

# Climate Change Strategy Progress update and next steps (July 2014)



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# 1. Background

In June 2010 the Council adopted its first Climate Change Strategy. The Strategy sets out the positive vision for reducing the Council's, and the Central Bedfordshire area's, carbon footprint, as well as preparing for the impacts, challenges and opportunities of the changing climate, both now and in the future.

The Strategy has three key aims:

- Cutting the Council's own carbon footprint Aim for a 35% reduction by 2015 and work towards an overall 60% reduction by 2020 (from the 2008/09 baseline).
- Cutting Central Bedfordshire's Area emissions continue to work towards the last Local Area Agreement area emissions target of a 10.7% by 2011 and future targets.
- Preparing for the impacts of climate change Working towards achieving level 4 (top level) of National Indicator (NI)188 which required preparation for the impacts of a changing climate by 2012/13.

Although only three years have passed much has changed in terms of the national policy context for action and the impact this has on how the Council implements the strategy. In spite of this good progress has been made to tackling these challenges.

This document provides an update and review of the:

- Changes to the drivers for action.
- The progress made to date in relation to each of the three areas detailed above.
- Current projects that are, and will in the future, contribute to the delivery of the Council's Climate Change Strategy objectives.
- Details of next steps to be taken to continue with the good progress made to date.

The Council's Climate Change Strategy itself will be fully reviewed and refreshed in 2015/16.

# 2. What has changed?

The Councils Climate Change Strategy detailed a number of drivers for action, many of which were linked to national policy.

Abolition of the National Performance Framework (NPF) and the Local Area Agreements (LAAs): The NPF and LAAs were introduced in 2004, allowing Councils and their local partners to define their own priorities through the selection of 35 of the most appropriate targets from a set of 198 different performance indicators. The Bedfordshire LAA included a target for carbon reduction (NI186). Outside of the LAA the Council had to report on the other indicators included in the NPF, this included those relating to its own greenhouse gas (GHG) emissions (NI185) and climate change adaption (NI188). One of the first acts of the Coalition Government was to abolish the NPF and LAAs in 2010.

What this meant for the Council? Data for NI186, which covered the local authority areas emissions that the LA has scope to influence, is still collected and reported by DECC (see page 18). The Council still also has to report annually on the GHG emissions from its buildings, services and schools, although this is now based DEFRA/DECC's standard green house gas (GHG) reporting methodology (see page 7). There is no reporting requirement relating to climate change adaptation.

**Simplification of the Carbon Reduction Commitment Energy Efficiency Scheme** (CRC): The CRC is a mandatory scheme aimed at improving energy efficiency and cutting emissions in large public and private sector organisations. CRC is extremely complex and burdensome in terms of what is required in order to comply. KPMG estimated the average cost of participation at £50K for the first year and then £35K for each following year.

In the 2012 Budget, the Chancellor, George Osborne, indicated the CRC may be scrapped stating that while the government was working to simplify what he described as a "cumbersome, bureaucratic" scheme, if administration costs could not be significantly reduced, he would replace it with another environmental tax. This was followed by a period of consultation on 'simplification' of the CRC scheme. As a result of 'simplification' the most substantial change to CRC for phase 2 of the scheme (from 2013/14 onwards) was that Schools have been removed completely from the scope.

What this means for the Council? Schools in Central Bedfordshire no longer face the combined financial burden of £216K per year. Without School's included within the scope of the Councils emissions, the half hourly metered (HHM) energy use in the qualification year (2012/13), that is used to determine whether the Council qualifies for phase 2 of CRC, is now at a level well below the threshold for participation.

As a result the Council does not qualify for participation in CRC and is therefore no longer liable for the annual 'carbon tax' of approximately £144K. Of this, £74K would have related to the Council's corporate estate, and £70K in for street lighting. In addition the Council does not have to cover the other associated costs needed for participation, such as registration and technical resource.

**Overhaul of national planning policy:** 2010 saw an overhaul of the planning system, aimed at promoting local decision-making and reducing planning "red-tape". This resulted in the production of a new National Planning Policy Framework (NPPF) replacing over 1000 pages of previous national planning policy with a streamlined document of 80 pages, (alongside supporting guidance). The NPPF recognises that 'Planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure'.

What this means for the Council? Central Bedfordshire will see considerable growth over the coming decades and will manage this through the emerging Development Strategy. This has to comply with the NPPF and will ensure that housing and business growth is sustainable and opportunities for low carbon development are maximised. This will also help ensure that development is focused in the most sustainable locations. More details can be found on page 26.

**The end of Warm Front, CERT and CESP:** The Warm Front scheme, which closed in January 2013, offered households receiving certain income related benefits a package of heating and insulation measures to the value of up to £3,500.

The Carbon Emissions Reduction Target (CERT) ran until the end of 2012 and required the large energy suppliers to achieve targets for reducing carbon emissions within domestic properties. This was mainly done through grant funding or heavily subsidised energy efficiency measures, including cavity wall and loft insulation.

During the period 2009 to 2012 the Council facilitated £2.4million of energy efficiency works for residents in Central Bedfordshire through these schemes.

The Community Energy Saving Programme (CESP) ran until the end of 2012, targeting areas identified on the Indices of Multiple Deprivation (IMD) in England, Scotland and Wales.

What this means for the Council? Warm Front and CERT in particular provided significant grant income to help residents in Central Bedfordshire improve the energy efficiency of their homes, particularly those in fuel poverty. Without this funding the Council has had to engage with energy suppliers to put in place schemes that qualify for funding under ECO (see below).

**Introduction of the Green Deal and Energy Companies Obligation (ECO):** Warm Front, CERT and CESP were replaced by the Green Deal and the Energy Companies Obligation (ECO). The Green Deal provides a framework that gives householders and businesses the upfront capital, via a low interest loan, to carry out energy efficiency improvements to their properties. The loan repayments are then repaid through their energy bill, with each repayment amount equivalent to less than the expected savings from the energy efficiency measures. The Green Deal loan is attached to the electricity meter at the property concerned. This means that if the property is sold the new occupier will take on responsibility for the loan repayments.

**ECO:** This provides additional funding to subsidise measures that either fall outside of the payback rules in the Green Deal, such as solid wall insulation, or that provide additional financial support for households in fuel poverty to implement affordable warmth measures and make the cost of Green Deal loans less prohibitive.

What this means for the Council? The Green Deal is far from perfect and whilst the Council's Private Sector Housing team is proactively working with Green Deal providers on ECO funded schemes, it also maintains a 'watching brief' on the development of the main Green Deal scheme before a decision is made on the role the Council has to play in promoting or supporting the scheme. More details are covered on page 20.

