



## Report to the Environment, Transport and Locality Services Select Committee

<b>Title:</b>	Carbon Management Programme & Energy Strategy for Buckinghamshire
<b>Committee date:</b>	8 <sup>th</sup> April 2014
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<b>Report signed off by Cabinet Member:</b>	
<b>Electoral divisions affected:</b>	<b>All</b>

### Purpose of Agenda Item

Information item on BCC Carbon Management Programme update and Energy Strategy for Buckinghamshire development, supporting verbal briefing at committee.

### 1. Background

1.1 A sustainability action plan that focuses on resource efficiency and driving long term value for the County Council was agreed by Cabinet in March 2013. The plan, which covers the period 2013-2016, reflects one of the areas of specific responsibility of the Environment Portfolio, yet it has cross cutting implications across the whole Council. The document sets out the key activities for the next three years, both internal work and work undertaken with our external partners. Cabinet was updated on progress against this action plan in December 2013. Since the plan's approval in March 2013:

- Energy efficiency projects have been directly implemented or facilitated that are now saving over **£257,000pa**
- More than **£2m of** external funding has been secured for expenditure on environmental measures including energy efficiency, low carbon workspaces and



Green Deal secured from Salix, Department for Energy and Climate Change(DECC) and European Regional Development Fund sources

- 1.2 The Sustainability Team are delivering work programmes captured within the Sustainability Action Plan to ensure that cost and energy savings are achieved for the council, and to help lay the conditions in Buckinghamshire to provide greater energy security with social and economic benefit for the residents and businesses in the county.
- 1.3 The Carbon Management Programme (CMP) consolidates and improves the approach to energy efficiency across the BCC estate and reducing carbon emissions from business mileage. Legislative, financial and reputational considerations provide the drivers for the programme, including increasing energy prices, reduction in Local Authority funding putting pressure on service budgets, Transformation and Future Shape and the role of the council to demonstrate leadership. National legislation provides a driver for action by Local Authorities – the Climate Change Act 2008 requires a reduction in CO<sub>2</sub> emissions by 34% by 2020 and 80% by 2050, and Local Authorities are well placed to contribute to these targets. The executive summary of the CMP is attached for reference.
- 1.4 The Energy Strategy is currently in development, coordinated by the Sustainability Team and the Energy and Resource Management Group. This is a long established officer task group reporting to the Natural Environment Partnership. Since 2011, modelling work was undertaken and a critical review of the output had been completed, to explore the technological potential for renewable energy generation, energy efficiency improvements and reductions in carbon emissions in Buckinghamshire. This provided the foundations for developing an energy strategy. The focus of this early work looked at setting targets for CO<sub>2</sub> reduction and renewable energy production across the four district council areas, to contribute to the national targets set by government under the Climate Change Act. A more pragmatic, technology-agnostic, benefits-led strategy is now being developed, with the aim of increasing energy resilience in Buckinghamshire and delivering social and economic benefit to communities, businesses and the Local Authorities.

## 2. ***Carbon Management Programme (CMP):***

- Focussed on own estate and energy consumption (including schools). Primarily energy efficiency projects, with some renewables (biomass boiler programme).
- The Plan will help the Council to achieve a 10% absolute reduction in CO<sub>2</sub> by April 2017 compared to 2011/12
- BCC are a mandated participant in Phase 1 of the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme, which requires reporting of energy consumption and purchase of allowances for CO<sub>2</sub> emissions. Phase 1 of the scheme ends in July 2014.
- Greenhouse Gas Reporting to DECC, not statutory but all LAs expected to report.
- Reports to Carbon Management Board, Property Board and COMT.
- Invest to Save projects funded using Salix ringfenced fund, MTP capital bids, corporate energy efficiency reserve.

### **3. Energy Strategy for Buckinghamshire**

- Countywide strategy, developed in partnership with District Councils and stakeholders.
- Focussing on opportunities for community owned energy generation projects, and overcoming barriers to implementation of energy schemes.
- Aims to increase long term energy security and local supplier competition and secure economic social benefit to the residents and businesses in Buckinghamshire.
- Governed by NEP, with LEP interface for securing funding.

## **Report**

### ***Progress to date***

#### **4. Carbon Management Programme**

- 4.1 The projects register is reviewed annually in conjunction with property maintenance programme and asset management programme. The project register is currently under review, and an updated programme for 14/15 is to be presented at Carbon Management Board on May 28<sup>th</sup> 2014.
- 4.2 Annual energy consumption and CO<sub>2</sub> emissions are calculated and reported by July each year, in line with CRC and GHG reporting timescales.
- 4.3 The Carbon Management Board recently reviewed and updated the Terms of Reference for the board and the task and finish delivery groups. A summary of the 'headline' projects completed in 2013/14 is provided below.

### ***Streetlighting***

- 4.4 In 2011/12 a four phase upgrade programme for streetlighting on A&B roads across the county was given approval. The four phase installation programme, delivered over four years, has been developed by TfB and Sustainability to deliver cross cutting objectives of financial and energy savings for the authority. The programme is being delivered by TfB, and is a key element of BCC's Carbon Management Plan.
- 4.5 Phase 1 of the programme has been fully delivered. This was a variable lighting scheme, as detailed in the original bid. This element of the programme is delivering energy savings of £85k pa and maintenance and associated savings of £54K pa.
- 4.6 The benefit of a phased programme is that there is opportunity to review the technology and financing arrangements. Phases 2-4 of the programme have been reviewed and LED lanterns are now the technology being installed. LED lanterns are more efficient, have a longer life and thus will deliver higher energy and maintenance savings for the authority.

