



To: Executive Councillor for Housing: Cllr Catherine Smart  
Report by: Bob Hadfield, Head of Technical Services  
Relevant scrutiny committee: Community Services Scrutiny Committee 16/11/2006

**HOME ENERGY STRATEGY**  
**Not a Key Decision**

**1. Executive summary**

- 1.1 Cambridge City Council's new Medium Term Objectives include the commitments to "agree targets for carbon dioxide reduction", "improve the energy rating of housing in the city" and to "help people understand how they personally can make changes to live more sustainably and contribute to carbon reduction".
- 1.2 Cambridge City Council recently signed the Nottingham Declaration on Climate Change. This acknowledges that climate change is occurring and that it will continue to have far-reaching effects on the UK's people and places, economy, society and environment. In signing the Declaration Cambridge City Council welcome the opportunity to lead the response to climate change at a local level.
- 1.3 More than a quarter of carbon dioxide emissions in Cambridge City are as a result of the energy we use to heat, light and power our homes.
- 1.4 The advent of a full-time Home Energy Officer has allowed time to develop a strategy to tackle home energy issues that will have effect across all tenures within Cambridge City.
- 1.5 The aim of the new Home Energy Strategy is to: "Increase the efficient use of energy in existing homes in Cambridge and reduce the emissions of carbon dioxide (and other greenhouse gases) associated with this use of energy in order to mitigate climate change."
- 1.6 There is also a need to inform and facilitate improvements in the households that need it most – for example, housing conditions of vulnerable private sector households tend to be worse than those of other households in the private sector [source: English House Condition Survey 2004].

**2. Recommendations**

The Executive Councillor is recommended:

- 2.1 to approve the content and action plan of the Home Energy Strategy.

## **3. Background**

### **3.1 Demand for a Home Energy Strategy**

Climate change is widely accepted as the single biggest threat to life on this planet. Without immediate and fundamental changes to the way we lead our lives there will be catastrophic effects for all human life and ecosystems. The UK government has committed to reducing carbon dioxide emissions by 20% by 2010 (from a 1997 baseline) and by 60% by 2050. However, recent studies have shown that a 90% reduction by 2030 will be required to only potentially avert these catastrophic disasters.

**3.2** The energy we use to heat, light and power our homes is responsible for 27% of the UK's carbon dioxide emissions. By being efficient with the energy we have; by making the change to renewable, de-centralised sources of energy; by taking responsibility for our everyday actions, we can take a huge step towards climate change reduction and hence improve the prospects of life on this planet.

**3.3** Domestic fuel bills have been rising over the past few years and the rate of increase in particular has caused major problems for householders. Many people have entered fuel poverty for the first time and even the most affluent of households are taking note as their bills increase. Annual average domestic heating costs in Cambridge have increased by up to 24% in the past year alone.

**3.4** The new Medium Term Objectives include the commitment to: "Promote Cambridge as a sustainable city, in particular by reducing carbon dioxide emissions and the amount of waste going into landfill in the City and sub-region". This will partially be done by "Working with national, regional and local partners to promote sustainability and agree targets for carbon dioxide reduction; taking practical steps towards promoting sustainability and reducing carbon dioxide emissions and waste in the way the council operates; improving the energy rating of housing, offices and other buildings in the city; working with local communities, organisations and businesses to help people understand how they personally can make changes to live more sustainably and contribute to carbon reduction."

**3.5** In September 2006 Cambridge City Council signed the Nottingham Declaration on Climate Change. This acknowledges that climate change is occurring and that it will continue to have far-reaching effects on the UK's people and places, economy, society and environment. In signing the Declaration Cambridge City Council has taken the opportunity to lead the response to climate change at a local level. It also commits the Council to contribute towards delivery of the various central government commitments and to progressively address the impacts of climate change (according to local priorities and securing maximum benefit for Cambridge communities).

