

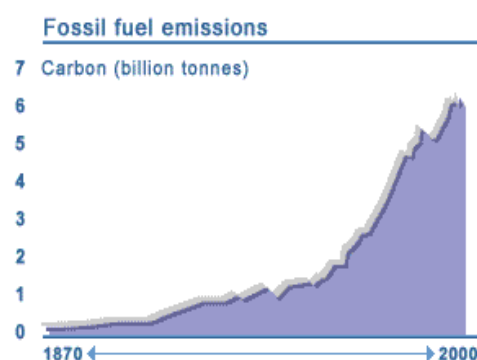
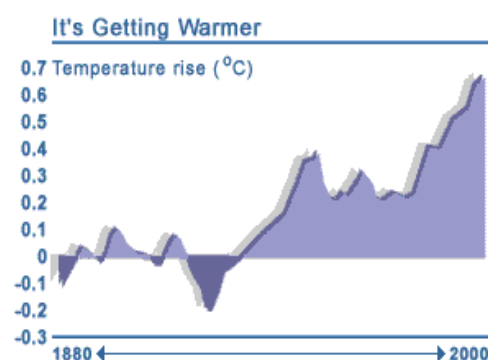
BRAINTREE DISTRICT COUNCIL SUSTAINABLE ENERGY STRATEGY

1. INTRODUCTION AND SCOPE

“There is no bigger long-term question facing the global community than the threat of climate change.” Tony Blair - April 2004

**"In my view, climate change is the most severe problem we are facing today, more serious even than the threat of terrorism." Sir David King
The UK government's Chief Scientist - March 2004**

- 1.1.1 Local authorities have an essential role to play in promoting and implementing sustainable energy and sustainable transport policies. In doing so, they can help to reduce climate change, improve air quality and reduce fuel poverty (which kills an estimated 50,000 people each year in the UK).
- 1.1.2 New climate change scenarios were launched by DEFRA in April 2002. They show that average annual temperatures across the UK may rise by between 2° and 3.5°C by the 2080's, with the degree of warming dependent on future levels of greenhouse gas emissions. In general there will be greater warming in the south and east than in the north and west of the UK. High summer temperatures will become more frequent and very cold winters will become increasingly rare.
- 1.1.3 It is not just temperatures that will change in the UK, but also rainfall amounts and frequency. Winters will become wetter and summers may become drier across all of the UK. The largest relative changes will be in the south and east where summer precipitation may decline by up to 50 % by the 2080s. Heavy winter precipitation will become more frequent, but the amount of snow could decline by 60% - 90% by the 2080s. In addition, sea levels will continue to rise and could be between 26 and 86 cm above the current level in southeast England by the 2080s. Extreme high water levels, which currently have a 2 % annual probability of occurring, could become 10 to 20 times more frequent at some east coast locations by the 2080s.



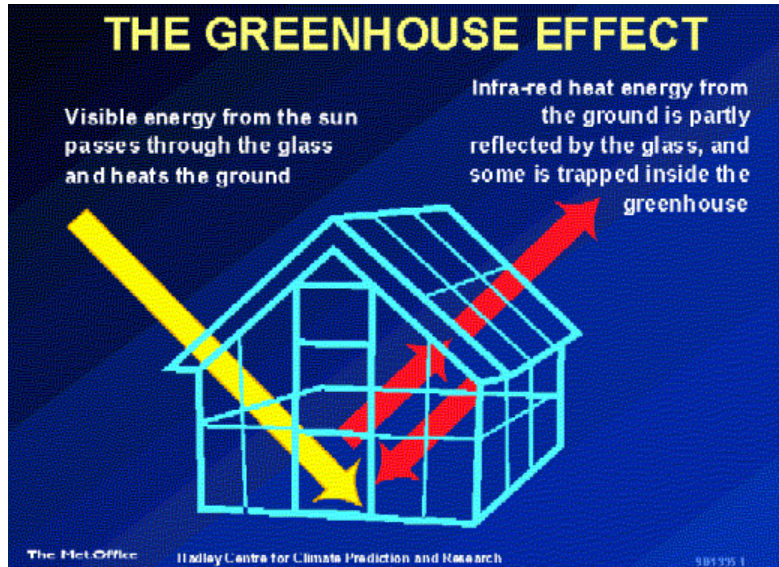
Other predicted effects are hotter drier summers leading to crop stress and stress on native flora and fauna. Clay shrinkage will cause subsidence.

