Charnwood Borough Council

Carbon Management Plan 2015 - 2020

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Version: 1.0
Owner: Strategic Director of Housing Planning Regeneration and Regulatory Services
Approval Route: Carbon Management Board
Approval Status: Draft

1. Foreword from Chief Executive

We believe the Council should lead by example in many ways, including protecting the environment and taking responsibility for the impact we have on it. Between 2006 and 2012, the Council reduced its Carbon emissions by 19 per cent thanks to measures including efficient lighting, improvements to insulation and the replacement of boilers at the offices in Southfields. However, the more energy efficient we become, the more difficult it is to find further savings, particularly without large scale investment. Despite this, we are committed to reducing our impact on the environment further. With the support of the Carbon Trust, staff and partners, we have developed our latest Carbon Management Plan which sets out how we will reduce our carbon footprint by 15 per cent in the next five years.

The Council's activities produce 2,132 tonnes of CO_2 a year and most of the carbon footprint is from the heating and lighting of the Southfields office and communal areas in our housing stock. Our vision is to reduce that to 1,812 tonnes of CO_2 a year or less. Not only will it help the environment, it will also make real financial savings and show leadership in our communities.

Geoff Parker
Chief Executive

2. Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for local government – by getting your own house in order and leading the wider municipality by example. The UK government and Committee on Climate Change have identified local authorities as key to delivering carbon reduction across the UK in line with Climate Change Act targets, and the Carbon Trust's Public Sector Carbon Management programme is designed in response to this. It helps public bodies to save money on energy, whilst also reducing the risk of dangerous climate change.

Charnwood Borough Council worked with the Carbon Trust in 2015 in order to develop a carbon plan through to 2020. This updated Carbon Management Plan commits the Council to a target of reducing CO_2 by a further 15% between 2012 and 2020, and underpins potential financial savings to the organisation of around £85,000 per year by that date.

There are those that can and those that do. Public bodies can contribute significantly to reducing CO_2 emissions. The Carbon Trust is very proud to support Charnwood Borough Council in their on-going implementation of carbon management.

T. Pryce

Tim Pryce
Head of Public Sector, Carbon Trust

3. Introduction

Why is carbon management important?

Over the past century, human activities have released large amounts of greenhouse gases, such as carbon dioxide (CO_2), into the atmosphere. The majority of these emissions have come from burning fossil fuels to produce energy, although industrial processes, deforestation and some agricultural practices also emit gases into the atmosphere. These greenhouse gases cause more heat to be trapped in the Earth's atmosphere, leading to an increase in global temperatures. This is known as global warming.

A warming planet will lead to a wide variety of effects on natural systems, causing increases in extreme weather conditions, changing rainfall patterns and rising sea levels. This will effect water supplies, agriculture, and power and transportation systems and will have significant impacts on human health and well-being.

Drivers for tackling Climate Change

The UK has specific domestic and international commitments to reducing emissions of greenhouse gases. Many public sector bodies and private businesses are taking a strategic view of carbon emissions, under pressure from regulation, market forces and stakeholders. Local Authorities (LAs) are also subject to many of these drivers, shown in more detail below, and can play a significant part in contributing to the national goal of developing a low carbon economy.

Climate Change Act	•This act commits the UK government to reducing emissions by at least 80% in 2050 compared to 1990 levels. The 80% target includes GHG emissions from the devolved administrations, which currently accounts for around 20% of the UK's total emissions.
Building Regulations L	•The regulations contains requirements relating to the conservation of fuel and power. set minimum energy performance standards for new buildings and major refurbishments of existing buildings, which the Council will have to meet.
Sustainability	•The main causes of greenhouse gases are from the use of fossil fuels and disposal of waste. There is a need to reduce the use of finite resources as by their nature they are irreplaceable and will run out.
Financial Pressure	•With increasing pressure on Local Authorities to cut costs, reducing the amount spent on energy bills is a key driver for lowering our energy consumption.
Air pollution	•There are concerns that over the next few years air quality in some areas of Charnood will not meet EU standards. Measures to decrease carbon emissions often lead to improvements in air quality.
Reputation	•With stretching national targets, there is increasing pressure on local authorities to be seen as "doing their bit" and playing a leadership role on climate change action. Failure to act could lead to reputational risks and and adversely affect the Council's public image.

OUR AMBITION

"Our vision is to maintain a leading role in local efforts to reduce the impacts of climate change by minimising our impact on the environment in our activities.

We will reduce carbon emissions from our activities by 15%, from a 2012/13 baseline of 2,132 tonnes CO_2, by 2020."

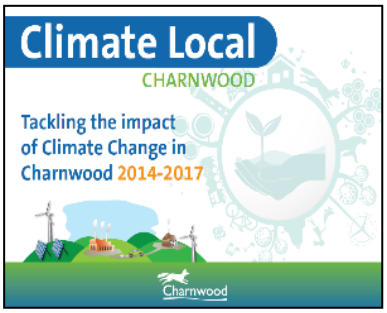
AIMS OF THE PLAN

- **Achieve a reduction in emissions of 15% from a 2012/13 baseline.**
- **Become a leader in carbon management in Leicester.**
- **Provide an integrated, coherent approach to carbon management across the Borough.**
- **Motivate and inspire staff to a common goal of reducing carbon.**
- **Deliver long term financial savings**

Charnwood Borough Council's role in carbon management

We recognise the local impacts of climate change on Council services and the communities we serve and believe it is important to show leadership and respond to community and stakeholder demands to do the right thing.

