

Leicester City Council's

Carbon reduction road map

January 2014



Introduction

Leicester City Council has set itself a challenging target, to reduce the carbon emissions from its own operations by 50% by 2025. The council has measured its carbon footprint¹ since 2008/09 and the 50% reduction target is based on performance

against this figure. In 2008/09 the council's carbon footprint was 61,310 tonnes CO₂e. This carbon reduction road map was first developed in September 2010 as a way of illustrating how the council would meet this target.

Managing performance

The carbon reduction road map is managed by the Environment Team at Leicester City Council who are required to report annually to the Carbon Board on its progress. Each year a summary report of the council's carbon footprint is published on

the council's website and submitted to DECC². The report is based on Defra's Greenhouse Gas Reporting Protocols³. The actions within this road map are also included within the council's EMAS⁴ programme.

Recent performance

In 2012/13 the council reduced its carbon footprint by 2.9% from the baseline year, although this was a year on year increase of 5.9%. Most of the increases were from energy used to heat and light council buildings, including schools.

A large challenge for the council in reducing carbon emissions is the context of increasing service provision, for example community buildings opening for longer hours and the number of places required for school children increasing.

Contact

Environment Team, Leicester City Council, 0116 454 2285 environment@leicester.gov.uk

¹ A carbon footprint is a measurement of the total set of greenhouse gas (GHG) emissions caused by an organisation, product or person.
² The Department for Energy and Climate Change <http://www.decc.gov.uk/>
³ The Department for Environment https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69282/pb13309-ghg-guidance-0909011.pdf
⁴ For more information on EMAS see <http://www.leicester.gov.uk/your-council-services/ep/the-environment/environmental-policies-action/>

Reducing Leicester City Council's carbon footprint

The following case studies are examples of ways in which the council have recently or are currently working to reduce its carbon footprint.

Energy efficient street lighting

Since the council has been measuring its carbon footprint, emissions from Street Lighting have fallen every year and are now 10% lower than they were in 2008/09. The council have undertaken a project to replace old style street lamps with new LED technology which will eventually when complete reduce the carbon emissions from

street lighting to less than 50% of the baseline year. There are also plans to develop a central management system for street lighting operations which will allow street lights to be controlled in a more sophisticated manner, which will reduce the energy used.



Improvements to leisure centres

Making changes to improve the energy efficiency of the council's leisure centres was identified as a project that could deliver significant carbon and cost savings. Work on Leisure Centres commenced in December 2009 and, to date, measures have been installed that have reduced emissions by

10% on the baseline year. These measures include variable speed drives on pool circulation and air handling, pool covers, plant room insulation and heating controls. Additional measures like voltage optimisation equipment will contribute to an anticipated 25% saving on the baseline year.

Upgrading ICT

Leicester City Council is working to update their ICT equipment across a number of areas to reduce carbon emissions. Projects this year have included the roll out of 900 replacement computers which use less energy than normal computers and updates to the council's servers. The council has also updated its phone system in anticipation of

the vacation of New Walk Centre, allowing staff more flexibility to schedule virtual meetings. Future areas of work that will deliver carbon savings are the development of a flexible working strategy and more upgrades to the council's data centre equipment.

Carbon 60 schools

As part of the Building Schools for the Future project, two schools, Crown Hills Community College and City of Leicester Schools have become 'Carbon 60' schools which mean that their predicted carbon emissions are 60% less than 2002 building regulations (the most up to date regulations at the time of the funding). Sustainability has been considered within the design of both schools from the outset which included appraising the site and considering initial design concepts. This includes looking at building orientation, lighting, heating,

cooling, building fabric, small power requirements (e.g. ICT) and energy supply. Both schools are being fuelled by bio-CHP units using low carbon fuels to generate both heat and electricity onsite. The building fabric is designed to high standards that are substantially better than building regulations. The classroom windows are designed to maximize quantities of natural light, ventilation and views to ground and an intelligent lighting design utilizes the benefits of daylight through smart controls.

SCoRE project

Carbon dioxide emissions from schools currently represent 38% of the council's carbon footprint. A recent trial in 4 primary schools of a more comprehensive, better co-ordinated approach to supporting day-to-day energy management "the

SCoRE pilot" produced a saving of 68 tonnes CO₂e. Roll out of the project to all 73 primary schools is predicted to save another 1240 tonnes of CO₂e.



