

CABINET ITEM COVERING SHEET PROFORMA

AGENDA ITEM

REPORT TO CABINET

22nd November 2007

**REPORT OF CORPORATE
MANAGEMENT TEAM**

CABINET DECISION

Environment – Lead Cabinet Member – Councillor Mrs Jennie Beaumont

CARBON MANAGEMENT – A CASE FOR ACTION

1. Summary

At the Cabinet meeting on 15th March 2007 it was resolved that the draft Stockton on Tees Climate Change Action plan be adopted. This report sets out the case for action by Stockton on Tees Borough Council to reduce its carbon emissions by 25% over five years. It shows that through the implementation of a programme of measures significant savings can be made in both emissions and in financial terms. A key part of the programme is the ability to demonstrate that all of these measures will have a payback period of five years or less, making this an “invest to save” plan.

In May of this year Stockton was accepted onto the carbon management programme as one of 29 local authorities, and the most northerly council to participate in this phase of the programme. The programme includes our administration buildings, leisure facilities, libraries and other public buildings, schools, fleet and business travel as well as street lighting. The initial stages of the programme are based around short term gains or “quick wins” in order to make an early impact and to ensure the revolving loan budget is replenished quickly.

A major part of the programme will be raising awareness within the organisation and this is to be achieved through a campaign developed in-house and which needs to involve all service areas and staff. Being involved with this programme provides the Council with the opportunity to bid for funding from the Salix finance company, a not-for-profit organisation established by the carbon trust with £20m of government funds to invest in energy efficiency measures.

2. Recommendations

It is recommended that:

1. Members note that the Council has been accepted on to the local authority carbon management programme.
2. Members note the “case for action” and the associated reductions in carbon emissions and financial benefits.
3. Members agree to officers developing the financial model utilising the available Salix funds for the delivery of carbon reduction projects. Any match funding to be subject to the allocation of resources through the budget process.

4. Officers progress to the next stage of the carbon management programme and produce a strategy and implementation plan to be considered at the cabinet meeting in March 2008.

3. Reasons for the Recommendations/Decision(s)

1. Climate change is real. The daily effects of climate change, the availability and cost of fossil fuels, environmental regulation and new technology will change the shape of energy use and supply and make the emission of greenhouse gases one of society's key concerns.
2. As an organisation Stockton Borough council is responsible through its activities and buildings for 2% of the total CO2 emissions in the Borough.
3. Stockton Council has a Community leadership role to use resources wisely, setting an example to other businesses, stakeholders, partner organisations and the wider community.
4. There is a need to meet climate change-driven regulation governing the public sector such as the Energy Performance of Buildings Directive, the EU Emissions Trading Scheme and the proposed Carbon Reduction Commitment scheme. Participation in the carbon management programme will put the Council in a position to meet these challenges and to stay ahead of the wave of regulatory pressures.
5. To deliver the significant reduction in carbon usage and consequent financial savings will require a robust strategy and implementation plan. This will be developed with the assistance of the carbon trust and through networking with other local authorities in the programme.
6. Adequate resources will be required to implement the measures necessary to achieve the carbon savings, at present the Council attributes £100,000 a year for energy efficiency initiatives. A substantial increase may be needed in order to fully realise the range of opportunities to save energy identified to date. The Government are supporting an energy efficiency investment fund, which will operate as a revolving loan adopting the criteria set by the Salix finance organisation. This is in practice an *invest to save* model with a proven mechanism for calculation of pay-back periods. A financial model will be developed for consideration during next years resource setting process.

4. Members' Interests

Members (including co-opted Members with voting rights) should consider whether they have a personal interest in the item as defined in the Council's code of conduct (**paragraph 8**) and, if so, declare the existence and nature of that interest in accordance with paragraph 9 of the code.

Where a Member regards him/herself as having a personal interest in the item, he/she must then consider whether that interest is one which a member of the public, with knowledge of the relevant facts, would reasonably regard as so significant that it is likely to prejudice the Member's judgement of the public interest (**paragraphs 10 and 11 of the code of conduct**).

