

Report to Scrutiny Panel

Name of Scrutiny Panel	ECONOMY & ENVIRONMENT	
Meeting Date	28 September 2011	
Subject	Carbon reduction in Calderdale: A strategic role for the Local Authority	
Wards Affected	ALL	
Report of	Phil Ratcliffe – Development Strategy Manager	
Type of Item (please tick ✓)	Review existing policy	
	Development of new policy	
	Performance management (inc. financial)	✓
	Briefing (inc. potential areas for scrutiny)	
	Statutory consultation	
	Council request	
	Cabinet request	
	Member request for scrutiny (CCFA)	✓

Why is it coming here?
Panel have asked for an update on various aspects relating to the management of carbon emissions from the Council's estate and within the District as a whole and the strategic role of the Local Authority.

What are the key points?
<p>This is a broad ranging report addressing many aspects of the work relating to carbon reduction and energy efficiency across the Council's estate.</p> <p>The Council is working on a continuous basis with a limited budget to reduce the consumption of energy within its estate and the emissions of greenhouse gasses associated with that energy consumption.</p> <p>A number of key aspects are considered in this report as follows : -</p> <ol style="list-style-type: none"> 1. The "10:10" Initiative, and action plan delivery; 2. Solar pv and other renewable sources for consideration across the estate; 3. The "Schneider Approach"; 4. The baseline report for the CRCEES, which has now been submitted to DECC; 5. The Climate Change Strategy – Council as Leader of the Community of Calderdale; 6. Climate Change - Supplementary Planning Document ; <p>Much work is being undertaken, which is heading toward the delivery of opportunities for significant carbon reduction and energy efficiency savings.</p>

Possible courses of action
Each of the areas considered has different implications and potential courses of action. This is highlighted after each sub-section.

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Should this report be exempt?
No

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1. Background

1.1 For the purposes of this report carbon management of the Council's estate has been split into 6 separate information areas.

1.2 "10:10" INITIATIVE AND ACTION PLAN

The council signed up to the "10:10" initiative to reduce emissions by 10% during 2010. (Calderdale's Reporting Year for this initiative is actually the Calendar year 2011, and reports to the "10:10" organisers will not be expected until April 2012). Cabinet authorised a fund of £400,000 towards an initial action plan,. Of this, £132,000 has been allocated and several schemes have now commenced with a predicted saving of 217 tonnes of carbon and £40,000 per annum achieving a 3.25 year payback. Whilst this is clearly lower than the "10:10" requirement of 1,878 tonnes CO₂ other soft measures also continue to reduce emissions.

The proposals that are now proceeding are :-

"10:10" SCHEMES	Total Scheme Cost £	Annual saving £	Payback (years)	Annual saving CO₂ tonnes	Annual saving kw hours
North Bridge Leisure Centre - air handling units	60,000	12,710	4.7	96	317,000
North Bridge Leisure Centre Heating controls	25,000	6,000	4.2	12	66,666
North Bridge Leisure Centre : voltage optimisation	12,000	3,500	3.4	20	40,000
Halifax Pool : Invertors	15,000	8,900	1.7	46	87,600
Todmorden Sports Centre - Hall : Lighting replacement	12,000	3,098	3.9	20	36,448
Todmorden Sports Centre - Invertor Pump	8,500	5,880	1.4	23	43,800
TOTALS	132,500	40,088	3.22	217	591,514

1.3 As part of the "10:10" Action Plan, it was considered possible to use soft measures (rather than physical technological changes") to further reduce CO₂ by approximately 620 tonnes. A Green Champions Scheme is being rolled out, supported by the Leader and Chief Executive , which will encourage individual responsibility in reducing energy consumption, and ensure that the soft measure savings are secured. If our current CO₂ reductions together with the "10:10" and soft measures are combined it is likely that we will be designated a "10:10"

authority, as a reduction in excess of 3% has been allowed by the “10:10” organisers.

Issue for Scrutiny Panel

Scrutiny are charged within monitoring the ongoing work for the “10:10” Initiative. Panel are invited to comment upon the Action Plan and progress to date.