### **3.6 Assessment of the current position**

Cambridge City is home to approximately 118,500 people divided between approximately 46,000 dwellings. Of these properties Cambridge City Council manages approximately 7600 rented homes, over 1000 leasehold properties and there is also a high proportion of private rented property within the City.

- 3.7** Table 1 shows the average SAP energy ratings per tenure (as at April 2006). It is envisaged that the actual figures will prove to be higher than those shown – this is as a result of time and budget constraints with working on the energy database. The strategy will help to ensure that the energy database is reliable and up to date across all tenures.

Tenure	Cambridge average SAP	National average SAP
Owner occupied	41	51
Private rented	45	49
Local authority	62	56
Other RSLs	49	61

**Table 1: Average SAP energy ratings per tenure as at April 2006 (National average SAP source – English House Condition Survey 2004).**

- 3.8** Table 2 shows the average carbon dioxide emissions per tenure (as at April 2006). It is envisaged that the actual figures will prove to be lower than shown – these emission levels are partly based on the SAP ratings above and so suffer from the same constraints.

Tenure	Average CO2 emissions (tonnes/year)
Owner occupied	10.5
Private rented	8.0
Local authority	5.1
Other RSLs	7.4

**Table 2: Average carbon dioxide emissions per tenure as at April 2006.**

- 3.9** Energy efficiency improvements to local authority housing is currently managed under the Decent Homes programme. Approximately £50,000 per year is spent on insulation measures and another £1.1 million is spent on repairing and replacing heating systems with energy efficient gas condensing boilers. These budgets are both programmed to continue until 2010. A revenue budget of £13,000 is also available to enable the purchase of licenses, promotional material, consultancy services and ongoing monitoring to help facilitate energy efficiency.
- 3.10** Local authority energy SAP rating data is collected on a regular basis via Decent Homes field based surveys and work undertaken by the Home Energy Officer. A database of housing across all tenures is also updated regularly to ensure that reliable stock assessment can be carried out. Recent software enhancements will enable greater accuracy in the forthcoming years.
- 3.11** It is estimated that the time of the Home Energy Officer is currently divided approximately 80-20 in favour of council-owned housing versus other housing. Considering that the housing tenure breakdown is roughly the reverse of this ratio there is much outstanding work in the private sector. It should also be noted that carbon dioxide emissions are much higher in the under-funded private sector and this adds to the problem.
- 3.12** Private sector work is currently limited to some energy efficiency awareness raising work and facilitating standard home insulation schemes. Private sector housing stock information is primarily collected in partnership with the Energy

Saving Trust. Cambridge City Council's Housing Standards team also collect this information during home visits.

- 3.13** Current sources of funding for energy efficiency work in the private sector include:

**Warm Front:**

WarmFront is the government-funded scheme that provides means-tested grants to improve the home energy efficiency of homeowners and private rented residents.

**Enact Energy:**

This organisation directly markets grant funded loft and cavity wall insulation to all households within the city through the HEAT project.

**Local installers:**

At least 10 independent insulation installers currently operate in Cambridge City, many of these offer grant-funded work.

**Utility companies:**

The main utility companies (Powergen, British Gas, Scottish Power, etc.) have a commitment to provide subsidised energy efficiency products under the Energy Efficiency Commitment (EEC). This usually takes the form of grant assisted loft and cavity wall insulation work, low energy light bulbs and occasionally energy efficient white goods.

**Low Carbon Buildings Programme:**

The DTI's Low Carbon Buildings Programme provides grants for microgeneration technologies for householders. It is managed by the Energy Saving Trust.

**Energy for Good:**

Additional Cambridge City Council grants available for solar thermal installations.

- 3.14** The Home Aid department in Cambridge City Council administers the Council's Grants and Loans Schemes to help owner-occupiers maintain their homes. In particular Home Aid can help older people or people with disabilities carry out repairs and maintenance on their homes and although this remains the main focus of the service, some of this work can be classified as energy efficiency improvements (e.g. loft insulation, new condensing boilers, etc.).
- 3.15** Although the Home Energy Officer already works with various other departments within Cambridge City Council and has good relationships with external stakeholders this could be developed further and formalised to deliver greater improvements in energy efficiency.