A Member with a prejudicial interest in any matter must withdraw from the room where the meeting considering the business is being held -

- in a case where the Member is attending a meeting (including a meeting of a select committee) but only for the purpose of making representations, answering questions or giving evidence, provided the public are also allowed to attend the meeting for the same purpose whether under statutory right or otherwise, immediately after making representations, answering questions or giving evidence as the case may be;
- in any other case, whenever it becomes apparent that the business is being considered at the meeting;

and must not exercise executive functions in relation to the matter and not seek improperly to influence the decision about the matter (**paragraph 12 of the Code**).

Further to the above, it should be noted that any Member attending a meeting of Cabinet, Select Committee etc; whether or not they are a Member of the Cabinet or Select Committee concerned, must declare any personal interest which they have in the business being considered at the meeting (unless the interest arises solely from the Member's membership of, or position of control or management on any other body to which the Member was appointed or nominated by the Council, or on any other body exercising functions of a public nature, when the interest only needs to be declared if and when the Member speaks on the matter), and if their interest is prejudicial, they must also leave the meeting room, subject to and in accordance with the provisions referred to above.

AGENDA ITEM

REPORT TO CABINET

22nd November 2007

**REPORT OF CORPORATE
MANAGEMENT TEAM**

CABINET DECISION

CARBON MANAGEMENT – A CASE FOR ACTION

SUMMARY

At the Cabinet meeting on 15th March 2007 it was resolved that the draft Stockton on Tees Climate Change Action plan be adopted. This report sets out the case for action by Stockton on Tees Borough Council to reduce its carbon emissions by 25% over five years. It shows that through the implementation of a programme of measures significant savings can be made in both emissions and in financial terms. A key part of the programme is the ability to demonstrate that all of these measures will have a payback period of five years or less, making this an “invest to save” plan.

In May of this year Stockton was accepted onto the carbon management programme as one of 29 local authorities, and the most northerly council to participate in this phase of the programme. The programme includes our administration buildings, leisure facilities, libraries and other public buildings, schools, fleet and business travel as well as street lighting. The initial stages of the programme are based around short term gains or “quick wins” in order to make an early impact and to ensure the revolving loan budget is replenished quickly.

A major part of the programme will be raising awareness within the organisation and this is to be achieved through a campaign developed in-house and which needs to involve all service areas and staff. Being involved with this programme provides the council with the opportunity to bid for funding from the Salix finance company, a not-for-profit organisation established by the carbon trust with £20m of government funds to invest in energy efficiency measures.

RECOMMENDATIONS

It is recommended that:

1. Members note that the Council has been accepted on to the local authority carbon management programme.
2. Members note the “case for action” and the associated reductions in carbon emissions and financial benefits.
3. Members agree to officers developing the financial model utilising the available Salix funds for the delivery of carbon reduction projects. Any match funding to be subject to the allocation of resources through the budget process.
4. Officers progress to the next stage of the carbon management programme and produce a strategy and implementation plan to be considered at the cabinet meeting in March 2008.

DETAIL

Background:

1. The local authority carbon management programme has been developed by the carbon trust and provides technical and change management support to help local authorities realise carbon savings. This is the fifth year that the programme has been running and the average targets set by local authorities to date has been 20% with savings of over £33m per year.
2. The carbon trust is an independent UK wide company set up in 2001 at the request of the CBI and funded by the government. Their mission is to accelerate the change to a low carbon economy. Specific examples are Bradford city council predicted to save 24,000 tCO2 and £6.4m over 5 years; North Yorkshire County council predicted to save 20,000 tCO2 and £5m over 5 years.
3. Stockton applied to join the programme earlier this year, officers were interviewed by the carbon trust and were advised in March that we had been accepted onto the programme and the launch would be in May. Stockton is the most northerly authority in England on this phase of the programme, the nearest other successful authorities are Scarborough and York.
4. The corporate project sponsor is the Director for Development and Neighbourhood Services and the political sponsor being the cabinet member for the environment. An initiation workshop took place on 7th June 2007, which consisted of a meeting between the carbon trust and the project sponsors and then the project team with officers from a range of services with a part to play.
5. The programme has five steps:

▪ Mobilise the organisation	June 2007
▪ Set baseline, forecast and targets	August 2007
▪ Identify and quantify options:	November 2007
▪ Finalise Strategy and Implementation plan:	March 2008
▪ Implement plan	2008 – 2013
6. A target of 25% carbon saving by 2013 has been adopted, based upon both the experience of other local authorities in previous phases of the programme and from the information supplied by members of the project team relating to actions that are planned or expected to happen over the next five years.
7. The scope of the project will include schools, leisure facilities, council administrative buildings, libraries, the fleet, business mileage, and street lighting. As the carbon impact of our waste management strategy is highly complex it is subject to a separate review process. However, it is expected that carbon 'expenditure' will be a major consideration in determining waste management strategies and will add to our overall target.
8. Tristar homes have not been included in the scope of this programme as there are other drivers and programmes in place to improve the energy efficiency of the social housing stock.

