

## HAMPSHIRE COUNTY COUNCIL

### Decision Report

<b>Decision Maker:</b>	Cabinet
<b>Date:</b>	26 July 2010
<b>Title:</b>	Carbon Strategy
<b>Reference:</b>	1152
<b>Report From:</b>	Director of Environment Director of Property, Business and Regulatory Services

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#### 1. Executive Summary

- 1.1. This report proposes that the County Council should adopt a carbon strategy aimed at reducing its own carbon emissions from **131,800 tonnes** and it should set an ambitious **reduction target of 20%** over an initial five year period to 2015. A significant proportion of this be achieved through existing funded work programmes and does not, at this stage, require any re-prioritisation of financial resources. The key principles of a first stage carbon management plan to 2015 are outlined in this report. Cabinet will be mindful of the major downturn in public sector funding and the plans referred to in this report need to be considered in this context.
- 1.2 Achieving a carbon reduction of 20% over the next 5 years will depend on a continued positive, willing and pro-active partnership approach adopted with the schools community, supported by the Schools' Forum, acting collectively on behalf of schools. The **school sector accounts for 58% of the County Council's carbon footprint** and there is significant potential to reduce carbon levels across the 500 school establishments.
- 1.3 The report highlights the importance of linking longer term carbon reductions to an **energy strategy** and therefore recommends that this is commissioned this financial year. The energy strategy will set the framework for our future energy decisions and will help to inform proposals in a second stage Carbon Management Plan from 2015-2025. The strategy will be developed and completed using existing resources.
- 1.4 The report also recognises the importance of striking the right balance between reducing our own carbon whilst continuing to work externally to facilitate more significant carbon reductions from the **9 million tonnes emitted across the wider Hampshire community**. Focussed external effort

will directly benefit the County Council in the future and demonstrate leadership commitment.

- 1.5 The strategy signals a direction of travel to reflect Members' ambitions and public commitments to reducing our carbon footprint to zero. A **35% - 40% carbon reduction target for the medium term** (by 2025) would set the parameters for a second stage carbon management plan.

## **2. Contextual information**

- 2.1. Cabinet is aware of the increasing importance of Climate Change and the internal Member and Officer arrangements that have been put into place in response to this evolving and fast moving agenda. Cabinet accepted that the Climate Change agenda was significant and challenging and that the associated financial and reputational risks required careful managing. That said, it was equally acknowledged that responding positively and appropriately also presented a major leadership opportunity for the County Council.
- 2.2. Tackling Climate Change and, in this case, reducing our carbon footprint, requires a strategic approach. It is not something we can simply do in isolation and requires focussed effort and action, linked to the stated future direction of the County Council and its major departmental and corporate change management programmes. It is also essential that the right balance is struck between mitigation and adaptation effort and between internally focussed effort and external leadership.
- 2.3 In terms of the mitigation agenda, there are a number of drivers for taking action to reduce our own carbon footprint. The Climate Change Act 2008 sets a legally binding 80% carbon reduction target for the United Kingdom by 2050. A Carbon Reduction Commitment trading scheme has since been introduced by Government requiring the County Council, as a large energy user, to trade carbon credits from 2010/11 with public and private sector organisations.
- 2.4 The tighter public sector financial position, energy price volatility and fears about energy security, and thus expected sustained future increases in energy prices, all provide a strong incentive for the County Council to be more energy efficient and cut its ongoing energy requirement. Carbon emissions are intrinsically linked with energy use and so being more energy efficient, using lower carbon energy sources and using less energy for the County Council's business activities will reduce both our exposure to future rises in energy prices and our carbon footprint.
- 2.5 Last and not least, the County Council's reputation will be enhanced or will suffer depending upon the leadership we demonstrate and what we actually achieve in this increasingly high profile agenda. Carbon mitigation is high on the list of priorities for most local authorities with numerous aspirations for significant reductions being publicised. The Carbon strategy that Cabinet are being asked to endorse has developed in this context. Its ambitious, but

achievable, carbon reduction targets will attract attention and scrutiny from interest groups, e.g. WINACC (a local Winchester action group), 10:10 Campaigners, etc.