Stormier wetter winters will lead to property damage and inland flooding. The recently updated Environment Agency indicative flood plain maps show an increased number of properties at risk. All of this will lead to higher insurance premiums.

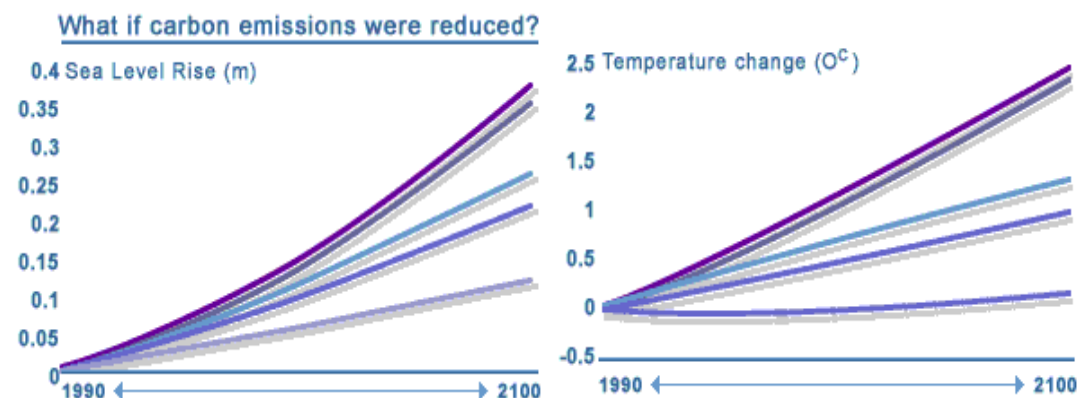
- 1.1.4 Climate change and our use of energy are inextricably linked. This is due to the production of electricity by the burning of fossil fuels, i.e. gas, coal and oil, the direct

burning of fossil fuels for space and water heating and the fuel used for transportation, i.e. petrol and diesel, and the subsequent emissions of “greenhouse gases”, primarily Carbon dioxide.

1.2 THE GREENHOUSE EFFECT



- 1.2.1 Water vapour, Carbon dioxide and methane form a natural blanket of air around the Earth. The sun heats the surface of the earth. As it warms up, it reflects heat back into the atmosphere. About 70% of the sun's energy is radiated back into space. But greenhouse gases, which warm the atmosphere, and reflect heat back down to Earth, trap some of the infrared radiation. As a result of the greenhouse effect, the Earth is kept warm enough to make life possible. This natural phenomenon keeps the earth about 30°C warmer than it does otherwise would be and allows life, as we know it. The rising CO₂ concentration threatens this balance and promotes a dangerously enhanced greenhouse effect.



1.3 SECURITY OF SUPPLY

- 1.3.1 Global energy demand continues to grow, driven by low oil prices. With the adoption of energy intensive ways of life and the expansion of third world economies we are faced with global energy supplies being concentrated in those regions with long term resources. The world is becoming increasingly dependent on energy imported from politically unstable regions (Eastern Europe, Africa and the Middle East). To ensure the security of energy supplies to meet our needs, there is a global need

for energy conservation and efficiency and the use of locally secured energy through renewable sources.

1.4 INTERNATIONAL CONVENTION

- 1.4.1 The Kyoto Protocol to the United Nations Framework Convention on Climate Change is the only global mechanism aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human induced interference with the climate system. It will enter into force after ratification by enough nations to account for 55% of global Carbon dioxide emissions.
- 1.4.2 Under the Kyoto Protocol the EU has committed to cut greenhouse gas emissions from burning fossil fuels by 8% of 1990 levels by 2012.

2.0 UK ENERGY CONTEXT

2.1 SECURITY OF SUPPLY

- 2.1.1 In the last 50 years there has been a shift from dependence on coal to oil and then gas for energy supply to homes and business. The UK has been a net exporter of oil and gas from its North Sea reserves but these resources are becoming exhausted.
- 2.1.2 Most of our economically viable coal will be exhausted within ten years; by 2006 we will be a net importer of gas and of oil by 2010. 2020 will have decommissioned the last of the nuclear power stations, and at this stage the UK will import 75% of its primary energy.

