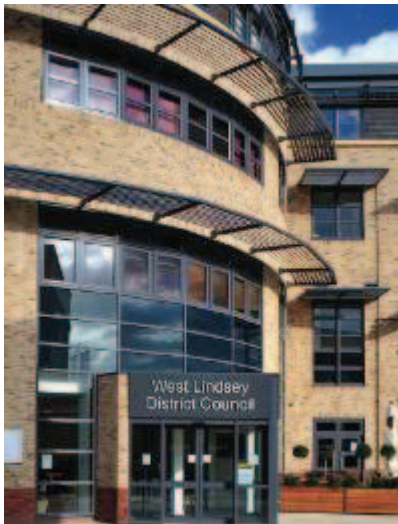


West Lindsey District Council Carbon Management Programme

Carbon Management Plan (CMP)



Date: 11th January 2010

Version number: 3.0

Owner: Karen Lond – Energy & Climate Change Officer

Approval route: James Nicholson – Director of Neighbourhoods & Health

Approval status: Final

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working with



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Foreword from Duncan Sharkey Chief Executive and Councillor Irmgard Parrott Chairman of Community and Waste Committee

Why does West Lindsey District Council need a Carbon Management Plan?

It is vital that the Council manages the risks and opportunities related to Climate change for example by controlling carbon emissions from our own operations.

West Lindsey District Council signed the Nottingham Declaration in January 2007 which sets out the Councils acknowledgment of the impacts that Climate Change has and the commitment to tackle the causes and effects on the District.

West Lindsey currently has the lowest carbon footprint of all the Lincolnshire 2nd tier councils which reflects our commitment to reducing carbon in both our buildings and transport through projects already completed such as office rationalisation and refuse round optimisation. This carbon management plan takes a strategic approach to understanding our carbon emissions corporately and prioritizing the most effective actions.

Whilst this is initially a 5 year programme this plan will be updated and reviewed annually and is expected to carry on delivering carbon and financial savings beyond the initial 5 years.

We are committed to reducing our carbon emissions as an authority and are proud to be participating in the East Midlands Carbon Action Programme supported by the Carbon Trust. We look forward to the challenges ahead.



Councillor Irmgard Parrott



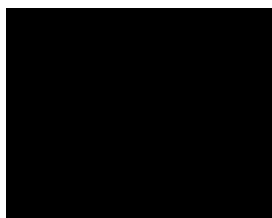
Duncan Sharkey Chief Executive

Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for local authorities - it's all about getting your own house in order and leading by example. The UK government has identified the local authority sector as key to delivering carbon reduction across the UK in line with its Kyoto commitments and the East Midlands Carbon Management programme is designed in response to this. It assists councils in saving money on energy and putting it to good use in other areas, whilst making a positive contribution to the environment by lowering their carbon emissions.

West Lindsey District Council was selected in 2009, amidst strong competition, to take part in this ambitious programme. West Lindsey District Council partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings. This Carbon Management Plan commits the council to a target of reducing CO₂ by 25% by 2014 and underpins potential financial savings to the council of around £0.2 million.

There are those that can and those that do. Local authorities can contribute significantly to reducing CO₂ emissions. The Carbon Trust is very proud to support West Lindsey District Council in their ongoing implementation of carbon management.



Richard Rugg
Head of Public Sector, Carbon Trust



Management Summary

Background

West Lindsey District Council has been working with the Carbon Trust through the East Midlands Carbon Management Programme to put together a Carbon Management Plan that will reduce the Council's CO₂ emissions over the next five years.

Vision

Corporate Priority 2.3 Lower the Carbon Footprint

Actions – reduce the Council's CO₂ emissions and reduce our carbon footprint

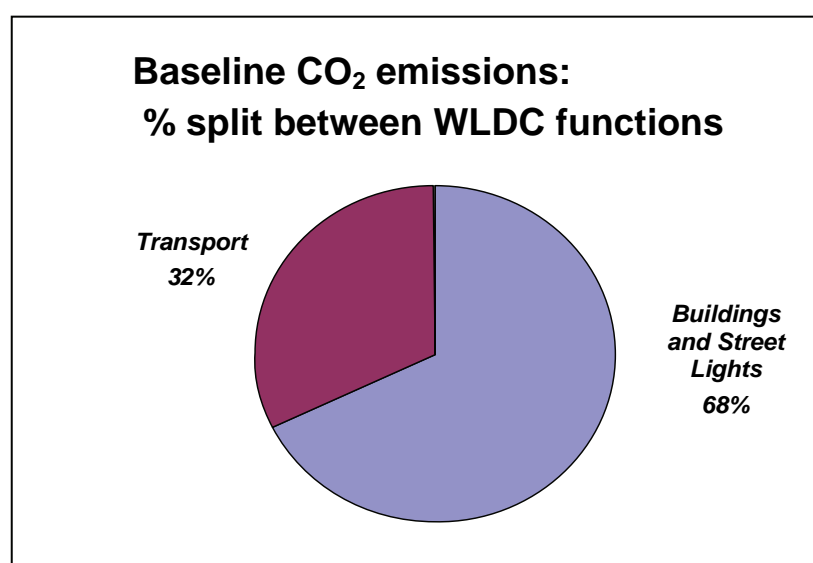
This plan supports our corporate priority to lower the carbon footprint and maps out how we can reduce the Council's CO₂ emissions and reduce our carbon footprint. Despite our modest CO₂ emissions we have set an ambitious target of reducing our emissions by 25% from our baseline year of 2008/2009. This shows our determination as a council to lead on addressing climate change. This plan supports our commitment through the Local Area Agreements to reduce our CO₂ emissions (NI 185) and assist with our progress to addressing and adapting to climate change (NI 188).

To achieve the 25% target from our current baseline we will need to reduce carbon emissions by 500 Tonnes by March 31st 2014.

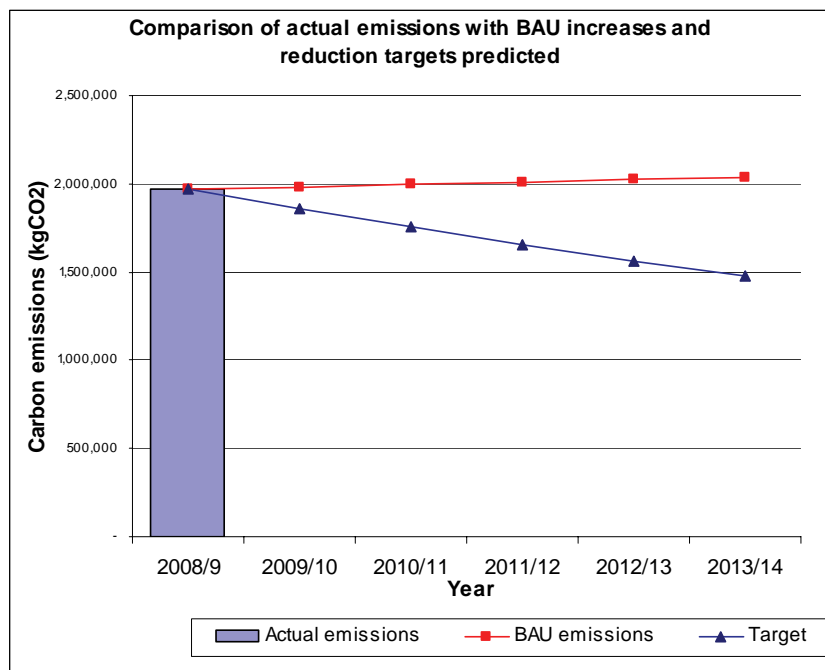
We have set a target in this carbon management plan to reduce our emissions by 25% by 2014 at a cost of approximately £200,000.

Baseline

West Lindsey District Council emitted 1996 tonnes of carbon in 2008/2009. The pie chart shows more clearly how this is split between our stationary sources and transport; roughly two thirds of our emissions come from our buildings and only one third from our transport.



The business as usual line (BAU) on the graph below shows that if we do nothing over the next 5 years emissions would rise above 2,000 Tonnes (2,000,000kgCO₂). The target line shows the emissions based on achieving a 25% reduction.



In financial terms with energy prices predicted to continue to rise over the next 5 years and beyond, if we continue with business as usual our energy bills would increase by £300,000 (about a third); whereas if we achieve a 25% reduction in carbon our costs would only increase by £40,000 by 2014,(based on the assumptions made on energy prices: see page 15).

We are proposing to ring fence £200,000 from our Invest to Save Reserve to finance the carbon saving projects identified in this plan, as a rotating fund. So far we have identified projects that should produce about half of the carbon savings needed to achieve our 25% target. Some of the identified projects have yet to be developed to show costs and potential CO₂ savings. The Carbon Management Programme is a rolling programme, so as projects are developed the figures will be added towards our target. Some of the identified projects may not be progressed as the cost benefit or other factors may make them unviable. In order to address the shortfall members of the Carbon Management Team will be tasked with bringing forward new projects to be evaluated and included in the programme. Careful consideration will need to be given to any future purchases and projects that could potentially increase our carbon emissions above our 2008/2009 baseline: such projects will need to include mitigation measures from the outset in order for us to achieve our target.

Identified projects include:-

- Server Virtualisation (Guildhall)
- Voltage Optimisation (Guildhall, Leisure Centre and Multi-storey Car Park)
- Insulation, replacement heating, lighting (Leisure Centre)

(For all identified projects see Appendix B page 29.)

1 Introduction

This carbon management plan shows our current carbon emissions and sets out a planned route to reducing our carbon emissions year on year for the next 5 years.

Within this plan are projects that can reduce our carbon emissions and timed action plans.

To ensure carbon reduction is embedded into corporate policies this plan details how it will be managed and the process for reviewing and updating annually.

The plan gives an estimated current price of energy that we use as an organisation and makes predictions on the likely future cost of energy and shows the carbon and financial savings if we implement the plan fully.

This plan has been built using the five step approach (see diagram below).



Our low carbon footprint is reflective of previous measures we have already put in place to reduce our carbon emissions. In February 2008 West Lindsey District Council moved all its Gainsborough based offices to one central location of the Guildhall, Marshall's Yard, Gainsborough from four previous sites. Our new Guildhall has achieved an A rated Display Energy Certificate the building also uses rainwater harvesting to flush the toilets and has photovoltaic panels on the roof that generate some of the electricity we use to function as an organisation. Our refuse fleet have benefitted from round optimisation.