Benefits to Participation in the Carbon Management Programme

9. Participation in the carbon management programme sends out a clear message that the council is committed to reducing its contribution to climate change and is utilising resources responsibly. During the course of the programme there will be opportunities to engage with

local businesses to encourage their participation in achieving carbon savings through ideas sharing, networking and support from the carbon trust.

10. The carbon management programme has been running for four years and is provides a tried and tested methodology to deliver carbon reduction and financial savings. It offers technical and specialist support to enable both the cultural shift within the organisation as well as offering proven technological solutions to energy issues within the local authority environment.
11. Carbon management has links to, and will contribute towards targets and objectives within:
 - The Stockton on Tees Climate Change Action
 - The Tees Valley Climate Change Strategy
 - Draft Sustainable Community Strategy 2008 - 2021
 - Asset Management Plan
 - Building Schools for the Future
 - Procurement Strategy
 - The Corporate Travel Plan

Actions to Date:

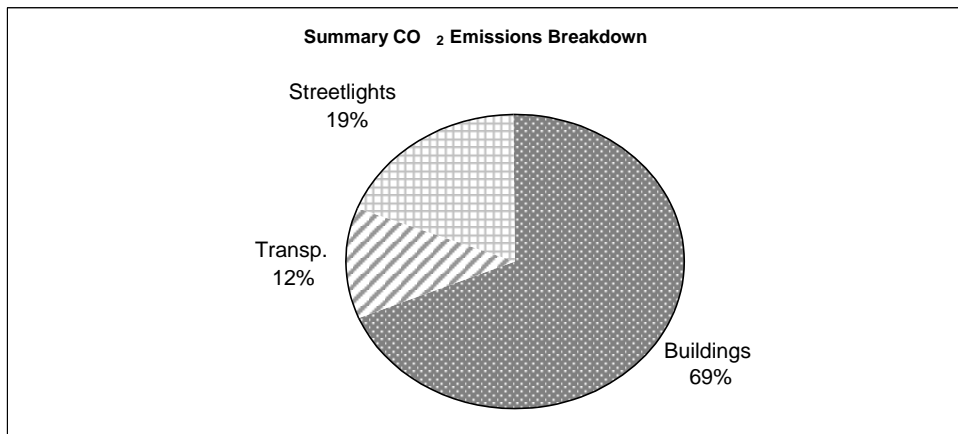
12. A cross-service project team has been established including membership from Tees Active. This group has brought together the necessary information to form the baseline position in terms of our carbon emissions and our energy costs as well as the following:
 - Developed a project plan with objectives, deliverables, governance and some potential opportunities for energy savings ;
 - Setting the target of 25% carbon reduction by March 2013, from the 2005/06 baseline;
 - An innovative awareness campaign including a draft communications strategy, considered an example of excellence by the Carbon Trust, has been devised in-house by officers within Development and Neighbourhood Services based around the carbon dioxide molecule and utilising the “CO2” in captions and messages. Examples of these will be available at Cabinet for information.
 - Held an opportunities workshop to produce a range of opportunities that could be included with other projects and planned maintenance programmes to save energy;
 - Prioritised those opportunities by ease and effect;

Significant Opportunities:

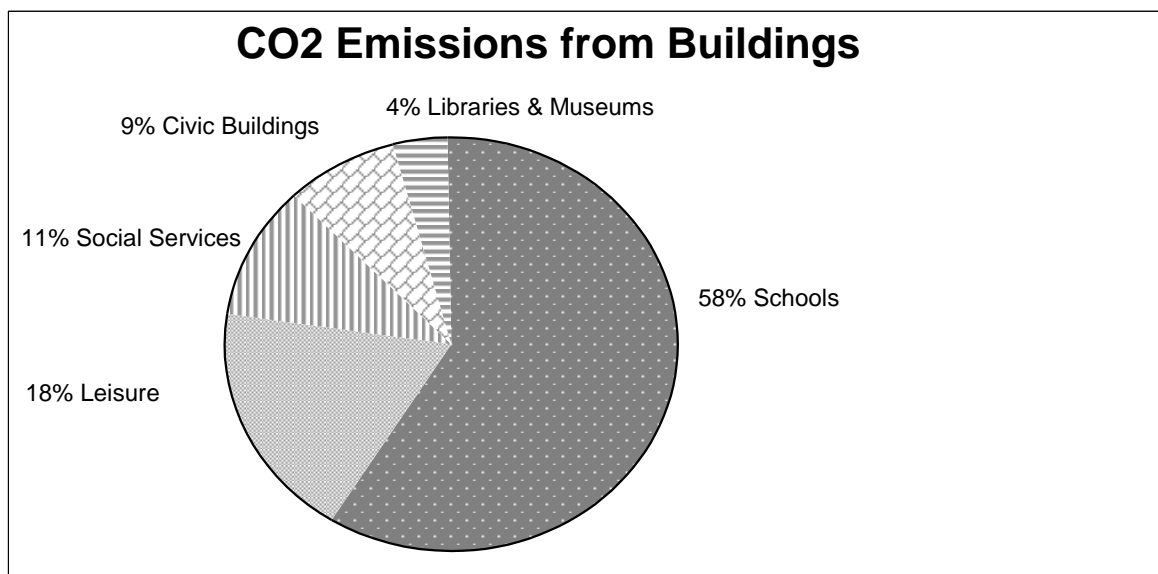
13. Around 40 opportunities have been identified as being potential projects to develop as part of the carbon management programme. These range from some of the more traditional approaches such as insulation measures, lighting controls, improving heating controls and zoning to the more unusual such as street light dimming, voltage reduction and liquid swimming pool covers. Those opportunities will be further evaluated to produce an action plan for consideration by Cabinet in March 2008. Underpinning the programme will be a comprehensive awareness campaign to engage staff in all service areas, within schools and Tees Active.

Case for Action

14. The case for action sets out the business case for reducing the council's carbon emissions from the baseline position in 2005/06 by 25% between 2008 and 2013. The baseline position is set out in summary form below for our public buildings, schools, leisure facilities, street lighting, as well as fleet fuel use and business miles travelled by staff.



