




# Introducing Local Authority Carbon Management



Making business sense  
of climate change



“Working as part of this national initiative has helped to elevate the profile of carbon management and wider sustainability in Medway, assisting us in developing a strong business case for investment in efficiency measures and low carbon technologies. This is a very important programme for us.”

Ieuan Edwards, Senior Research & Review Officer,  
Medway Council

“The programme was excellent in galvanising the interest of key officers and bringing them together to develop the Carbon Management Action Plan. We now have a clear programme and process for carbon management in the authority.”

Kate Hall, Sustainable Development Manager,  
Dorset County Council

# The Local Authority Carbon Management programme

Carbon Management from the Carbon Trust provides technical and change management support to help Local Authorities (LAs) realise carbon emissions savings. The aim is to reduce emissions under the direct control of councils – whether caused by energy use in buildings, street lighting, landfill waste or vehicle fleets.

Consultants help participating LAs with workshops, meetings and other support tailored around a 5 step process. The process guides your LA through:

- ▶ a systematic analysis of your carbon footprint
- ▶ a calculation of the value at stake and the case for taking action
- ▶ an assessment of opportunities to help manage carbon emissions
- ▶ development of structured action plans for realising carbon savings and embedding carbon management in your authority's day to day business.

The programme responds to key drivers within the Local Authority sector and gives significant benefits. It allows LAs to:

Save money – by managing and reducing energy bills

Meet regulation – preparing for incoming regulation and legislation

Raise your profile – be amongst the top performing councils

Lead by example – influencing business and the community.



Chester Town Hall

# How it works

To be accepted into the programme, your authority will need to put forward a team that is committed to driving the programme forward. This should include sponsors from senior management who can champion Carbon Management at the top of the organisation, a practical, enthusiastic and knowledgeable team leader and willing, relevant stakeholders from across the authority.

All members of the team will need to apply a broad set of skills, including working across organisational boundaries, project management, regular stakeholder communication, data gathering, opportunity assessment and business case development, as well as enthusiastically promoting Carbon Management.

## The 5 Step Process

Consultants help participating local authorities with workshops and dedicated support tailored around the 5 Step process. This helps guide your authority through an analysis of your carbon footprint, the value at stake and the opportunities available to help manage your carbon emissions better.

It's a genuine partnership: on average it requires a minimum commitment of two days a week from the team leader for the programme's ten month duration, plus less intensive effort from other team members – regularly supported, reviewed and championed by a senior sponsor.

The programme is supported by the Local Authority Carbon Management Toolkit, a web-based self-help workbook. The Toolkit captures lessons learned and provides detailed carbon management process instructions, technical guidance and relevant tools, details of which are outlined in this guide.



## ▶ Step 1 Mobilise the organisation

Step 1 focuses on mobilising your organisation by identifying key members of the carbon management team and preparing the foundation for all subsequent steps. Here you will:

- ▶ ensure that key individuals are committed to the process
- ▶ create a team capable of carrying the project forward successfully
- ▶ determine the scope and ambition of your authority with regard to carbon savings and climate change mitigation
- ▶ make sure stakeholders understand the broad issues and opportunities
- ▶ set out a timetable for the development of the Carbon Management Strategy and Implementation Plan (SIP) and how this fits in with Local Authority priorities and timescales. It will be used in regular updates with the consultant team.

### Step 1: Key Elements

Build an effective team for Carbon Management.

There are two main roles:

- ▶ Project Leader
- ▶ Sponsors (ideally directors or senior managers) who support the Project Leader at a higher level in the organisation.

As Project Leader you will need to choose your team and engage with a variety of stakeholders. This step defines the main responsibilities of each role and gives advice on the people who might fulfil them.

Identify key stakeholders, introduce them to Carbon Management and plan their involvement. A 'stakeholder mapping' tool is provided.

Communicate the process internally. Gather the views of stakeholders and use them to devise a communications strategy and plan. This analysis should be regularly revisited and updated as communications needs change.

Define a Project Plan for how all elements of Carbon Management programme will be completed. This will become the main reference document for the implementation of the programme, so it should set a clear timetable and identify the responsibilities and internal resources required etc.