2 Carbon Management Strategy

2.1 Context and drivers for Carbon Management

West Lindsey District Council signed the Nottingham Declaration in January 2007 and is committed to addressing climate change.

Reducing the carbon emissions of West Lindsey District Council is a corporate priority.

2.2 National and local drivers to take action on Climate Change

The UK Government has placed an emphasis on local authorities setting a leading example on Climate Change. Action by local authorities will be critical to the achievement of the Government's climate change objectives, such as the long term goal to reduce CO₂ emissions by 80% by 2050 in the Climate Change Act.

This has created a number of legislative drivers for LAs:

- **Display Energy Certificates:** Since 1 October 2008 all public sector buildings with a total useful floor area of over 1,000m² have been legally required to show a Display Energy Certificate (DEC) in a prominent place, clearly visible to the public.¹ Our Guildhall has achieved an A rated DEC.
- **Carbon Reduction Commitment:** The Carbon Reduction Commitment (CRC) is a mandatory "cap & trade" emissions trading scheme for organisations whose total electricity consumption is greater than 6,000MWh or approximately £500k. If an organisation falls within the CRC scheme, **all** electricity and fuel emissions are covered. From 2010, poorly performing Local Authorities will be penalised depending on their position in a CRC league table². **Currently WLDC does not qualify** for CRC but we will need to submit an Information Disclosure between 1st April – 30th September 2010, to the Environment Agency: this may change in the future.

Defra have also created two National Indicators specific to CO₂ reduction:

- **NI185 – percentage CO₂ reduction from LA operations:** the public sector can lead on efforts to reduce CO₂ emissions by setting a behavioural and strategic example to the private sector and to the communities they serve. Measurement against this indicator requires each local authority to calculate its CO₂ emissions from energy and fuel use in its buildings and transport, including outsourced services.³

West Lindsey District Council and the councils of Lincolnshire have recognised that to lead on climate change and to the wider community they must first address their own carbon emissions. For this reason NI 185 is a designated indicator in the Local Area Agreement (LAA) and all the Lincolnshire councils have signed up to reduce their emissions by 12.5% by 31st March 2011. The Lincolnshire councils have a NI 185 working group which meets regularly to assist officers in measuring NI 185 and to ensure that as a county we are all using the same scope and reporting consistently; we also share good practice and look at ways we can reduce our carbon by working together. Currently four Lincolnshire councils are looking at joint tendering and procurement for Voltage Optimisation (see Project Definition WL1, WL2 & WL) and at a recent Lincolnshire Improvement & Efficiency Partnership (LIEP) board meeting it was provisionally agreed to fund a

¹ more information on DEC can be found at

www.communities.gov.uk/planningandbuilding/theenvironment/energyperformance/certificates/displayenergycertificates

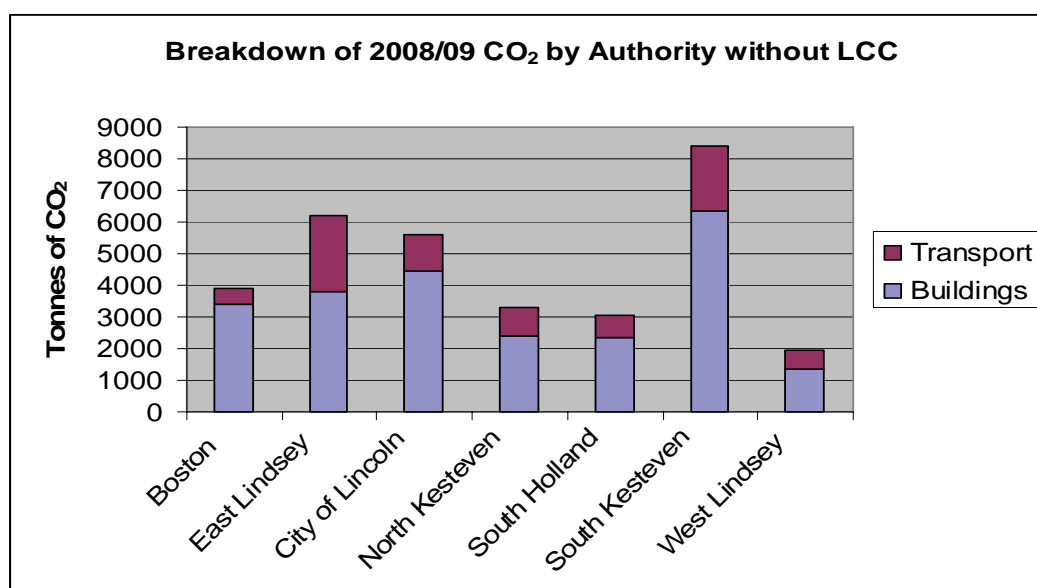
² more info on the CRC can be found at: <http://www.defra.gov.uk/Environment/climatechange/uk/business/crc/index.htm>

³ more information on NI185 and NI186 can be found at: www.defra.gov.uk/environment/localgovindicators/indicators.htm

project to procure electrical vehicles and charging stations for each authority in Lincolnshire (see Project Definition WL20). **All the Lincolnshire councils have participated in the Carbon Trust's Carbon Management Programme to ensure reduction of carbon emissions are embedded throughout their organisations in corporate procedures and policies.**

West Lindsey District Council has the lowest carbon footprint so to reduce our carbon emissions by the LAA target will be very challenging for us. We will need to plan and action projects that deliver the maximum carbon savings in the most cost effective manner and ensure that projects defined in the carbon management plan are supported and actioned.

Figure 2.2 – Shows CO₂ emissions for Lincolnshire by authority for 2008/2009 excluding Lincolnshire County Council (LCC)



- **NI186 – per capita CO₂ emissions in the LA area:** Local authorities are uniquely placed to provide vision and leadership to local communities by raising awareness and to influence behaviour change. The percentage reduction in CO₂ per capita in each LA will be reported annually. This will be produced by central government based on CO₂ emissions in the Local Area from business and public sector, domestic housing and road transport. ***Not a designated indicator for Lincolnshire currently, but likely to be included in the next LAA.***
- **NI 187 – Tackling fuel poverty - % of people receiving income based benefits living in homes with a low and high energy efficiency rating:** this indicator measures the levels of fuel poverty annually. NI 187 is a designated indicator in Lincolnshire. Within the delivery plan for this indicator is a wider target to assist the community in being energy efficient and achieving affordable warmth: thereby reducing their carbon footprints (in most instances).
- **NI 188 – Planning to adapt to climate change:** each local authority needs to demonstrate that they have considered how climate change may affect the services they deliver and have put adaptation plans in place. NI188 is a designated indicator in Lincolnshire and has a target to reach level 2 by the end of March 2010 and level 3 by March 2011.

Finally, and by no means the least, measures to increase energy efficiency will reduce energy costs, which is particularly important for the future given the predicted increases in energy prices. Energy and fuel costs have seen a dramatic rise in recent years, with energy prices increasing by well over 50% since 2004. This trend is not expected to change and we must accept that the price we pay for our energy will continue to increase in the coming years.

As part of the West Lindsey Citizen Panel Survey in 2008 residents were asked several questions about climate change.

Residents were asked how important it is to take action on climate change?

89% of respondents thought it was important; with 54% of these thinking it was very important.

Residents were asked who they thought should take the lead in tackling climate change in West Lindsey?

80% of respondents felt the responsibility lies with Central and local government.

The results of this survey show that the people of West Lindsey expect the authority to take actions that both mitigate and adapt to climate change. We plan to ask further questions about climate change in future Citizen Panel Surveys and will analyse the results and use these to inform and report in future Carbon Management Plan reviews.

2.3 Targets and objectives

West Lindsey District Council is committed to reducing its carbon emissions and will reduce the CO₂ emissions from its activities by 25% from the 2008/2009 baseline by the end of March 2014.

Table 2.3 – Shows CO₂ targeted annual savings to achieve 25% target reduction

Annual CO ₂ reduction targets to March 2014				
Year	Target CO ₂ cumulative amount in tonnes	Targeted annual CO ₂ saving in tonnes	Annual CO ₂ % saving	Cumulative % target
2008/2009	1996	Baseline year		
2009/2010	1896.2	99.8	5%	5%
2010/2011	1746.5	149.7	7.5%	12.5%
2011/2012	1656.68	89.82	4.5%	17%
2012/2013	1576.84	79.84	4%	21%
2013/2014	1497	79.84	4%	25%

Leadership:-

- Show a visible lead to local community on climate change and reducing the districts carbon emissions.
- Show value for money services by reducing our energy consumption.
- Ensure that a new development such as Gainsborough Growth Point is energy efficient and incorporates on site renewable technologies.

Engagement:-

- Work with the community and partners to assist them in saving energy to reduce their carbon footprints and help them to achieve affordable warmth.
- Work with the community and partners to ensure adaptations are put in place to prepare West Lindsey for a changing climate.

Performance:-

- Make efficiency savings that we can pass on to our residents through value for money initiatives.

3 Emissions Baseline and Projections

The baseline year is a measurement of our CO₂ emissions for year 2008/2009 using the scope below. The baseline year is the starting point for all reduction targets set in this plan.

3.1 Scope

NI 185 describes its scope as follows:

"The indicator is to include all CO₂ emissions from the delivery of local authority functions...It covers all an authority's own operations and outsourced services...It relates to the energy used in buildings and transport of delivering the functions of a local authority, but not the embedded emissions in the goods procured by the authority..."

The NI 185 scope should be viewed as mandatory when completing the baseline:

- Council owned buildings energy use
- Building energy use for outsourced council functions – note that Mouchel carry out our Payroll but their building energy use is captured by Lincolnshire County Council so it is not included in our scope for NI 185.
- Council owned fleet fuel use
- Fleet fuel use for outsourced council functions
- Council owned business travel
- Business travel for outsourced council functions

The above includes mileage claimed by councillors whilst on West Lindsey District Council business.

There are a number of additional scope areas that could have been included for a more complete baseline, as detailed below. They have been excluded as data is currently unavailable.

