

**CLIMATE CHANGE PROGRESS REPORT**  
TWO YEARS OF PROGRESS SINCE THE NOTTINGHAM DECLARATION  
**Agenda Item 7(a)**

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**Background Papers:-** [Nottingham Declaration 2006](#); [BDC Sustainable Energy Strategy](#)  
**Financial Implications:-** None  
**Equalities Implications:-** None  
**Legal Implications:-** None  
**Options:** To note progress being made on climate change mitigation and adaptation; the development of a carbon management plan and new national indicators on climate change  
**Risks:-**None

### **EXECUTIVE SUMMARY**

This report marks the end of a second year of progress in dealing with climate change issues since the Council signed the Nottingham Declaration on Climate Change in January 2006. During the past year Braintree District Council has continued to play a leading role in the reduction of carbon emissions from its own operations and in the wider community. Many of the ideas and projects mentioned in last year's report have now come to fruition with increased activity in all areas related to climate change. In particular, planning requirements that ensure new developments incorporate carbon reduction measures are now firmly embedded in development control practice and are making an impact as the developments come on stream.

This report lists a number of new and ongoing initiatives that either contribute to the reduction of climate change or help adapt to the effects of our changing climate. Wherever possible the effect of the initiatives is quantified in terms of CO<sub>2</sub> savings. It also identifies new initiatives for the year ahead, many of which are already in progress and introduces the two new climate change indicators in the new local authority performance framework.

A key feature of the past year's climate change activity has been partnership working with Colchester Borough Council and Uttlesford District Council. Through this partnership Braintree has been able to access the support of the Carbon Trust in developing a Carbon Management Plan. This report provides some background details to the Carbon Management Plan and a summary of the proposed Strategic Implementation Plan.

Climate change and carbon reduction are recognised as being key areas for action in the Council's new four-year objectives. The carbon management programme together with the development of existing initiatives will ensure that Braintree District Council continue to play a leading role in this important area of work.

### **DECISION**

To note the progress made on climate change during the past year, actions proposed for 2008/09 and the climate change indicators in the new national performance framework.

# CLIMATE CHANGE PROGRESS REPORT TWO YEARS OF PROGRESS SINCE THE NOTTINGHAM DECLARATION

## 1.0 BACKGROUND

Early in 2006 the Council, together with Uttlesford District Council signed the [Nottingham Declaration on Climate Change](#). By signing the declaration the Council acknowledged that Climate Change is occurring and that it will have far reaching effects on our economy, society and environment. The declaration commits the Council to achieve a significant reduction in greenhouse gas emissions from its own operations and to encourage the community and key partners to do the same.

Last year's progress report, "The Nottingham Declaration One Year On" highlighted a wide range of activities which contributed to the mitigation of climate change or the adaptation of our environment to deal with inevitable change. This included the obvious energy efficiency and promotional work as well as introducing some of the enormous improvements that could be achieved through implementing effective planning policies.

This year the report shows further progress and achievements over and above the ongoing activities from 2006. During the year, working in partnership with Colchester and Uttlesford Councils on the high profile Carbon Management Programme has strengthened commitment to CO<sub>2</sub> reduction. This has enabled a better understanding of our current performance and an ambitious carbon reduction programme for the next five years.

The body of this report follows the same format as last year, listing activities and actions under the main service delivery themes and quantifying CO<sub>2</sub> reduction wherever possible. New sections have been added to cover changes to performance reporting and the Carbon Management Programme.

## 2.0 SCOPE OF REPORT

Much of the environmental work carried out by the Council has a positive climate change impact and the report includes the more significant ongoing activities as well as new initiatives. Both mitigation and adaptation measures are included as are direct effects and indirect or service effects. Calculating the net carbon savings at a local level is not always straightforward as many services also contribute to emissions. The report uses recognised carbon calculators and even rule of thumb methods where appropriate but does not attempt to apply complex life cycle analysis tools where readily available data is not available. The reporting period is for the calendar year January 07 to December 07 rather than the more usual financial year. This fits better with the date of signing the Nottingham declaration and the reporting periods for the new indicators.

### 3.0 DESCRIPTION OF CLIMATE CHANGE INITIATIVES

#### Energy Conservation

Home energy use is a major source of carbon dioxide with the domestic sector being responsible for 28% of all CO2 emissions. Burning fossil fuels to heat our homes or to produce electricity releases carbon. Improving standards of insulation and other energy saving measures can reduce this. Home energy conservation also helps deal with fuel poverty, reducing heating costs for low-income households and providing more comfortable homes. The Council encourages home energy conservation through promotional work and the provision of grant aid.