1.4 SOLAR PV AND OTHER RENEWABLE ENERGY SOURCES

Cabinet explored that potential for Solar pv on a significant scale on the Council's own stock (Cabinet Report : 14 March 2011) . However difficulties with the procurement process have shown that the original model proposed could not be achieved without a full OJEU competition.

As part of the process a feasibility study has been carried out across 100 council buildings to assess the solar panel (photo-voltaic) potential across its estate. It shows that the Council's estate has the potential between 2.2 and 2.8 mega watt peak from solar pv.

The results outline excellent scope for the installation of solar photovoltaic systems on the Council's estate. This could be on either an individual or multi site basis. To achieve this would require between £5.5 and £6.5million investment. With the current Feed in Tariff rates, a large scale collective scheme could bring approximately £1.146million FIT income to the Authority on an annual basis (RPI Indexed), and reduce our energy purchasing costs significantly. It would also demonstrate to others what can be achieved.

Procurement options are being further assessed to consider how to maximise the benefits of this potential.

Yorkshire Purchasing Organisation have undertaken a Stage 1 OJEU completion on behalf of partners in the consortium as part of the establishment of a procurement framework agreement. This could allow Calderdale to undertake procurement through a mini-competition from within this pool of Framework Partners without having to enter a full OJEU process. However formal legal advice from our own Solicitors has not yet confirmed that this would be the position. Issues surrounding the Council's role in support of schools are still a matter for further clarification. In particular any legal or contractual arrangements for renewable energy being fitted upon or within schools which become academies have yet to be resolved. However it is hoped that four school will receive biomass boilers in the near future, once the contractual issues have been resolved. This would make the heating of these building carbon neutral, thus reducing registered emissions and liabilities under the CRCEES.

Issue for Scrutiny Panel

A number of key issues arise: -

- the potential procurement issues ;
- contractual matters relating to schools becoming academies; and
- the funding requirements to advance this sort of proposal.

Panel are invited to comment on the progress made and consider the extent to which they consider this to be a Council priority.

1.5 “SCHNEIDER APPROACH”

The “Schneider Approach” is a holistic assessment in terms of energy management and consumption of the entire estate to establish the full scale and complexity of a project that would significantly reduce energy consumption and carbon emissions.

A Pre-Study has been undertaken by Schneider Electric, one of the world’s largest energy management companies with a turnover in excess of 18 billion Euros. This is investigating a range of Council buildings and those for which we are also responsible in terms of carbon (such as schools). This Pre-Study is assessing the potential for a holistic programme of works over an extended period to significantly reduce energy consumption and CO₂ emissions across the estate.

There is a workshop taking place on 29 September in which the savings opportunities identified are being presented to the Energy Management Team, AM/FM Team, Finance and Procurement and the Portfolio Holder before further consideration of the implications of such a collaborative approach is undertaken. This approach would require a full OJEU competition of the project.

Schneider have undertaken a large number of projects around the world, including in the United States and Scandinavia, where significant savings in CO₂ and energy have been achieved. In the UK, they have only recently entered the market and are exploring potential with a number of authorities including Hull City Council, NHS Trusts and Sheffield University.

At Sheffield a £4.37 million project is now being undertaken across the 72 buildings in their estate. This is guaranteeing carbon reduction savings of 2,079 tonnes, costs savings in the order of £698,000 per year (including reduced reactive maintenance of £250,000) and a payback time of 5 years. Whilst each case is very different, this gives some indication of the potential that can be achieved by undertaking such an holistic approach.

Depending upon the priorities that the Council may set, different ways of funding any project (prudential borrowing or payment from savings) would have to be addressed, should the decision be taken to proceed into a project of this nature. The Schneider Approach will feed in to the current AM/FM review, and final proposals will be put to Cabinet at a later date.

Issue for Scrutiny Panel

This matter is for information. Panel could consider whether they endorse this sort of approach to the management of the Council’s estate, and may wish to receive further information once the feed-back from Schneider has been delivered.