- 2.6 County Council carbon emissions can be attributed to five broad theme areas and currently total **131,800 tonnes per annum** (2008-2009 measurements). In many cases the data is a best estimate as we do not yet have accurate 'live' metering for all sources. Accuracy will begin to firm up as the Smart Metering Programme is rolled out. (Automated meters which give accurate and up to date live readings via software and web links.)

<b>Sector</b>	<b>Carbon (tonnes)</b>	<b>%</b>
<b>Schools</b>	<b>77,600</b>	<b>58</b>
<b>Street Lighting</b>	<b>26,600</b>	<b>21</b>
<b>Corporate Estate</b>	<b>11,700</b>	<b>9</b>
<b>Residential</b>	<b>9,300</b>	<b>7</b>
<b>Business Travel</b>	<b><u>6,600</u></b>	<b><u>5</u></b>
	<b>131,800</b>	<b>100</b>

- 2.7 It is clear that the County Council needs to demonstrate its commitment to reducing its carbon footprint and, in so doing, respond to the carbon reduction drivers outlined earlier, including the reputational issues and the clear political ambition for action. That said, significant carbon reductions will not be achieved quickly or easily and if real progress is to be made it will be essential for the schools community to work proactively across the 500+ schools estate in implementing joint carbon reduction initiatives in partnership with the County Council.
- 2.8 The proposed strategic response therefore balances short term focussed carbon reduction actions in the first stage carbon management plan alongside the development of an energy strategy and external leadership initiatives, that combined, will lead to more substantive medium and longer term reductions.

### **Energy Strategy**

- 2.9 The County Council was designated as an Intensive Energy User by the previous Government as part of its Carbon Reduction Commitment (CRC) trading scheme. The new Coalition Government has not yet signalled whether the CRC will continue as planned but given its clear support for a lower carbon society, it is prudent to continue to plan on the basis that the CRC scheme will proceed in a similar vein.
- 2.10 Despite being classified as an intensive energy user, the County Council does not have a recognised energy strategy. As the profile of the carbon and

energy agendas rise, it will be increasingly important that future carbon management plans are informed by a formally approved 'Energy Strategy'.

2.11 The Energy Strategy, which it is recommended should be progressed this financial year, would set out as a minimum: planned future energy requirements; energy sources/options; the optimum renewable/non-renewable balance; our position on different renewable technologies; price forecasts and a risk matrix. It should also set out the County Council's aspirations in terms of energy generation and energy sales.

2.12 Flowing from the Energy Strategy, opportunities to take advantage of de-carbonised energy will be outlined and pro-actively pursued. For example, strategic district heating opportunities exist in Winchester, Havant and Basingstoke with initial carbon reductions of 30% achievable via gas-fired schemes.

2.13 District energy schemes and using the heat from the three Hampshire Energy Recovery Facilities, present wider and possibly very attractive financial opportunities for the County Council that go beyond simply benefitting from reduced energy costs. A Public/Private business venture could be an increasingly important corporate opportunity to achieve financial, reputational and environmental gains. Linked to this opportunity, a consultation launched earlier this year by the out-going Government might also pave the way for local authorities to generate and sell its own generated renewable energy.

### **External Leadership**

2.14 Nationally, many local authorities are publicly aspiring to challenging carbon reduction targets. This is not surprising, given that carbon mitigation was the most popular target included in the current LAA round and is a high political priority for many public sector bodies.

2.15 Locally, the Leader, Cabinet and full Council have demonstrated a strong commitment to the carbon mitigation agenda. In late 2007, full Council passed a resolution for the County Council to reduce its carbon footprint to zero. To reflect this ambition, in 2008, the Leader established a cross-party 'Centre of Excellence Panel' chaired by the Executive Member for Environment to consider the County Council's carbon reduction options, and in the same year the County Council signed up to three year LAA targets in respect of county-wide carbon reductions.