### 3.16 The new Home Energy Strategy

The new Home Energy Strategy will be the first such strategy to cover all tenures within the Cambridge City Council boundary.

3.17 The aim of the new Home Energy Strategy is to:  
 “Increase the efficient use of energy in existing homes in Cambridge and reduce the emissions of carbon dioxide (and other greenhouse gases) associated with this use of energy in order to mitigate climate change.”

3.18 Dwelling-focused objectives of the strategy are shown below in Table 3.

1	Improve the average SAP energy rating for all housing in Cambridge City by at least 2 points per annum (from an April 2006 baseline).
2	Ensure that there are no domestic properties with a SAP rating of less than 35.
3	Increase the use of micro-renewables on Cambridge homes along with other renewable energy sources.
4	Establishment of a Cambridge City Council Home Energy Forum / Network that will form partnerships with stakeholders who will be able to help us deliver home energy savings.

**Table 3: Dwelling-focused objectives.**

3.19 The rolling programme of targets will be developed as the Home Energy Strategy matures. The Action Plan includes details of the first two year’s planned activities. Table 4 below outlines the major initial action points (for further plans please see the Home Energy Strategy Action Plan).

No.	Key action points (taken from Home Energy Strategy Action Plan)	Priority
1	Decent Homes central heating and insulation improvement work to all Local Authority housing. All lofts to be insulated to a minimum of 200mm and all replacement boilers to be A rated condensing models.	2010
2	Pilot Action Zone – Selection of a small geographical area (covering all housing tenures) for concentrated energy efficiency improvement and promotional work. Production of a case study showing the improvements possible across all housing tenures with set resources.	2008
3	Using the new Landlord Accreditation scheme monitor progress against the energy efficiency standards and facilitate further work leading to increasing baseline standards within the private rented sector.	2008
4	Anglia Energy Services scheme – All void properties will be automatically switched to a single utility company meaning that new tenants will benefit by having information on their supplier when they move in and no outstanding debt issues. Cambridge City Council will also benefit by the creation of a fund of referral fee money that is spent on further energy efficiency measures within the housing stock.	2007
5	British Gas Council Tax reduction insulation scheme. Any resident who applies for wall and/or loft insulation work via British Gas will automatically qualify for £50 reduction from their Council Tax account (more depending on any Cambridge City Council contribution).	2007
6	Free home energy audits to assist local residents directly with their	2007

	utility bills, consumption monitoring and general energy saving.	
7	Domestic wind turbine trial – installation and monitoring of three domestic wind turbines at Aragon Close flats.	2007
8	Continue to improve the reliability of the energy database to monitor all housing energy efficiency in the city. Utilise this data to target additional work.	2007

**Table 4: Major initial action points.**

**3.20** The Home Energy Strategy is designed to be an organic, evolving document that will adapt to remain up to date and ensure that the Action Plan can deliver the required improvements. It is planned that there will initially be 11 Performance Indicators and these will form part of the annual review process. This annual review process will include a full report to members and updating of the strategy and objectives to take into account progress, funding and new technology.

### **3.21 Consultation**

Consultation has taken place with all major stakeholders. This includes all relevant departments within Cambridge City Council, local residents, the Energy Saving Trust, local insulation and energy efficiency contractors, Cambridge and South Cambridgeshire Primary Care Trust, Age Concern, the Home Energy Officer's Network and utility companies.

3.22 New potential projects have been entered into the Action Plan as a result of the consultation process. These include the Council Tax credit scheme, Anglia Energy Services Company, and annual promotional mail outs to all households.

3.23 Cambridge City Council has recently appointed a Sustainable Construction Coordinator who has contributed to the development of this strategy. However, since approximately 70% of the housing stock that will exist in 2050 has already been built (source: Communities and Local Government) this strategy will concentrate predominantly on the existing housing stock.