**Incentives for Renewables (FITs and RHI):** Introduced in 2010, the Feed-in-tariff (FITs) provides installers of small-scale low-carbon electricity systems (5 MW or less) a generation tariff for every kW of electricity generated and an export tariff for surplus electricity exported to the grid. Technologies eligible for FITs include solar photovoltaic (PV), wind, hydro, micro-CHP and anaerobic digestion.

The Renewable Heat Incentive (RHI) provides installers of renewable heat technologies, (such as biomass, heat pumps and solar thermal panels) among householders, communities and businesses financial incentive for every kWh equivalent of heat produced.

What this means for the Council? The Council now considers the contribution of FITs and RHI in assessing business case for the measures included in the Carbon Management Programme (see page 9 more details). This has made it viable to install Photo-voltaic panels across some of the Council's corporate estate, including Priory House. This also makes use of renewable heat technologies a more viable option, particularly in areas of Central Bedfordshire that are off the gas grid and rely on oil for heating.

# 3. Progress so far

### **Cutting the Council's carbon footprint**

Steady progress has been made in reducing emissions particularly from the Council's corporate estate. The carbon footprint for 2013/14 has been measured at 26,738 tonnes of  $CO_2$ . This represents a decrease of 17% from 2009/10.



**Figure 1:** Central Bedfordshire Council's carbon footprint for the period 2009/10 to 2013/14.

The Council's target, adopted in the Climate Change Strategy, is for a 35% reduction across the Council's estate and schools by 2015/16, and the aspiration to work towards an overall 60% reduction by 2020 (from the 2009 baseline).

Whilst progress to date has been in the right direction, a 35% reduction by 2015 could be challenging unless work to cut energy use is delivered at a faster pace.

In response to this, and the predicted significant financial threat of increasing energy costs over the next ten years, the Council has commissioned detailed Energy Audit's to generate a fully priced programme of energy efficiency measures. The audits will be conducted between October 2014 and January 2015 and inform the Carbon Reduction programme for 14/15 onwards. This will also highlight where existing capital and maintenance programmes can be better aligned to support this goal.

There are also a range of other measures that will be fully accounted for in the 2014/15 GHG report. This includes:

i. Measures and impacts of Your Space 2, such as significantly reduced staff commuting between sites and the removal of emissions from Technology House from the scope of the Council's carbon footprint.

- ii. The full impact of measures taken in the 13/14 carbon reduction programme. This includes Solar PV installations at Priory House and other offices, new lighting schemes for many of the Council's libraries and better use of automated meter reading equipment.
- iii. The expected on-going success of the School's engagement programme, with an increased emphasis on the targeting of the worst performing schools and solar PV projects.

It is also important to note that the carbon footprint is also influenced by variations in weather patterns. For example, emission reductions up to and including 2011/12 where on the right trajectory to hit the Council's target, with a 16.5% reduction. However a longer and colder than usual winter in 2012/13 saw an increase in energy use for heating and a 9% increase in emissions in relation to the previous year.

### How different areas of the Council perform

The make-up of the Council's carbon footprint remains similar to in 2009 with schools - which combined are unsurprisingly the largest energy user, representing the largest share of emissions.

Figure 2 shows the breakdown of the Council's carbon footprint based on the most recent data (2013/14).



Figure2: Breakdown of the Council's carbon footprint by area for 2012/13.

All areas other than Leisure and Libraries & community centres have seen reductions in emissions. This is partially due to the Council focusing resource on reducing energy use in the corporate estate, which represents by far the most effective way to reduce emissions. This also links to greater efficiency savings from reducing overall energy use. A proportion of the building related savings have also been delivered through the Council's building rationalisation programme.

Libraries, in particular are the focus of a range of energy efficiency measures in the 2013/14 carbon management programme. It is envisaged that the impact of this work will start to be seen in the 2014/15 carbon footprint (to be competed for submission to DECC by the end of July 2015).

It is also expected that from 2014/15 onwards business mileage will see a marked reduction with a far larger proportion of the Council's staff being located at the Priory House and Watling House offices. This will significantly reduce the need for travel between these buildings and other offices, such as Technology House in Bedford, where 426 staff are no longer be based (from March 2014).

#### Next steps:

- In order to upscale and increase the implementation of energy efficiency measures across the Council's estate a programme of detailed investment-grade energy audits has been commissioned. These will be completed by February 2015 and inform how the Council's carbon reduction budget, alongside capital and maintenance budgets, are better programmed to better deliver energy efficiency projects alongside other works.
- 2) Work will continue to improve energy monitoring through use of Building Management Systems, Automated Meter Reading and proactive facilities management.

### Schools

Currently emissions from schools make up 51% of the Council's carbon footprint. Reducing the  $CO_2$  emissions attributed to schools represents a significant challenge given:

- the number of individual schools to work with (139);
- on-going budget constraints being faced across the whole public sector;
- the challenging nature of the schools estate (e.g. the age and structure of buildings), and the number of stakeholders involved
- the changes to how schools are organised, managed and funded particularly in relation to Academies.

Since 2012 the Council has had a dedicated Schools Energy Officer in post, funded by the Schools Forum. The purpose of this role being to support schools to reduce energy use and operate in a more environmentally sustainable manner.

Whilst reducing  $CO_2$  emissions from schools is a significant challenge, the Schools Energy Officer has supported schools to reduce their combined carbon footprint by 28.22% between 2009/10 and 2013/14, this is equivalent to a reduction of 5,300 tonnes of  $CO_2$  over this period.

The 2013/14 Carbon Footprint from Schools was 13,522 tonnes, a 10.25% reduction against 2012/13

**Figure 3:** Carbon emissions from schools in Central Bedfordshire for the period 2009/10 to 2013/14



### School's Carbon Reduction Action Plan

The Council is approaching the challenge of cutting CO<sub>2</sub> emissions from schools through the School's Carbon Reduction Action Plan (SCRAP). SCRAP is being delivered through a number of tools and mechanisms, which are detailed below. So far feedback from schools has been very positive.

- SCRAP Phase 2
- Invest to Save
- Smart Metering
- School's Energy Event
- Site Agents working Group
- Behaviour Change and the BluEffect

### SCRAP Phase 2

Phase 2 of the SCRAP programme was launched in May 2013 and saw the introduction of a more formalised engagement structure with schools.