2.16 The Leader is set to host a Climate Change 'summit' of public sector leaders and chief executives later this year in December. It is expected that ambitious long term carbon reduction commitments will be promoted and that the County Council will have a significant leadership role to play, both in terms of reducing its own footprint and in driving strategic actions (e.g. the delivery of district energy schemes) across the wider Hampshire community.

2.17 Most authorities which have publicly declared targets are proposing minimum reduction levels of 15% by 2015. A number are going well beyond this. Whilst the robustness of other authority plans is unclear based on research of

publicly available information, it is important that the right balance is struck for our Council given the importance that is attached to this agenda.

2.18A selected comparison covering 'Shire' authorities, our 'Comparator' authorities, our 'Neighbouring' authorities and some of the larger unitaries (see Appendix 1), shows that anything less than a 15% aspiration over the next five years is likely to be perceived externally as below average and therefore unambitious, and certainly not reflecting the 'Centre of Excellence' political aspiration.

### **The Carbon Strategy**

2.19 The proposed strategy is in three stages: a 20% carbon reduction from the 2010 baseline, over an initial five year period to 2015; a 35%-40% reduction by 2025; and achieving carbon neutrality by 2050. The carbon management plan that details how the initial five year target will be achieved is summarised in section 3 of this report.

2.20 The initial five year carbon reduction period reflects the complex nature of the many variables that affect the County Council's carbon footprint. These include: the generally rising carbon trend; the autonomous nature of schools (which account for 58% of the total carbon) and the projected increases in pupil numbers due to demographic change; the challenging nature of our major corporate change programmes; the worsening public sector finance position; energy security and price concerns; and other external factors that could result in new approaches to, and responsibilities for, service delivery impacting on our carbon footprint.

2.21 Even allowing for the fact that a five year timescale has been set for the first stage of the strategy, it is essential that progress against the plan is reviewed annually. This will allow changing circumstances, any delivery related concerns and other associated issues to be addressed and accommodated.

### **3. Carbon Management Plan (2010 – 2015)**

3.1. Accepting that there are a number of drivers for reducing our own carbon footprint (e.g. exposure to increasing energy prices and leadership aspirations), the Carbon Management Plan has been carefully prepared so that it does not impact on the current corporate funding position and does not have a detrimental impact on key service areas.

3.2. The proposed carbon management plan comprises two elements. The first section includes 'known' programmes based on committed and/or agreed existing and future work areas. This is set to deliver a 8.3% carbon reduction in the next five years.

3.3. The second element is both future and 'behaviour' programmes that are principally focussed on schools and the corporate estate and is targeted to deliver the remaining 11.7% carbon reduction. It is almost certain that any behavioural and new programmes will involve 'works' and investment in

carbon reduction 'projects' as opposed to being restricted only to changes in behaviour. Details of the two programme areas are set out below.

**a - Programmed Work: (8.3% or 11,000 Tonnes)**

*Corporate Estate (including some Residential) – 7,000 Tonnes*

- 3.4. A number of initiatives under this umbrella heading are either already underway or are planned to be pursued and completed during the next five years. These include continuing Workstyle asset reduction activities (e.g. closing offices in Havant and sharing with the Borough Council); further HQ office rationalisation in Winchester (a further reduction of over 4,000m<sup>2</sup> of occupied offices); a boiler emission control programme which will be delivered by October of this year; a range of green IT initiatives: and continuing reductions from our annual landlord programme.

*Street Lighting – 4,000 Tonnes*

- 3.5. Carbon savings linked to a reduced energy requirement were a key feature of the recently negotiated Street Lighting PFI contract. Over the initial five years of the contract, which starts this April, some 15,000 street lights will be replaced, achieving an annual 15% carbon reduction from the point at which the replacement programme is completed in 2015.

*Schools*

- 3.6. The Coalition Government has recently stopped the Buildings Schools for the Future Programme which previously was expected to deliver 2,200 tonnes of carbon reduction in the 'known programmes' category. Expectations are that the Government will announce in the Autumn Spending Review, a revised approach to school buildings capital expenditure. Although anticipated to be significantly less than previously in overall quantum, it is expected to focus more on building condition, repair and refurbishment which will still deliver carbon reductions. Once known, this can be factored into the 2010-2015 Plan.