As a major local employer and service provider, we have an important role to play in influencing low carbon actions in the wider community by leading by example. The overarching Vision for Charnwood in 2033 reiterates our commitment to protect our natural resources through efficient use of energy that reduces our impact on the planet so that residents get even greater value for money and to ensure Charnwood will be a place that future generations will be proud of.



The Council became a signatory to the Climate Local agreement in 2013. Climate Local supports the Council's efforts both to reduce carbon emissions and also to improve resilience to the effects of our changing climate and extreme weather. Climate Local will help Councils across the country to capture the opportunities and benefits of action on climate change. Building on success to date, our Climate Local Vision aims to reduce CO_2 emissions by 2% annually from our 2012/13 baseline.

We recognise that utility costs are on a distinct upward trend. By reducing carbon emissions in a systematic way, spending on energy and carbon related costs can be reduced. This will help to meet cost saving targets, allow reinvestment in services will help ensure we are an efficient organisation in this respect.

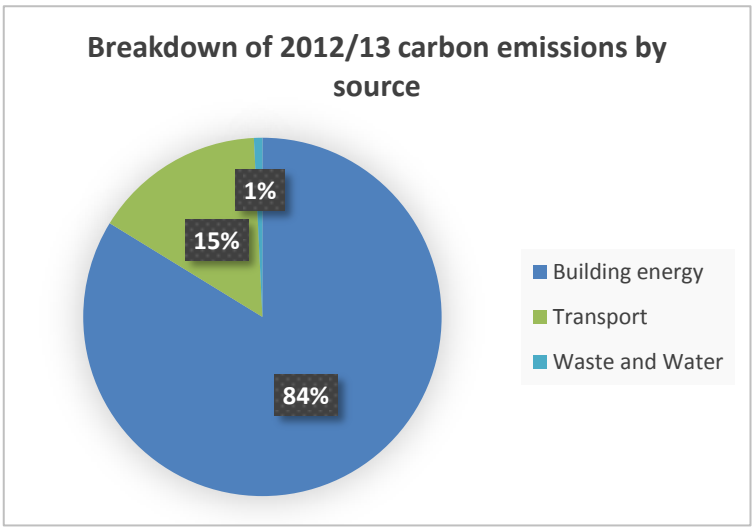
Towns and cities have a huge impact on carbon emissions, because of the growing number of people who live and work in them. Tackling carbon emissions within our own estate is the first step in understanding and identifying the emissions released by Charnwood as a whole and will provide a platform from which we can extend our focus and catalyse action on carbon management in the wider community.

4. Baseline and Targets

Current baseline

The carbon baseline is a record of our approximate carbon emissions in 2012/13. Targets and performance in reducing emissions are measured against this figure as a percentage of the baseline value.

The total carbon baseline for 2012/13 is 2,132 tCO_2 with an associated cost of £730,021.



This baseline figure covers emissions in buildings and activities that we have management control and influence over, for example owner occupied buildings and the emissions from Council-owned vehicles.

Energy Benchmarking – understanding where our emissions come from

In order to assess how efficiently a building uses energy and identify priority areas for projects, it is useful to standardise energy consumption against a suitable parameter. In this case, energy use per square meter (kWh/m2) has been calculated for a number of our high consuming sites and this has then been compared to CIBSE (Chartered Institution of Building Services Engineers) industry benchmarks.

	Electricity-kWh/m^2		Gas-kWh/m^2	
Building / Site	**2013**	**Typical**	**2013**	**Typical**
Loughborough Town Hall	136	95	342	120
Southfield Rd ICS Building	669	95	167	120
Charnwood Museum	131	70	218	200
Southfield Rd Offices	55	95	95	120
The Oak Business Centre (communal) / Car Park	101	95	18	120
Car Park Beehive Lane	27	20	N/A	N/A

Green cells indicate energy performance is better than the typical practice benchmark; amber cells indicate energy performance is comparable with the typical practice benchmark; red indicates the energy performance is worse than typical practice.

Loughborough Town Hall, Southfield Rd ICS Building and Charnwood Museum appear to benchmark poorly against CIBSE benchmarks. Gas consumption at Loughborough Town Hall is particularly high (primarily due to an aging heating plant). In the case of the ICS building, it should be recognised that the building hosts a significant amount of server and air conditioning equipment and this is likely to be the reason for the very high electricity consumption.

Southfield Road Offices and The Oak Business Centre benchmark very well against typical practice and this is positive, especially in the case of The Oak Business Centre (which has reasonable electricity consumption despite most of the heating being provided from electrical sources). However, this does not mean there are no opportunities for improvement.

Beehive Lane Car Park benchmarks about average but upon inspection, lighting infrastructure is considered efficient and the major reason the site doesn't benchmark better than average is likely to be due to its constant and 24 hour usage.

5. Targets for 2020

TARGET FOR 2020

We will reduce carbon emissions from our activities by 15%, from a 2012/13 baseline of 2,132 tonnes CO2, by 2020.

