Carbon Management Report 2015

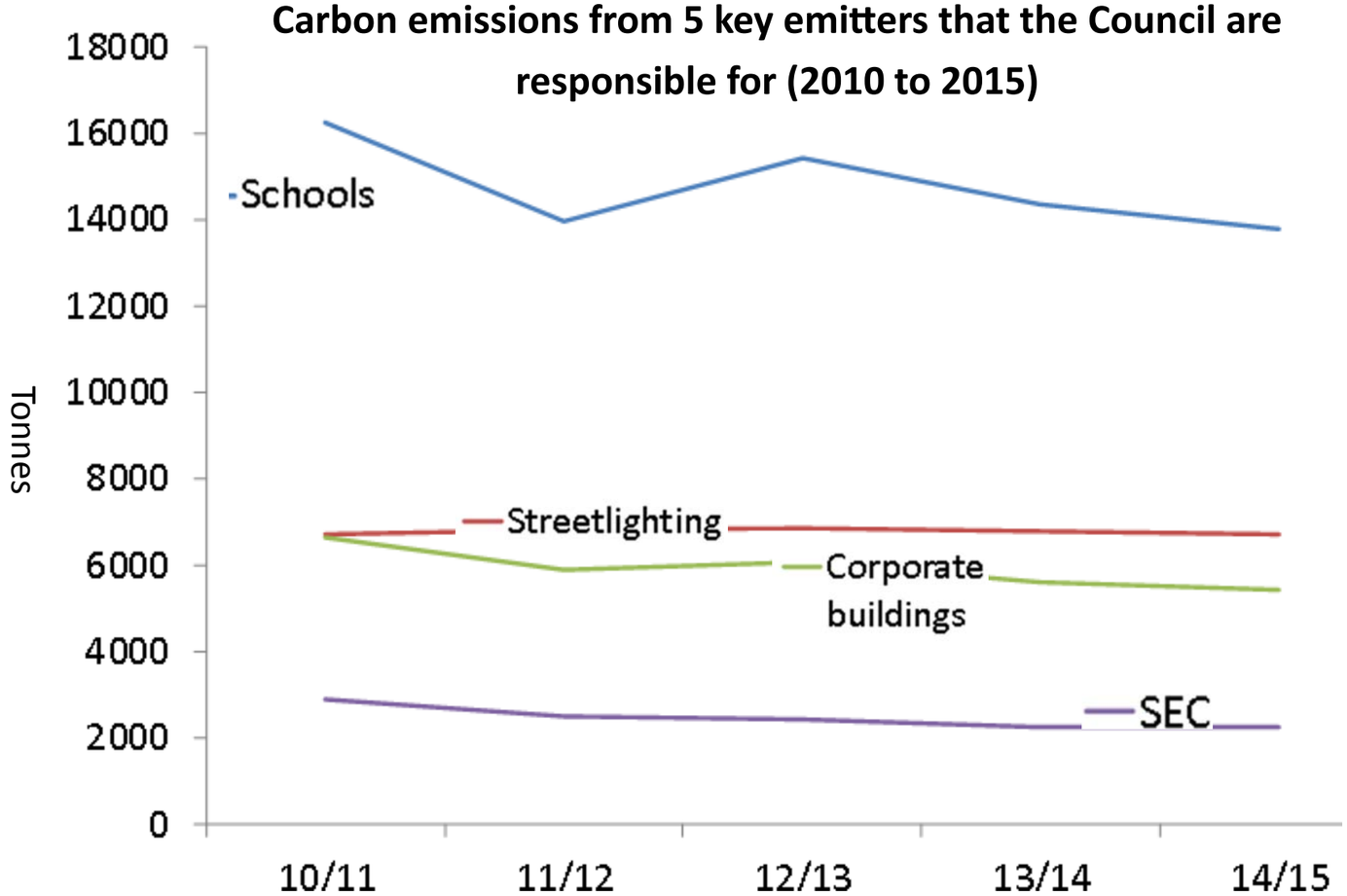
Solihull Council is committed to reducing its contribution to the impact of climate change, and ensure its resources including energy are used efficiently and in a responsible manner.

Carbon Management is the process used by the Council to monitor and reduce its carbon (carbon dioxide) emissions. The Council takes responsibility for the emissions from; **schools, corporate buildings, streetlighting, strategic environment contract, transport.**

The Council emitted **29,432 tonnes in 2014/15**, and this is a reduction of approximately **10%** on the 2009/2010 baseline.

It is taking the lead from the Climate Change Act 2008 which sets legally binding national targets for emissions reductions of 34% by 2020 and 80% by 2050.