2.2 FUEL POVERTY

- 2.2.1 Some five million households in Great Britain spend, or need to spend, 10% of their income on fuel in order to heat their homes to the temperature recommended by the World Health Organisation (21° C in the living room, 18° C in other occupied rooms). Some estimates put the figure higher. Indeed, around one million households spend up to 30% of their income on fuel, while the average is just 4% - 5%.
- 2.2.2 Many, but not all, of the 'fuel poor' are pensioners; often single pensioner households, mainly reliant on the state pension. Households with young children account for 17% of the total; and single parents 10%. Many pensioners do not heat their homes adequately, either because they cannot afford to, or because they fear they will get into debt.
- 2.2.3 The UK Fuel Poverty Strategy (DoH 1999) identified that fuel poverty is caused by several, interrelated factors:
- low income
 - the condition of the property
 - the efficiency of the heating system
 - the size of the property
 - under occupancy
 - the price of fuel.
 - external environmental factors
 - the lack of mains gas supply
- 2.2.4 This is a particular UK phenomenon, being unheard of in most of Europe. In the UK the excess winter mortality of 50,000 deaths per annum, is higher than other North European and Scandinavian countries with colder winters.

2.3 HOME ENERGY CONSERVATION ACT (HECA)

- 2.3.1 Since 1996, local authorities with housing duties (Energy Conservation Authorities, ECA's) have been required to produce a Home Energy Conservation Act (HECA) strategy, outlining how energy efficiency in all housing (including the private sector) in their region, can be increased by 30% between 1995 and 2010. They also have to report annually on progress towards this target.
- 2.3.2 Since 2000, all ECA's must include in their annual HECA reports information on activities that have taken place in order to relieve fuel poverty in their area.

2.4 THE ENERGY EFFICIENCY COMMITMENT (EEC)

- 2.4.1 OFGEM, the energy regulator has set energy saving targets for each energy supply company. These targets have resulted in the energy companies employing demand side initiatives. Each household with electricity or gas supply has to pay £3.20 a year on their bills and this funds the energy conservation initiatives. These are normally free or subsidised, insulation, free or subsidised, low energy appliances, and subsidies for energy efficient boilers. The scheme has been reviewed and the Government has recently announced that it wants to double the EEC activity in the phase from 2005-2011.

2.5 THE CLIMATE CHANGE LEVY (CCL)

- 2.5.1 The levy is a single stage tax imposed at the time of supply to industrial and commercial consumers rather than at the time of use. The levy is charged to most organisations that purchase their energy under a non-domestic tariff, this includes the public sector.
- 2.5.2 The rates are set dependent on the effect on climate change of the emissions when the fuel is produced or burnt, they are:
- electricity - 0.43 pence per kilowatt hour;
 - natural gas - 0.15 pence per kilowatt hour;
 - solid fuel e.g. coal and coke - 1.17 pence per kilogram; and
 - liquid petroleum gas *for heating* - 0.96 pence per kilogram
- 2.5.3 The purpose of the levy is to encourage efficient use of energy. On introduction, all revenue raised is being recycled to business through a reduction in employers' National Insurance Contributions in 2001-2002 and additional Government support for energy efficiency measures. This includes the running of the Government Agency, the Carbon Trust, and it's energy conservation initiatives, including Actionenergy.

2.6 ENERGY BILL 2003

- 2.6.1 In February 2003, the government published its Energy White Paper entitled "Our energy future - creating a low carbon economy". This defines a long-term strategic vision for energy policy combining environmental, security of supply, competitiveness and social goals. Because energy requires very long-term investment it looks ahead to 2050. It sets out the challenges the UK faces on the environment, the decline of its indigenous energy supplies and the need to update its energy infrastructure and the policies needed to meet these challenges.

- 2.6.2 The government is committed to reducing carbon dioxide emissions by 20% by 2010 over 1990 levels, with an aspiration of a 60% reduction by 2050.
- 2.6.3 The government has set targets of producing 5% of UK electricity from renewable energy by the end of 2003 and 10% by 2010, with an aspiration of 20% by 2020.
- 2.6.4 By 2016, that as far as is reasonably practical, no one should be living in fuel poverty, and every home is adequately and affordably heated.