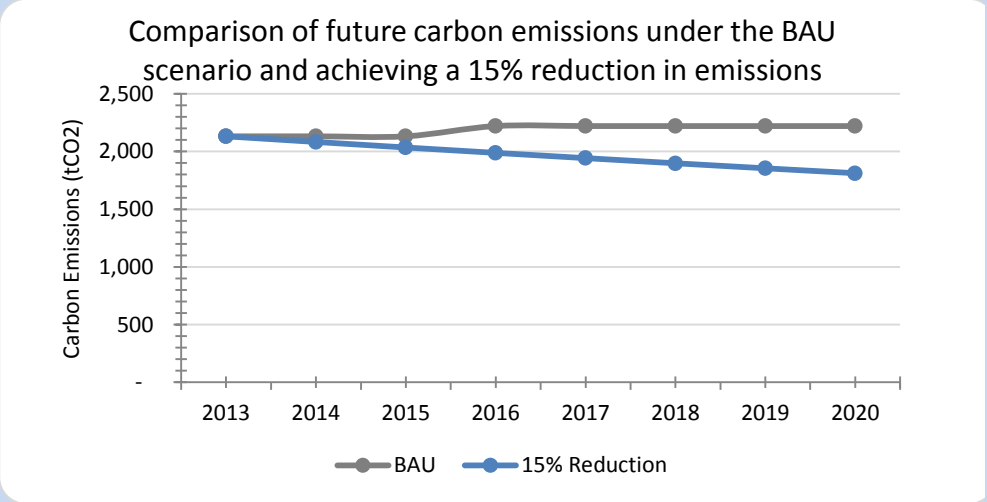
BENEFITS OF ACHIEVING THE TARGET

- **Cost savings**
- **Compliance with legislation**
- **Raised awareness of climate change amongst staff, stakeholders and the public**
- **Positive community leadership**
- **Contribute towards Government targets**

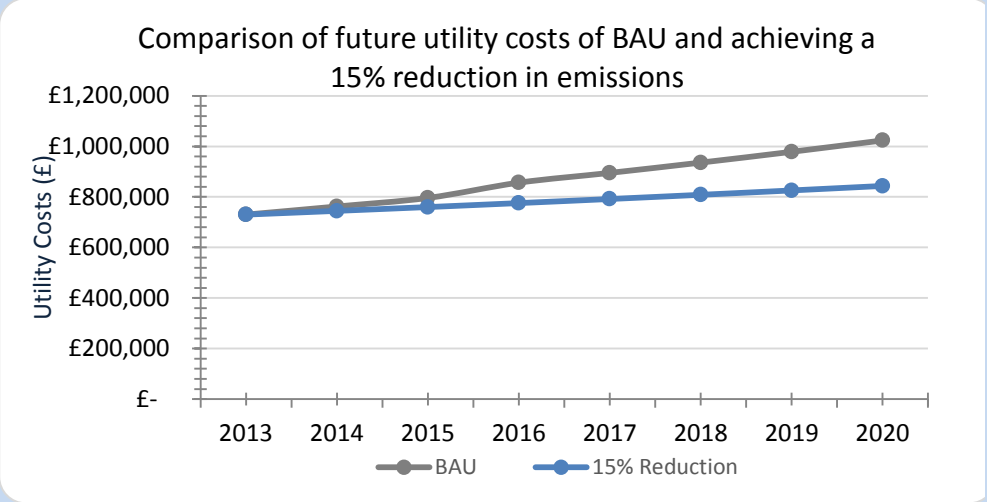
Our vision is to maintain a leading role in local efforts to reduce the impacts of climate change by minimising our impact on the environment in our activities. To achieve this aim the Council has set targets that are challenging, yet realistic.

The Value at Stake

The Value at Stake (VAS) shows the cumulative potential savings, or avoidable costs/carbon emissions, associated with implementing our Carbon Management Plan and achieving our target against the alternative of doing nothing, i.e. Business as Usual (BAU) costs.



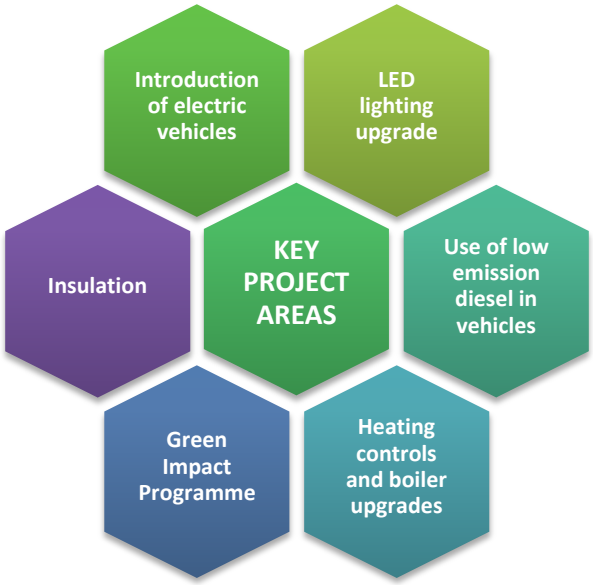
Achieving a 15% reduction in carbon emissions from our baseline over this period will result in final year emissions savings of 409 tCO2 and cumulative savings of 1,753 tCO2.