1.6 **CARBON REDUCTION COMMITMENT ENERGY EFFICIENCY SCHEME (CRCEES) BASELINE**

Calderdale submitted its Footprint Report and Annual Report for the CRC Energy Efficiency Scheme, as required by the Regulations, before the deadline, and thus avoided penalty charges for late submission. The carbon emissions covered by the scheme in 2010-11 amounted to 32,568 tonnes. We do not have to pay for carbon allowances for 2010-11, but we will have to pay for allowances for the current financial year (2011-12). Payment for this year will be due between April and July 2012. Central Finance have already made provision for £200,000 to cover Council emissions, and a further £200,000 covering schools.

Using the data from 2010-11 as a best estimate, the likely costs of the scheme next year might be as follows:

	Council buildings/streetscene	Schools	Total
CRC emissions 2010-11 (tonnes CO ₂)	18,881	13,687	32,568
Hypothetical cost (at £12 per tonne CO ₂)	£226,574	£164,244	£390,842
<i>Of which street lighting</i>	<i>£88,272</i>	<i>£0</i>	<i>£88,272</i>
<i>Of which sites tenanted by third parties</i>	<i>£7,236</i>	<i>£0</i>	<i>£7,236</i>

Due to a loophole in the current scheme we will be able to discount street lighting next year, saving almost £90,000 in CRC allowances. This is because we have switched from 'active' to 'passive' metering for the street lighting account. However, this saving will only last for the first three years of the CRC, as the Government has announced that it will close the loophole from 2014.

The league table of CRC participants is unlikely to be published until the end of October at the earliest. However, early indications from data collected by the Local Government Information Unit suggest that Calderdale Council will appear in the top 50%, which is a pleasing result and provides a publicity opportunity. The CRC requires year on year reduction in carbon emissions in order to maintain position in the league table, and some of the projects outlined within this Scrutiny Report would contribute to achieving these continued reductions.

Issue for Scrutiny Panel

This matter is for information. Panel could acknowledge the work undertaken by staff in submitting the baseline report within the deadlines.

1.7 CLIMATE CHANGE STRATEGY - CALDERDALE'S ENERGY FUTURE

The Council has a significant role to play in shaping carbon reduction across the district as a whole, whether this is as policy maker, leader of the community or by example. Work on the Climate Change Strategy, which looks at possible ways of reducing green-house gas emissions across the district is on-going. There is a real challenge in trying to reduce carbon across the district by upwards of 40% by 2020 (from a 2005 baseline), but this is the challenge that is being set. Some of the solutions such as technology development will lie outside our control; others, such as, information provision, community leadership, insulation, and building retrofit (both for domestic and employment properties) can lie within our gift. Three strands are being followed in the preparation of the Climate change Strategy: -

1. Calderdale's Energy Future (Climate Change Strategy)

- Calderdale has committed to writing a climate change strategy for the borough.

- Work has begun to engage the local community to input into the strategy. 3 key events have been arranged in September and October for businesses, the general public and key deliverers.
- Future scenarios are being computer modelled for pathways to meet a 40% reduction in CO₂ emission by 2020. This will form part of the evidence base for the action.
- One to one interviews are being held with key council and community members to gather further intelligence for the strategy and action plan.
- It is expected that a draft strategy will be heard by Cabinet in November 2011.

2. Carbon Modelling

- Scenarios have been run using Carbon Descent's Vantage Point Computer modelling software.
- Initial results show that key infrastructure required to meet an ambitious carbon reduction target is wind power and Combined Heat and Power. Currently there is one CHP unit in Calderdale based at Sonoco. This plant produces 7mw of energy and exports two-thirds of this to the national grid. There are opportunities to install a district heat network using CHP in Halifax town centre, but this will require considerable technical and feasibility work in order to be progressed..
- All results will be written up into a report which will be used as part of the evidence base for the Climate Change Strategy; Calderdale's Energy Future.

3. Community Renewable Scheme Development

- Calderdale Council Environmental Management Team and The Alternative Technology Centre are working together to develop a community renewable energy scheme. Three sites were initially identifies with Hydro potential; Cromwell Bottom, Callis and Copley.
- Funding provided by Local Government Yorkshire & Humber Climate Change Skills Fund was used to engage the local community about community energy.
- A series of workshops are being delivered to local community groups around the Borough which aim to inform local people about the opportunities of community energy.