2.7 THE SUSTAINABLE ENERGY ACT 2003

- 2.7.1 This act obliges the Secretary of State to report annually on progress towards sustainable energy aims, including fuel poverty.

2.8 SUSTAINABLE COMMUNITIES

- 2.8.1 The Government is committed to a planning system that creates sustainable communities and delivers sustainable development. Planning has a critical role in supporting the Government's wider economic, social and environmental objectives, for example, the Government's objectives for balancing housing markets and for achieving sustainable improvements in the economic performance of all English regions. To do that, the country needs a simpler, more flexible, more predictable, efficient and effective system that will deliver the quality development needed to secure sustainable communities. A positive, proactive approach to planning is needed to achieve this.
- 2.8.1 Planning Policy Statement 1 sets out the Government's vision for planning and the key policies and principles which should underpin the planning system. PPS 1 is presently out as a consultation draft.

2.9 ENERGY CONSERVATION

- 2.9.1 The main guidance for ensuring the thermal efficiency of buildings is enshrined in the Building Regulations, Approved Documents L1 and L2, the Conservation of Fuel and Power in dwellings and other buildings respectively.
- 2.9.2 Under these approved documents there is also a requirement for the developers of all new dwellings to display the SAP rating of the dwelling to prospective purchasers. The SAP (Standard Assessment Procedure) is a measure of the energy rating of the property in a range of 1 to 120 (poor to good). It is based on the annual space and water heating costs per square metre, under standard occupancy and location assumptions using deflated three year average fuel prices.
- 2.9.3 The production of this rating will eventually be a requirement for all dwellings when they are sold or let under the EU Directive on the Energy Performance of Buildings.
- 2.9.4 In the BDC Local Plan Review, Revised Deposit Plan the energy efficiency of buildings is encouraged through Policy RLP 73, this is detailed below:

ENERGY EFFICIENCY AND CONSERVATION

As with schemes specifically designed to act as renewable energy sources for a wider area, so individual new built developments can assist in reducing total energy requirements. The siting, layout and design of development, and also construction methods and materials (with techniques such as Life Cycle Analysis) can all play a part. Active water heating systems and passive solar design are becoming recognised as achievable within both housing and other development schemes.

Policy RLP 73 Energy Efficiency

New development proposals shall clearly demonstrate the optimum use of energy conservation and incorporate energy conservation and efficiency measures, including where appropriate passive solar gain and the use of energy efficient appliances or other systems in order to contribute to the reduction in their total energy consumption.

2.9 RENEWABLE ENERGY

2.9.1 Introduced in April 2002, the Renewables Obligation calls on all licensed electricity suppliers in England & Wales to supply a specified and growing proportion (growing to 10% by 2011) of their electricity sales from a choice of eligible renewable sources.

2.9.2 This has led to increased interest and longer term viability in these sources, they are:

- Landfill gas
- Sewage gas
- Hydro>20MW (commissioned after April 2002)
- Hydro<20MW
- Onshore/offshore wind
- Some biomass
- Geothermal
- Tidal
- Wave
- Photovoltaic
- Energy crops.

2.10 PLANNING POLICY GUIDANCE – RENEWABLE ENERGY

2.10.1 New guidance in the form of PPS 22 was published in September 2004. The main thrust of the document is to guide Local Planning Authorities into encouraging the development of Renewable Energy sources in their districts where appropriate. This new PPS is intended to balance valid public concern about developments following due consultation procedures, stakeholder interest, and the need to balance the planning of new renewable energy developments with other major infrastructure developments.

The following sections are extracts from the BDC Local Plan Review, Revised Deposit Plan and the East of England Regional Assembly's regional planning guidance. Whilst both these documents predated PPS 22 they both reflect its intended guidance.

2.10.2 The BDC Local Plan Review, Revised Deposit Plan encourages Renewable Energy Development in Policy RLP72. An extract is detailed below:

RENEWABLE ENERGY SCHEMES

Braintree Council wishes to increase the use of sources of renewable energy in the District, to contribute towards diversity of supply, the local economy, potentially cheaper sources of fuel and reductions in harmful emissions to the environment. A number of potential sources are available in the District, each referred to within PPG22 - Renewable Energy as increasingly viable and suitable local sources:

- Solar power;
- Bio - mass (forestry and farm wastes)
- Wind turbines
- Landfill gas
- Municipal (compost) and industrial waste
- Other developing sources - including photovoltaics, which is the conversion of light into electrical energy.