Participating schools now have a site visit with the Schools Energy Officer that incorporates an energy audit and on-going one to one support specific to that school. The Schools Energy Officer then works with the school to draw up an action plan with achievable goals for reducing energy use. Since the April 2013, 41 schools (out of 136) have participated in the energy audit/action plan process

This places an emphasis on the school taking ownership of the action plan with responsibility for completing the actions resting primarily with the school. All action plans are proactively followed-up. This ensures actions are reviewed, next steps identified and a better understanding is gained of any barriers that are stalling progress. The site visit is also used as the primary way of engaging schools in the other support offered by the Council, such as the Invest-to-Save scheme and Automated Meter Reading equipment (AMR) see below.

Schools have also started to take advantage of wider range of complimentary services provided by the Schools Energy Officer. These include student workshops and eco school accreditation, both of which support the work being tackled through the action plan.

In order to attract schools to the programme that have not been involved before presentations have been given to detail what services are offered at a range of head teacher meetings, governor events and school forums. This has proved to be a successful approach, with many new schools signing up to benefit from the support provided by the Council.

### Schools Invest-to-Save scheme

The Invest-to-Save scheme is currently in its fourth year and works by the Council providing up-front finance to schools for energy efficiency measures. Schools then pay back into the fund over an agreed timescale from the savings on their energy bills.

Funding is always challenging for schools, so the Invest to Save scheme is intended to help alleviate this uncertainty by supporting schools to invest in energy efficiency and renewable/low carbon generation technologies. Once installed the technology reduces energy bills, and in the case of Solar Photovoltaic (PV) panels generate income for the school, which in turn allows schools to spend more of their budget on the students and teaching resources.

Many schools have already taken advantage of the scheme and having listened to feedback from the schools the scheme has now been redesigned to include Solar PV installations. The first of these schemes was completed at Leedon Lower school in March 2014 (see case study below).

The Council is in the process of setting up a robust procurement framework for delivering further Solar PV projects through the Invest to Save scheme and other financing options. The framework has proved very popular with 28 submissions being received through the PQQ process. A procurement framework has been welcomed by schools keen to take advantage of the Feed in Tariff and energy reduction available through Solar PV

### Case Study – Leedon Lower School

In March 2014 Leedon Lower School completed a project to install a 50kW peak solar PV system onto their flat roofs as part of the Invest to Save scheme. This will provide the school with up to 50% of their electricity requirement resulting in a dramatic reduction in utility bills.

The School is now producing its own clean green energy, benefiting from income through the Feed in Tariff (FITs) and through selling unused power back to the national grid. The children are learning about energy issues and can see how the system is performing through the solar panel information display installed in the school foyer.

Leedon Lower were chosen for the first solar PV 'Invest to Save' project as they have shown great interest and enthusiasm for the scheme and have the full backing of the Governors and Leadership team.

Furthermore, the school is not connected to the gas grid and so uses a lot of electric heating, meaning that the school currently has a high electricity bill that the Council would like to help the school reduce.

The layout of the school's flat roofs allowed for an easy installation completed within five days during the Easter half term. The project was completed on time and to budget.

To view a video of the Leedon Lower Solar PV story please follow the below link to the Council's website;

https://www.youtube.com/watch?v=wE8JQWbCNm4&list=UUimNJr877Xr1EC\_7wF8p AfQ



Figure 4: Solar Panels installed at Leedon Lower School

### **Smart Metering**

AMR technology (also known as Smart Metering) is an effective way of managing and reducing energy usage in schools and other public buildings through accurate measuring of consumption patterns.

The half hourly usage data that these systems collect and display in an accessible format, allows for a clear understanding of when building is wasting energy and clearly shows opportunities to use energy more efficiently – many of which can be realised at little or no cost at all to the school.

Phase one of the AMR installation process included 50% of all applicable schools and is now complete. The Council has started delivery of phase 2, through which the remaining qualifying schools will be added to the programme.

This will involve the Council working with the remaining 70 schools in order to encourage take up, manage budget and coordinate the complex web of organisations involved in the delivery of AMR installation (delivery of tests, shut downs and installations).

Caddington Village School (see the case study below) and Parkfields Middle School are two good examples of schools making substantial reductions to their energy use through better analysis of their data, facilitated by the AMR.

To support all schools with AMR to use their data effectively the Energy Officer has set up the AMR Working Hub. The working hub is a collection of schools who already work together in other areas and so have an existing relationship. Activities include specific training for using the data with key members of staff and in some cases pupils. The hub has been encouraged to meet regularly to discuss how they are using the data, to share best practice and overcome hurdles. This has seen success with engaged schools actively

asking for more in depth training to use more features from the AMR software and further drive efficiency.

### Case Study – Caddington Village School

Caddington Village School have made significant savings on both their gas and electricity bills due to a host of complimentary actions. This has created a saving of nearly 8 tonnes of  $CO_2$  over the autumn and winter months 2013-14, which translates as a cost saving of £9,000.

The school has achieved much of this reduction in energy consumption by adjusting opening times and ensuring the heating is on much stricter timing controls through use of their AMR technology. By regularly checking the data and fine tuning procedures as a result, the school has made significant savings.

They have also installed energy efficient T5 and LED lighting to newly refurbished areas as well as installing movement sensors to the lights, thermostatic controls to radiators and making their own "Hippos" to reduce water consumption.

The pupils have got involved as well and the school recently achieved Green Flag status against the national Eco School award scheme.

This is a great example of a school utilising support from the CBC energy team to drive investment, behaviour change and pupil involvement to see a real financial and ecological benefit through energy efficiency.

### **Schools Energy Event**

On 20th May the Council ran a conference on energy efficiency with over 80 delegates and 50 schools represented. The event was a great success and was an opportunity for schools to discuss opportunities with each other and get updates on the next phase of SCRAP.

The event included workshops on how to make immediate steps towards achieving energy efficiency within schools and how to deliver a solar PV project. There were two inspiring case study presentations from Parkfields Middle School and Caddington Village School. Other presentations included those from Bedford College, Stark (providers of the Smart Meter equipment) and the BluEffect, and online behaviour change tool, see below. A range of organisations who provide energy efficiency technology were on hand to lend their expertise.

Feedback from the event was positive with attendees finding the information presented useful and relevant with the majority feeling that they had come away with ideas that were immediately transferable to their school.

### Site Agent Working Group:

The site agent is a key contact to develop at a school when considering energy efficiency and they are often the person who is best placed to use AMR technology effectively. In recognition of the role that site agents play and the value they bring to energy efficiency and carbon reduction a Site Agent working group has been set up to provide a forum for on-going issues and new ideas relating to energy use and efficiency to be shared and highlighted.

The workshop is an opportunity for site agents to get together and discuss prevelant issues to them alongside Council collegues. Attendees have found it a useful opportunity to discuss ideas and pitfalls, strategies for change and as a way to overcome issues.