With no action on carbon, we have calculated that utility costs for Charnwood Borough Council could increase from £730,021 to £1,023,491 by 2020 – an increase of approximately £293,470. Achieving a 15% reduction in carbon emissions from our baseline over this period could result in cumulative savings of £698,018.

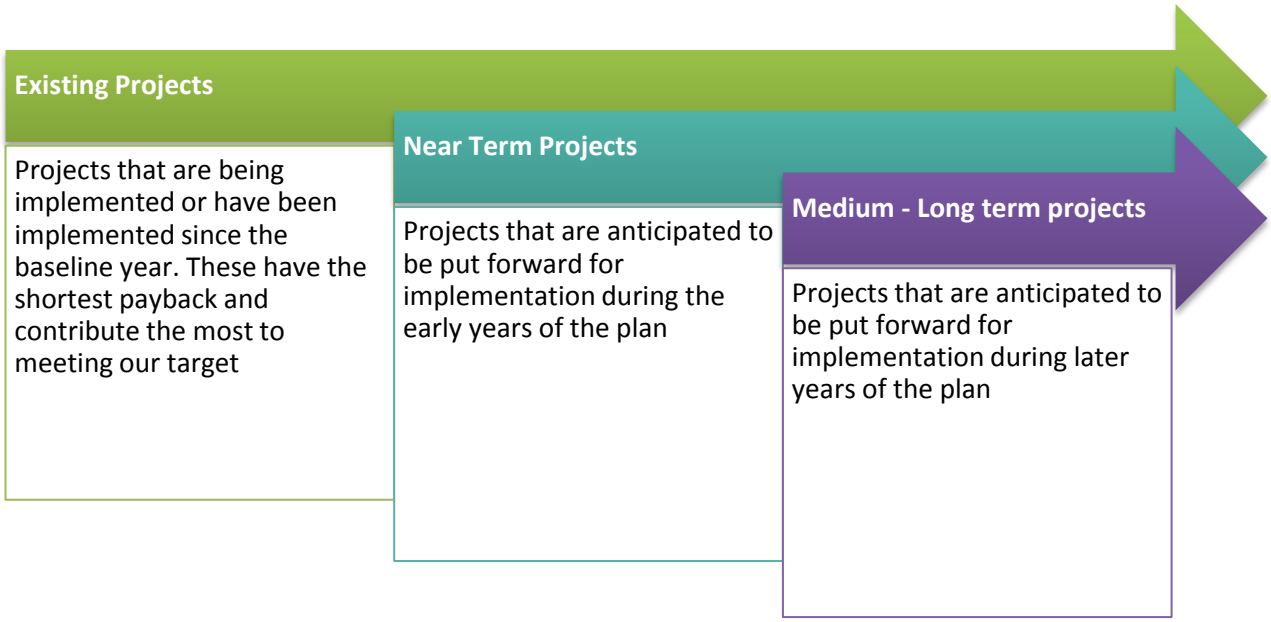
6. Project Identification

To meet the 2020 target, 320 tCO_2 will need to be saved each year. The projects to achieve this reduction were identified through a variety of means including the existing knowledge of the Council staff and service function heads, Carbon Trust high level surveys, Opportunity Identification Workshops facilitated by the Carbon Trust and one to one meetings with key Departments at Charnwood Borough Council.



Our priorities for action

The projects have been shortlisted and prioritised into three implementation stages based on key criteria such as capital expenditure, revenue expenditure, return on investment, carbon savings, alignment with other Council priorities (i.e. maintenance, asset management) and ease of implementation.



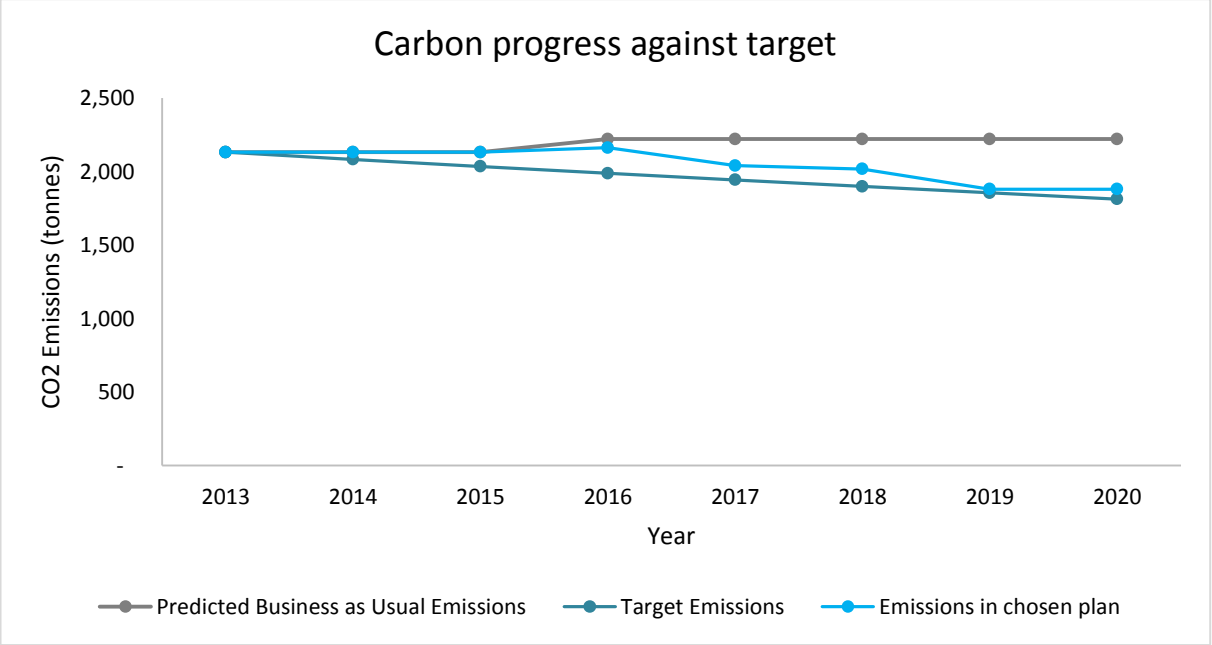
The costs and savings associated with each of these implementation stages is shown in the table below.