- Council employees commuting – no data available currently. May consider adding this to the scope in the future when more data becomes available.
- Waste produced by council buildings and operations – no data available. May consider adding this to the scope in the future when a method of capturing this data is devised.
- Water used in council buildings and operations – only data for Guildhall readily available. May capture this data in the future.
- Refrigerant gas loss, if applicable (e.g. for air conditioning systems) – No data currently available but will consider capturing in the future.

3.2 Baseline

The baseline year for the data has been chosen as financial year 2008/2009 and runs concurrent to our reporting times for NI 185.

Figure 3.1 – Emissions for baseline year 2008/2009

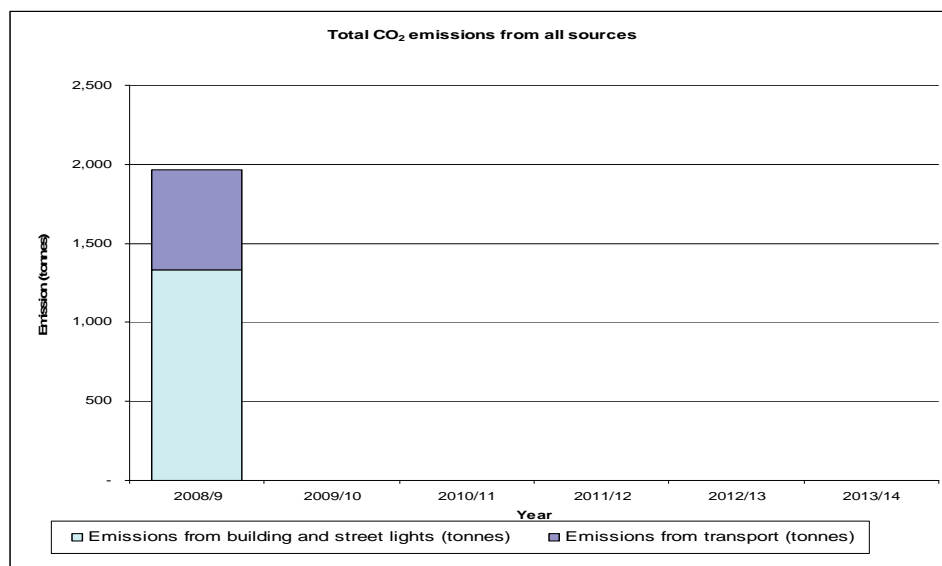
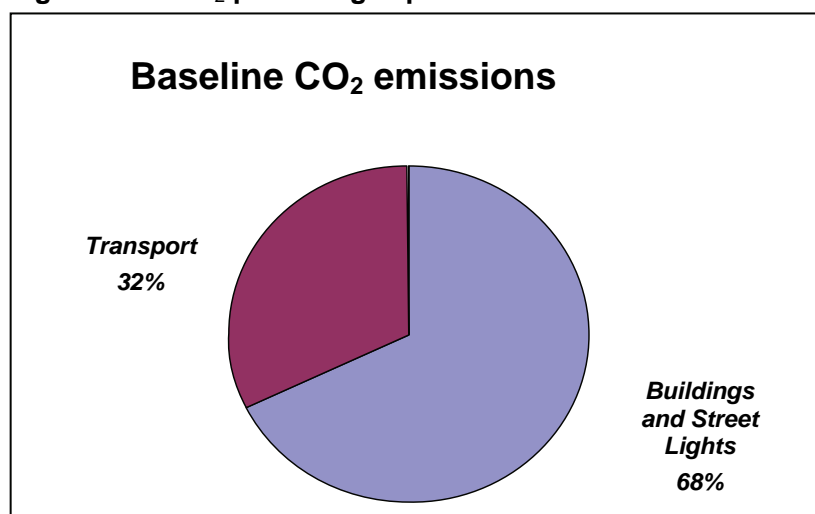


Figure 3.2 – CO₂ percentage split for WLDC functions 2008/2009



Figures 3.1 and 3.2 show that approximately two thirds of West Lindsey's emissions are from our buildings, streetlights and other stationary sources and a third of our emissions are from transport, both fleet and business mileage. West Lindsey District Council is the most sparsely populated council in the East Midlands so our transport emissions are quite modest when you factor this in. The Leisure Centre is responsible for half of our carbon emissions from our buildings i.e. about one third of our total carbon emissions.

Table 3.2 Sources of baseline data; assumptions and issues

Emission Source	Data Source	Assumptions	Issues
Buildings	Electricity, Gas and burning oil bills Meter readings Floor areas from property records	Some bills are estimated.	Some bills did not cover exactly 12 months; or the relevant 12 months and therefore an additional calculation was carried out to estimate the amount for 12 months
Streetlights	Electricity bills	Energy use calculated by Wattage x time x number of lamps	Not metered
Business Travel	Mileage supplied by Mouchel – payroll Size of vehicle and fuel type obtained from staff directly	Where employees had left or were on long term sick an average car size with fuel unknown was assumed	Current mileage forms don't record fuel type
Fleet fuel consumption	Details of vehicles and annual mileage supplied by Depot	Recorded mileage rather than price of fuel	Fleet records of vehicles and mileage only in paper format

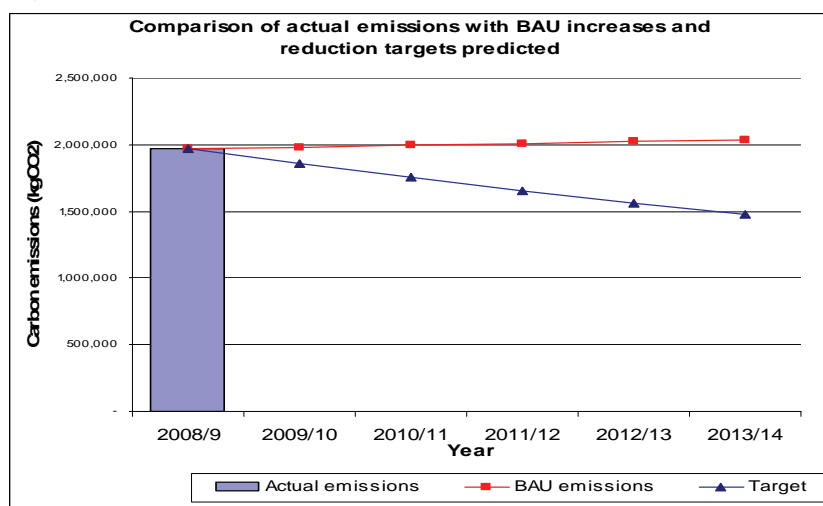
The NI 185 spreadsheet assumptions made on fuel price are far lower than actual cost.

Included on our baseline are also the 4 offices (The Guildhall, Lord Street Offices, Cross Street Offices and Spital Terrace Offices) that we previously occupied before moving to our new purpose built offices in February 2008. If these buildings are sold in the next 5 years there will be some additional carbon savings, weighted against this is the planned Market Rasen Pool that will add to our CO₂ emissions.

3.3 Projections and Value at Stake

Figures 3.3 and 3.4 highlight the business as usual scenario and how a targeted 25% reduction in emissions will effect our CO₂ emissions and the cost to the authority for energy and transport fuel.

Figure 3.3 CO₂ predicted emissions for business as usual and with a targeted 25%



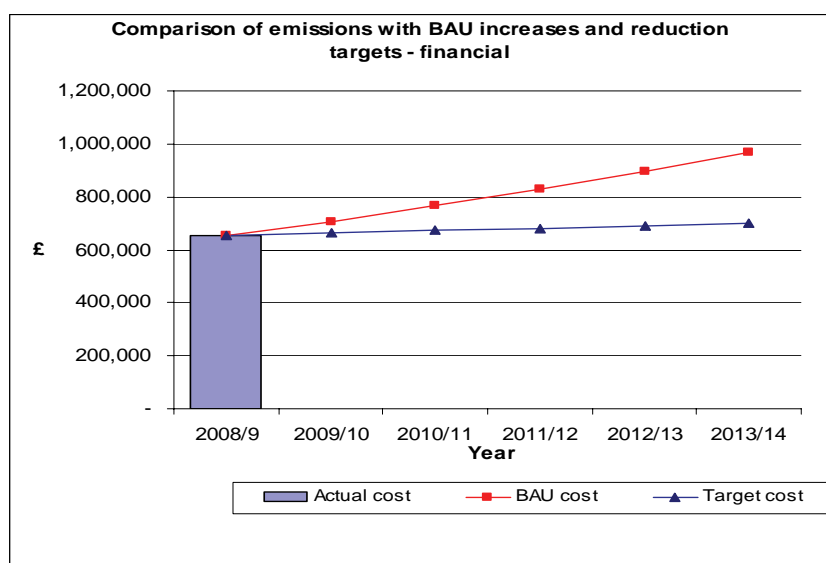
The business as usual projections are based on an assumption of an increased demand for energy of 0.7% from the stationary sources and fleet (business mileage is included in fleet) as per DTI's Energy Paper 68. BERR predicts 5.3%, and 8.4% increases in year on year stationary and transportation fuel costs, respectively. This is also factored into these projections.

If we put no projects in place to address our carbon emissions then year on year emissions will rise to over 2,000 Tonnes (2,000,000kgCO₂), see Figure 3.3. Not factored in to the above projections is the potentially significant impact that the planned Market Rasen pool could have on our future CO₂ emissions.

Figure 3.4 shows the cost to us as an authority currently for our energy of over £660,000 approximately and a predicted rise to £975,000 if we do nothing. If we achieve our target of a 25% reduction in CO₂; whilst the cost of energy will increase, it will be a much more modest rise to a predicted £700,000 by 2014.

West Lindsey District Council could be paying another £300,000 for our energy in 2014 if we do not put measures in place now to significantly reduce our carbon emissions. If we achieve the 25% reduction target, our energy costs would only increase by approximately £40,000.

Figure 3.4 Financial Value at Stake from Inaction



4 Carbon Management Projects

4.1 Existing projects

These are projects that had already started or been planned prior to or since we commenced the East Midlands Carbon Management Programme in September 2009; some of these projects may not have been specifically about carbon management but have been included as they reduce our carbon emissions significantly.