- 4.7 Phase 2 is 90% complete and will be fully installed by 31<sup>st</sup> March 2014. This first wave of LED installations will deliver energy savings of £129k pa and associated maintenance savings of £57k pa.
- 4.8 Phase 3 figures are based on current scheme designs being approved at the moment. Work is due to start by June 2014 and completed by December 2014. This second phase of LED installations is forecast to deliver £177k pa energy savings. This is a part MTP, part Salix funded programme.

#### *Schools Insulation*

- 4.9 In 2013/14 an insulation programme for schools was delivered. Loft and/or cavity wall insulation was installed in 54 schools, and pipe insulation in boiler rooms was installed across 105 schools. Savings will be reported in July 2014.

#### *NCO Window Replacement*

- 4.10 Estimated savings on heating New County Offices will be reported at the next Carbon Management Board in May, with actual savings reported in July 2014. The building is noticeably warmer since the windows were replaced, and communication on appropriate use of radiators was issued with all programme updates. It is anticipated that there will be a reduction in gas consumption over the winter period compared to last year. Weather correction analysis will be conducted to ascertain how much the window upgrade may have impacted the heating bill.

### **5. Energy strategy:**

- 5.1 The Energy and Resource Management Group identified a group of key stakeholders for consultation and contribution to the development of the Energy Strategy. This included elected members and senior officers from all five councils, community energy groups, private sector, LEP and NEP representatives.
- 5.2 In January 2014, a stakeholder consultation document was circulated to this group of stakeholders, which contained four scenarios for Buckinghamshire; business as usual, high social benefit, high economic benefit and resource led (maximum deployment). Feedback was invited prior to a stakeholder engagement workshop which was held in February 2014.
- 5.3 The workshop was well attended and well received. Stakeholders from the key groups listed above attended and participated in developing an outline content structure for further development. Cllr Lesley Clarke OBE opened the workshop with a keynote address, and Mark Luntley from the Westmill wind and solar co-operative in Oxfordshire gave a presentation on the benefits of community owned renewable energy projects. A visit to Westmill is scheduled for Weds 30<sup>th</sup> April for Buckinghamshire stakeholders.
- 5.4 The stage one report for the Energy Strategy is attached. This includes the scenario document for stakeholders, the consultation feedback responses and the workshop report and recommendations.

## ***Future projects, challenges and opportunities***

### **6. Carbon Management Programme**

#### *Biomass Boiler Programme*

- 6.1 Following the review of the sites in the BCC property portfolio (including schools) that have oil boilers, 8 sites will be having replacement biomass boilers installed during summer 2014. These boilers will use wood pellets, which are cheaper than oil. Biomass boilers are eligible for the Renewable Heat Incentive (RHI) which is an income stream paid by Government for every kWh of heat generated. This biomass programme will deliver fuel cost savings and generate a revenue stream for BCC as well as reducing CO2 emissions. The 8 sites include Green Park, Black Park Country Park (offices and accommodation) and 5 schools. This is an MTP funded programme.

#### *Streetlighting*

- 6.2 There are two years remaining on the four year upgrade programme. Phase 3 figures are based on current scheme designs being approved at the moment. Work is due to start by June 2014 and completed by December 2014.
- 6.3 Phase 4 the scheme will not be designed until late 2014/ early 2015. Work will be completed by December 2015.

#### *Review of energy efficiency opportunities for corporate estate*

- 6.4 An in depth review of the corporate estate will be undertaken in summer 2014, reviewing the energy consumption and energy performance data to identify additional projects to update the CMP projects register and develop business cases for further investment in energy efficiency measures.

#### *Schools Energy Support Package*

- 6.5 A traded support package for schools is in development, which will include Display Energy Certificates, AMR (smartmetering) support, surveys to identify opportunities for energy efficiency projects and support with funding applications.

### **7. Energy Strategy**

- 7.1 The next stage of the strategy development is to hold a second workshop session with a core group of stakeholders in May 2014. The agenda for this session is likely to be:
- A 'Chatham House Rules' based discussion about the real barriers to the development of energy projects in Buckinghamshire to help focus on the outcomes that the Energy Strategy needs to achieve.

- A 'live' drafting session to identify what the Energy Strategy needs to contain. The intention is that this will then enable the drafting group to complete the production of a complete 'first draft'.
  - Discussion on suggested communication plan for wider stakeholders
- 7.2 In parallel to this, work is progressing to review the opportunities for renewable energy generation on the BCC agricultural estate. This will seek to identify where we may be able to develop income generation from energy for BCC and local communities.
- 7.3 Work is underway to explore opportunities for BCC to set up an Energy Services Company (ESCO). An ESCo may provide income generation opportunities for BCC as well as providing a social and economic benefit to people living and working in Buckinghamshire, through the generation and sale of energy.

***Items for review/update at future ETL Committee***

8. Potential areas that the Committee may like to be updated on or review in 2014-15:
- Review of first draft of Energy Strategy (expected June 2014), giving special consideration to how to overcome barriers to development of energy projects
  - Update in August 2014 on 2013-14 energy consumption and emissions (post July reporting to DECC)
  - Progress update on delivery of biomass boiler installations, LED streetlighting upgrade and additional invest to save energy efficiency projects within CMP projects register in Oct/Nov 2014 (prior to Cabinet update on Sustainability Action Plan in December)