Project Category	Cost (£)		Annual Savings (yr 1)		Payback (yrs)	% of Target
	Capital	Operating cost savings	Energy Cost Saving	tCO_2		
Existing	£106,402	(£848)	£53,314	206	4.3	64.1%
Near Term	£141,500	£1,233	£22,749	95	6.17	29.6%
Medium - Long Term	£61,600	£100	£8,742	40	5.60	12.8%
Totals	**£309,502**	**£485**	**£84,806**	**341**	**3.64**	**106.5%**

Detailed project information can be found in Appendix 1.

Projected Achievement towards Target

The figure below shows predicted business-as-usual (BAU) emissions and the target emissions. The 'emissions in chosen plan' plot shows the emissions reductions from implementing all the projects scheduled in the duration of this plan.



7. Plan financing

The value at stake shows that approximately £698,018 could be saved by 2020 compared to the BAU scenario by implementing the plan. However, to achieve these savings significant capital investment will be needed. This section summarises the funding required for the projects year by year, describes what sources we intend to pursue and identifies any gaps where funding may not yet be secured. The project register tool that accompanies this plan contains the calculations to assist with the selection of carbon reduction projects.

Key Points

- To implement the projects defined in this plan it will **cost £309,502** over the five years of the plan.
- **£106,402 of funding** has already been sourced, with £203,100 still to be achieved.
- When all these projects are implemented, it will result in an estimated annual energy cost savings of **£84,806**.
- The average payback period of projects in this plan is **3.6 years**

Capital costs

The table below summarises the total capital costs for our carbon management plan by year. These figures include only the upfront cost of the project and do not include any operation or maintenance costs or take revenue expenditure into account.

Project Year[1]	2014	2015	2016	2017	2018	2019	2020
Total Costs	£-	£38,902	£153,000	£15,000	£72,600	£30,000	£-

The cost of implementing the projects in this plan has been estimated at £309,502 over the next five years, of which £106,402 has already been allocated for Existing Projects, leaving £203,100 yet to be sourced.

Sources of funding

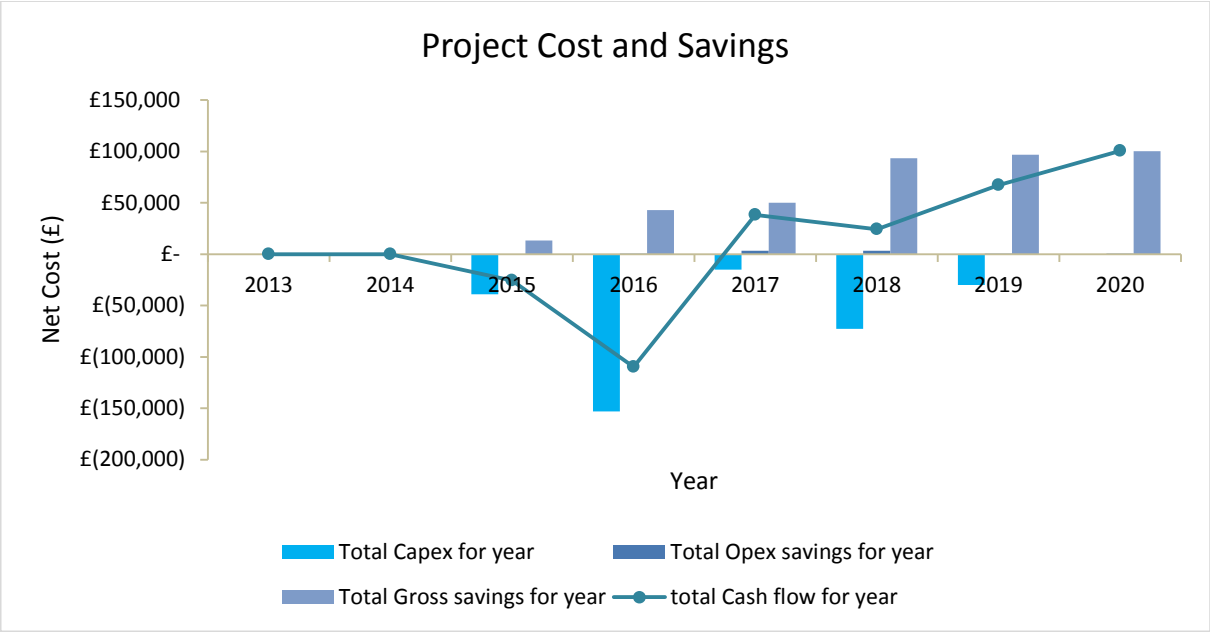
Existing Projects include those carbon reduction schemes that the Council has approved for implementation (using internal funds) over the duration of this plan and in certain instances, have already been implemented.