**b - Future Initiatives and Behaviour Change Programmes: (11.7% or 15,400 Tonnes)**

- 3.7. The Carbon Trust has publicly stated that carbon reduction savings of between 5% and 12% are possible through changes in corporate and personal behaviour. Whilst there is no robust evidence to support this, it is generally accepted that local leadership and proactive personal approaches will result in decreases in carbon levels and, to this end, focussed effort in these areas could enable a further 10% carbon reduction to be achieved.

*Schools – 9,700 Tonnes*

- 3.8. This element of future initiatives and behaviour change represents 36% of the overall carbon management plan. Although this is a challenging aspiration, there are numerous opportunities to reduce carbon levels to a significant extent across the school community. The school estate is substantial and extends to more than 500 individual and autonomous establishments. Through its landlord programme of capital investment, the County Council has been working with individual schools and collectively via the Schools' Forum to raise the profile and importance of the energy and carbon agendas for both schools and the County Council.
- 3.9. The Schools' Forum was persuaded of the importance for schools of reducing energy use and thus costs against a background of rising prices, increasing IT use and increasing demand from local communities, partly in response to schools themselves seeking additional income streams. The Forum has subsequently agreed to allocate funding to support the roll-out of a smart metering programme across the entire school estate, which will be used to inform targeted efficiency and reduction measures.
- 3.10. Additionally, the Forum will fund specialist staff resources (energy advisors) who will be employed by the County Council to identify energy efficiency opportunities and improve knowledge and awareness leading to practical actions. It will be important that 'early wins' result from the energy advisors input e.g. through the identification and delivery of energy efficiency projects linked to developed business cases that schools can fund themselves, if the overall target in this area is to be reached and if Schools' Forum funding is to continue to be forthcoming beyond its initial £1 million in the first year.
- 3.11. Aside from the energy advisors work, the County Council is already working with schools in the area of I.T. This is an arena which has substantial potential, not least because modern secondary schools can typically use upwards of 500 PC's and, in turn, individually employ costly I.T support set ups. A pilot project is currently running at a Secondary school in Winchester which could result in HCC extending its internal corporate I.T offer to the school which will lead to energy, carbon and I.T support cost savings for the school. Other schools, including primaries, have expressed an interest in running their own pilots and, taking an optimistic view, there is no reason why the 'offer' cannot be made available to more schools who come forward after the pilot has concluded and the benefits of it are clearer and are more widely publicised.
- 3.12. Following the recent introduction of 'Feed-in-Tariffs' (FITs) whereby the previous Government guaranteed income streams in return for new renewable energy supplies, there has also been a growing interest in the schools community from private sector companies and entrepreneurs who increasingly are looking to work with individual schools in terms of renewable energy projects. As landlord, the varied nature and the terms of the different 'offers' is a potential cause for concern. However, from a positive perspective, the County Council is in a strong position to enter into strategic renewable

energy discussions with major providers and take advantage of our substantial buying power to effect real changes across the school network that both reduce carbon levels, reduce each school's energy bills and potentially provide financial rewards.

*Corporate Estate (including Residential) - 5,040 Tonnes*

- 3.13. The corporate estate comprises many hundreds of buildings. The Carbon Management Group has established the concept of local 'carbon champions' in each department, initially based around the Headquarters complex. The carbon champions are acting as role models in their departments, promoting best practice and linking into the corporate Facilities Management Team. This initiative will begin to be introduced beyond Winchester in due course, once early feasibility work has been analysed and the outcome of a carbon reduction pilot in Mottisfont Court has been evaluated.

*Business Travel – 660 Tonnes*

- 3.14. Business travel accounts for 5% of the County Council's carbon footprint. Average annual business mileage totals 18 million miles. Given the current emphasis on flexible working and the efficiency agenda, it is suggested that a 10% mileage reduction should be targeted over the next five years. Taking into account proposed reductions in car mileage allowances, this would deliver a sizable annual financial saving as well as achieving an estimated carbon reduction of 660 tonnes.