Staff travel

Emissions from staff business travel in their own vehicles have been steadily falling over the last 5 years to the current level which is 21% lower than baseline year emissions. Over the last year there have been a number of projects undertaken to address emissions from this area. Human Resources have initiated a review of the essential user status of city council drivers which is expected

to make modest carbon savings. Additional projects have been put in place to incentivise the use of public transport and alternative modes of transport, through the bus salary sacrifice scheme and the increased mileage rate for bicycle users. The introduction of the new phone system has also opened up opportunities for virtual meetings, to avoid unnecessary staff travel.

Greener driver training

The greener and safer driving course is designed for all drivers who drive for Leicester City Council. The aim of the programme is to teach techniques to drivers to enable them to drive in a style that is more fuel efficient, therefore also reducing the CO2 output of the vehicle they are driving. The roll out of the scheme to all existing employees

who drive on council business is now complete and the training course is now being targeted to new employees at the council. In total 1980 employees have so far been through the course, and it has been so successful that it is now being delivered for external partners

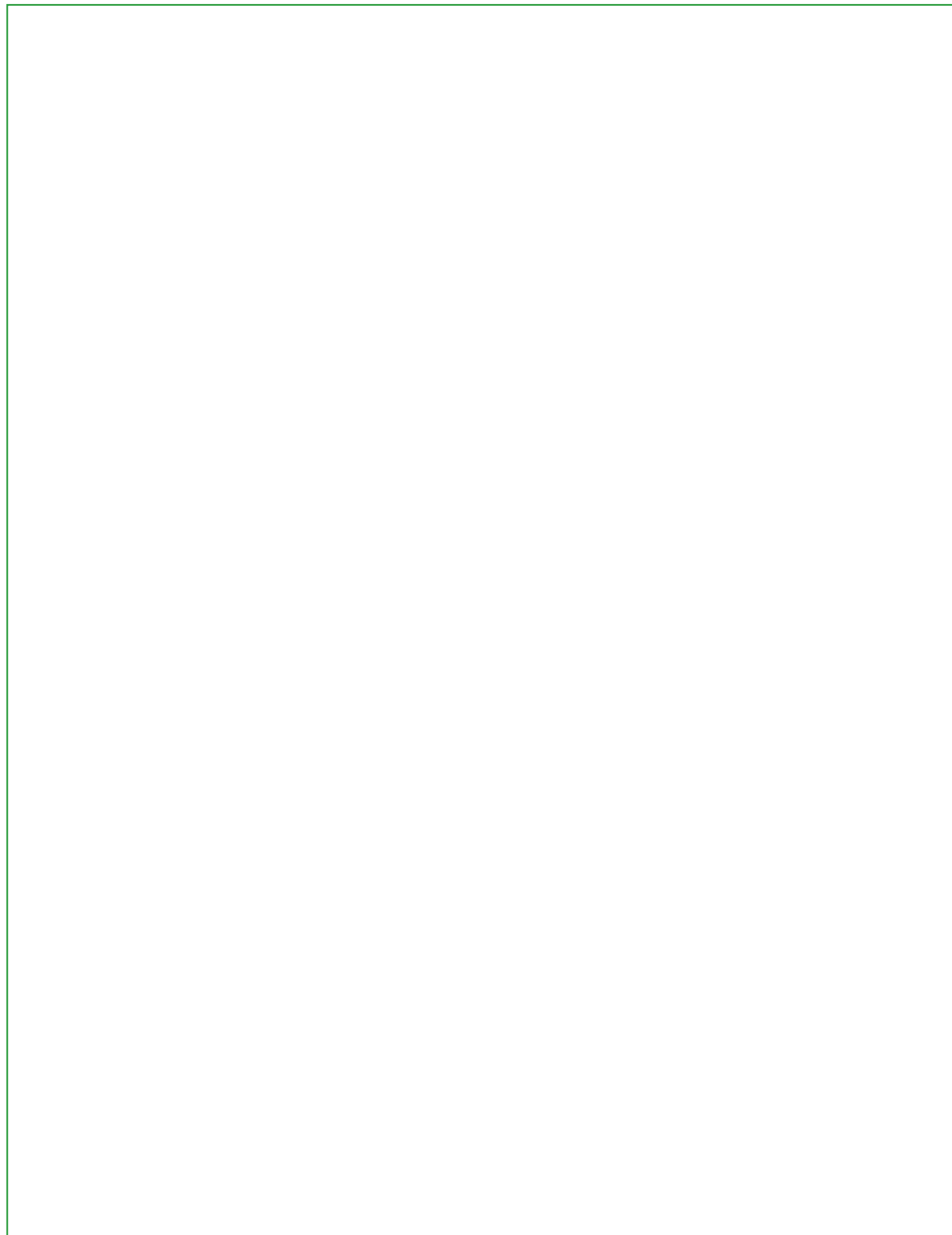


Action plan theme	Project	Lead service area	Project description	Estimated CO2e savings by 2025 (tonnes)	Date of expected completion	Status
Public lighting	Traffic signal maintenance	Planning, Transportation & Economic Development	Contractors carry out day to day maintenance on all traffic signals and bollards. Replacements of newer standard LEDs and LEVs will deliver carbon savings.	371	2025	
Public lighting	Street Lighting Renewal Programme and Central Management System for Streetlighting	Planning, Transportation & Economic Development	The renewal programme focusses on replacing old styles street lamps with newer technology which uses less energy. Additional savings are planned from the installation of a Central Management System (CMS) that would bring greater control to street lighting around the city.	6340	2025	
Travel	Greener safer driving programme	Planning, Transportation & Economic Development	The council requires all employees who drive on council business to undertake training on greener and safer driving. The aim of the programme is to teach techniques to drivers to enable them to drive in a style that is more fuel efficient (therefore also reducing the CO2 output of the vehicle they are driving). These techniques go hand in hand with driving in a safer fashion.	175	2012/13	
Travel	Fleet review	Planning, Transportation & Economic Development	A review of the fleet is in progress as part of the council's budget planning process. It is anticipated that the rationalisation of the fleet could produce significant carbon savings.	207	2014/15	
Travel	Essential user status review	Planning, Transportation & Economic Development	The human resources team are conducting a review of the terms of essential car user status. It is hoped this will incentivise more sustainable forms of travel than car use.	37	Completed 2012/13	