## ▶ Step 2 Set baseline, forecast and targets

Step 2 asks the questions “Where are we now?” and “Where do we want to be?” It helps you develop an understanding of what drives the Carbon Management process, gathering information on the current emissions levels and trends and formulating your aspirations. Some of the areas of specific interest are:

- ▶ key climate change related drivers
- ▶ council commitments and future goals on energy and emissions management
- ▶ historic emissions levels and trends, including data quality and availability
- ▶ financial impact of energy consumption and carbon emissions
- ▶ existing and planned potential projects to reduce emissions
- ▶ current routes for financing relevant projects
- ▶ your vision and targets.

### Step 2: Key Elements

Map out all strategic influences and drivers for your organisation relevant to Carbon Management, as well as any elements of Carbon Management already in place – government policies, legislation, Local Authority partnerships, initiatives and goals etc. This is about gauging the level of awareness of carbon issues among key internal stakeholders. The aim is to understand the current structure of responsibilities relevant to Carbon Management – policies, financing, management, reporting, etc.

Calculate your carbon emissions baseline by putting together an inventory of your emission sources (e.g. buildings, street lighting, transport and waste). Here you'll need to decide what to include in the baseline, typically only those things you have management control over. Next start gathering and logging historic energy and emissions data for these sources for a selected year. Finally, to calculate your baseline, this data needs to be converted into emissions by using the current CO<sub>2</sub> conversion factors of energy and fuels.

Produce your emissions forecasts based on informed assumptions (e.g. known trends or national average projections) and known developments (e.g. property development/acquisitions, extending service areas such as recycling).

Calculate the value at stake. Estimate the financial implications given the price of energy, price of carbon, cost of compliance and voluntary commitments. Calculating the value at stake (VAS) helps develop a stronger, rational case for taking action to reduce your LA's emissions. The emissions baseline and the emissions forecast should be added to the relevant parts of the SIP. These arguments and items will also provide key points to raise with stakeholders.

Develop vision and strategic goals. Creating a shared sense of direction and setting out long-term aspirations. This is where the high-level objectives for emission reductions are discussed and defined.

## ▶ Step 3 Identify and quantify options

Here you are looking at identifying opportunities for emissions reductions and assessing their impact – on carbon emissions and on overall performance (including financial implications, management practices and public image). The result should be an extensive appraisal and database (usually a spreadsheet) of carbon emission abatement opportunities. The options appraisal should be included in the SIP.

Each opportunity needs to be defined in qualitative terms, such as its area of impact, how complex it is to implement

and what effect, if any, will there be on your reputation and stakeholders. Quantitative analysis looks at calculated costs and benefits, as well as the carbon saved. This options appraisal and database will be an important part of your Carbon Management Strategy and Implementation Plan (SIP).

You start by identifying a wide range of opportunities before condensing them to a shortlist of the most practicable and realistic projects.

### Step 3: Key Elements

**Compile options.** Creating a broad and ambitious list of projects including enabling projects (e.g. changes to the procurement process to include whole-life costing) and/or direct emissions reduction projects (e.g. improving insulation in the town hall or a large biomass heat project). This options appraisal should be included in the SIP.

**Prioritise.** Having created a long list of projects, it is important to start thinking about feasibility. Opportunities that look most realistic and promising can then be further examined on the way to creating a shortlist.

**Costs and benefits.** A realistic shortlist of projects should feature a costs and benefits analysis looking at generic and accepted figures for individual carbon-saving interventions and technologies and also examining the specific context of your projects.

Options must be prioritised by financial savings, tonnes of carbon and feasibility

Effect	V. effective	Option 1 Option 5	Option 13	Option 3
	Moderate	Option 6 Option 7 Option 10	Option 4	Option 2
	Ineffective		Option 8 Option 9	Option 11
		V. easy	Moderate	Difficult
		<b>Ease</b>		
		High priority	Medium priority	Low priority
				Dismiss

## ▶ Step 4 Finalise strategy and Implementation Plan

Here you are completing your strategy for managing carbon and adding the finishing touches to a practical Implementation Plan. You should have been completing

your SIP throughout the programme. The plan should ultimately be endorsed and approved at a high level within your Local Authority.