- 3.15. Refer to Appendix 2 for a Summary Chart of the Plan.

#### **4. Finance**

- 4.1. The proposed carbon management plan can be delivered without requiring additional finance beyond that already committed to agreed work programmes, e.g. street lighting, workstyle, landlord improvements, etc. It is possible that some additional resource will be required to see through the latter stages of the corporate green IT plan but, equally, efficiencies of circa £0.5 million per annum could, for example, result from reducing business travel.
- 4.2. Delivery against the management plan will allow the County Council to comply with, and possibly benefit from, the Carbon Reduction Commitment trading scheme. Delivery will also reduce exposure to future energy price rises both for the County Council direct and for the individual schools who embrace the carbon reduction measures described above. Depending upon both the rate and speed of energy price rises in the next five years, it is possible that financial savings might accrue rather than just cost pressures being avoided.
- 4.3. Against the backdrop of a worsening economic position for the Public Sector, the proposed carbon reduction targets are rightly ambitious, reflecting both political will and the strong sense that there are significant opportunities for reducing carbon levels across the County Council estate which not only

should be pursued for the environmental agenda but need to be delivered in the increasingly turbulent financial climate. Whilst it might have been possible to go beyond a 20% carbon reduction over the next 5 years, such an approach would have required disproportionate additional financial resources relative to the extra carbon savings that could have been achieved. Additionally, there would be other implications to consider, including the capacity of the organisation to deliver much longer pay back periods and the potential that small scale, short term carbon reductions could compromise the ability to achieve longer term strategic opportunities.

## **5. Further Internal Carbon Reduction (Beyond the CMP)**

- 5.1. Whilst the initial carbon management plan targets specific reductions for the next five years, the Carbon Strategy proposes medium term carbon reductions of 35%-40% By 2025 on which substantive progress should be made over the latter part of this decade in line with Members' aspirations.
- 5.2. At this point in time, it is clearly difficult to predict the extent of further progress beyond 2015 from our annual landlord work programmes, from new IT innovations and from continuing behavioural work. Carbon reductions achieved in these areas are likely to be steady rather than spectacular but nevertheless are an important contributor to our efforts to lower our carbon levels and reduce our exposure to future energy prices.
- 5.3. More significant carbon gains will need to be targeted. They could result from extending work programmes such as Workstyle across the wider public sector but are more likely to be realised from: the potential introduction of viable District Energy/CHP initiatives; prioritising energy strategy actions; taking advantage of other external initiatives (e.g. Government efforts at decarbonising the grid) and further interest free or grant funding programmes, etc.

## **6. Future direction**

- 6.1. The report has set out the rationale for the County Council to adopt a phased approach to reducing its carbon footprint. Although the carbon programme is complex, a strategy has been developed that is both ambitious and focussed, linking better to the wider energy and climate change agenda.
- 6.2. An initial five year Carbon Management Plan has been prepared that allows for a 20% carbon reduction to be achieved. The plan is largely based on the County Council's major change programmes and its ability to work proactively with Schools. The plan reduces the County Council's exposure to rising energy prices, does not require new funding and does not impose on departments' ability to deliver strategic corporate priorities.

6.3. The proposed direction of travel allows credible carbon reductions to be achieved, alongside the County Council playing a leading role in driving strategic actions that will benefit the wider Hampshire community and, in turn, the County Council itself.

## **7. Recommendations**

7.1. That it be agreed that the County Council's strategic response to the internal carbon agenda should comprise three stages:

- (i) a 20% carbon reduction from the 2010 baseline, over the next five years to 2015;
- (ii) a 35% - 40% reduction target by 2025; and
- (iii) becoming carbon neutral by 2050.

7.2. That the principles of the initial five year carbon management plan set out in this report be agreed and that progress be reviewed annually. The plan will be implemented without the need for substantial new financial resources.

7.3. That it be agreed that an energy strategy for the County Council be commissioned from the Directors of Property, Business and Regulatory Studies and Environment this financial year.