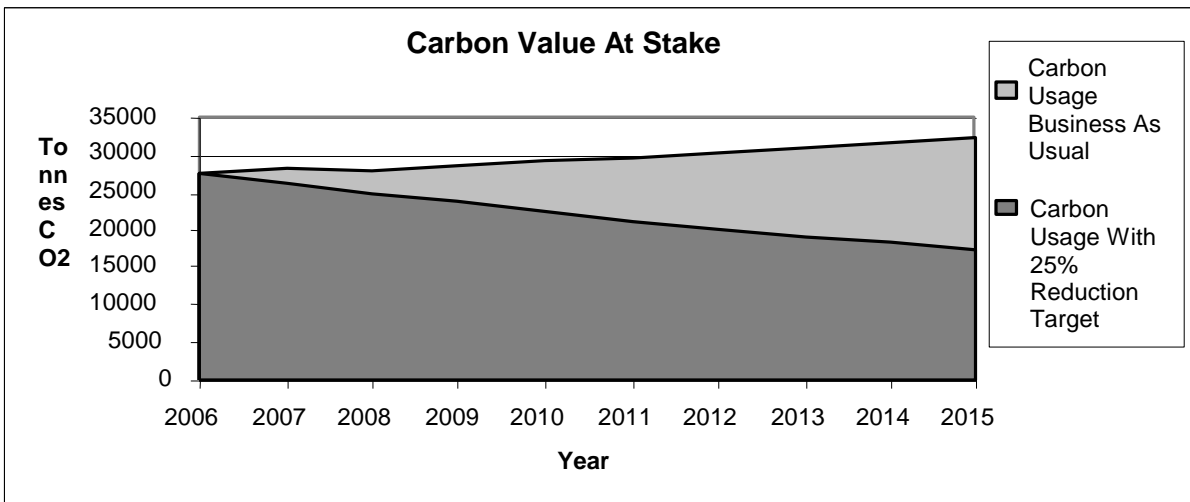
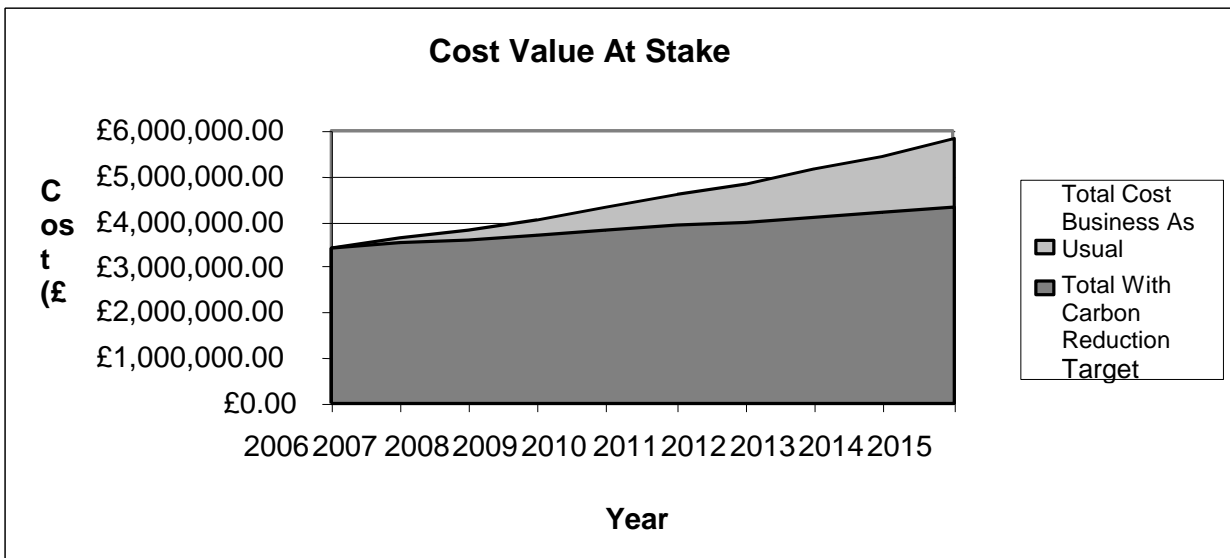
This can be broken down further to show the emissions from the buildings, where it becomes clear that schools are the biggest users of energy followed by our leisure facilities.



Key facts from the baseline year of 2005/06 are:

- 29,700,856 kWh/yr electricity used;
- 48,973,915 kWh/yr gas used;
- 950,000 litres of fuel for the fleet;
- 2,668,000 business miles travelled;
- Total costs - £4,139,000
- 27,758 tonnes CO₂ emitted.

15. Using this baseline data a forecast has been prepared using both known and predicted factors which may influence pricing such as inflation and fuel price rises over the next five years and based upon data from the Dti and using a formula produced by the carbon trust. Two scenarios are then produced. The first the “business as usual” scenario (BAU) where no energy efficiency measures are installed and prices continue to rise. The second scenario where the energy saving measures are implemented to achieve the 25% reduction. The difference between the two is known as the “value at stake” and is graphically illustrated below in terms of cost and carbon savings. In terms of savings this equates to £4.2m over five years and 42,120 tonnes CO₂.



Resources:

16. There is an existing budget for energy efficiency measures of £100,000 which operates on a revolving loan basis and has largely been utilised for school energy efficiency measures. This level of resource may not be sufficient to deliver the measures necessary to achieve the significant reduction in energy use identified within the carbon management programme opportunities. A financial model and appraisal is to be developed as a part of the programme.

Salix Ring Fenced Fund Scheme

17. Salix is an independent, publicly funded company that provides interest-free match funding grant to the public sector to invest in energy efficiency measures and technologies that will reduce carbon emissions.
18. It is a not-for-profit company set up by the carbon trust in 2004 with Government funding of £20 million with the aim of working with local authorities, hospitals and universities towards reducing their carbon emissions through capital investment in energy efficiency projects.

