

Climate Change

Introducing Climate Change and Service Planning: drivers and relevance

The profile of climate change within the work of local authorities has progressively risen in recent years, to the point where it can no longer be viewed as a desirable but discretionary add-on. It is now **a priority and cross-cutting corporate issue** and as such should be an integral consideration across all levels of service planning and delivery.

The following sections briefly introduce the parameters of responsibility and then outline the service level expectations in terms of both accountability and moving the agenda forward.

For the purposes of service planning, the climate change agenda may be divided into two distinct functions:

Mitigation: reducing our contribution as agents of climate change – typically arising from atmospheric carbon emissions¹ (and also from the degradation of carbon ‘sinks’ such as forests and woodlands).

Adaptation: reducing the impact of the level of climate change to which we are already committed (as a consequence of historic actions).

Both functions should be actively and demonstrably taken account of during the process of service plan formulation – Boxes 1 and 2, below, provide some essential context.

Box 1: Mitigation: the imperative of reducing carbon emissions

The Climate Change Act (March 2009) requires the UK Government to ensure that an 80% national reduction in CO₂ emissions (from a 1990 baseline) is achieved by 2050 – with an interim ‘carbon budget’ target of a 34% reduction by 2020 (21% relative to 2005). These national targets find local expression through the countywide Local Area Agreement: all Cambridgeshire districts are required to reduce their per capita CO₂ emissions by 11% by 2011/12. This target is tied to national performance indicator NI 186 – the South Cams 2005 baseline for which is 10.1 tonnes/capita/annum.

Alongside NI 186, national indicator NI 185, holds data for CO₂ emissions from the Council’s own operations (essentially transport and buildings). This data was collated and reported for the first time for 2008/09, giving us a baseline of approximately 1,862 tonnes CO₂ for the year. SCDC presently falls below the threshold for statutory inclusion within the new Carbon Reduction Commitment (carbon emission trading for large organisations and businesses) but will be required to register and inclusion may become a future requirement.

Box 2: Adaptation: preparedness for the impacts of climate change

The UK Climate Impacts Programme (UKCIP) has sought to establish the likely weather-related consequences of the level of climate change to which we are already committed (even if all emissions stop tomorrow, the Earth will warm by a further 0.5-1°C over coming decades). The extent of LAs’ proactive response is enshrined within national indicator NI 188. This is a measure of progress towards ensuring that LAs are sufficiently prepared to manage risks to service delivery, the public, local communities, local infrastructure, businesses and the natural environment from a changing climate, and to make the most of new opportunities.

¹ The term ‘carbon emissions’ is used here to cover all gases released from human activity that have the potential to increase the atmospheric greenhouse effect and its implications for dangerous levels of global warming and climate instability – gases containing carbon are the principal cause (especially CO₂). It is standard for all such emissions to be converted to a CO₂ equivalent - all references to CO₂ and carbon emissions in this guidance embrace this collective meaning.

In addition to these nationally established performance drivers (and many other national policy documents such as the Low Carbon Delivery Plan, the UK Renewable Energy Strategy and UK Climate Projections 2009 – all published in July 2009) SCDC has, as a signatory to the Nottingham Declaration, formally committed itself to tackling climate change mitigation and adaptation. This position is reflected within the Council's own corporate policy and objectives, its Climate Plan (currently subject to major review and redrafting) and the work of its formally constituted member-led Climate Change Working Group. Further reported commitment will be assessed through the audit processes for Comprehensive Area Assessment that will include the importance of partnership working and a broader local view.

Responding to Climate Change: service plan objectives

In formulating their 2010/11 delivery plans all service managers should consider climate change issues as integral elements of the services they provide and, wherever relevant and practically possible, seek to include mitigation and adaptation measures with specific attention to:

- (a) how they can reduce CO₂ emissions through service specific operations
- (b) how they can actively facilitate or enable a reduction in per capita CO₂ emissions for the South Cambs residents that are directly or indirectly influenced by the services provided.
- (c) how service provision should be adapted to improve its resilience or and effectiveness in response to the impacts of climate change (as both threats and opportunities).

N.B. with baselines already set (NI 185: 2008/09, NI 186: 2005, and NI 188: 2008/09) it is no longer acceptable to make retrospective reference to the climate change-related spin-off benefits of a service function. Year-on-year additionality is the only route to quality performance.

Integrating Climate Change: steps within the service planning process

Step 1: Assess your service area's operational carbon footprint.