A number of these, most notably wind turbines, have specific locational requirements, which may give rise to possible conflicts with areas of major landscape, nature conservation, or heritage importance. Within most of the District, however, there are no overriding constraints, which are envisaged as ruling out renewable energy schemes.

Policy RLP 72 Renewable Energy

Proposals for renewable energy schemes and the integration of renewable energy generation into new developments, will be encouraged and permitted where no demonstrable harm is caused to landscape, nature conservation, or historic features within or immediately adjacent to the site. Developers are also encouraged to enter into a dialogue with the District Council to identify sites for renewable energy development.

2.10.3 Regional Policy Document RPG 14 also encourages the development of Renewable Energy and Energy Efficiency, an extract is detailed below:

POLICY ENV 8 RENEWABLE ENERGY AND ENERGY EFFICIENCY

To help the region move towards energy self-sufficiency, and meet and improve on its renewable energy targets set out in Table 9.2, Local Development Documents (LDDs) will contain policies for promoting and encouraging energy efficiency and renewable energy. These policies will presume in favour of, and emphasise the wider sustainable development benefits associated with, energy efficiency and renewable energy and will:

a) require developers to maximize energy efficiencies to be gained from sustainable design and construction, community heating and combined heat and power schemes, and encourage developers to strive to achieve energy efficiency standards that exceed minimum standards;

b) require energy consumption statements for development proposals above a threshold of 1,000 sq. m or 50 dwellings, in order to ensure that the technical, environmental and economic feasibility of alternative systems such as:

- Decentralised energy systems based on renewable energy
- CHP (Combined Heat and Power);
- District or block heating or cooling, if available;
- Heat pumps, under certain conditions;

is considered and is taken into account before construction starts;

c) require all developments above the same threshold to incorporate equipment for renewable power generation so as to provide at least 10% of their predicted energy requirements;

d) specify the locational and other criteria by which applications for renewable energy developments will be assessed. LDD policies will define and relate renewable energy and energy efficiency policies to:

- Sustainable Communities Plan Growth Areas [see Chapter 5];
- settlements outside Growth Areas;
- non-designated landscapes;
- designated landscapes;

in accordance with the detailed guidance in Appendix C to this RPG;

e) favourably consider the on-shore developments associated with off-shore energy generation;

f) encourage the use of existing infrastructure and the undergrounding of cables connecting new plant to the grid, wherever possible;

g) encourage methane exploitation from appropriate landfill sites, provided this is not used to prolong landfill operations beyond currently agreed targets;

h) actively encourage the development of community-based schemes, through full community engagement, for renewable energy generation and energy efficiency. Small-scale and community-based schemes appropriate to local need are most likely to be permissible in areas which are:

- within or close to settlements;
- within suitable landscapes;
- close to the origin of the energy resource;
- close to groups of buildings (in rural areas).

Supplementary Planning Guidance (SPG) and, for major proposals, Development Briefs should be produced to elaborate and support renewable energy and energy efficiency policies and locational criteria contained in LDDs.

2.11 PLANNING GUIDANCE LIGHTING

2.11.1 PPS 23, Planning and Pollution Control includes an annexe on Light Pollution which will for the first time give Local Authorities specific national policy guidance on lighting in order to determine planning applications.

2.11.2 The Government is considering making excessive light a Statutory Nuisance under the Environmental Protection Act 1990 and adding it to the list of nuisances where Local Authorities have powers to act.

2.11.3 The common standard for lighting applications is the Institute of Lighting Engineers Guidance on Lighting publication.

2.11.4 The new Essex County Council Streetlighting Policy will be aimed at reducing light pollution.

2.11.5 The BDC Local Plan Review, Revised Deposit Plan encourages low energy, efficient lighting in development in Section 6.11 and Policy RLP 134. An extract is detailed below:

External lighting is increasingly seen as an intrusive and avoidable source of pollution, in terms of the character of rural and tranquil areas at night, settings of listed buildings and other heritage areas and features, and not least, the potential for loss residential amenity for neighbours in both town and country and distraction for amateur and professional astronomers. Although planning controls do not currently extend to most residential or roadside lighting, the Council seeks to use the detailed design stages of planning applications to achieve external lighting, which minimises these and are compatible with community safety objectives and do not compromise highway safety.