19. Projects funded through this route must meet certain criteria:
- Maximum 5 year payback period and £100/ tonne CO2 lifetime basis, for energy efficiency projects;
 - Or maximum 7.5 year payback period for projects with lifetime £/ tonne CO2 equal or less than £50 for approved energy efficiency and renewable projects.
20. The grant is provided in six monthly tranches over a maximum of two years. The fund must be dedicated to implementing energy efficiency and renewable energy projects through interest free internal “loans”. The loans are then repaid to the fund over a period agreed with the carbon reduction programme using a minimum of 75% of the annual savings – the balance being retained by the project host e.g. a School. Once the project loan has been repaid to the fund the project recipient will continue to benefit from the ongoing energy savings. As repayments are recycled back into the fund they become available for re-investment, hence creating a self-sustaining fund.
21. Participants can apply for a grant of up to £250,000, in exceptional circumstances this can be increased to £500,000 provided there is a well thought out business case that demonstrates effective use of the fund over the longer term.
22. Typical projects that would be eligible for Salix funding would be:

Measure	Typical Energy Saving %	Typical Payback Period (years)
Time controls on photocopiers and office equipment	20 – 60	0.5 - 3
Automatic lighting controls	20 – 50	2 – 10
Swimming pool cover	2 – 5	2 – 3
Thermostatic radiator valves	5 – 10	2
Cavity wall insulation	10 – 20	3 – 6
Variable speed drives on pumps, fans, compressors	20 – 70	0.5 – 5
Combined heat and power for swimming pools	30 – 55	3 – 6

Next Steps:

23. The next stage of the programme consists of developing the project opportunities formulating the strategy, developing the financial model and implementation plan. This implementation plan will be presented to a future meeting of cabinet in March 2008.
24. The awareness campaign will be rolled out to our administrative buildings, schools, leisure facilities, libraries and other public buildings.
25. Recruitment of a number of “carbon savers” to help to disseminate the message, to encourage colleagues to participate, and to suggest ideas to save energy. There will be an annual awards event for the carbon savers with awards in categories such as the best energy saving idea, significant contribution to the programme, team effort etc.

FINANCIAL IMPLICATIONS

26. An existing budget of £100,000 exists for energy efficiency measures and sits within Development and Neighbourhood Services, Technical Services Division. The proposal is to prepare a financial model that may require expanding this budget through a bid for additional resources through the budget process in order to deliver the programme. This

will then be utilised to act as match funding in a bid for Salix finance funding as part of a funding package to implement the carbon management strategy.

27. The resulting energy efficiency investment fund will then act as an “invest to save” revolving interest free loan fund for eligible projects.

LEGAL IMPLICATIONS

28. Participation in the carbon management programme will enable the council to meet its obligations in a number of regulatory areas such as the energy labelling of buildings, and the proposed carbon reduction commitment.

RISK ASSESSMENT

Carbon Management – A Case for Action is categorised as low to medium risk. Existing management systems and daily routine activities are sufficient to control and reduce risk.

COMMUNITY STRATEGY IMPLICATIONS

Economic Regeneration and Transport

Through networking and sharing best practice this programme can help businesses to a reduction in energy costs thereby improving their viability and sustainability.

Safer Communities

This programme can help to reduce the fear of crime through efficient use of energy in street lighting.

Children and Young People

School travel planning can help to reduce health inequalities for children within the Borough.

Healthier Communities and Adults

The programme may contribute to a reduction in road congestion.

The programme may help to bring about a reduction in road traffic related air pollution.

Liveability

This will improve the efficiency of energy use within the Borough.

EQUALITIES IMPACT ASSESSMENT

The equalities impact assessment will be carried out during the development of the carbon management strategy and implementation plan.

CONSULTATION INCLUDING WARD/COUNCILLORS

Consultation has taken place with Tristar Homes and Tees Active in respect of the implications on their respective business. Both organisations have welcomed this initiative.

Individual ward members have not been consulted on this proposal as it is a direct result of the climate change action plan, previously adopted by the Council. It is largely focused around operational issues within the Council services whereby energy and financial savings can be achieved.

Name of Contact Officer: Mike Chicken

Post Title: Environmental Projects Manager

Telephone No. 01642 528148

Email Address: mike.chicken@stockton.gov.uk

Background Papers

None.

Ward(s) and Ward Councillors:

Not ward specific.

Property

Endorses the principles covered in the Asset Management Plan especially the asset management section 3.14.

The principle of the revolving interest free internal loan utilising capital and supported by match funding from the Salix finance company maximises the use of limited resources and creates a sustainable funds for long term energy efficiency investments.