Ref	Project	Lead	Cost £			Annual Saving		Pay back (yrs)	% of Target	Year
			Cap'l	Rev'ue	Oper'	Fin £	CO ₂ Tonnes			
WL1	Voltage Optimisation – Leisure Centre	GR	£13,600		£0	£7,600	45.0	1.8	9%	2009
WL 2	Voltage Optimisation – Guildhall	GR	£11,100		£0	£4,410	26.0	2.5	5.2%	2009
WL 3	Server Virtualisation	MC	£49,800			TBC	50.7	4.1	10.1%	2009
WL 4	Energy Awareness Campaign for staff – Offices and Depot	KL	£0		£0	£860	5.6	3.3	1.1%	2009
WL 19	Effective Office Space Utilization	NC	£5,000		£0	£5,140	33.1	0	6.7%	2009
WL 23	Voltage Optimisation – Multi storey car park	GR	£4641		£0	£1096	6.5t	4.3	1.3%	2009
Totals			£84,130			£19106	166.9t		33.4%	

Boxes highlighted in yellow above denote actual costs and predicted savings provided by suppliers or manufacturers. All other costs and CO₂ estimated savings are taken from the Carbon Trust's supplied support: as projects are worked up these estimates will be replaced with actual costs.

4.2 Planned / funded projects

These are planned projects that have funding identified or approved.

Ref	Project	Lead	Cost £			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'ce	Fin £	CO ₂ Tonnes			
WL14	Round Optimisation	GP	£3,000			TBC	0	-	0	TBC
WL7	Bowls Hall Heating – Leisure Centre	GR	£11,340			£640	5.5	-	1.1%	2010
WL9	Cavity Wall Insulation – Leisure Centre	GR	£12,400			£3,200	19.8	3.9	4.0%	2010
Totals			£26,746			£3840	25.3t		5.1%	

4.3 Near term projects

Ref	Project	Lead	Cost £			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'ce	Fin £	CO ₂ Tonnes			
WL 5	Pool Pump Efficiency – Leisure Centre	GR	£600			TBC	TBC	-	TBC	TBC
WL6	Pool Cover – Leisure Centre	GR	£4,800			TBC	TBC	-	TBC	TBC
WL 8	Lighting – Leisure Centre	GR	£11,900			£1,480	9.7	8.1	2.0%	2010
WL10	Pipe Lagging – Leisure Centre	GR	£4,350			£1,500	9.2	2.9	1.9%	2010
WL12	Lighting – Multi-storey Car Park	GR	£4896			£643	4.2	-	0.85%	2010
WL13	Vehicle Replacement Strategy	GP	TBC			TBC	TBC	-	TBC	TBC
WL 15	Driver Training/Awareness Raising	GP	£0			£5,300	3.7	-	0.8%	TBC
WL 18	Secondary Glazing/Replacement Glazing – Leisure Centre	GR	£4,940			£1,070	6.6	-	1.3%	TBC
Totals			£26,910			£9430	33.4t		6.85%	

4.4 Medium to long term projects

Ref	Project	Lead	Cost £			Annual Saving		Pay back	% of Target	Year
			Cap'l	Rev'ue	Res'ce	Fin £	CO ₂ Tonnes			
WL22	Travel Plan	?	£2,190			£2,050	4.6	1.1	0.9%	TBC
WL 11	Sports Hall & Gym Heating – Leisure Centre	GR	TBC			-	-	-	-	TBC
WL16	Mobile communication technologies	GP	TBC			-	-	-	-	TBC
WL 17	Low energy photocells for streetlights	CA	£2,250			£670	4.4	3.4	0.9%	TBC
WL 21	Replacement bulbs for streetlights	CA	£4,500			£1,340	8.8	3.4	1.8%	TBC
WL 20	Electric Vehicle & Charging Station	KL	£0			TBC	TBC	-	TBC	TBC
Totals			£8940			£4060	17.8t		3.6%	

4.5 Projected achievement towards target

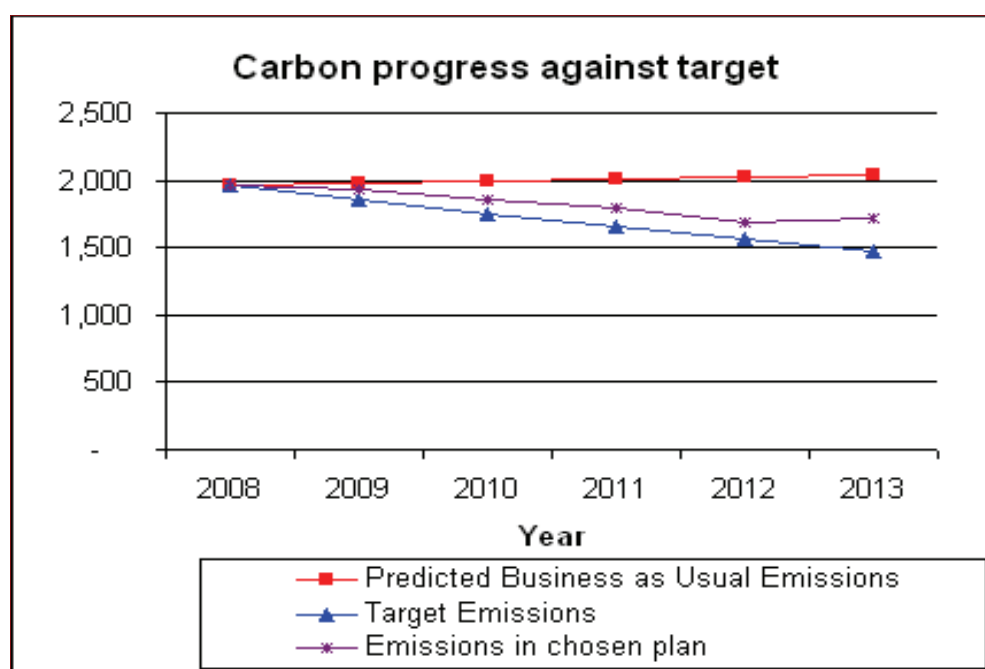
Figure 4.1 illustrates 3 possible paths for CO₂ emissions within WLDC operations.

- The business as usual case with gently increasing emissions
- The target line with steadily reducing emissions, and
- The emissions from the chosen path associated with implementing the opportunities described within this plan.

It should be noted that degradation factors for the carbon saved are incorporated into the analysis within the chosen path emissions. Degradation factors take account of the fact that each year of the project the amount of CO₂ saved potentially reduces as projects become less effective either because they have not been maintained like say an energy awareness campaign or if a saving is based on a percentage CO₂ saving on a building then as other projects are actioned the original project results in a smaller absolute CO₂ reduction.

Figure 4.1 is a conservative view that tries to add real life factors into the modelling of the projects needed to meet our targets. Ideally the emissions from the chosen path will match the target emissions and this demonstrates the need for this document to present a working plan that is constantly re-visited and updated.

Figure 4-1 Projection of impact of projects on meeting carbon target – Reductions Plan from CMPR WLDC version



5 Carbon Management Plan Financing

A rotating capital fund from our Invest to Save reserve is proposed and will be presented to Organisation and Resources Committee for consideration in February 2010. The sum of £200,000 will be ringfenced specifically to fund carbon management projects. This fund will be re-plenished with the monies saved from the carbon projects. We will not access funding from Salix (currently) as we are a debt free council and choose not to access loan funding with our current debt free status.

5.1 Assumptions

- The cost of gas is calculated at 3p/kWh,
- the cost of electricity is calculated at 8p/kWh, and
- the estimated costs for medium and long term projects will need further more accurate assessments as the projects are progressed.

5.2 Summary of benefits, resources required, cost and funding sources

		2009/10	2010/11	2011/12	2012/13	2013/14
Benefits	Annual cost saving	£19106	£3840	£9430		
	Annual CO₂ saving	166.9t	25.3t	29.7t		
	% of target achieved	33.4%	5.1%	6%		
Additional resources	[department a]					
	[department b]					
	[department c]					
Cost & funding source	Annual costs:					
	Total annual capital cost					
	Total annual revenue cost					
	Total costs					
	Committed funding:					
	Committed annual capital			<i>Draft</i>		
	Committed annual revenue			<i>To be developed with Project Definitions</i>		
	Total funded					
	Unallocated funding					
	Unallocated annual capital					
	Unallocated annual revenue					
	Total unfunded					

Unquantified benefits:

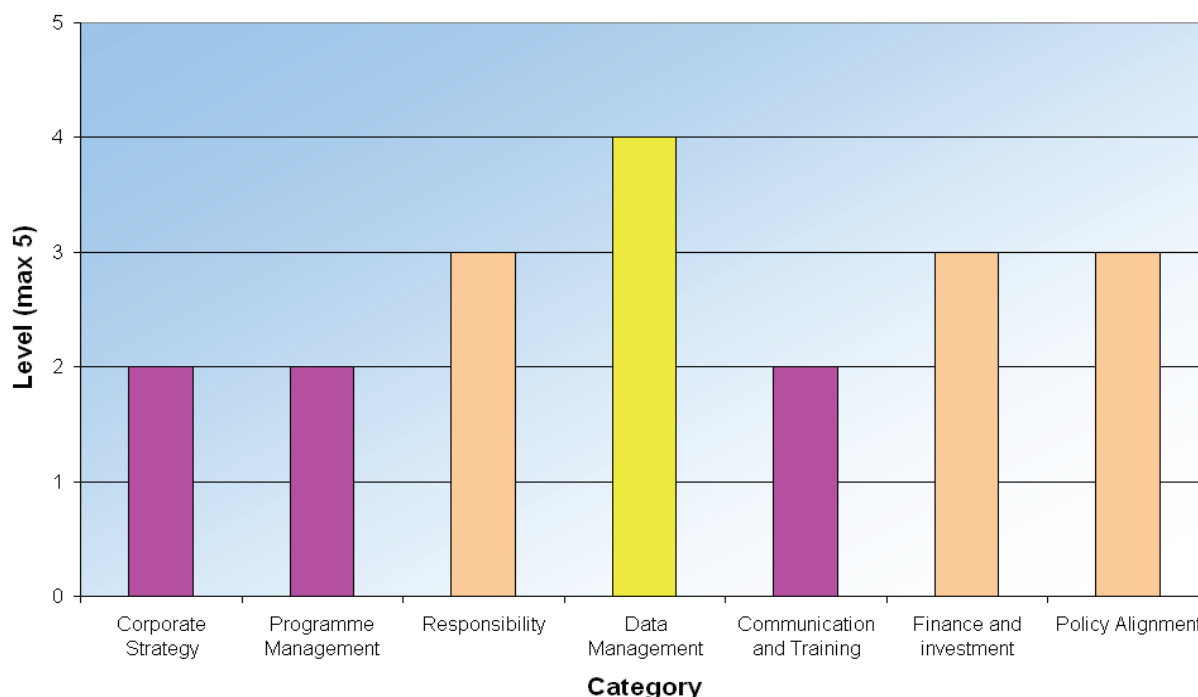
The bullet points below detail some of the additional benefits of carrying out these projects that have not already been quantified.