<b>Activity</b>	<b>Performance (January 07 to December 07)</b>	<b>Mitigation or Adaptation</b>	<b>Estimated Carbon Savings (CO<sub>2</sub> Equivalent)</b>
Cavity Wall and Loft Insulation Grants are promoted through a scheme offering £100 credit on Council Tax payments.	231 properties improved	M & A	409 tonnes
Free Cavity Wall and Loft Insulation is available to many residents on a means tested basis in the Warmfront partnership with British Gas.	95 properties improved	M & A	168 tonnes
Low energy light bulbs (compact fluorescent lamps) are distributed as part of promotional activities such as World Environment Day.	6,000 compact fluorescent lamps distributed	M	150 tonnes per annum, 3,000 tonnes for lifetime of bulb
Sustainable energy promotion through newsletters, leaflets, targeted mailings and face to face contact. Performance based on national figures showing an average 5% saving as a result of individual contact with personalised information and advice. Number of contacts include World Environment Day pledges.	3,200 contacts	M & A	1,760 tonnes
An environmental education programme has been developed which includes Climate Change talks and activities to school age children.	10 climate change talks	M & A	Unknown

## Renewable Energy

Renewable sources of energy are helping to reduce dependence on fossil fuels and offer major reductions in carbon dioxide emissions. They also contribute to national energy security. In addition to large-scale generation projects there is increasing interest in small-scale local generation. The Council encourages the installation of domestic-scale technologies such as solar hot water and wind turbines through its planning policies, the provision of information to the public and developers, and the provision of grant aid.

<b>Activity</b>	<b>Performance (January 07 to December 07)</b>	<b>Mitigation or Adaptation</b>	<b>Estimated Carbon Savings (CO<sub>2</sub> Equivalent)</b>
Wind Turbine grant aided installations	1	M	Unknown
Solar Hot Water grant aided installations	21 completed installations	M	466 tonnes
Planning consents for wind turbines	2 installations, total installed capacity 16kW	M	Unknown (reliant on windspeed)
6KW demonstration wind turbine at Discovery Centre	Ongoing energy saving to Discovery Centre	M	99 tonnes
Solar hot water demonstration project at Discovery Centre	Ongoing energy saving to Discovery Centre	M	50 tonnes
Web site information and leaflets advising the public on energy efficiency and small-scale renewable energy projects.	3000 leaflets distributed	M	Unknown

## Planning and Sustainable Development Policies

Planning and sustainable development policies are key drivers in establishing low carbon development in the District. The past year has seen considerable progress in translating the broader aims of the Local Plan and emerging Local Development Framework documents into more specific guidance for developers and the appraisal of our own policies for climate change and sustainability impacts.

<b>Activity</b>	<b>Performance (January 07 to December 07)</b>	<b>Mitigation or Adaptation</b>	<b>Estimated Carbon Savings (CO<sub>2</sub> Equivalent)</b>
Planning decision notices have required that all developments of 10 dwellings or more meet the Code for Sustainable Homes Level 3 rating	496 new dwellings required to achieve Level 3	M	25% reduction over and above current Building Regulation standards
Planning decision notices have required that all developments of 1000m <sup>2</sup> or more meet the BREEAM "Very Good" rating	13 new warehouse units required to achieve very good	M	25% reduction over and above current Building Regulation standards
Planning conditions imposed requiring on site primary energy provision in new developments.	24 dwellings, 2 warehouses and one nursery school required to include renewable energy	M	Performance over and above current Building Regulations, installed capacity unknown.
Planning conditions imposed requiring developments to demonstrate energy efficiency and renewable energy provision.	286 dwellings, 6 commercial developments and 2 recreation centres required to comply with enhanced standards	M	Performance over and above current Building Regulations, installed capacity unknown.
A "Sustainable Development Guide" and "Checklist" was produced for developers to encourage high standards of energy efficiency and provision of renewables. A number of applications are now being received for developments incorporating these principals.	Checklist required for all new dwellings and commercial developments.	M & A	Unknown