### Step 4: Key Elements

Finalise the Strategy and Implementation Plan. The Carbon Management Strategy and Implementation Plan should explain the “why, what, how and when” of Carbon Management. The objective is to review, confirm and complete your strategy development. It should summarise key drivers, your authority’s vision, targets and overall objectives. Projects and actions selected for the Implementation Plan should meet the strategic objectives from the options appraisal. The final strategy must be communicated to key stakeholders and agreed by them.

Obtain Approval. The aim here is to finalise the Strategy and Implementation Plan and get formal approval for it. To make sure that approval is granted, key stakeholders and those responsible for approval must be consulted and their opinions taken into account. The final draft plan, the process leading to its development and the strategic objectives that it meets, must be communicated at various levels and through various forums. The toolkit contains presentation templates to help you do this.

The Strategy and Implementation Plan must obtain full approval and be embedded into day-to-day business

MEDWAY COUNCIL

Local Authority Carbon Management Programme

Strategy and Implementation Plan

MARCH 2006



## ▶ Step 5 Implement plan

Here you are beginning to action the opportunities identified in the Implementation Plan, monitoring progress and communicating success to stakeholders. It is not

regarded as the 'final' step; rather it should be seen as the start of a cyclical process of implementation, monitoring and updating of your implementation plan.

### Step 5: Key Elements

Launch the Implementation Plan. Think about an internal launch for Carbon Management, communicating the objectives of the plan to relevant staff and letting them know what they can do to support you. This is also a good opportunity to consult staff directly involved in implementation, to test and reinforce their understanding of their roles and to let them know about the intentions of the launch.

Plan, implement & monitor projects. The teams responsible for delivery of individual projects now need to plan in more detail the tasks required for delivery of projects and make the case for funding. Once implementation has started, monitoring progress is essential to ensure that all projects deliver what they have promised on time and within budget.

Monitor progress of the implementation. Constant monitoring can ensure that your Carbon Management programme is proceeding as planned. This could include regular review meetings with all those involved in implementing projects and reporting to senior management to ensure the programme is meeting strategic objectives as well as monitoring spending.

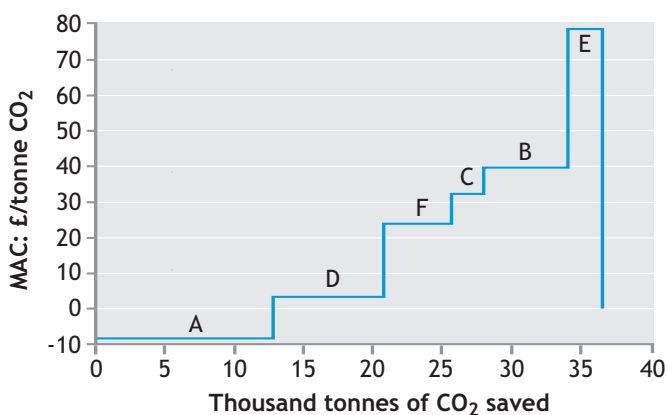
Update emissions inventory. Data will need to be collected on an annual (or more frequent) basis to update the emissions inventory.

Report progress & communicate success. Good communications are vital. So the emissions inventory information should feed into reports to senior management, assessing whether you are on track to meet your targets. The Implementation Plan itself should contain an outline communications plan.

Review Implementation Plan & strategy. The Carbon Management Strategy and Implementation Plan should be updated every 1-2 years to ensure that it remains timely and relevant. This involves ensuring that drivers, strategic objectives and targets are still appropriate and reviewing how far existing projects have been successful in meeting your emissions reduction target. It should also identify any new opportunities for inclusion in the Implementation Plan.

Externally launch the Implementation Plan. Lead by example. Tell your local residents what you have been doing and what they could do. Communicate your progress to other public sector bodies including universities, schools and neighbouring councils. Promote the benefits of energy efficiency and the support of the Carbon Trust to local businesses. A high profile launch event is a great way to disseminate what you have learnt. Sponsoring or hosting business awards also promotes energy efficiency in the private sector and endorses the behaviour of other leaders by example.