[1] Note, costs shown for each year represent the financial year – for example the costs shown for 2014, represent the financial year 2014/15.

Near Term and Medium to Long Projects scheduled for 2015 – 2020 are still in development and the funding source has not yet been agreed but all relevant options including internal budgets as well as external opportunities such as the Department of Energy and Climate Change (DECC) Electricity Demand Reduction (EDR) Pilot scheme will be investigated.

We believe that our Carbon Management Plan offers a compelling and robust business case for implementation even without taking other benefits such as improved staff comfort, improved visitor experience and further enhanced environmental credibility into account.

Plan costs and savings



If all the projects are implemented as planned it would result in estimated financial savings / cost avoidance of £84,806 per annum. These savings will come from lower energy bills as well as reduced maintenance and replacement cost. The overall payback period of the projects in this plan is approx. 3.6 years. It should be noted that the analysis in the tables included in this section do not account for inflation and all figures are shown at today's prices. If inflation was included, we would expect energy cost savings to be higher (as energy prices are increasing at a rate well above RPI). It should also be noted that costs for certain projects scheduled for later years may also be higher for the same reason but this will not be the case for all projects – certain technologies such as LED lighting are reducing in cost all the time.

8. Embedding Carbon Management across Charnwood

Beyond the set of initiatives identified above, it is important that organisational changes are put in place to maintain a focus on carbon management over time. This section describes the main activities and changes that will help us achieve this.

Corporate Strategy & Policy Alignment

To ensure that carbon management is established and maintained as an organisational priority, it should be considered as part of all decision making processes. We recognise that in order to achieve our carbon reduction target, we need to change a number of current practices / procedures and embed a philosophy of considering carbon emissions in business as usual activities. This includes:

Change Action	Completion Date
Re-alignment of the Council Environmental Policy to include the Carbon Management Plan	October 2015
Consider including spend to save criteria into the next capital plan based on the Corporate Plan.	November 2015
Consider inclusion of Carbon Management Plan in the next Corporate Plan 2017-2021	March 2016
Include the carbon plan as a mitigating action on our Strategic Risk Register	March 2016
Include achievements around carbon reduction in our Annual Report and consider the introduction of our carbon reduction targets in our next Business Plan (2016/17)	March 2016
Consider introducing a more formal process which prioritises the procurement of environmentally friendly and energy efficient goods and services	March 2016

Responsibility – Being Clear That Saving Carbon is Everyone's Job

Carbon Management is already part of the Sustainability Officer's responsibilities. However, for an organisation the size of Charnwood Borough Council, both departmental and local engagement is required if we are to ensure we meet our 15% reduction target by 2020.

Since our first Carbon Management Plan in 2006, we have rolled out lots of carbon reduction projects at Charnwood Borough Council. To ensure that carbon reduction is not just seen as the responsibility of a few people in the organisation, but is truly embedded and part of our organisational culture we will ensure the following changes are implemented:

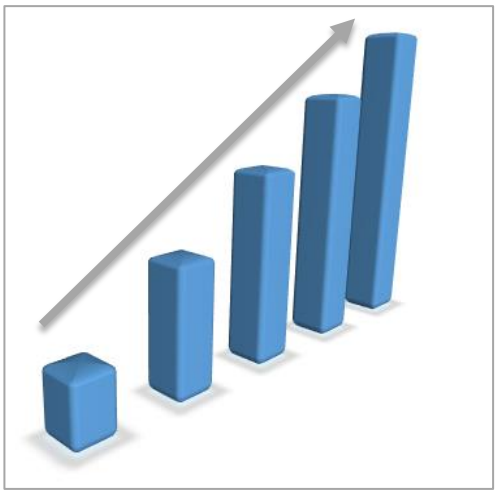
Change Action	Completion Date
Implement a staff green impact programme to promote sustainable ways of working	October 2015
Implement a carbon management promotional campaign	March 2016
Consider a process to review sustainability responses as of decision making process in committee papers	March 2016
Consider implementing a sustainability induction module as part of the staff induction process through e-learning	March 2016

9. Monitoring and Reporting

This section describes actions we will take to improve the quality of carbon emissions data and the data gathering process, and how will we report on our progress. Robust data will provide us with the basis to monitor and report on the results of our actions and it will help to drive behaviour change.

Progress Reporting

The progress of the Carbon Management Plan will be discussed and reviewed every quarter at the Council's Carbon Management Project Board. Progress will be monitored against the targets set within this plan and the KPI's set out below.



- Gas, electrical and water consumption per month
- Carbon emissions by year
- % increase/decrease carbon emissions by year
- Achievement against projected carbon savings
- Number of projects completed
- Number of projects submitted for approval and progressing towards completion.

For each meeting of the Project Board, the progress of the carbon management plan as a whole, as well as individual projects will be discussed against these KPIs. It is important that we adopt a way of flagging the projects that are perhaps stalling or not progressing as expected. We will do this by using the Red, Amber & Green (RAG) risk register.