Green Travel Plan approved for implementation in 2008/09 to include car share scheme and incentives to reduce journeys and encourage modal shift.	In progress, implementation delayed to allow inclusion in Carbon Management Plan targets	M	Unknown
Green Fleet Review undertaken by the Energy Savings Trust, recommendations have been incorporated in the Green Travel Plan and Carbon Management Plan	Review Completed	M	Unknown
A research programme to develop a Climate Impact Profile for the District has been commissioned. This will provide a localised indication of the likely effects of climate change and aid future planning and adaptation work.	Report due September 2008	A	Not applicable
Developer and Agent Forum to introduce Code for Sustainable Homes and Permitted Development Rights on Micro Generation	September 2007, second forum planned for 2008	M & A	Unknown
Training programme introduced for Building Regulation and Planning Officers on the introduction of sustainable construction and renewable technologies.	Ongoing Programme	M	Unknown
The "Uttlesford" planning condition requiring high standards of energy efficiency in houses being extended will be implemented in the Braintree District once suitable inspection resources are in place.	Planned for summer 2008	M	Unknown
A sustainability checklist approach is being applied to all new Council strategies and incorporated in planned reviews of existing strategies to ensure climate change issues are addressed.	Ongoing	M & A	Unknown

### Waste and Recycling

Landfilling organic wastes is one of the main sources of climate change gases. The methane gas produced in landfills is 23 times more potent as a global warming gas as CO<sub>2</sub>. In addition the resource recovery from recycling represent significant fossil fuel savings over the first time production of goods from raw materials. For example recycling one tonne of aluminium saves seven tonnes of CO<sub>2</sub>. The alternate weekly collection system in the Braintree District has consistently delivered high rates of recycling and reduced the need for landfill. This reporting period includes a full year of improvement as a result of extending alternate weekly collections in October 2006 and the WRAP (Waste and Resources Action Programme) behavioural change work. The 2007/08 recycling rate is expected to be in the region of 42%.

<b>Activity</b>	<b>Performance (January 07 to December 07)</b>	<b>Mitigation or Adaptation</b>	<b>Estimated Carbon Savings (CO<sub>2</sub> Equivalent)</b>
Ongoing diversion of waste from landfill by recycling.	24,074 tonnes	M	23,171 tonnes

### Biodiversity and Carbon Sequestration

Climate Change will have significant implications for our natural environment, including biodiversity, trees, woodlands and landscape. Management plans need to consider greater extremes of drought and storms. There will be a migration of species, which will need to be aided by the development of wildlife corridors and planting of different species to adapt to the new climate and provide new habitats. Retaining existing landscape features will need extra care in supporting trees and planting at the limits of their natural growing conditions. An increased demand for biomass to fuel the growth in renewable energy will provide a major opportunity for local agriculture but will also have an impact on our landscape and biodiversity.

The planting of new trees can help offset carbon emissions. Offsetting isn't the answer to climate change but as some emissions can't or won't be avoided, particularly in the short term, it is a way of compensating for these emissions with an equivalent carbon saving. Carbon dioxide is absorbed by growing trees and locked into the developing plant. However there are complications in calculating the amount of carbon sequestered by this method and risks of early release due to fire, disease or failure to re-plant when eventually felled. The usefulness of tree planting is being questioned by the scientific community but the technique has been included in this report as it is still widely used and promoted.

<b>Activity</b>	<b>Performance (January 07 to December 07)</b>	<b>Mitigation or Adaptation</b>	<b>Estimated Carbon Savings (CO<sub>2</sub> Equivalent)</b>
Planting of new trees and woodlands in the District aided by grants from BDC.	2200 trees planted	M & A	440 – 1430 tonnes depending on method.
Planting of new trees and woodlands in the District as a result of planning conditions etc.	6,300 trees planted	M & A	1260 – 4095 tonnes depending on method.
Provision of guidance to public and private landowners on habitat management.	Ongoing	A	Not applicable
Ensure plantings are adequately protected against the increasing risk of attack by mammals.	Ongoing	A	Not applicable
Develop management plans that minimise the threat to sensitive species and habitats.	Ongoing	A	Not applicable
Increased monitoring of plant health and developments in control measures for pests and disease.	Ongoing	A	Not applicable

## 4.0 FUTURE PLANS – THE LOCAL AUTHORITY CARBON MANAGEMENT PROGRAMME

Braintree District Council was one of the local authorities selected to participate in the 5<sup>th</sup> phase of the Carbon Trust's Local Authority Carbon Management (LACM) Programme following a successful joint bid with Colchester and Uttlesford Councils. The programme provides a comprehensive process for measuring and managing the emissions of greenhouse gases produced by Council activities. The Carbon Trust provides councils with technical and change management support, with guidance to help realise carbon emissions savings. Improvements are structured through a Strategy and Implementation Plan (SIP). The SIP sets out how the carbon reductions will be achieved through the systematic analysis of the carbon footprint, calculates the value at stake and quantifies the opportunities available. The Council now has a much clearer understanding of its baseline carbon footprint and with a whole organisation approach has set strategic targets, the key ones being to:

- Reduce overall CO<sub>2</sub> emissions from buildings by 25% by 2012 from a 2006 baseline.
- Reduce the energy costs of BDC by at least 10-25% in real terms by 2012 from a 2006 baseline.
- To aim for the aspirational target of Carbon neutral BDC buildings by 2012.