- Improved longevity of electrical equipment
- Improved efficiency in collecting waste
- Improved heating to bowls hall at Leisure centre which could encourage better usage
- Reduction in ongoing revenue for repair/replacement of equipment
- Improved performance against NI 185
- Provides opportunity for council good news stories
- Better council profile
- Improved council reputation locally at county and regional level
- Employee energy awareness raising campaign may have knock on positive effect on staff which they use in their home environment and will assist with delivering NI 186.

6 Actions to Embed Carbon Management

Figure 6.1 illustrates where we are now in terms of embedding carbon management into our organisation. (The Carbon Management Embedding Matrix is included in full at Appendix A). Our self assessment is that we are currently at levels 2 and 3 in the main. This is broadly similar to the other Lincolnshire and Leicestershire councils that are also participating in the East Midlands Carbon Management Programme. ***Our aspiration is to achieve level 5 in all areas.***

Figure 6.1 Self assessment of WLDC status



6.1 Corporate Strategy – embedding CO₂ saving across our organisation

This Carbon Management Plan has been endorsed by West Lindsey's Chief Executive and the Council Leader and will be published on West Lindsey's website.

Carbon reduction and addressing climate change is identified as a priority for the Council in the Corporate Plan (2009/2012). We plan to run some training for service managers which will consider possible future projects for carbon reduction and also climate change adaptation commencing February 2010 onwards.

We plan to write a climate change strategy for West Lindsey District Council under the umbrella of the planned countywide climate change strategy.

We are also considering setting specific targets for carbon reduction to service areas but at the moment the data collection necessary to action this may outweigh the benefit.

6.2 Programme Management – bringing it all together effectively

This factor of embedding Carbon Management is covered in section seven of this Plan.

6.3 Responsibility – being clear that saving CO₂ is everyone's job

Service Managers will be responsible for considering carbon management in their service developments and projects. Climate change risks and opportunities are also considered as part of our committee reports. It is planned to have carbon management as a standing item for all team meetings commencing April 2010.

It is planned to include reducing carbon into new employment contracts for all staff to address reducing their environmental impact whilst carrying out of their duties. We may formulate some carbon questions to be asked at interview. We will also investigate the potential for embedding saving carbon into the existing staff appraisal system.

The council's commitment and participation in the Carbon Management Programme has been announced to all staff via the staff newsletter (November 09): as part of the Energy Awareness Campaign we will be seeking Carbon Champions in each service area and will initially seek to recruit these by producing another article in the staff newsletter and through service team meetings. These Champions will be linked to the existing Lincolnshire County Council champions known as Supporting A Greener Environment (SAGEs) and to West Lindsey's Carbon Management Team: they will be an integral part of present and future Energy Awareness Campaigns.

6.4 Data Management – measuring the difference, measuring the benefit

Currently baseline data has only been measured in its entirety for NI185 on an annual basis. Our main office (Guildhall) has half hourly metering and a Building Management System (BMS) which enables us to analyse and manage our energy use on a zoned basis. Our other main buildings have monthly meter reads. The mileage of fleet vehicles is now being collected monthly.

In the future we will move to monthly meter reads for all our buildings and also start collecting data on water consumption in all our buildings.

It is intended to add more detail to business mileage forms so as to ease data collection.

6.5 Communication and Training – ensuring everyone is aware

Plan to include environmental issues into future induction days in 2010 for new staff.

Network of energy champions (SAGEs) will be recruited and trained commencing in March 2010 and will pass on energy saving ideas and advice to staff in their areas.

A Energy Awareness campaign is planned using Energy Champions (SAGE's), newsletters, intranet and team meetings; initially we have publicised our participation in the East Midlands Carbon Management programme and the potential for our carbon savings corporately in the West Lindsey staff Newsletter for November 2009.

We plan to set up a web page in early 2010 on the West Lindsey District Council corporate website (internet and intranet) specifically on climate change and carbon savings which will have a direct link back to the existing energy efficiency page.

In the next staff survey we plan to ask some questions relating to climate change and carbon savings and analyse the results to ascertain our progress in embedding climate change and carbon savings into our council.

Since commencing the Carbon Management Programme our press officer has released information to the local press and the Lincolnshire Echo published an article in October 2009. Further successes and milestones will be released to the press. The West Lindsey News Winter 2009 also included an article about our participation in the carbon management programme and the predicted possible carbon savings – the West Lindsey News goes out to all West Lindsey households.

6.6 Finance and Investment – the money to match the commitment

This factor of embedding Carbon Management is covered in section five of this Plan.

6.7 Policy Alignment – saving CO₂ across our operations

Pending the Carbon Management Plan being agreed by Community and Waste Committee on 17th February 2010 and by Organisation and Resources Committee on 25th February 2010, then the process of policy alignment will begin.

Lowering the Carbon Footprint is a corporate priority in West Lindsey's Corporate Plan 2009/2012 so this Carbon Management Plan supports the action of reducing the Council's CO₂ emissions and reducing our carbon footprint. For the 2010-11 Business Plan period we are developing cross-cutting projects to address the identified corporate priorities; the Carbon Management Plan is one of the identified projects.

6.8 Engagement of your Suppliers – working with suppliers to reduce our carbon footprint

All purchases above £75,000 have to go through Procurement Lincolnshire (a shared service for Lincolnshire). Procurement Lincolnshire is currently working towards a sustainability policy. Procurement Lincolnshire also has a banned list of products/materials that are not permitted for environmental reasons. Purchases under £75,000 are tendered based on three quotes and commissioned by the Service Manager. Future training for service managers will consider adding carbon savings and environmental issues into the procurement criteria.

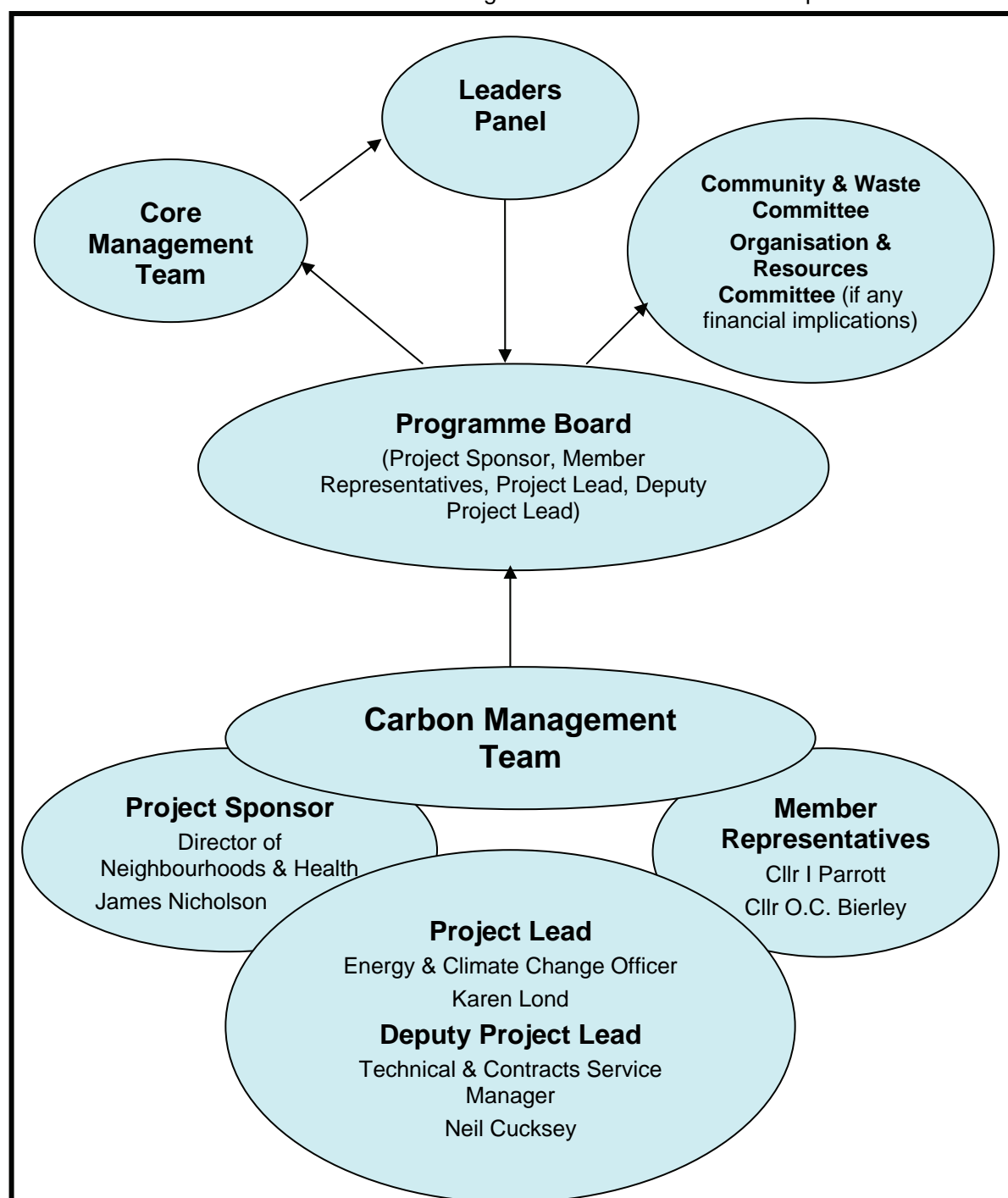
It is planned to include reducing carbon into new corporate and service contracts for all service areas and to formulate some questions to be asked of potential suppliers and contractors, to be evaluated as part of the tender process.