An annual report of progress towards our carbon management target will be produced and presented to the Board. This report will provide an update on progress against the KPI's above and embedding actions included in this plan. The report will be prepared by the Project Lead and signed off by the Project Sponsor. This report will also be circulated to the wider organisation and uploaded on the Council intranet.

Change Action	Completion Date
Produce a report on annual progress to report back to the Carbon Management Plan Project Board	Annual
Produce a report on annual progress to the Performance Scrutiny Board	Annual
Produce a quarterly update report for each of the four annual sessions of the Carbon Management Project Board	Ongoing
Produce a quarterly update report for the senior management team	Ongoing
Produce a quarterly update report for the corporate management team	Ongoing

Stakeholder Engagement & Communication

To keep carbon management a priority in people's minds and behaviours we need to regularly communicate with stakeholders at various levels. Effective and timely communications with our staff is an important aspect to delivering our target. We will do this by rolling out the following change actions.

Change Action	Completion Date
Develop a communications plan	July 2015
Publication of the Carbon Management Plan on the Council intranet and internet	October 2015
Communication & engagement on the carbon management plan to Council stakeholders	March 2016
Produce a Progress Report on an annual basis for the Project Board / wider organisation.	Annual
Use social media to increase awareness on environmental projects & benefits with internal & external stakeholders	Ongoing
Regular column in internal newsletter	Ongoing

Data Management

Effective data management has been a critical element of developing this plan. It underpins our strategy and target and it will continue to be a critical element as we monitor implementation progress. Having confidence in our figures, assumptions and data sources helps ensure that:

- **High priority areas are targeted:** a good understand of where are emissions are coming from will allow us to identify high emitters and prioritise projects that tackle these.
- **Suitable carbon reduction targets are set:** targets should be challenging but achievable to ensure maximum impact.
- **Carbon reduction projects are accurately quantified:** this will allow us to predict the impact a project will have on carbon emissions and how effective our portfolio of projects will be at achieving our target.
- **Business / investment cases are credible and accurate:** accurate estimations of costs and savings ensures that funds are used in the most cost effective way.
- **The effectiveness of carbon reduction projects can be measured and demonstrated:** this allows progress against target to be tracked and strengthens the business case for future investment.
- **Continuity and succession planning is not problematic (data sources / referencing):** all activities should be well documented and referenced to ensure smooth hand over of responsibility.

Control of Risks and Issues

Any member of the Project Board or Project Team may raise an Issue or Risk with the Project Manager. They should be communicated verbally and confirmed in writing within 24hrs. The Project Manager will then record the

Issue/Risk on the appropriate log and allocate a reference number. The Logs will be maintained with each Issue or Risk being allocated a status of either "Acknowledged", "In Progress" or "Resolved". All risks are monitored and updated in a detailed Risk Register maintained by the Project Manager and this is saved on the carbon management shared drive at http://info.charnwood.local/sites/CM.

Some of the key risks associated with the plan are set out below:

- Resources unavailable to achieve actions identified
- Reputational risk to authority for not pursuing or meeting carbon reduction targets
- Carbon management not seen as a strategic priority by the Council
- Lack of buy-in by staff reduces participation in relevant carbon reduction projects
- Potential for an increase in energy demand due to the 'Our Space' projects DWP & Limehurst relocation threatening the ability to meet the carbon reduction target.

10. Conclusion

Climate change is said to be the defining challenge of our age and Charnwood Borough Council is committed to maintaining a leading role in local efforts to tackle this problem. This plan sets out a target of reducing carbon emissions from our activities by 15% by 2020 compared to 2012/13 levels. This amounts to a decrease in emissions of 1,753 tCO2 and a cumulative financial saving in energy costs of £698,018 over this time period compared to business as usual.

Savings will be achieved through a variety of different projects, including upgrading lighting across the estate to LEDs, investing in electric vehicles to replace high emitting vehicles in the Council's fleet and rolling out a Green Impact programme. The cost of implementing the projects in this plan has been estimated at £309,502, with anticipated financial savings of £84,806 per annum.

Progress will be reviewed quarterly by the project team and an annual report of progress towards our carbon management target will be produced and presented to the Board as well as circulated to the wider organisation. This report will provide an update on progress against the KPI's above and embedding actions included in this plan.

Tackling carbon emissions within our own estate is the first step in understanding and identifying the emissions released by Charnwood as a whole. This provides a platform from which we can extend our focus and catalyse action on carbon management across the Borough.

11. Appendix 1 – Project Lists

11.1 Existing Projects

This section includes projects that are already underway or have been completed since the baseline year.