This should exclude emissions arising from basic building and office support services (i.e. warmth, cooling, lighting, basic ICT and appliances) for Council-run or owned properties (i.e. South Cambs Hall, the Depot and housing stock).

The figure should specifically include, where relevant:

- Staff business mileage: using staff-owned/leased cars (visiting clients, customers, partners, and for service transactions and meetings);
- SCDC fleet vehicle mileage: council-badged vans, HGVs etc.
- Equipment and processes: energy use unique to the service area over and above generic corporate building services and ICT support.

(Useful conversion factors: 1 kWh grid electricity = 0.54Kg CO₂; 1 litre diesel = 2.63Kg CO₂; 1 litre petrol = 2.32Kg CO₂).

Using these conversion figures, calculate an operational baseline figure for CO₂ emissions for your service area.

Step 2: Reflect on how it might be possible to effectively reduce this operational baseline. An area of particular interest, and one available to most service areas, is in reducing business mileage – not only will this save CO₂ but it will also save money and is included within SCDC's ongoing efficiency savings programme.

Many carbon/energy reduction measures are front-loaded in terms of cost and therefore often best presented on an 'invest to save' basis. The Council's Procurement Strategy has recently been updated to include guidance on the influence of climate change. When assessing cost-benefit in a new or reviewed service function, policy or procurement exercise, such activities should include the damage costs of climate change caused by each additional

tonne of CO₂ emitted. To help with these assessments the Government has released annual shadow price of carbon figures (the use of which is mandatory across Central Government departments). For operational delivery and project work it is important to use the figure associated with each year that the activities run through.

Shadow Price of Carbon 2010 – 2020 (£/tCO₂)

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
27.0	27.6	28.1	28.7	29.2	29.8	30.4	31.0	31.6	32.3	32.9

Step 3: Reflect on the influence that your service may have on the carbon emissions of your South Cambs' customers – considering how carefully thought through changes to provision might directly or indirectly reduce their use of fossil fuels for heating, cooling, transport, procurement and consumption as a whole.

Partnership and cross-service working maybe especially useful in drawing benefit from this step. For example it may be possible to establish working links between elements of service delivery and existing work streams (such as the South Cambs Sustainable Parish Energy Partnership or Cambridge Climate Change Charter support for businesses and organisations)

Step 4: Reflect on how the likely impacts of climate change will affect your service delivery and how they might be countered or exploited to improve its resilience. Likely effects are:

- wetter, warmer winters, leading to increased flood risk;
- hotter, drier summers, leading to water scarcity, drought and placing greater strain on wildlife;
- rising sea levels leading to a greater risk of coastal and (in East Anglia) inland inundation; and
- more frequent extreme weather events, such as heatwaves, gales, storms, tidal surges and intense rainfall.

Risk areas	Vulnerability	Project issues arising
Hotter and drier summers – droughts/water shortages, heatwaves	Water conservation, limited water supply, need to provide cooling/shade, manage overheating, subsidence	
Milder and wetter winters – flooding, water-logging	Fewer frosts, infestation, damp, water inundation	
More extreme climate events – storms, high winds, flash floods	Increased surface water run-off, wind protection	

Risk areas	Adaptation measures
Managing water conservation	
Managing heat risks	
Managing inundation/flooding	
Managing storm events	

Step 5: Transparently incorporate your findings from Steps 1-4 within your 2010/11 Service Plan.

In bringing the above steps together, service managers should be looking to realise the following outcomes within their service plans:

- Have **collated energy use data** for their service (business and fleet mileages, and service specific equipment and processes) and calculated a service-based CO₂ emissions baseline
- Have put in place basic business measures that will generate permanent reductions in the carbon and revenue costs associated with direct **day-to-day service operations**.
- Have established one or more service plan **improvement** initiatives specifically designed to enable (directly or indirectly) service customers to reduce their individual carbon emissions.
- Have reviewed the potential **impacts of climate change** upon service delivery operations and service customers.
- Have put in place **appropriate adaptive measures** that will protect the service from weather-related compromise or threats to customer well-being.

The above is a brief outline of the essential service level requirements for this authority to reach its targets and potential in tackling the climate change agenda.

If you would like to discuss further any of the matters raised or have any queries or would benefit from additional support, please do not hesitate to contact Richard Hales (Strategic Sustainability Officer) on 01954-713135, or e-mail Richard.hales@scambs.gov.uk.