Increasingly the workshop is moving to involve issues wider than energy and carbon efficiency. The team running the school's buy back program have now become involved and the valuable contribution from attendees is helping to shape the next phase of the buy back program.

### Behaviour Change and The BluEffect

The BluEffect offer an online tool for measuring and encouraging sustainable behaviour change within organisations. The team are working with Central Bedfordshire Council and schools to develop their software for the education sector.

At Central Bedfordshire Council we are in the privileged position to have first access to this new software and it will form a primary part of the strategy towards delivering behaviour change within schools. Focus areas revolve around travel, energy, waste and water. These are all areas that can be affected by everyone at a school site, students, teachers and support staff alike. We are keen to see how this tool will help support schools to make significant improvements in these focus areas.

#### Positive feedback from schools:

The work of the Energy Officer in working with schools under the SCRAP programme to reduce their energy use and carbon footprints has been extremely positively received.

**Campton Lower**: "Our Year 4 class teacher was full of praise for the excellent 'Energy sources' and efficiency' workshop led by Central Bedfordshire's Energy Officer, Pete Hughes on the 4th December 2013. The workshop provided a lively consolidation of previous learning together with inspiration for further research. The session was age appropriate and well- paced, with a variety of activities for the class to undertake in groups.

From the evidence of this session, I would certainly recommend this workshop for other Year 4 classes."

Husborne Crawley lower: "We were impressed with the knowledge and advice given during our audit and the follow up paperwork/information – thank you very much. We are very keen to attend the Reducing your Carbon Footprint seminar now scheduled for May."

> Potton Lower: "Hoping to hear about any savings we could make to our energy bills and how we can improve our consumption - all suggestions given were very helpful. Information regarding Invest-to-Save was especially useful."



Figure 4: Winning designs from the School's Energy Saving Poster Competition

### Next steps – 2014/15 Deliverables

### **Benchmarking and Targeting**

• Analyse energy performance of schools through extensive benchmarking against a range of metrics. Identify the 20 sites with the greatest opportunity for savings.

#### Energy Audit/Engagement program

- Deliver targeted support for 20 sites with greatest opportunity following benchmarking exercise
- Maintain energy audit/action plan/review program with engaged sites.
- Smart Meter installation program to 50% of remaining sites (25% of estate)

### **Invest to Save**

- Increase spend from £70k up to £100k with potential for some additional stretch
- Produce a Solar PV framework to deliver up to 3 Solar PV projects

#### **Energy Performance Contracting**

- Identify financing mechanism for including Schools/Academies
- Support Corporate estate through review of investment grade proposals, data management and analysis, smart meter install

### Procurement

The Council spends approximately £165 million on external goods and services annually. Many of these procurement decisions have the potential to reduce  $CO_2$  emissions and ultimately the Council's carbon footprint.

Procurement processes have been put in place by the Council that will allow us to drive forward environmental improvements and use our buying power to help shape the market.

### Carbon hot spot footprint

In 2010 Sustainability East provided funding for Trucost to carry out a supply chain carbon footprint assessment. This identified the Council's suppliers and areas of spending by carbon intensity. An analysis of the carbon footprint of the 219 largest suppliers to the Council for the year ending March 2010 was carried out. Sector level emissions were analysed before drilling down to individual suppliers within each sector. By focusing on these areas and engaging with the suppliers, the Council is well positioned to influence, manage and reduce the carbon footprint of the supply chain.

To enable comparison, suppliers were ranked according to their carbon intensity. Many of the suppliers represented small expenditures and are individually immaterial to the environmental impact of the supply chain, therefore only those companies that account for 90% of the total expenditure were included.

Carbon emissions increasingly have financial implications for companies. As such carbon is represented through the report in both in absolute quantities and in financial terms. The findings facilitate the Council in focusing on those areas of spend that have the largest impact. This means that through working with just a handful of suppliers that have the largest carbon footprint, in order to cut emissions can make the biggest difference.

This work also highlights those higher risk areas were there is scope to explore higher environmental standards and include carbon reduction targets as part of its contract management.

Finally, the hot spot report identifies those areas where the Council's consumption is to be further explored and limited. For example use of utilities such as energy are focused on through the Council's carbon reduction and energy efficiency programmes (see page 9). Further information on the Sustainability East's and the Council's work with Trucost can be found at:

http://www.sustainabilityeast.org.uk/index.php?option=com\_content&view=article&id=210&I temid=124

#### Next steps:

- 1) New procurement guidance for staff was launched in 2014, this includes comprehensive advice on embedding the principles of sustainable procurement in to how procurement decisions are made.
- 2) The Trucost work will be revisited using data for 13/14. This will track progress from the 09/10 assessment carried out by Trucost and highlight thee key areas to target.
- 3) Sustainability, the environment and carbon reduction will continue to be picked up in any future significant contracts that the Council let.

### Highway's

A good example of how the Council has worked with its suppliers to reduce environmental impact and carbon emissions can be seen in the Highways contract with Amey.

The contract has specific clauses relating to environmental management and key performance indicators relating to energy, carbon emissions, waste and recycling are also in place.

In response to this Amey, have embraced operating in a more environmentally sound and low carbon way. This is in part due to requirements placed on Amey's environmental performance though the contract and its on-going performance management, although Amey have been enthusiastic to explore and instigate measures that go well beyond doing the minimum.

To date key measures Amey have implemented include:

- The on-going replacement of Amey's fleet with the most up to date Euro engines. All 18 of Amey's gritting fleet are running with Euro5 engine technology, and a lot of the others are running with Euro4 engine technology. There are now only few trucks left which are running on the older engine type, with these are being Autumn 2013. There are no vehicles no older than those first registered in 2009 to ensure Euro4 engines are the minimum.
- In addition where possible some vehicles have been replaced with vehicles with automated gear boxes to reduce fuel consumption and therefore also C0<sub>2</sub> emissions.
- Within Amey's new Standard Operating Model (SOM), use of the Three X Masternaut system has allowed Amey to dynamic schedule certain works so that the most efficient and effective route to undertake this is taken. This scheduling has proved effective for pothole repairs, sign scheme work (installation of new posts and signs) and grit bin replenishment.
- When planning larger works Amey have used third party suppliers to import and export
  materials, this dramatically reduces the need for Amey's own vehicles to travelling
  unnecessary distances to and from sites and also reduced the total miles travelled of
  the materials.
- Amey run daily reports on engine idling, which is sent out to each department to brief the operatives and encourage them to reduce idling times to bring fuel usage down. Combined with the introduction of the SOM, vehicle idling has reduced dramatically.
- Amey are also undertaking in situ recycling within Structural Maintenance activities and some larger projects. For example, Poynters Road alone retained 7500 tonnes of material in situ, reducing waste and preventing an estimated 750 vehicle movements.
- The three sites on the Bedfordshire Highways contract have all been set a target to
  reduce their electricity use by 3% over 12 months (May 2013 April 2014), compared to
  what had been used at each site over the same period last year (2012/13). This
  challenge was set up as a competition between the three sites in a bid to increase
  engagement and therefore get better results. Each month the sites are ranked against

each other using the percentage saving made compared to the same month in the previous year. The results are then communicated to all staff.