ID	Project	Lead	Cost		Annual Savings (yr 1)		Pay back (yrs)	% of Target	Start Year
			Capital	Revenue[2]	Financial (Gross)	tCO_2			
6	Beehive Lane - LED	Street Management	£2,402	£100	£698	3	3.01	0.8%	2015
17	Sheltered Accommodation - LED (Yr. 1)	Landlord Services	£15,000	£150	£4,977	21	2.93	6.5%	2016
18	Sheltered Accommodation - LED (Yr. 2)	Landlord Services	£15,000	£150	£4,977	21	2.93	6.5%	2017
19	Sheltered Accommodation - LED (Yr. 3)	Landlord Services	£15,000	£150	£4,977	21	2.93	6.5%	2018
20	Sheltered Accommodation - LED (Yr. 4)	Landlord Services	£15,000	£150	£4,977	21	2.93	6.5%	2019
21	Sheltered Accommodation - LED (Yr. 5)	Landlord Services	£15,000	£150	£4,977	21	2.93	6.5%	2020
22	Fleet Transport EV	Fleet Management	£-	-£754	£1,411	1	0.00	0.4%	2015
23	Fleet Transport - low emission diesel	Fleet Management	£-	£2,456	£68	0	0.00	0.0%	2015
24	Business Travel	Sustainability	£-	£-	£5,223	3	0.00	1.0%	2015

[2] Where revenue expenditure costs are listed with a negative (-), this indicates a non-energy cost saving benefit. In the instance above, this represents maintenance savings from LED lighting projects.

25	Green Impact Programme	Sustainability	£-	-£3,400	£16,455	72	0.00	22.5%	2015
14	Woodgate Chambers - Boiler	Property	£25,000	£-	£3,363	16	7.43	5.1%	2015
15	Woodgate Chambers - Heating Controls	Property	£4,000	£-	£1,211	6	3.30	1.8%	2015
		Totals	**£106,402**	**-£848**	**£53,314**	**206**	**4.3**	**64.1%**	**-**

In addition to the above, we also plan to replace the existing lighting in our social housing blocks with energy efficient alternatives such as LEDs when they fail until a planned replacement programme is agreed and initiated.

11.2 Near Term Projects

This section lists those projects that are anticipated could be put forward for implementation during the early years of the plan.

ID	Project	Lead	Cost		Annual Savings (yr 1)		Pay back (yrs)	% of Target	Start Year
			Capital	Revenue	Financial (Gross)	tCO_2			
1	Town Hall - LED	Town Hall Staff	£30,000	£400	£3,595	15	7.51	4.7%	2016
2	Town Hall - Stage Lighting LED	Town Hall Staff	£15,000	£200	£2,095	9	6.54	2.7%	2016
7	Other Carparks - LED	Street Management	£20,000	£500	£4,699	20	3.85	6.1%	2016
8	Charnwood Museum - LED	Property	£45,000	£-	£3,699	15	12.17	4.8%	2016
11	Southfield Road ICS - LED	Property	£7,500	£33	£1,046	4	6.95	1.4%	2015
12	Southfield Road ICS - Server Room Layout	ICS / Property	£20,000	£-	£6,975	29	2.87	9.1%	2016
16	Oak Business Centre - LED	Property	£4,000	£100	£639	3	5.41	0.8%	2016
		Totals	**£141,500**	**£1,233**	**£22,748**	**95**	**6.17**	**29.6%**	**-**

We also plan to introduce the following changes to working practices:

- **Document Management** - This project should result in paper waste reduction across the Council administrative property and will result in carbon reduction. There would also be carbon benefits associated with purchasing less paper but this element of scope 3 emissions has not be included in the CBC baseline at the moment.
- **Flexible Working** - The project will review current ways of working such as home and flexible working where feasible. Allied to this would be new standardised work stations in order that the space can be used as efficiently as possible with the possibility of staff being located in team areas rather than at individually allocated desks. This project will also consider mobile working and hot-desking, including requirement for different IT equipment and new HR policies to ensure that co-locations work more effectively. These changes may reduce the building energy usage.

Once further details are available, the above carbon reduction projects can be quantified and included within this plan.

11.3 Medium – Long Term Projects

This section lists those projects that are anticipated could be put forward for implementation during the later years of the plan.

ID	Project	Lead	Cost		Annual Savings (yr 1)		Pay back (yrs)	% of Target	Start Year
			Capital	Operating cost savings	Financial (Gross)	tCO_2			
3	Town Hall - Heating System	Property	£30,000	£-	£4,117	20	7.29	4.8%	2018
4	Town Hall - Pipe Insulation	Property	£5,000	£-	£1,120	5	4.47	3.0%	2018
5	Town Hall - VSDs on heating pumps	Property	£4,500	£-	£719	3	6.26	0.4%	2018
9	Charnwood Museum - Heating System	Property	£17,000	£-	£1,960	9	8.67	1.4%	2018
10	Charnwood Museum - Pipe Insulation	Property	£1,100	£-	£245	1	4.49	2.4%	2018
13	Woodgate Chambers - LED	Property	£4,000	£100	£581	2	5.87	0.8%	2016
		Totals	**£61,600**	**£100**	**£8742**	**40**	**5.6**	**12.8%**	**-**

Project Table Key	**Description**
ID	Corresponding reference in the Project Register Tool
Project	Project name / description
Lead	Lead department for project
Cost - capital	Up front one off capital expenditure
Cost - Revenue	Operating / maintenance expenditure/savings for running a project i.e. non energy related costs and savings where applicable (negative cost indicates a saving)
Annual Savings (yr 1) Financial gross	Cumulative annual savings
Annual Savings yr 1 – tCO^2	Tonnes of Carbon Dioxide savings
Payback years	Measures how long a project takes to "pay for itself
% of Target	Percentage reduction towards meeting overall carbon target
Start year	Estimated implementation date of projects