strategy. The focus will be on both our own organisation and the community in general, including partnership working.

The Corporate Plan refresh for 2010-11 continues to have numerous sustainability/climate change related measures, which demonstrates the commitment of this Organisation on this issue.

Progress regarding our work towards carbon reduction will be reported on an annual basis. Progress on the three National Indicators NI185, NI186 and NI188 is reported back through the Corporate Plan, annually.

## References

- AEA 2008. AEA 'Local and Regional Carbon Dioxide Emissions Estimates for 2005-2006.
- DECC 2009. Department of Energy and Climate Change National Statistics 2009
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- UKCIP 2009. UK Climate Impacts Programme. Website "What is climate change?"