### **Street lighting**

Over the last 2 years Amey, the Council's contractor for Highways works, have facilitated the reduction of 11.7 tonnes of  $CO_2$  emissions from the Council's carbon footprint through the street light change programme.

Apparent lack of progress has been largely due to how street lighting energy use (and therefore  $CO_2$  emissions) is metered. Currently this is done through a non-dynamic system, where by each lamp is assumed to use a fixed amount of energy. This relates to the age of the street lighting stock, with the vast majority of it being installed before automated metering was viable.

As the street lighting stock is metered in this way it also means that it is excluded from the scope of the Council's carbon emissions used to determine qualification for CRC. If the metering system used was dynamic then it would have been included and it is likely the Council will have qualified for phase 2 of CRC (costing an estimated £360K per year). Now the qualification period for phase 2 has passed, the Council can now explore moving to a dynamic metering system for street lighting, which will better reflect the improvements made.

In addition to this, if the size of the number of streetlights the Council is responsible for had remained static and other issues, such as increases in charge codes where Low Pressure Sodium (SOX) and a number of High Pressure Sodium (SON) lamp types have had their KW hour values increased, had not occurred, the action taken would have resulted in a 226 tonne reduction in the Council's carbon footprint.

Savings have largely been delivered through replacing life-expired assets with more efficient LED (light emitting diode) lamps. LED lamps typically use 68.64 kWh of electricity compared to the old style lamps that use 236.6 kWh over a 12 month period.

The changes to charge codes and the increasing size of the Council's Streetlighting estate make this a challenging area of emissions to tackle as some of the impact of the positive action taken is offset by these.

#### Next steps:

1) Proposal of introducing the new technology of LED lighting is being considered. This will save 80% of the energy consumed by each lantern the Council replaces in future, saving 376 tonnes of  $CO_2$  per year over the next 2 years. The aim is to replace all existing residential SOX lanterns with LEDs.

# Cutting green house gas emissions from the Central Bedfordshire area

Carbon emissions are measured at a local authority level by DECC. This data goes back to 2005 and was originally used to report progress on NI 186: *Per capita*  $CO_2$  *emissions from local authority area.* There is a two year time lag in data being reported, with the most recent data set for Central Bedfordshire being for 2012.



Figure 6: Per capita CO<sub>2</sub> emissions for Central Bedfordshire for the period 2005 to 2012.

The data is measured on a per capita basis as this allows for population growth to be taken in to account. On this basis Central Bedfordshire has actually seen an 16.2% reduction in per capita  $CO_2$  emissions since 2005, from 8 tonnes per person in 2005 to 6.7 tonnes per person in 2012.

The target in the Council's climate change strategy was:

**Cutting Central Bedfordshire's Area emissions** - Continue to work towards the last Local Area Agreement area emissions target of a 10.7% by 2011.

The data above (Figure 6) shows a 16.2% reduction in  $CO_2$  emissions between 2005 and 2012, surpassing the target. The extent to which this is linked to the economic downturn

from 2008 onwards is unclear although there was a downward trend in emissions in the years preceding this.

A new area emissions target will be determined and set as part of the comprehensive refresh of the Climate Change Strategy in 2015/16. At this point it is anticipated that the extent of future housing growth will be determined through an adopted Development Strategy, allowing for any target set to accommodate the impact of future growth.

### Housing

Improving the energy efficiency of existing housing stock in Central Bedfordshire, and therefore facilitating a reduction in the green house gas emissions associated with domestic energy use, is a significant challenge. To date, and in the foreseeable future, one of the main drivers for the Council in this area is supporting those households in fuel poverty to reduce their energy costs – largely by making their homes more thermally sound and energy efficient.

### Targeting home energy use and Fuel Poverty

Central Bedfordshire Council took on the mantle of tackling fuel poverty from the legacy Council's it replaced. This provided a strong platform on which to progress. Since 2009 the Council has facilitated householders and landlords to access the range of grant funding that was available. For the period 2009/10 to 2012/13, when the majority of the major grant schemes ended (see Section 2), the Council's private Sector Housing Team helped 1,320 households access over £2.4 million of grant funding for energy efficiency measures.

	2009/10	2010/11	2011/12	2012/13	Total installations
Loft Insulation	106	67	7	4	184
Draught proofing	64	31	7	0	102
Cavity Wall Insulation	60	36	4	2	102
FIDIHWT*	4	1	1	0	6
Tank Jackets	17	4	2	0	23
Gas Central Heating	22	16	11	2	51
Heating Repairs	2	0	2	8	12
Electric Storage Heating	37	19	5	1	62
Boiler Replacement (Gas)	225	224	65	29	543
Oil Central Heating	0	1	0	1	2
Boiler Replacement LPG	4	6	1	5	16
Boiler Replacement (Oil)	10	8	3	1	22
Boiler Replacement (Warm Air)	7	9	2	3	21
Compact Florescent Bulbs**	299	168	0	0	467
Total measures for year	558	422	110	56	

**Figure 9:** Energy efficiency measures installed across Central Bedfordshire through CERT and Warmfront Schemes for the period 2009/10 to 2012/13.

\* Foam Insulated Dual Immersion Hot Water Tank

\*\*CFL's were no longer provided after March 2011

### Key points:

- 2009/10 was the highest activity/value year and was helped by being heavily promoted during fuel poverty promotional work (tied in with government performance indicator data collection). Central Bedfordshire was tenth highest in the Eastern Region in terms of measures installed.
- 2010/11: The Council was successful in securing nearly £1million of funding for domestic energy efficiency measures. Central Bedfordshire was the fourth highest local authority in the Eastern Region in terms of measures installed. The scheme was heavily promoted during fuel poverty promotional work (tied in with government performance indicator data collection).
- 2011/12: The Council built on its success in 2010/11, Central Bedfordshire being the fifth highest recipient of measures in the Eastern Region.
- 2012/13: The schemes were due to end mid year but this was extended. This made promotion difficult to plan.
- The most frequent measure installed was Gas Boiler replacements, with 543 installed during the four year period. The next highest was loft insulation with 184 installations.