3.24 Cambridge City Council is also currently developing an Affordable Warmth strategy in conjunction with South Cambridgeshire District Council and the Primary Care Trust.

3.25 The consultation process will continue as part of the establishment of a Cambridge City Council Home Energy Network. It will directly feed into the annual updates of the strategy and will help to shape future action plans.

3.26 An Equality Impact Assessment (stage 1) has been carried out on the strategy and highlighted the need to reach all sectors and groups within the city. A stage 2 assessment will be undertaken at a later date provided sufficient resources are in place.

## **4. Implications**

### **4.1 Financial implications:**

Resources for improving the energy efficiency of the council-owned housing stock are already in place under the Decent Homes programme. This will be spent predominantly on loft insulation over the next two years but will also increasingly work on hard-to-treat homes.

**4.2** A limited increase in private sector activity will be possible through the establishment of the Cambridge City Council Home Energy Network. Funding will be required for further activity; current resources will result in energy saving and carbon emission reduction targets not being met.

**4.3** Any income generated from energy schemes or via Energy Efficiency Commitment (EEC) funding must be ring-fenced for spending on future energy efficiency improvements.

**4.4** Since all energy efficiency home improvements will reduce householders utility bill outgoings an increase in local spending will go hand in hand with increased energy efficiency work.

**4.5** The post of Home Energy Officer was originally agreed for a period of two years in 2005. Funding for this post came from £70,000 EEC funding already attracted prior to this time. The new Home Energy Strategy will start in the second year of this two-year period, so Year 1 of the strategy already has adequate funding.

**4.6** During Year 2 of the Home Energy Strategy the position of Home Energy Officer will also be self-funding. This is via approximately £35,000 EEC funding attracted as a result of Decent Homes work during 2005-07 (in particular the installation of high energy efficiency condensing boilers and loft insulation upgrades). Whilst it is hoped that this income will continue it will obviously depend on how central government decide to proceed with the next phase of the EEC. There is also a direct correlation between the money spent on energy efficiency improvement work carried out by Cambridge City Council and the amount of additional funding we can attract.

**4.7** Due to this lack of secure funding and since the carbon emission reduction and energy efficiency subjects are rising rapidly up the political scale we will be seeking additional funding to continue and develop our home energy work. Funding issues will be dealt with in future budget papers.

### **4.8 Environmental implications:**

The environmental implications of not acting immediately to increase the efficient use of energy in existing homes in Cambridge are clearly outlined in the Background section of this report.

### **4.9 Equal Opportunities and Diversity:**

Helping residents make efficient use of the energy in their homes will provide particularly vulnerable groups with the capacity to affordably heat their homes.

**4.10** An Equality Impact Assessment (Stage 1) has been carried out on the Home Energy Strategy and further work will be carried out during implementation.

**4.11 Staffing:**

The post of Home Energy Officer will ensure that the Home Energy Strategy is implemented successfully to a standard level. This post is currently a temporary position and is funded from external sources (as highlighted above) – this will need to be reviewed.

**4.12** There may be resource implications for other departments that have important roles in the Home Energy Strategy (e.g. Home Aid, Housing Standards, Sustainable City, City Homes, City Services, etc.) although it should be possible to (at least initially) absorb these duties into current services.

## **5. Background papers**

These background papers were used in the preparation of this report:

Cambridge City Council Home Energy Strategy (Full Version) 2006 - 2011

Cambridge City Council Home Energy Strategy (Action Plan)

Cambridge City Council Housing Strategy 2004 – 2007

Cambridge City Council Private Sector Housing Stock Condition Survey 2002

Cambridge Environment Strategy

Census 2001 data

Private Sector Housing Strategy 2006 – 2011

## **6. Appendices**

No appendices.

## **7. Inspection of papers**

To inspect the background papers or if you have a query on the report please contact:

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