The primary focus of the programme is to reduce emissions under the control of the local authority such as buildings, vehicle fleets and leisure facilities. The Council's CO<sub>2</sub> emissions are split between Buildings 58% & Transport 42%, with a total emission figure of 6,455 tonnes CO<sub>2</sub>/year by the Council, at a cost of £1,099,891. The programme is to be funded from the Capital Programme with a match funding loan from the Carbon Trust's partner firm, Salix Finance Ltd. The savings made from the projects listed below are both re-invested in further carbon saving projects and used to pay back the Salix Finance Ltd loan.

The Strategy and Implementation Plan (SIP) is due to be submitted to the Carbon Trust for their approval by 31<sup>st</sup> March 2008. Some of the key projects in the plan are:

- Halstead Pool liquid pool cover, building management system, variable speed drives and sports pitch lighting upgrade
- Discovery Centre refurbish solar roof, reschedule Termodeck climate control
- Silver End new pavilion with thermal and electrical improvements
- Causeway House new boilers, improved heating controls, voltage optimisation, PC switch-off software, timers on vending machines
- Staff awareness campaign
- Bramston Leisure Centre new boilers, insulate pipework, variable speed drives/housekeeping
- Braintree Leisure Centre pipe insulation
- Braintree Swimming Centre pool covers, combined heat and power, variable speed drives, lighting upgrade
- George Yard Car Park T5 adapter lighting retrofit
- Community Centres good housekeeping and low cost improvements
- Travel planning including incentives for reducing business miles, driver training, fleet maintenance and waste collection re-routing

An opportunity has been taken to create a new post of Climate Change Manager whose role will be to drive through these improvements. This has been achieved through the switching of resources and the consolidation of roles within the Council. This will ensure that there is a more focussed and consolidated approach to these issues throughout the Council.

## 5.0 NEW PERFORMANCE REGIME

The new performance framework for local authorities and local authority partnerships will be introduced from 1<sup>st</sup> April 2008. The simplified single set of 198 national indicators contains five indicators directly related to climate change.

NI 185	CO <sub>2</sub> reduction from local authority operations
NI 186	Per capita reduction in CO <sub>2</sub> emissions in the local authority area
NI 187	Tackling fuel poverty – people receiving income related benefits living in homes with a low energy efficiency rating
NI 188	Adapting to Climate Change
NI 189	Flood and coastal erosion risk management

The full specification for these indicators is attached as appendix 2.

There are no national targets set for these indicators but the Local Area Agreement (LAA) process will include negotiated targets for up to 35 of the national indicators. There are clear signals from Government that at least one climate change mitigation indicator and target should be included in the LAA. Current indications are that Essex will include NI 186 and NI 188 in the LAA. These will be addressed with continued progress on planning and sustainability policies, energy efficiency and promotional work, encouraging renewables, waste minimisation and recycling, and managing the natural environment as detailed earlier in this report.

The Local Authority Carbon Management Programme contributes directly to NI 185 and progress in delivering the strategy and implementation plan will be monitored in relation to that indicator and expected LAA target.

## 6.0 SUMMARY AND CONCLUSION

This report identifies a wide range of activities carried out by the Council that provide a positive response to Climate Change. The list is not exclusive and there are many other traditional local authority services that help mitigate or adapt to climate change. The Council's response to climate change has continued to grow since signing the Nottingham Declaration. Initiatives range from major service improvements such as in waste and recycling, internally focussed actions to reduce energy use and carbon emissions and externally focussed actions, which achieve results through promotion and bolder regulation. Many initiatives have still to come to fruition and planned activities will ensure continued improvements over the coming year. The Carbon Management Plan sets out a clear programme for the next five years to reduce the organisation's own carbon emissions by at least 25%. This will deliver high performance against the new national indicator NI 185 and demonstrate the organisation's strong commitment to climate change and sustainable development. Overall, the actions being taken and those proposed for the future will ensure that Braintree District Council continues lead in driving the climate change agenda forward.

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11<sup>th</sup> March 2008