7 Programme Management of the CM Programme

7.1 The Programme Board – strategic ownership and oversight

The Programme Board will oversee the delivery of the Carbon Management Plan and will ensure support at all levels. Potential Projects will be looked at by the board and considered before being approved for funding. The board will meet at least quarterly or sooner if necessary for emerging projects. The Programme Board will consist of Project Sponsor, appointed Member Representatives, Project Lead and Deputy Project Lead.

The structure chart below shows how the Programme Board fits with the corporate structure.



7.2 The Carbon Management Team – delivering the projects

The team is a virtual team, comprising of staff who can take accountability for the delivery of actions. Initially officers have been asked to join the team where their service area has a direct impact on the corporate emissions (Property Services, Waste) or where their input will be necessary (such as Finance and Human Resources) to ensure the programme is financed and embedded. Members of the team will be responsible for gathering information and championing projects. The team will meet regularly, report progress against actions, discuss the mitigation of risks and most importantly take ownership and accountability for projects in their areas. The team will meet at least 4 times a year. A Terms of Reference will be drawn up and agreed by the Carbon Management Team.

Role	Name and position in the LA	Contact details
Member Representative	Councillor Owen Bierley Vice-Chairman	01469 560865 cllr.o.c.bierley@west-lindsey.gov.uk
Project Sponsor	James Nicholson Director of Neighbourhoods & Health	01427 675105 james.nicholson@west-lindsey.gov.uk
Project Leader	Karen Lond Energy & Climate Change Officer	01427 676618 karen.lond@west-lindsey.gov.uk
Deputy/Co Project Leader	Neil Cucksey Technical & Contract Services Manager	01427 676557 neil.cucksey@west-lindsey.gov.uk
Carbon Management Team members	Matthew Clarke Business Improvement Manager	01427 676589 matthew.clarke@west-lindsey.gov.uk
	Gary Reeve Building Surveying Team Leader	01427 676561 gary.reeve@west-lindsey.gov.uk
	Anna Grieve Contracts Officer	01427 676620 anna.grieve@west-lindsey.gov.uk
	Glyn Pilkington Operational Services Manager	01427 675124 glyn.pilkington@west-lindsey.gov.uk
	Chris Allen Public Protection Services Manager	01427 675133 chris.allen@west-lindsey.gov.uk
	Steve Leary Team Leader (Administration & Recycling)	01427 675176 steve.leary@west-lindsey.gov.uk
	Russell Stone Financial Services Manager	01427 676542 russell.stone@west-lindsey.gov.uk
	Geoff O Neil Communications Manager	01427 676580 or 01205 360757
	Elaine Pepper Human Resources Manager	01427 676577 elaine.pepper@west-lindsey.gov.uk

7.3 Succession planning for key roles

Project Lead

The Project Lead is the Energy & Climate Change officer if this officer leaves or is on long term sick then the Deputy Lead the Technical & Contract Services Manager would lead this project to ensure the Programme runs smoothly. On recruiting a new or temporary replacement The Project Lead role will be taken up by the Energy & Climate Change Officer.

Project Sponsor

The role of Project Sponsor is currently the Director of Neighbourhoods & Health should this post become vacant another Project Sponsor would be sought from senior management ideally at Director level.

Member Representative

The role of member representative provides an important link to the committee process so it is essential that there is always member representation. Currently we have two member representatives, The Chair and Vice Chair of Community and Waste Committee; if either leaves or stands down we would request that their successors are recruited.

Carbon Management Team

The success of this programme relies on a functioning Carbon Management Team; where members of this team leave or roles change it will be the responsibility of their service manager to ensure a suitable substitute or replacement attends who is able to represent their service area.

7.4 Ongoing stakeholder management

Progress towards our carbon reduction targets will be ***measured annually and reported to DECC as part of NI 185.***

Progress towards our ***Carbon reduction target*** will be ***reported to Members annually.***

Residents will be informed of progress towards our ***Carbon reduction target*** through ***press releases, an up to date web page and through articles in the Council's paper the West Lindsey News.***

7.5 Annual progress review

The plan will be reviewed annually after data has been collected for purpose of reporting to DECC on NI 185 – Percentage CO₂ reduction from LA operations.

The annual progress review will show carbon and financial savings for the year: progress towards the target will be reviewed and new projects will be included and there potential impact on our targeted carbon savings.

There will also be an annual follow up from the Carbon Trust in February/March which will help us to assess the impact of what West Lindsey's Carbon Management Plan has achieved.

Appendix A : Carbon Management Matrix – Embedding

	CORPORATE STRATEGY	PROGRAMME MANAGEMENT	RESPONSIBILITY	DATA MANAGEMENT	COMMUNICATION & TRAINING	FINANCE & INVESTMENT	POLICY ALIGNMENT *	ENGAGEMENT OF SCHOOLS
5 BEST	<ul style="list-style-type: none"> Top level target allocated across organisation CO₂ reduction targets in Directorate Business Plans Action plans in place to embed strategy. Progress routinely reviewed 	<ul style="list-style-type: none"> Cabinet / SMT review progress against targets on quarterly basis Regular diagnostic reports provided to Directorates Progress against target published externally 	<ul style="list-style-type: none"> CM integrated in responsibilities of senior managers CM part of all contracts / T's&C's Central CO₂ reduction advice available Green Champions leading local action groups 	<ul style="list-style-type: none"> Regular collation of CO₂ emissions for all sources Data externally verified Monitoring & Targeting in place for: <ul style="list-style-type: none"> buildings street lighting transport/travel 	<ul style="list-style-type: none"> All staff given formalised CO₂: <ul style="list-style-type: none"> induction and training communications Joint CM communications with key partners Staff awareness tested through surveys 	<ul style="list-style-type: none"> Finance committed for 2+ yrs of Programme External funding being routinely obtained Ring-fenced fund for carbon reduction initiatives 	<ul style="list-style-type: none"> CO₂ friendly operating procedure in place Central team provide advice and review, when requested Barriers to CO₂ reduction routinely considered and removed 	<ul style="list-style-type: none"> A 'whole school approach' including curriculum Mature programme of engagement in place CO₂ saving in schools having a wider community impact
4	<ul style="list-style-type: none"> CO₂ reduction commitment in Corporate Strategy Top level targets set for CO₂ reduction Climate Change Strategy reviewed annually 	<ul style="list-style-type: none"> Sponsor reviews progress and removes blockages through regular Programme Boards Progress against targets routinely reported to Senior Mgt Team 	<ul style="list-style-type: none"> CM integrated in to responsibilities of department heads Cabinet / SMT regularly updated Staff engaged through Green Champion network 	<ul style="list-style-type: none"> Annual collation of CO₂ emissions for: <ul style="list-style-type: none"> buildings street lighting transport/travel Data internally reviewed 	<ul style="list-style-type: none"> All staff given CO₂ reduction: <ul style="list-style-type: none"> induction communications CM matters communicated to external community 	<ul style="list-style-type: none"> Coordinated financing for CO₂ reduction projects via Programme Board Funding principles and processes agreed Finances committed 1yr ahead Some external financing 	<ul style="list-style-type: none"> Comprehensive review of policies complete Lower level policies reviewed locally Unpopular changes being considered 	<ul style="list-style-type: none"> A clear emphasis on energy / CO₂ reduction in schools Council activities fully coordinated Broad set of education stakeholders engaged Funding in place
3	<ul style="list-style-type: none"> CO₂ reduction vision clearly stated and published Climate Change Strategy endorsed by Cabinet and publicised with staff 	<ul style="list-style-type: none"> Core team regularly review CM progress: <ul style="list-style-type: none"> actions profile & targets new opportunities 	<ul style="list-style-type: none"> An individual provides full time focus for CO₂ reduction Key individuals have accountability for carbon reduction Senior Sponsor actively engaged 	<ul style="list-style-type: none"> Collation of CO₂ emissions for limited scope i.e. buildings only 	<ul style="list-style-type: none"> Environmental / energy group(s) given ad hoc: <ul style="list-style-type: none"> training communications 	<ul style="list-style-type: none"> A view of the cost of CO₂ reduction is developing, but finance remains ad-hoc Some centralised resource allocated Finance representation on CM Team 	<ul style="list-style-type: none"> All high level and some mid level policies reviewed, irregularly Substantial changes made, showing CO₂ savings 	<ul style="list-style-type: none"> A person has responsibility for Schools CO₂ reduction Schools CO₂ reduction projects coordinated Ad-hoc funding
2	<ul style="list-style-type: none"> Draft Climate Change Policy Climate Change references in other strategies 	<ul style="list-style-type: none"> Ad hoc reviews of CM actions progress 	<ul style="list-style-type: none"> CO₂ reduction a part-time responsibility of a few department champions 	<ul style="list-style-type: none"> No CO₂ emissions data compiled Energy data compiled on a regular basis 	<ul style="list-style-type: none"> Regular awareness campaigns Staff given CM information on ad-hoc basis 	<ul style="list-style-type: none"> Ad hoc financing for CO₂ reduction projects 	<ul style="list-style-type: none"> Partial review of key, high level policies Some financial quick wins made 	<ul style="list-style-type: none"> Ad-hoc schools projects to specifically reduce energy / CO₂
1 Worst	<ul style="list-style-type: none"> No policy No Climate Change reference 	<ul style="list-style-type: none"> No CM monitoring 	<ul style="list-style-type: none"> No recognised CO₂ reduction responsibility 	<ul style="list-style-type: none"> No CO₂ emissions data compiled Estimated billing 	<ul style="list-style-type: none"> No communication or training 	<ul style="list-style-type: none"> No specific funding for CO₂ reduction projects 	<ul style="list-style-type: none"> No alignment of policies for CO₂ reduction 	<ul style="list-style-type: none"> No CO₂ / energy reduction policy for schools

* Major operational policies and procedures, e.g. Capital Projects, Through Life Costing, Procurement, HR, Business Travel

Appendix B: Definition of Projects

Project: Reference:	Voltage Optimisation (Leisure Centre) WL 1 Carbon Project – existing
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Installation of a voltage optimisation device to the Leisure Centre, Gainsborough.
Benefits	<ul style="list-style-type: none"> • Annual savings £7,599 • Payback 1.8 years • Reduction in energy usage – CO₂ saving 45t annually • % of CO₂ target = 9% • Longevity of electrical equipment
Funding	<ul style="list-style-type: none"> • Project cost = £13,600 • Potential funding through ring fenced Invest to Save scheme
Resources	Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Accurate assessment pre-installation • No dramatic increase in future peak load
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	Proposed for March 2010
Notes	Actual costs and projected savings provided by supplier Power Perfector. WLDC, SKDC, CoLC are jointly tendering for voltage optimisation so as to achieve the most competitive price.