**Making the Council's housing stock more energy efficient:** The Council is working towards improving the energy efficiency of our housing stock. Whilst  $CO_2$  emissions from the Council's housing stock are not included within the scope of the Council's own carbon footprint, more significantly it does help tackle fuel poverty, reduce residents' energy costs and contribute to reducing the Central Bedfordshire area's carbon footprint.

Energy efficiency improvements are carried out as part of on-going planned maintenance programmes currently undertaken by Asset Management.

Approximately £320,000 per year is spent on various measures to improve the efficiency of our housing stock such as:

- Loft and Cavity Wall insulation
- New central heating systems
- Solid wall and Pre Cast Concrete (PRC) insulation

These budgets are both programmed to continue until 2020.

**SAP energy rating:** The SAP (Standard Assessment Procedure) energy cost rating is the government's recommended system for energy rating of dwellings. It is based on energy costs for space and water heating under standard occupancy, heating pattern and location using average fuel prices.

The current SAP scale is rated from 1 to 120 - the higher the number the better the performance.

The current average score for the Council's housing stock is 68.9, and the Council is currently working towards a target SAP rating of 71.

### Next steps:

The Council has set out its priorities for home energy conservation within the *'HECA Further Report 2013'*. This report provides details of planned actions to tackle fuel poverty and improve the energy efficiency of homes in Central Bedfordshire for the years 2013 to 2015. The full HECA report can be found here:

http://www.centralbedfordshire.gov.uk/Images/130328HECAFurtherReport\_tcm6-42186.pdf#False

- 1. There remains significant potential to improve energy efficiency through basic insulation and heating measures; most significantly in the private sector.
- 2. There is scope to integrate improvements in the Council's own stock with the availability of ECO Carbon Saving Community funds in qualifying areas and surrounding neighbourhoods.
- 3. The Council will be looking to the ECO Home Heating Cost Reduction Obligation as a source of funds to reduce heating costs and carbon emissions for residents.
- 4. The Council will continue to improve the efficiency of its own housing stock through the range of measures detailed above.

### Transport

### Local Transport Plan and major schemes

Transport investment contributes significantly to the ambitions of the Climate Change Strategy through providing more sustainable travel alternatives to the car and through the more efficient operation of the network. There are four main areas of funding in transport locally and the role of each of these is set out below:

**Major Scheme funding:** This is awarded to local authorities to deliver schemes with a value of over £5million following a successful bidding process. By their nature they entail high profile, high value interventions that make a tangible difference to the transport network in the local area. One of these schemes, which opened on 24 September 2013, is the Luton to Dunstable Busway.

This £91 million project has seen the provision of an 8.3 mile link between Luton, Dunstable and Houghton Regis, of which 4.6 miles forms guided Busway out of a total segregated link of over 6 miles. Since opening the route has seen journey times between Luton and Dunstable reduce to around 15 minutes from up to an hour in peak times previously, to provide a realistic and attractive alternative to the car for commuters and shoppers alike.

**The Local Transport Plan (LTP):** The LTP forms the framework for investment in local transport schemes in Central Bedfordshire. Funding for the Plan comes from an annual settlement received by the authority from Central Government. In 2011/12 this equated to  $\pm 1.26$  million, a figure which increased to  $\pm 1.34$  million in 2012/13. This has been invested across 11 localities through Local Area Transport Plans (LATPs).

Measures introduced have included small scale walking, cycling, road safety and capacity improvement schemes, whilst others have sought to reduce the impact of commuting and freight movements on local communities. A series of targets and indicators are in place upon which to ascertain the success of the initiatives delivered through the LTP.

These have seen mixed performance since the Plan was adopted in April 2011. The headline figures highlight:

- **Road maintenance:** The condition of the roads in the authority remains of a high standard.
- Accessibility: The ability of local residents to access a hospital, supermarket or town centre by public transport has deteriorated since 2010/11.
- **Freight:** Increase in the perceived ease of movement of goods in the authority by the business community.

Due to the revision of data sets and the establishment of new baselines, it is still too early to report on the progress against a number of the indictors. These include:

• Volume of traffic: New sites at which to monitor traffic flows were identified in 2012 and a baseline established to reflect the better geographical spread of the Annual Average Daily Traffic counts.

• Levels of cycling: New monitoring sites were identified in 2013 and a baseline is being established against which to benchmark performance from 2014 onwards.

### Local Sustainable Transport Fund – Travel Choices

Travel choices is a three year initiative funded (£4.9m) through the Governments Local Sustainable Transport Fund (LSTF) to support the economy of Dunstable, Houghton Regis and Leighton Buzzard by providing residents and businesses with an improved choice for local journeys reducing car use, cutting costs and improving health. The key objectives of the project are:



- Improved access to employment by sustainable modes of transport
- To reduce the impact of commuting trips on local communities
- To maximise opportunities for training and education for those without access to a car

Work will be focussed on Dunstable and Houghton Regis and Leighton Linslade, supporting the authority's growth agenda. Partnership working will be key to successful delivery and Central Bedfordshire will be working closely with a number of partner organisations including Town Councils, NHS Bedfordshire, local businesses, Dunstable College, Jobcentre plus and third sector organisations. Work focuses on the following areas of activity:

- Improvements to walking and cycling routes in Dunstable and Houghton Regis including National Cycle Route 6,
- Improved information for pedestrians, cyclists and public transport users,
- **Promotional events and activities** in town centres, employment areas and local communities,
- A promotional 'hub' in Dunstable town centre which will provide information on travel options and other programmes of activity,
- A Wheels to Work scheme, offering alternative forms of transport (scooters & bicycles) to young people for whom travel remains a barrier to work and training.
- Sustrans 'Bike It' programme in local schools promotes the benefits of cycling.
- A team of **Active Travel advisors** offering personalised travel and transport information to residents and local businesses.

Further information is available on the Central Bedfordshire Council web pages at: <u>www.centralbedfordshire.gov.uk/travelchoices.</u>

**Developer Contributions:** Developer contributions are secured on the back of development proposals which are granted planning permission. They are designed to mitigate the impact of growth on the local area and provide travel choices to local residents.

Plugged in Places: EValu8, the East of England's new 'Plugged in Places' scheme, was approved by Government on 14<sup>th</sup> December 2010 and will oversee the installation of 1,200 charging points across the East of England. The vision of EValu8 is to install an operationally effective electric vehicle (EV) charging network across the East of England, using it as test bed and innovation platform to build upon the region's significant innovation capabilities and help catalyse the new global EV economy.