7.4. That it be agreed that a focussed and balanced approach to working internally and externally be developed to optimise the County Council's business, carbon reduction and reputational interests.

7.5. That a second stage carbon management plan, to take effect from 2015, be developed taking into account the outputs of the work proposed in recommendations 7.3 and 7.4 above.

**CORPORATE OR LEGAL INFORMATION:****Links to the Corporate Strategy**

<b>Hampshire safer and more secure for all:</b>	YES
Corporate Improvement plan link number (if appropriate):	
<b>Maximising well-being:</b>	YES
Corporate Improvement plan link number (if appropriate):	
<b>Enhancing our quality of place:</b>	YES
Corporate Improvement plan link number (if appropriate):	

**Other Significant Links**

<b>Links to previous Member decisions:</b>		
<u>Title</u>	<u>Reference</u>	<u>Date</u>
<b>Direct links to specific legislation or Government Directives</b>		
<u>Title</u>		<u>Date</u>
Climate Change Act		2008

**Section 100 D - Local Government Act 1972 - background documents**

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

DocumentLocation

None

## **IMPACT ASSESSMENTS:**

### **1. Equalities Impact Assessment:**

- 1.1. No adverse impact. Potential positive impact if strategy aspirations are delivered.

### **2. Impact on Crime and Disorder:**

- 2.1. None.

### **3. Climate Change:**

- a) How does what is being proposed impact on our carbon footprint / energy consumption?

The Carbon Strategy, and its associated Carbon Management Plan positively impact on the County Council's carbon footprint and by reducing energy consumption. Furthermore, the strategy recognises the strong community leadership role the County Council is well placed to adopt and recognises the opportunities that exist to reduce the carbon footprint in the wider Hampshire community.

- b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

There is a fine line between the Climate Change mitigation and adaptation agendas. The proposals included in this report set the County Council on its way towards being a zero carbon authority in the future and to playing its full part in delivering against the legally binding 80% carbon reduction target included in the Climate Change Act of 2008. Substantial reductions in carbon levels by the middle of this century are seen as key to limiting future climate change activity. Additionally, sourcing the County Council's energy from local supply generation will reduce reliance upon the grid and will increase resilience in the light of future climate change impacts.

### Other Local Authority – Carbon Reduction Public Commitments/Aspirations

<u>Shires</u>	<u>Authority</u>	<u>% Reduction</u>	<u>Timeframe</u>
	Buckinghamshire	4%	by 2011
	Cambridgeshire	11%	by 2011
	Derbyshire	No Figure	No Figure
	Hertfordshire	25%	by 2012/13
	Leicestershire	30%	by 2014
	Lincolnshire	No Figure	No Figure
	North Yorkshire	No Figure	No Figure
	Northamptonshire	No Figure	No Figure
	Nottinghamshire	60%	by 2050
	Oxfordshire	18%	by 2012
	Staffordshire	80%	by 2050
	Warwickshire	60%	by 2050
	Worcestershire	53%	by 2010
	<u>Comparators</u>		
	Surrey	No Figure	No Figure
	Essex	No Figure	No Figure
	Kent	10%	by 2010
		20%	by 2015
		60%	by 2050
	<u>Neighbours</u>		
	West Sussex	20%	by March 2010
	Dorset	30%	by 2020
	<u>Large Unitaries</u>		
	Nottingham	30%	by 2016
	Bristol	60%	by 2050
	Leicester	50%	by 2025
	Oxford	15%	by 2010
		20%	by 2015
		30%	by 2020
		40%	by 2030
		60%	by 2050
	Portsmouth	30%	by 2014
	<u>Other</u>		
	Cumbria	25%	by 2014
	Devon	13.30%	by 2012
	East Sussex	14%	by 2009/10
	Norfolk	11%	2011
	Somerset	30%	by 2015
	Suffolk	80%	by 2050

**Note: This table was correct at the time of data being gathered in early 2010**

# Hampshire County Council Carbon Management Plan

Table of Target Savings : 2010 - 2015