Proposals for external lighting which require planning permission will only be permitted if:

1. The lighting is designed as an integral element of the development;
2. Low energy lighting is used
3. The alignment of lamps and provision of shielding minimises spillage and glow, including into the night sky;
4. The lighting intensity is no greater than necessary to provide adequate illumination; and
5. There is no significant loss of privacy or amenity to nearby residential properties and no danger to pedestrians and road users:

6. There is no unacceptable harm to natural ecosystems

2.12 THE EU DIRECTIVE ON THE ENERGY PERFORMANCE IN BUILDINGS

2.12.1 Under this new law, EU member states must set up by 4 January 2006 a scheme to certify the energy performance of all buildings (domestic and commercial) and carry out regular inspections of boilers and air conditioning systems. This is being enacted in UK law mainly through changes in the Building Regulations and the forthcoming Housing Act, which will introduce Home Information Packs comprising an energy report for properties to be sold or leased.

3.0 BRAINTREE DISTRICT CONTEXT

3.1 Background

- 3.1.1 The Braintree District has an area of 610 square km's, with a population of approximately 135,000 (as of 31st March 2004). There are about 58,000 residential dwellings (as of 31st March 2004), increasing at a rate of approximately 1.5% pa. There are approximately 4,000 businesses in the district.
- 3.1.2 Essex as a county is a net importer of energy. There are no major power stations in the Braintree District and no significant supplies of energy are fed into the National Grid.
- 3.1.3 The 2004 Braintree House Condition Survey has indicated that the rate of unfitness (unsuitable for human habitation) within the district's residential housing stock is 3.8%. The unfitness is concentrated within the older housing. 10.8% of pre 1919 dwellings are unfit.
- 3.1.4 A third of the unfit dwellings came into the category because of a lack of space heating and thermal insulation, and the houses built pre-1964 were worst affected.
- 3.1.5 The average SAP (energy efficiency) rating for the private sector dwellings in Braintree District Council is 50, almost the same as the average SAP rate in the UK, which is 51. 9.6% of properties have a SAP rating less than 30.
- 3.1.6 There is a Best Value Performance Indicator (BVPI 63) for the energy rating of the Council's own housing stock. This stands at a SAP of 51 at March 2004 with a target of 66 by 2008.
- 3.1.7 A Centre for Sustainable Energy Fuel Poverty Study based on the 1991 census showed that the level of fuel poverty in the district ranged from 12-24%.
- 3.1.8 BDC has developed partnerships with many external organisations to promote energy conservation and the alleviation of fuel poverty, e.g. British Gas and their EEC funding provide free or subsidised insulation and free low energy lamps, the Witham, Braintree and Halstead Care Trust and the Energy Champion initiative for cold homes.
- 3.1.9 There has been an Energy Management Section within Braintree District Council for about 15 years. Historically, it has been responsible for:

- The Council wide purchase of electricity, gas and water supply
- The evaluation of energy conservation technology for use in the buildings
- Monitoring and targeting of energy use
- The scrutiny of all energy related invoices for Council owned buildings, this includes sheltered housing blocks but not individual council houses.

3.1.10 The Section has concentrated on these areas and improving energy conservation technology through more energy efficient lighting, better insulation and building energy management systems but it has carried out some energy efficiency awareness raising exercises amongst staff.

3.1.11 The main Performance Indicator for energy use is:

Ex - BVPI 180a – Energy consumption per m² of operational buildings compared to UK buildings. This indicator is currently being reviewed but it will remain in some sort of form, particularly in light on the EU Directive on the Energy Performance of Buildings. The BDC portfolio compares favourably in that over 90 % of our non domestic buildings are in the same range as other comparable UK buildings.