The total value of the project is £7 million, and will fund 50% of eligible costs for the installation of 600 double headed recharging posts (1,200 recharging points) across the East of England, focused on 8 key cluster areas. Currently, Charging Points have been installed in the Council's main offices – Priory House, Chicksands and Watling House, Dunstable. Charging points have also been installed at the Grove Theatre in Dunstable, West Street multi- storey car park in Leighton Buzzard and Marston Vale Forest Centre.



Chief Executive Richard Carr and Cllr Maurice Jones unveil the EV Charging Point at the Council's Priory House Offices

### **Managing Development**

The Development Strategy will be the main planning document for Central Bedfordshire. It will set out the overarching spatial strategy and development principles for the area together with more detailed policies to help determine planning applications.

A considerable number of new homes will be delivered during the period up until 2031 to meet the housing needs of all our existing and future residents, ensuring efficient use of land to provide safe, sustainable communities and development, promoting sustainable forms of transport and encouraging healthy lifestyles.

The Development Strategy, once adopted, will steer how this growth and other development will be delivered, ensuring this is done in a truly sustainable way. By doing so, the emerging Development Strategy's policies will also support the positive goals and intentions of the Council's Climate Change Strategy, particularly in relation to resource efficiency (e.g. energy and water), climate change adaptation and the development of large scale renewables.

Central Bedfordshire Council – Climate Change Strategy: Update & next steps, 2014 **Resource Efficiency:** The Council's emerging Development Strategy proposes that:

- In order to accommodate a step change necessary to achieve zero carbon homes, the Council will seek a minimum 10% of the buildings energy requirements to come from renewable or low carbon energy generation, as an improvement on the carbon dioxide emission standard set by the Building Regulations.
- The Green Deal finance mechanism (see section 2) eliminates the need to pay upfront for energy efficiency measures and instead provides a mechanism for the cost of energy efficiency measures to be covered by savings they generate in electricity bills. This means that the cost of retrofitting in particular is made more affordable. The Council is therefore seeking to require that planning applications for extensions and alterations to existing buildings are accompanied by an Energy Performance Certificate, Green Deal Assessment or equivalent nationally recognised assessment. The applicant will need to demonstrate how any improvements that are technically, functionally and economically feasible will be carried out, with these being set as planning conditions.
- Non residential buildings including care homes are also an important consideration. Their environmental performance can be measured to recognised standards, such as the BREEAM environmental assessment method and rating system. A BREEAM assessment uses established benchmarks, to evaluate a building's specification, design, construction and use. Based on the above rationale the Council will seek to require non-residential buildings over 1000m<sup>2</sup> to achieve a BREEAM Excellent by 2015; or a comparable standard if a new nationally recognised scheme like the mooted Code for Sustainable Buildings is introduced.
- The Council's Climate Change Risk Assessment identifies that the Central Bedfordshire area is within region of predicted scarcity of water resources. The study highlights Anglian Water's assessment of deployable water output for the region which estimates that even in a 'typical' rainfall scenario they will face a shortfall of 70% in deployable water supply by 2020. The study highlighted that climate change alone is likely to cause significant water supply shortages. The predicted growth in Central Bedfordshire will put additional stress on our water resources, making it is essential that any new development is as water efficient as possible, and justifying water efficiency standards to be set at a level higher than those set nationally. The Council is therefore seeking that new housing meets higher water efficiency standards equivalent to 105 litres/day/person.

**Allowable Solutions**: It is also understood by government that delivering higher energy efficiency/ $CO_2$  reduction standards on site may in some cases be financially or technically unviable. It is therefore proposed that in the future developers will pay for  $CO_2$  emission measures off site, through payment to an 'Allowable Solutions' fund.

The Zero Carbon Hub proposes a framework for how allowable solutions might work<sup>1</sup>, and gives examples of what measures could be considered as potential allowable solutions. These include:

<sup>&</sup>lt;sup>1</sup> 'Allowable Solutions for tomorrows new homes – towards a workable framework), Zero Carbon Hub (July 2001)

- **"On-site"** options such as 'smart' energy efficient appliances, home electric vehicle charging facilities and LED street lighting.
- "Near-site" options including investment in the creation or expansion of locally planned sustainability infrastructure or the export of low carbon or renewable heat from the development to other developments.
- **"Off-site"** options include investments in low and zero carbon heat infrastructure and investment in low carbon energy generation assets up to a maximum determined scale, e.g. excluding large scale off-shore generation.

As developers may be able to invest in properly accredited offsite Renewables as an 'allowable solution', the Council will seek to ensure that the benefits of these measures are captured within the unitary authority area by ensuring qualifying opportunities and projects are identified..

Further guidance is awaited from government on how 'allowable solutions' are to be implemented. Once this is in place the Council will develop further guidance and policy on how 'allowable solutions' will be managed with respect to development in Central Bedfordshire. This will clarify the range of measures that are acceptable, how emissions will be accounted for and what other measures could also contribute to delivering a portfolio of options for allowable solutions, for example woodland creation.

**Renewables policy and guidance:** The Council recognises the environmental, social and economic benefits of renewable or low-carbon energy. The proposed policy in the emerging Development Strategy proposes that, we will work with developers to ensure that proposed developments are:

- Directed to those areas where negative impacts can be most effectively mitigated. Any unavoidable adverse impacts, including cumulative impacts, such as noise, pollution and harm to visual amenity, should be mitigated through careful consideration of location, scale, design and other measures;
- Have good accessibility to the transport network;
- Located and designed so as to have no unacceptable adverse impact on heritage assets, sensitive landscapes such as the Chilterns AONB, or any area identified through the Landscape Character Assessment as being of high sensitivity; green belt areas and townscapes.
- All developers of Renewables schemes are required to engage with all affected stakeholders, including local communities, at the earliest stage in order to proactively mitigate impacts and provide adequate compensation and benefits.

To support this, the Council has produced additional guidance for large scale Renewables. This advises on levels of sensitivity (visual, landscape etc) and what is expected with regards to management of impact (particularly on communities and other sensitive receptors like wildlife and heritage sites) other planning issues. To date technical guidance relating to wind and solar farm developments has been adopted by the Council for development management purposes. The intention is that once the emerging Development Strategy is adopted these will go through the process to be made supplementary planning documents. This includes revision, public consultation and input from members via the committee process (including endorsement at Executive).