Issue for Scrutiny Panel

This matter is for information. Panel could consider the implications of some of the evidence that is arising showing that Calderdale may need to host a significant wind farm, and the funding of a CHP project for the centre of Halifax.

1.8 CLIMATE CHANGE / ENERGY –SUPPLEMENTARY PLANNING DOCUMENT (SPD)

A number of Councils have put in place Climate Change SPDs to assist developers in the delivery of the actions needed to reduce CO₂ and energy consumption and deliver sustainable development.

Many of these SPDs look at sustainable development in its broadest sense but in recent times standards such as Lifetime Homes, Building for Life, Secured by Design and Code for Sustainable Homes / BREEAM have also started to be incorporated.

One of the key features that all these SPDs have in common is that there is a Core Strategy in place and more often than not a Climate Change Strategy as well. SPDs can communicate local solutions for mitigating against and adapting to climate change, and can make use of the same evidence that has been collected for the Core Strategy itself.

The latest advice from the Government contained in the draft National Planning Policy Framework proposes that all standards to be used to assess planning applications and to bring forward sustainable development should be contained within the Local Plan (Core Strategy). The draft NPPF also states that “SPDs should only be necessary where their production can help bring forward sustainable development at an accelerated rate, and must not add to the financial burdens on development”. Given that there is much existing advice and guidance already available to householders, businesses and developers, the value of a Calderdale specific SPD on Climate Change/Energy, might be limited. The local requirements for Lifetime Homes, sustainability standards, Building for Life, Secured by Design, Energy Efficiency Standards/Renewable Energy generation etc, will be incorporated into the Core Strategy/Local Plan, and there will be no scope for an SPD to set out these requirements. The Draft National Planning Policy Framework (July 2011), is proposing that SPDs are further reduced in their use and status. As a result, informatives or guidance may very well be a more appropriate way forward rather than formal SPD.

SPDs are valuable tools but only when they are building upon policy that is already in place. The Council's key priority for plan making at this time should be the development of the Core Strategy/Local Plan, which could provide useful pegs for relevant SPD production. However to bring forward SPD in advance of the Core Strategy/Local Plan would further delay the development of that document. Given the need to get a Core Strategy/Local Plan in place as soon as possible in order to address some of the issues arising from the draft National Planning Policy Framework, diverting resources to the production of a SPD at this time is not considered to be the most effective use of resources.

Issue for Scrutiny Panel

To consider whether in the light of existing circumstances and resources it would be appropriate to recommend to Cabinet that a Climate Change/Energy SPD should be incorporated into the project plan for the Local Development Framework/Local Plan.

2. Main issues for Scrutiny

- 2.1 These are indicated at the end of each individual section of the report.

3. Consultation

- 3.1 No separate consultation has been undertaken on this Report.

4. Further action and timescales

- 4.1 Panel may wish to consider receiving further Reports on a number of aspects as these develop : -
- “10:10” Action Plan – Monitoring;
 - “Schneider Approach” – findings and progress report;
 - Climate Change Strategy – following adoption and development of the Action Plan;

5. Options appraisal

- 5.1 No specific options appraisal has been undertaken within the context of this Report.

6. Conclusions

- 6.1 The Council is continuing to address energy and carbon reduction from within its estate and as leader within the community. A number of work streams are coming together with the prospect of significant reductions being available. Further appraisal and validation work including procurement and financing is required before the Council can choose which approaches to progress for our own estate, whilst the Climate Change Strategy and action plan should be presented to Cabinet in November for adoption.

7. Appendices

- 7.1 There are no appendices to this Report

8. Background documents

- 8.1 There are 3 background documents ; -
1. “10:10” Action Plan;
 2. Solarpv Feasibility Study 2011;
 3. CRCEES Baseline Report;

9. Documents available for inspection at : -

These documents are available for inspection in Environmental Management, Development Strategy Team, Planning Services, Northgate House, HALIFAX