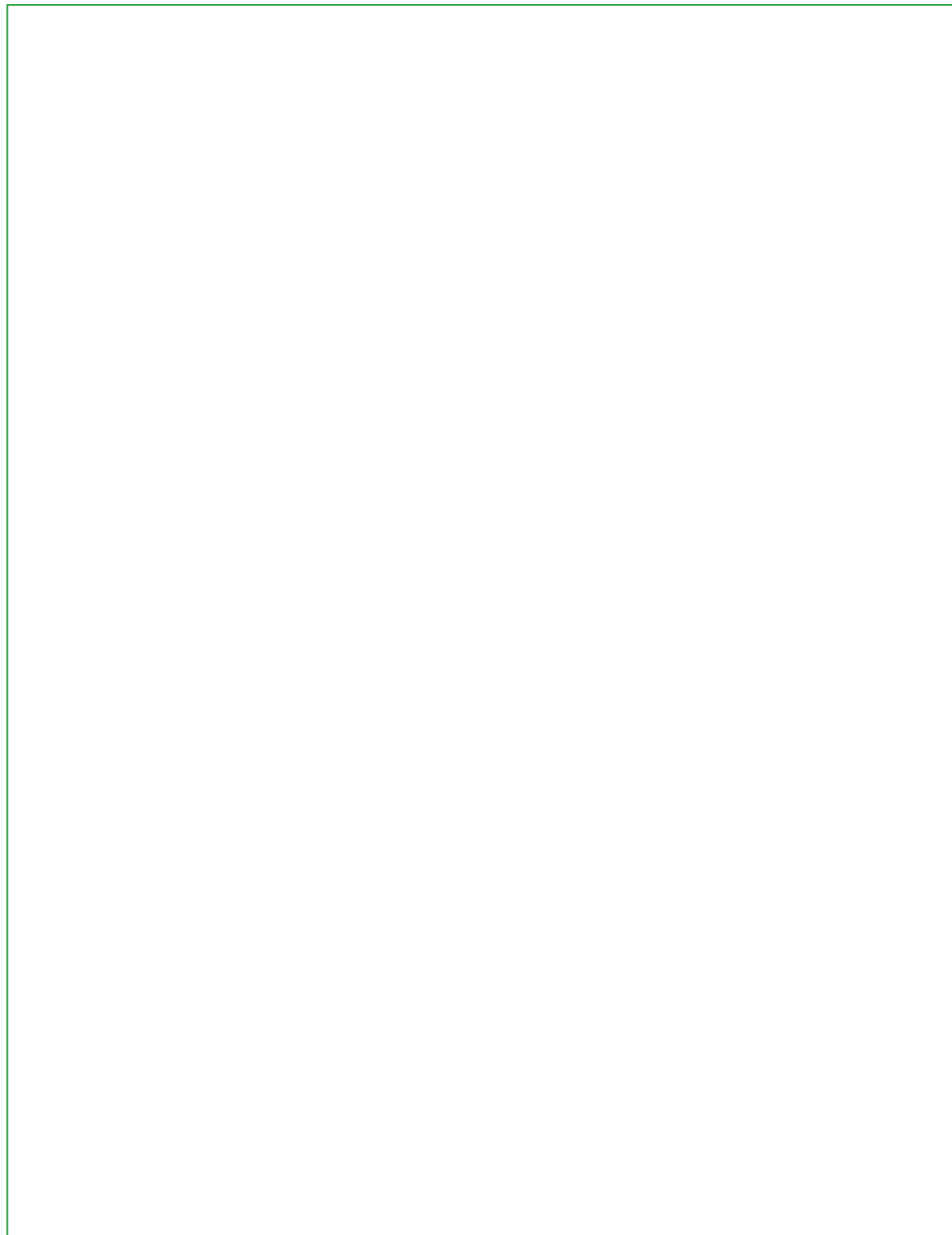
Action plan theme	Project	Lead service area	Project description	Estimated CO2e savings by 2025 (tonnes)	Date of expected completion	Status
Travel	Electric vehicle trial	Planning, Transportation & Economic Development	Two electric vehicles are currently being trialled as part of the council's fleet of vehicles in its parks department.	28	Ongoing trial	
Buildings	Leisure centre improvements	Property	Various energy saving projects have been implemented at leisure centres across the city including installing pool covers and variable speed drives to pumps.	1107	The project was completed in 2012 but the savings are ongoing.	
Buildings	Building survey & investment programme	Property	A large proportion of the council's buildings have been surveyed to build a picture of which energy efficiency technologies could be installed to each building. These proposals now need to be processed and actioned. This project has faced delays due to uncertainty around the relocation of a large number of council staff into alternative accommodation.	2400	Ongoing	
Buildings	Carbon action planning & behaviour change	Property	A programme of internal communications and divisional carbon action planning has been in place at the council for a number of years and is expected to achieve carbon savings in the long term.	3045	Ongoing	
Buildings	City centre buildings accommodation strategy	Property	Alternative accommodation is being sought to house those staff currently in New Walk Centre and other city centre buildings. The new options for staff are planned to be much more energy efficient.	2345	2013/14	