Project: Reference:	Voltage Optimisation (Guildhall) WL 2 Carbon Project – existing
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Installation of a voltage optimisation devices to the <ul style="list-style-type: none"> • Guildhall, Marshall's Yard, Gainsborough
Benefits	<ul style="list-style-type: none"> • Annual savings £4,407 • Payback 2.5 years • Reduction in energy usage – CO₂ saving 26t annually • % of CO₂ target = 5.2% • Longevity of electrical equipment
Funding	<ul style="list-style-type: none"> • Project cost = £11,107 • Potential funding through ring fenced Invest to Save scheme
Resources	Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Accurate assessment pre-installation • No dramatic increase in future peak load
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	Proposed as March 2010
Notes	Actual costs and projected savings provided by supplier Power Perfector. WLDC, SKDC, CoLC are jointly tendering for voltage optimisation so as to achieve the most competitive price.

Project: Reference:	Server Virtualisation WL 3 Not Carbon Project - existing
Owner	Matthew Clarke and Steve Anderson
Department	Business Improvement Team
Description	Install server virtualisation
Benefits	<ul style="list-style-type: none"> • Reduced future spend – Annual savings unknown • Payback 4.1 years • Reduction in energy usage to IT suite – CO₂ savings 50.7t annually • % of CO₂ target = 10.1% • Improved server management, maintenance and support facilities available to ICT staff • Frees up space which could potentially be let
Funding	<ul style="list-style-type: none"> • Project cost = £49,800 • Funded through existing IT service budget
Resources	ICT team
Ensuring Success	Project 80% completed (11/1/10)
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Guildhall • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • Project implementation 16/11/2009 • Complete physical to virtual server conversions 23/12/09: extended to end of January 2010
Notes	Projected CO ₂ savings and costs provided by supplier. Cost is for whole project not just carbon saving part of it.

Project: Reference:	Energy saving awareness campaign for WLDC staff WL 4 Carbon Saving - Existing
Owner	Karen Lond
Department	Technical and Contract Services
Description	Organisation wide campaign to save energy and reduce our Carbon Dioxide emissions, using a network of energy champions, posters, email, newsletters etc.
Benefits	<ul style="list-style-type: none"> • Annual savings = £860 • Reduced energy use in our offices – CO₂ savings 5.6t annually • % of CO₂ target = 1.1% • Reduced fleet and business mileage • Will assist with embedding Carbon Management corporately
Funding	<ul style="list-style-type: none"> • Project cost = unknown • Within existing service budget
Resources	<ul style="list-style-type: none"> • Energy & Climate Change Officer to organise campaign and events • Staff time for Energy Champions
Ensuring Success	<ul style="list-style-type: none"> • Project requires support from senior managers • Project requires buy-in from employees • Will need Energy Champion in each service area • Project will need to be maintained to ensure it continues to deliver carbon reductions
Measuring Success	<ul style="list-style-type: none"> • Should contribute to corporate annual reductions in carbon dioxide • Measured and reported on annually through NI 185
Timing	<ul style="list-style-type: none"> • Commenced September 2009 • Ongoing
Notes	Projected savings are estimated using the Carbon Trust's RAP tool. Will piggy back onto Lincolnshire County Councils SAGE scheme and be able to participate/contribute to SAGE newsletter.

Project: Reference:	Pool Pump Efficiency – Leisure Centre WL 5 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Pool pump circulation – turbidity Reduced water circulation during out of hours
Benefits	<ul style="list-style-type: none"> • Annual savings = to be confirmed • Payback period to be confirmed • Reduction in electricity used – CO₂ saving to be confirmed • % of CO₂ target = to be confirmed • Extended plant lifespan • Reduction in maintenance costs- longevity of equipment
Funding	<ul style="list-style-type: none"> • Project costs = to be confirmed • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Compatibility with existing equipment • Secure funding
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 6-12months
Notes	Project costs and savings to be established from supplier.

Project: Reference:	Pool Cover – Leisure Centre WL 6 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Installation of pool covers to two pools to reduce heat loss and lower humidity levels (either solid or liquid covers)
Benefits	<ul style="list-style-type: none"> • Annual savings to be confirmed • Payback to be confirmed • Reduction in electricity used to heat pool – CO₂ savings to be confirmed • Extended plant lifespan • Reduced use of humidistat controlled extraction fans
Funding	<ul style="list-style-type: none"> • Project cost = to be confirmed • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Ensuring covers are used • Energy awareness raising for staff at Leisure Centre
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 6-12months
Notes	<p>Project costs and savings to be established from supplier.</p> <p>Regimes to be put in place ensuring covers are used when pools are not in use.</p> <p>Therefore ease of use must be considered when specifying product.</p>

Project: Reference:	Bowls Hall Heating – Leisure Centre WL 7 Not specifically carbon project – existing
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Removal and replacement of old electric storage heaters at Bowls Hall, Leisure Centre, Gainsborough with more efficient heating system
Benefits	<ul style="list-style-type: none"> • Annual savings = £640 • Potential reduction in energy usage – CO₂ saving 5.5t annually • % of CO₂ target = 1.1% • Provide adequate heating for Hall • Increase use of facilities
Funding	<ul style="list-style-type: none"> • Projected costs = £11,340 • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Careful assessment of alternative energy efficient heating system
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • Assessment ongoing • Delivery 6-12months
Notes	

Project: Reference:	Lighting- Leisure Centre WL 8 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Replacement and re-alignment of existing lamps: potentially with T5 and possibly motion control (sensors) to Bowls Hall. Replacement lamps to T5 and sensors throughout rest of Leisure Centre where practical.
Benefits	<ul style="list-style-type: none"> • Reduction in electricity used • More efficient use of lighting • Improved lighting
Funding	<ul style="list-style-type: none"> • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Careful assessment of appropriate lighting
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 6-12months
Notes	

Project: Reference:	Cavity Wall Insulation - Leisure Centre WL 9 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Install cavity wall insulation to suitable walls at Leisure Centre that have not been previously insulated.
Benefits	<ul style="list-style-type: none"> • Annual savings = £3,200 • Payback 3.9years • Reduction in electricity used – CO₂ savings 19.8t annually • % of CO₂ target = 4% • Reduction in condensation • Improved efficiency of heating • Improved comfort for Leisure Centre users
Funding	<ul style="list-style-type: none"> • Project costs = £12, 400 • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Determine appropriate type of insulation • Establish which walls are suitable for CWI and that they haven't previously had it installed
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 3-6 months
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool.

Project: Reference:	Pipe lagging - Leisure Centre WL 10 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Lag all heating pipework in Leisure Centre and related buildings where necessary and accessible.
Benefits	<ul style="list-style-type: none"> • Annual savings = £1500 • Payback 2.9years • Reduction in electricity used – CO₂ savings 9.2t annually • % of CO₂ target = 1.9% • Increase heating efficiency
Funding	<ul style="list-style-type: none"> • Project costs = £4350 • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 6-12months
Notes	Projected savings and costs are estimated using the Carbon Trust's RAP tool.

Project: Reference:	Sports Hall and Gym Heating - Leisure Centre WL 11 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Energy efficiency improvements to heating and ventilation of Sports Hall and Gymnasium; to include heat recovery.
Benefits	<ul style="list-style-type: none"> • Provide adequate heating for Hall and Gym • Increase use of facilities • Potential reduction in energy usage
Funding	<ul style="list-style-type: none"> • Project costs = to be confirmed • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Careful assessment of most appropriate heating and ventilation system.
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 12 – 18 months
Notes	

Project: Reference:	Lighting- Multi – storey car park WL 12 Carbon Saving – near term
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Survey of existing lamps and replacement with T5 where applicable. Improvement or replacement/management of existing time clock. To install automatic lighting controls.
Benefits	<ul style="list-style-type: none"> • Annual savings = £643 • Reduction in electricity used – CO2 saving of 4.2t • % of CO2 target = 0.85% • More efficient use of lighting • Less light pollution to neighbouring domestic properties
Funding	<ul style="list-style-type: none"> • Project cost = £4896 • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Careful assessment of appropriate lighting
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Multi Storey • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • 3-6 months
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool.

Project: Reference:	Vehicle Replacement Strategy WL 13 Not Carbon Saving – near term
Owner	Glyn Pilkington
Department	Operational Services
Description	Review the policy on the way fleet vehicles are acquired to ensure that the most cost effective method of acquisition and maintenance is used. Consider the range of alternative fuels available and bearing in mind the overall operational cost recommend the vehicles that has the least environmental impact.
Benefits	<ul style="list-style-type: none"> Potential to replace existing fleet with energy efficient vehicles
Funding	<ul style="list-style-type: none"> There are no funding requirements in preparing the strategy however, if it is shown that a certain fuel type would have long term carbon reduction benefits and there is a need to develop an infrastructure to take advantage of those long term benefits then financing or Salix funding might be beneficial.
Resources	<ul style="list-style-type: none"> Operational Services staffing Accountancy staff Energy and efficiency Advisor (both WLDC and LCC) Lincolnshire Procurement
Ensuring Success	<ul style="list-style-type: none"> Dependent upon the gathering of comparative performance data of various types of fuels and the availability of this information. Ultimately a decision may well have to be made between the most cost effective or the most environmentally friendly option.
Measuring Success	<ul style="list-style-type: none"> Thorough Vehicle Replacement Strategy produced
Timing	<ul style="list-style-type: none"> There is a target date for completion of the Strategy of March 2010 however this is very much dependent upon the availability of technical information.
Notes	Whilst there are a number of alternative fuel options available there is a general lack of performance data on which to measure success and make comparisons.