3.2 Strategy Objectives

The Council, through this Sustainable Energy Strategy will:

- 3.2.1 In general, promote the cause of sustainability and encourage reduction in the reliance on finite resources.
- 3.2.2 Maximise energy efficiency and use sustainable technologies such as the use of renewable energy and Combined Heat and Power (CHP), wherever practicable
- 3.2.3 Mitigate climate change from energy related activities
- 3.2.4 Increase the contribution of renewable and low carbon technology
- 3.2.5 Improve security of supply through locally sourced renewable energy sources
- 3.2.6 Seek a reduction in the climate change impacts of transport energy use
- 3.2.7 Seek an improvement in the energy performance of BDC operated buildings
- 3.2.8 Increase awareness and understanding of energy issues
- 3.2.9 Engage business and industry with energy issues
- 3.2.10 Improve the energy performance of housing
- 3.2.11 Strive to eliminate fuel poverty
- 3.2.12 Seek a reduction in light pollution through energy efficient lighting and modern shielded designs

3.3 Braintree District Sustainable Energy Targets

3.3.1 Climate Change

- Reduction of emissions of CO₂ to 20% below 1990 levels by 2010
- Reduction of emissions of CO₂ to 60% below 1990 levels by 2050
- Reduction of greenhouse gas emissions to 12.5% below 1990 levels by 2012

3.3.2 Renewable Energy

- Increase percentage of electricity from renewable sources to 10% by 2010
- Increase percentage of electricity from renewable sources to 20% by 2020
- Investigate joining consortia to achieve economy of scale when purchasing energy
- Issue supplementary planning guidance to encourage development of renewable energy sources
- Promote Community Renewables Initiatives
- Promote the adoption of Planning Policy Statement 22 for developments
- Promote the provision of a proportion of energy supply for all new developments to be from renewable energy sources

3.3.3 Housing

- Reduction of energy use in housing by 30% from 1990 baseline by 2010
- Encourage Developers to build houses to exceed the minimum energy performance required by the Building Regulations
- Elimination of Fuel Poverty from all vulnerable households by 2010
- Elimination of Fuel Poverty from all households by 2016
- Target fuel poor households for available grants
- Develop a grant or funding system for implementing renewable and low carbon energy technologies for domestic properties, e.g. photovoltaics, solar water heating, domestic wind turbines, heat pumps, micro-chp
- Maximise the use of external funding, e.g. Energy Companies Energy Efficiency Commitment, Warm Front
- Develop the professional energy network in the district and region and coordinate with the existing organisations within it, e.g. Essex HECA Forum, HECA Eastern Officers Network, GO-East, Renewables East, Essex Energy Efficiency Advice Centre, Warm Front, NEA
- Further develop the partnership with the Witham, Braintree and Halstead Care Trust
- Promote efficient lighting and prevention of light pollution in specific of FCO streetlights or similar shielded designs on all new developments.

3.3.4 Transport

- Develop the draft green transport plan
- Promote the use of clean fuel vehicles
- Develop Transport Energy training and awareness
- Further enhance the Council's lease car scheme to encourage clean fuel vehicles
- Develop the links with the Witham, Braintree and Halstead Care Trust to promote walking and cycling strategies and safer journey schemes.
- Promote the use of Public transport

3.3.5 Energy Performance of Operational Buildings

- Increase percentage of electricity from renewable sources for BDC buildings to an aspirational 100% target, but with a minimum target of 10% by 2010
- Increase percentage of electricity from renewable sources for BDC buildings to an aspirational 100% target, but with a minimum target of 20% by 2020
- Investigate the feasibility of CHP in any new or refurbished BDC building
- Reduce emissions of CO₂ from buildings by 30% by 2015

- Review external lighting of all BDC premises and BDC owned streetlights. Replace with energy efficient lighting limiting light pollution and glare, wherever practicable, to FCO or similar designs.

3.3.6 Awareness and Understanding

- Deliver information and training to schools
- Investigate the Healthy Schools Initiative
- Deliver information and training to all key energy partners
- Deliver information and training to BDC staff, introduce energy efficiency awareness into the induction programme
- Make appropriate information available to the public and businesses
- Promote grants that are available to the public and businesses
- Advise on existing and forthcoming legislative developments in connection with energy, e.g. Building Regulations, Home Information Packs, Building Energy Performance Notices
- Develop a Sustainable Energy Centre, possibly through consortia of Local Authorities, to conduct information, advice and awareness campaigns in order to increase public and business acceptability of energy conservation and renewables.
- Maximise the use of existing national organisations and their programmes for the benefit of Braintree District Residents and Businesses, e.g. Energy Saving Trust and Practical Help, Carbon Trust and Action Energy, Transport Action and Powershift
- Make available in partnership with the Campaign for Dark Skies, new guidance leaflets on external lighting to the domestic, commercial and public sectors, aimed at encouraging energy conservation and the use of modern controlled and shielded lighting designs.