Adaptation: The case for designing for the future climate is strong. Buildings and infrastructure have long life spans and what we build today will, in many cases still be around in fifty years or more. We generally build to suit the current climate and take no account of their performance in future. As a result, the impacts of climate change can make buildings and infrastructure uncomfortable, unsafe or even commercially unviable to maintain. To ensure development is resilient and adaptable to the impacts arising from climate change the Council is proposing that all new developments, where relevant, will be required to:

- use design, layout and orientation to maximise natural ventilation, cooling and solar gain;
- retain and properly manage existing trees, landscaping and other natural features;
- incorporate additional landscaping including green and brown roofs and walls and suitable street tree planting;
- use appropriate strategies including Sustainable Drainage Schemes to prevent surface water flooding; and
- use water efficient fixtures and fittings and incorporate rain water harvesting and storage.

**Sustainable Drainage Systems (SuDS):** The Council recognises the important role that SuDS play to manage flood risk and improve water quality. SuDS enable different design solutions, dependent on site circumstances such as underlying geology, to be used to create environmentally sustainable approaches to surface water drainage management. They can also be designed to deliver many other benefits to the development and local area, such as improved biodiversity and habitat and better quality public amenity.

Under the Floods and Water Management Act 2010 the Council has a duty to form a SuDS Approving Body (SAB). This means it will have responsibility for the approval of proposed drainage systems in new developments and redevelopments, subject to exemptions and thresholds. Therefore the Council will expect all development to use SuDS as normal practice in order to help achieve sustainable forms of development. This will include schemes to ensure long-term maintenance.

To help prepare for when the Council becomes a SAB, ensure new development meets the challenges that the changing climate presents, and to also highlight the other benefits that well designed SuDS can bring to a development and its future residents, the Council has produced its own supplementary planning guidance for SuDS. The Council was one of the first in the UK to do so with many Local Authorities looking to follow the Council's lead and learn form our experience. This takes into account local character and geology and will help guide developers to design the most all round suitable SuDS solution for their development.

### Adaptation

### Preparing for the impacts of the changing climate on Central Bedfordshire

LDA Design were commissioned to conduct a local climate change adaptation study to help define and understand the risk and opportunities in the Central Bedfordshire area. The study provides the evidence needed to inform and shape the Council's Climate Change

Adaptation Plan, which will contribute to preparation of the Development Strategy, corporate policies and emergency planning. The study compliments the first national Climate Change Risk Assessment (CCRA), published in January 2012, by applying its methodologies and findings to a local level. The findings include:

- Surface water flooding: 15,000 homes and 1.1million m<sup>2</sup> of commercial buildings are located in areas susceptible to surface water flooding. This represents 9% of all homes and 34% of all commercial floor space. The risk of surface water flooding based on the Environment Agency's current estimate is for one flood event in every 30 years; this will increase to 1 in 18 year events in the 2050s and 1 in 14 year events in the 2080s.
- **Pressure on water resources:** Central Bedfordshire is in an area of area of 'serious water stress'. This pressure is expected to increase in future and will reduce water available for householders, agriculture, industry and natural environment. The Anglian region currently has a deployable output (water supply available from the water company) of 1230 million litres per day (MI/d) and current surplus of 96 MI/d, roughly 8% spare capacity. The CCRA made an assessment of projected changes to deployable output under 3 scenarios: 'wet', 'mid' and 'dry'. These show that even in the near term (by 2020) we could experience significant constraints, even without considering the additional demand need to satisfy growth.

Figure 10: Change in deployable water output for the Anglian Region.

		Wet	Mid	Dry
Anglian	2020	4%	-6%	-16%
	2050	-10%	-25%	-40%
	2080	-20%	-30%	-40%

• **Overheating:** High and sustained temperatures have potentially serious consequences for health, productivity in the workplace and for the environment. This will see an increased level of risk, particularly for vulnerable groups such as the very young and elderly. The national CCRA states that higher temperatures could also bring some benefits. Milder winters will reduce winter mortality, demand for heating and can also cause a general reduction in the number of days of snow and ice; potentially reducing delays and disruption on the transport network. Longer warmer summers will also have economic benefits for the tourism sector.

The report can be found on the Council's website:

http://www.centralbedfordshire.gov.uk/environment/natural-environment/climate-changesustainability.aspx

**Emergency Planning:** The impacts of the changing climate, particularly extreme and prolonged weather events will place additional pressures on the Council, its services and those who live, work and travel in Central Bedfordshire.

The Council already has in place Severe Weather Emergency Plan, this details the actions that different Service Areas are expected to take on receipt of specific alerts and warnings received. This also has an overview of the different activities the Council is doing, for example:

- SOS system for schools and highways gritting alerts
- Community Emergency Response Teams including community gritting (Running a pilot scheme in Leighton Buzzard)
- Severe weather website on the CBC website
- Heatwave leaflets
- Cold leaflets
- Information for Event Organisers on planning for severe weather through the Safety Advisory Group
- Highways winter maintenance plan
- The use of our emergency volunteer partnership to help in times of severe weather transport from 4x4s, bottles water distribution etc.

The Council also works closely with our key partners through Bedfordshire & Luton Local Resilience Forum (BLLRF). This has led to advice to help being prepared for severe weather risk (see <a href="https://www.bllrf.org.uk/content/?id=190">https://www.bllrf.org.uk/content/?id=190</a>) alongside a multi-agency plan for activation arrangements in severe weather.

The Council and partners regularly review risk, using the latest information and understanding. Through this process it is envisaged that the future risk resulting from the changing climate will be accounted for with appropriate plans put in place to react to emergency situations as and when they occur in the future.

# Summary

The Council has made good progress in realising the commitments it made in its Climate Change Strategy, however there have been many changes to national policy which have had impacts, both positive and negative.

- Steady progress has been made in reducing the council's own carbon footprint, which has seen a 24% reduction from 2009/10. The 35% target by the end of 2015 (to be measured from the 2015/16 GHG report) will be challenging and will require concerted effort from teams across the Council to achieve.
- Excellent progress has been made in reducing emissions from the schools estate, which has seen a 28% reduction from 2009/10. In 2013/14 schools reduced their combined energy bills by approximately £250K.
- Per capita CO<sub>2</sub> emissions from across the Central Bedfordshire area have fallen from 8 tonnes of CO<sub>2</sub> per person to 6.7 tonnes of CO<sub>2</sub> per person between the period 2005 and 2012. This exceeds the 10.7% target set through the Central Bedfordshire Local Area Agreement.
- Good progress has been made to ensure Central Bedfordshire is resilient to impacts of the changing climate, this included putting in place appropriate planning guidance in relation to Sustainable Drainage Systems (SuDS), to mitigate the impact of new development.



## A great place to live and work

### Contact us...

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