Project: Reference:	Round Optimisation WL 14 Not Carbon Saving – near term
Owner	Glyn Pilkington Adrian Selby
Department	Operational Services
Description	Reduce operational services fleet travel mileage: reduce the travel distance on vehicles to the optimum minimum level by re-evaluating refuse rounds and EPA routes such that fuel use is minimised and therefore carbon emissions are reduced.
Benefits	<ul style="list-style-type: none"> • Potential reduction in fleet mileage • Reduced fuel costs • More efficient service
Funding	There will be a cost of publicising new refuse and recycling rounds and in managing the change process, cost and funding are yet to be determined.
Resources	<ul style="list-style-type: none"> • Use of Webaspex round management tool and LCC staff time in modelling the rounds. • Existing service team with some assistance from Business Improvement.
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Effective communication • Customer Services Support • Publicity and Promotion
Measuring Success	<ul style="list-style-type: none"> • Reduction of fleet mileage • Measured and reported on annually • Reduction of number of fleet vehicles
Timing	<ul style="list-style-type: none"> • Scheme to be completed as close to Sept/October 2010 as possible.
Notes	<p>Success will be achieved by the monitoring of existing rounds and identifying spare capacity within the existing rounds. A decision will have to be taken on how such issues as missed bins, properties not able to have wheeled bins and service provision to isolated properties are handled.</p> <p>The success will also depend on the partnership arrangement with the WDA (LCC) and the future provision of Waste Transfer Sites and other material disposal points. Changes need to be timed to avoid the issue of Council Tax demands and the elections.</p>

Project: Reference:	Raising Driver Awareness WL 15 Carbon Saving – near term
Owner	Glyn Pilkington Adrian Selby and Kevin Johnson
Department	Operational Services
Description	Through monitoring of driver performance using on-board electronic equipment, training and one to one counselling encourage economic driving methods. Consider ways of rewarding economic use of fuel.
Benefits	<ul style="list-style-type: none"> • Reduction in the amount of fuel being used by drivers. • Reduction in Carbon emissions. • Reduction in fleet operating costs • Raising the professional status of drivers.
Funding	<ul style="list-style-type: none"> • Revenue funding has been requested of £5300; may possibly fund from service under spend
Resources	<ul style="list-style-type: none"> • Operational Services Staff • Lincolnshire Procurement
Ensuring Success	<ul style="list-style-type: none"> • Thorough evaluation of the equipment by visiting other users. • Accurately monitoring the scheme against a clear bench mark
Measuring Success	<ul style="list-style-type: none"> • Reduction in the amount of fuel used and the consequent reduction in Carbon emissions • Measured and reported on annually
Timing	<ul style="list-style-type: none"> • There are no time constraints
Notes	

Project: Reference:	Mobile communication technologies WL 16 Not Carbon Saving – near term
Owner	Glyn Pilkington Adrian Selby
Department	Operational Services
Description	Evaluate the opportunities to use mobile communication technologies to manage the activities of refuse, recycling and street cleansing crews to reduce the need for non-essential travelling.
Benefits	<ul style="list-style-type: none"> • Improved communication • Faster response of customer requests • Early notification of missed bins, contaminated bins, fly tipping etc. • More efficient operations should lead to reduced travel mileage and the consequent reduction in carbon emissions.
Funding	<ul style="list-style-type: none"> • Potential funding from ring-fenced Invest to Save scheme
Resources	<ul style="list-style-type: none"> • Operational Services Staff • IT staff
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Effective communication to staff
Measuring Success	<ul style="list-style-type: none"> • Lower fleet mileage resulting in reduced carbon emissions • Measured and reported on annually • Reduced customer complaints • Reduced return to missed bins
Timing	<ul style="list-style-type: none"> • unknown
Notes	

Project: Reference:	Low Energy Photocells WL 17 Carbon Project – medium to long term project
Owner	Chris Allen
Department	Public Protection Services
Description	<ul style="list-style-type: none"> • Installation
Benefits	<ul style="list-style-type: none"> • Annual savings = £670 • Payback 3.4 years • Reduction in energy usage – CO2 savings 4.4t annually • % of target = 0.9% • Longevity of lamps?
Funding	<ul style="list-style-type: none"> • Project costs = £2250 • Potential funding through ring fenced Invest to Save scheme
Resources	Public Protection Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Accurate assessment pre-installation
Measuring Success	<ul style="list-style-type: none"> • Reduction in Carbon emissions from lighting • Measured and reported on annually
Timing	?
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool. To investigate jointly tendering and procuring with other Lincolnshire Councils

Project: Reference:	Secondary Glazing/ replace glazing (Leisure Centre) WL 18 Carbon Project – medium to long term project
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Install secondary glazing to Leisure Centre.
Benefits	<ul style="list-style-type: none"> • Annual savings = £1070 • Reduction in energy usage at leisure centre – CO₂ saving 6.6t annually • % of CO₂ target = 1.3% • Reduction in drafts and condensation
Funding	<ul style="list-style-type: none"> • Potential funding through ring fenced Invest to Save scheme
Resources	Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Accurate assessment pre-installation
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Leisure Centre • Measured and reported on annually
Timing	?
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool. May be necessary to replace all glazing for maintenance reasons.

Project: Reference:	Effective Office Space Utilization WL 19 Carbon Project – existing
Owner	Neil Cucksey
Department	Technical and Contract Services
Description	Optimise space occupied by West Lindsey District Council in main Guildhall to enable collaborative working with other partners.
Benefits	<ul style="list-style-type: none"> • Reduction in energy usage of gas and electricity
Funding	<ul style="list-style-type: none"> • From existing service revenue budget
Resources	Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Effective communication with staff managers and partners • Effective partnership working
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from electricity use at the Guildhall • Measured and reported on annually
Timing	Ongoing – to be implemented by Jan 2010
Notes	Addresses issues in KLOE 3.1 & 3.2 for use of Resources Assessment and Impact on NI 185.

Project: Reference:	Electric Vehicle and Charging Station WL 20 Carbon Project – existing
Owner	Karen Lond / Glyn Pilkington
Department	Technical and Contract Services
Description	Electric city van/pick up type for local waste collections and charging unit. Each vehicle will be branded with district logos and carbon message (to be agreed).
Benefits	<ul style="list-style-type: none"> • Reduction in energy use of fleet • Positive publicity for green vehicles
Funding	<ul style="list-style-type: none"> • Potentially will be fully funded through Lincolnshire Improvement and Efficiency Partnership (LIEP) • May match fund from existing WLDC budget so that we can procure additional electric vehicle
Resources	Energy and Climate Change Officer to liaise with SKDC who are progressing project on behalf of Lincolnshire
Ensuring Success	
Measuring Success	<ul style="list-style-type: none"> • Carbon emissions from fuel use by fleet • Measured and reported on annually • Annual cost of fuel
Timing	
Notes	<p>Project costs and savings to be established from supplier.</p> <p>At the recent Lincolnshire Improvement & Efficiency Partnership (LIEP) board meeting (13th Nov) it was provisionally agreed to fund a project to procure electrical vehicles and charging stations for each authority in Lincolnshire.</p>

Project: Reference:	Replacement bulbs for Street-lighting WL 21 Carbon Project – medium to long term project
Owner	Chris Allen
Department	Public Protection Services
Description	<ul style="list-style-type: none"> • Installation of replacement bulbs to street-lighting
Benefits	<ul style="list-style-type: none"> • Annual savings = £1,340 • Payback 3.4 years • Reduction in energy usage – CO2 savings 8.8t annually • % of target = 1.8%
Funding	<ul style="list-style-type: none"> • Project costs = £4,500 • Potential funding through ring fenced Invest to Save scheme
Resources	Public Protection Team to deliver
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Accurate assessment pre-installation
Measuring Success	<ul style="list-style-type: none"> • Reduction in Carbon emissions from street-lighting • Measured and reported on annually
Timing	To be confirmed
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool. To investigate jointly tendering and procuring with other Lincolnshire Councils

Project: Reference:	Travel Plan WL 22 Carbon Project – medium to long term project
Owner	Karen Lond
Department	To be confirmed
Description	Devise travel plan for West Lindsey District Council
Benefits	<ul style="list-style-type: none"> • Annual savings = £2,050 • Payback 1.1 years • Reduction in business and fleet mileage – CO2 savings 4.6t annually • % of target = 0.9%
Funding	<ul style="list-style-type: none"> • Project costs = £2,190 • Potential funding through ring fenced Invest to Save scheme
Resources	To be confirmed
Ensuring Success	<ul style="list-style-type: none"> • Secure funding • Effective communication with staff
Measuring Success	<ul style="list-style-type: none"> • Reduction in Carbon emissions from transport • Measured and reported on annually
Timing	To be confirmed
Notes	Projected costs and savings are estimated using the Carbon Trust's RAP tool.

Project: Reference:	Voltage Optimisation (Multi-storey Car Park) WL 23 Carbon Project – existing
Owner	Gary Reeve
Department	Technical and Contract Services
Description	Installation of a voltage optimisation devices to the <ul style="list-style-type: none"> Multi-storey Car Park, Beaumont St, Gainsborough
Benefits	<ul style="list-style-type: none"> Annual savings £1,096 Payback 4.3 years Reduction in energy usage – CO₂ saving 6.5t annually % of CO₂ target = 1.3% Longevity of electrical equipment
Funding	<ul style="list-style-type: none"> Project cost = £4,641 Potential funding through ring fenced Invest to Save scheme – subject to approval
Resources	Building Surveying Team to deliver
Ensuring Success	<ul style="list-style-type: none"> Secure funding Accurate assessment pre-installation No dramatic increase in future peak load
Measuring Success	<ul style="list-style-type: none"> Carbon emissions from electricity use at the Multi-storey Car Park Measured and reported on annually
Timing	Proposed as March 2010
Notes	Actual costs and projected savings provided by supplier Power Perfector. WLDC, SKDC, CoLC are jointly tendering for voltage optimisation so as to achieve the most competitive price.