Buildings	Gilroes cemetery improvements	Environmental Services	Improvements to the equipment used at Gilroes cemetery will mean the site operates much more energy efficiently.	163	Completed in 2012/13 savings are ongoing.	

Action plan theme	Project	Lead service area	Project description	Estimated CO2e savings by 2025 (tonnes)	Date of expected completion	Status
ICT	Green ICT strategy	Information & Customer Access	The ICT team have put together a suite of energy saving activities that make up the green ICT strategy, these include switching to more energy efficient equipment whenever possible and rationalising data storage.	1475	2020	
Schools	Building Schools for the Future Programme	Property	The BSF programme has suffered from significant funding cuts, meaning carbon savings have had to be scaled down, however improvements to school buildings through rebuilding and refurbishing are expected to deliver vital carbon savings.	1442	2025	
Schools	Score project pilot	Property	This pilot project delivered a programme of support and guidance to 5 schools to help them maximise carbon reduction from the operations of their buildings and the activities of staff and pupils.	68	2012/13	
Schools	Score project roll out	Property	The score pilot project could be scaled up to deliver approximately 15-20% savings from the energy bills of all schools.	1250	2014/15	

Notes



Notes



Further Information

For more information on the council's plans to mitigate the effects of climate change, please contact:

Environment Team
Leicester City Council
environment@leicester.gov.uk