Marginal abatement cost curve  
— an example produced for a Local Authority



# Cutting carbon emissions.

There are those that can  
and those that do.

Aberdeen City Council. Angus Council. Belfast City Council. Birmingham City Council. Bristol City Council. Bristol University. Buckinghamshire County Council. Caerphilly County Borough Council. Chesterfield Borough Council. Chichester District Council. City of Edinburgh Council. Countryside Council for Wales. Defence Estates (MOD). Defra. Department of Education (NI). Department of Finance and Personnel (NI). Derry City Council. Dorset County Council. DTI. Durham County Council. East Sussex County Council. English Heritage. Forth Valley NHS Trust. Glasgow University. Hammersmith NHS Trust. Hampshire County Council. Herefordshire Council. High Peak Borough Council. HM Prison Service. HM Treasury. Imperial College London. Inland Revenue. Kent County Council. Kirklees Metropolitan Council. Leeds City Council. Leicester City Council. London Borough of Croydon. London Borough of Lewisham. London Borough of Southwark. Lothian NHS Trust. Middlesbrough Council. National Museum of Science and Industry. Naval Recruiting and


Training Agency. Neath Port Talbot County Borough Council. NHS Grampian. NHSScotland. North Glasgow University Hospitals. North Yorkshire County Council. Northamptonshire County Council. Nottinghamshire County Council. Oldham Metropolitan Borough Council. Oxford Brookes University. Perth and Kinross Council. Portsmouth City Council. Renfrewshire Council. Rochdale Metropolitan Borough Council. Rotherham Council. Sheffield Teaching Hospitals NHS Foundation Trust. Slough Borough Council. Stirling University. Stockport Council. Suffolk County Council. Surrey County Council. Translink. Transport for London. University of Bath. University of Leeds. University of Wales, Bangor. Warwickshire County Council. Water Service (NI). Welsh Health Estates. Worcestershire County Council.

In 2004 these organisations worked with the Carbon Trust to cut their carbon emissions.

Every organisation can do something about climate change, call 0800 085 2005 or visit [www.carbontrust.co.uk](http://www.carbontrust.co.uk)

M A K I N G   B U S I N E S S   S E N S E   O F   C L I M A T E   C H A N G E





“It has made us look at what we are doing, why we do it and how we prove we have done what we said we would do. It has helped us realise that some monitoring and recording of data was not as good as it should have been.”

Trevor Farnes, Senior Energy Conservation Officer,  
London Borough of Islington

[www.carbontrust.co.uk](http://www.carbontrust.co.uk)  
0800 085 2005



The Carbon Trust works with business and the public sector to cut carbon emissions and capture the commercial potential of low carbon technologies.

An independent company set up by the Government to help the UK meet its climate change obligations through business-focused solutions to carbon emission reduction, the Carbon Trust is grant funded by the Department for Environment, Food and Rural Affairs, the Scottish Executive, the Welsh Assembly Government and Invest Northern Ireland.

Whilst reasonable steps have been taken to ensure that the information contained within this publication is correct, the Carbon Trust, its agents, contractors and sub-contractors give no warranty and make no representation as to its accuracy and accept no liability for any errors or omissions.

Any trademarks, service marks or logos used in this publication and copyright in it are the property of the Carbon Trust. Nothing in this publication shall be construed as granting any licence or right to use or reproduce any of the trademarks, service marks, logos, copyright or any proprietary information in any way without the Carbon Trust's prior written permission. The Carbon Trust enforces infringements of its intellectual property rights to the full extent permitted by law.

The Carbon Trust is a company limited by guarantee and registered in England and Wales under Company number 4190230 with its Registered Office at: 8th Floor, 3 Clement's Inn, London WC2A 2AZ.

Printed on paper containing a minimum of 75% de-inked post-consumer waste.

Published in the UK: April 2006.

© The Carbon Trust 2006. All rights reserved.

CTX601