3.3.7 Business and Industry

- Develop partnerships with local business and industries to address energy use
- Develop the professional energy network in the district and region and coordinate with the existing organisations within it, e.g. Essex Business Link, East Anglian Business Environment Club, University of East Anglia, Suffolk and Essex Energy and Environmental Management Group, East of England Energy Group
- Promote the adoption of Environmental Management Systems within local businesses
- Give advice to businesses with regard to integrated pollution and prevention control
- Encourage businesses and owners/developers of public buildings to adopt energy efficient lighting avoiding light pollution where practicable

3.3.8 General

- Prioritise the energy use of equipment as a key factor in the BDC purchasing policy
- Confirm baseline data for energy use within the district
- Consult with stakeholders to develop policies and action plans to implement the objectives and achieve the targets
- Develop internal working groups comprising Members, Officers, Partners and Contractors to produce policies and action plans to achieve BDC's own targets

4.0 GLOSSARY

BDC Braintree District Council

| | |
|-------------------|---|
| Bio-diesel | Usually a mix of conventional diesel and a percentage of vegetable oil produced by energy crops or waste vegetable oil treated to remove contaminants. |
| BVPI | Best Value Performance Indicator |
| Carbon Trust | The Government Agency for promoting energy conservation in non domestic buildings |
| CCL | Climate Change Levy |
| CHP | Combined Heat and Power, a method of producing heat as a by product of electricity generation |
| DEFRA | Department for Environment, Food and Rural Affairs |
| DETR | Department of the Environment, Transport and the Regions (no longer exists) |
| DTI | Department of Trade and Industry |
| DoH | Department of Health |
| ECA | Energy Conservation Authorities, Local authorities with housing duties |
| EEAC | Energy Efficiency Advice Centre |
| EEC | The Energy Efficiency Commitment. The target for energy savings set by the Regulator, OFGEM, on energy supply companies. |
| EST | The Energy Saving Trust, the Government Agency responsible for promoting energy conservation to domestic properties |
| EUEPBD | European Union Energy Performance of Buildings Directive |
| Fuel Poverty | Where occupiers spend more than 10% of their income on fuel due to poorly insulated properties and inefficient appliances. |
| GO-East | The Government Office for the East of England |
| Greenhouse Gases | The six main gases referred to in the Kyoto Protocol are: Carbon dioxide (CO ₂), Methane (CH ₄), Nitrous oxide (N ₂ O), Hydrofluorocarbons (HFC), Perfluorocarbons (PFC), Sulphur hexafluoride (SF ₆). |
| HECA | Home Energy Conservation Act |
| Hybrid Technology | The use of internal combustion engines to power up batteries on vehicles so that electricity is used to power them in low speed areas. |
| LA | Local Authority |
| LGA 200 | The Local Government Act 2000 |
| LPG | Liquid Petroleum Gas |
| LSP | Local Strategic Partnership |
| MicroCHP | CHP for domestic properties |
| NEA | National Energy Action, the fuel poverty alleviation charity |
| OFGEM | The Office of Gas and Electricity Markets |
| Pis | Performance Indicators |
| PPS22 | Planning Policy Statement 22 on Renewable Energy issued by the Office of the Deputy Prime Minister |
| SAP | Standard Assessment Procedure. This is a Government defined method for producing an energy rating for a domestic dwelling. It takes into account the factors that affect the building's energy efficiency, most significantly the fuel used, the type of heating and water heating systems and insulation levels. |
| SES | Sustainable energy Strategy |
| Warm Front | The Government Programme to combat fuel poverty by installing heating and insulation measures in targeted households. Managed in the Eastern Region by Powergen Warmfront |

This strategy has been produced on behalf of the Environment Policy Development Group of Braintree District Council

Peter Chisnall, Environmental Services Manager, June 2005