Carbon emissions from 5 key emitters that the Council are responsible for (2010 to 2015)



Our Approach to Carbon Reduction

Schools

The Council remains engaged in reducing carbon emissions from the schools estate. There are elements of the use of energy that the Council can influence or have some control over, while other elements are within the control of the schools. The approach is to work on:

- Engagement, education and training on energy management.
- Promoting and supporting projects linked to both energy efficiency e.g. LED lighting upgrades, and renewable energy generation.
- Assisting schools to finance projects e.g. council's investment loan fund.
- Energy management, including training on monitoring energy.

2014/15 emissions were 13790 tonnes.

Streetlighting

Solihull published a new street lighting strategy for the Borough in 2012. The strategy aims to strike a balance between the need to reduce the environmental impact of street lighting and the need to provide lighting for the safe use of the highway and for the community in general. The strategy sets the direction for the service over the period until 2022, in order to ensure the best possible street lighting service for the residents and travelling public within Solihull. In terms of energy usage and carbon emissions, the strategy aims to;

"minimise future energy usage and carbon emissions from street lighting through the implementation of economically viable programmes of work to achieve energy savings and by ensuring that new street lighting is provided only where necessary".

2014/15 emissions were 6742 tonnes and the actions are predicted to deliver a **750tonne reduction by 2016, and 1200tonnes by 2024/25.**

Corporate Buildings

The Corporate Asset Management Plan includes the carbon management of corporate buildings, known as the Corporate Carbon Reduction Programme.

This programme includes:

- Monitoring and managing the energy use in buildings.
- Implementation of energy efficiency measures in maintenance and refurbishment programmes.
- Identify opportunities for energy efficiency/renewable energy.

2014/15 emissions were 5421 tonnes

Strategic Environment Contract (SEC)

Our partner Amey, responsible for delivery of this contract, is committed to carbon reduction in refuse and recycling collections, street cleansing and grounds maintenance activities. The reductions will be delivered through a fleet of new vehicles and the continuing revision of the way the service is delivered.

2014/15 emissions were 2221 tonnes.

Transport

This is a small proportion of the total, covering the Strategic Highways Contract (SHC), corporate vehicles, who report to the Carbon Management Group, and schools taxi service and business mileage who do not.

Carbon Management— present and future activity

Schools – Low Carbon Service to Schools

School Asset Support Team (SAST) currently have specific initiatives, including:

- Schools bespoke Asset Management and Development Plans contains a carbon reduction section.
- Promotion of sustainable school design, such as those for the emerging Northern Primary Programme Phase 4 proposals.

Property Services Team (PST) deliver a service level agreement (SLA) to schools providing mandatory services, maintenance, and repair. They also deliver programmes of work to schools using a centrally funded schools maintenance programme to deal with maintenance replacements (over £15,000) i.e. to replace roofs, boilers, electrical refurbishments, windows etc.

As part of the SLA, PST supports:

- The identification of opportunities through energy surveys and feasibility studies.
- Project management.
- Energy management, including training of bursars on monitoring energy through AMR system.

Streetlighting Strategy

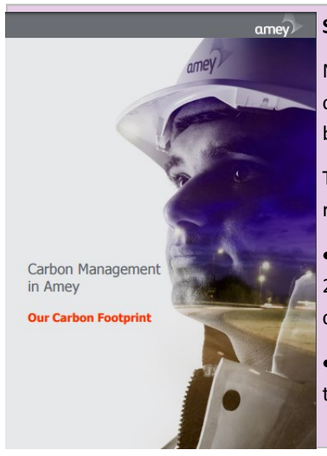
A comprehensive Action Plan accompanied the strategy setting out the various actions required to ensure its delivery. These included a programme to renew out of date lighting and in particular to replace the Boroughs stock of Mercury Blended Filament Unit (MBFU) lamps with low energy lighting.

To introduce low energy lighting across the whole of Solihull's 23,000 street lights requires significant investment and the upgrade work is to undertaken in 4 stages.

The first stage involved replacing 6,083 obsolete MBFU lamps with LED lighting and this is expected to reduce emissions by 750 tonnes.

Following completion of the MBFU project, the main roads will then be upgraded to LED lighting involving the replacement of approximately 5,116 lighting units on strategic traffic routes and in town centres delivering 1,200 tonnes of carbon by 2024/25.

On completion of the main road upgrade project, lighting units in other residential areas within the Borough would then be considered for replacement totalling approximately 9,000 lights delivering 1,100 tonnes of carbon by 2024/25.



Strategic Environment Contract (SEC)

New targets to be proposed to the SEC Board will be based on investigations to determine not only the optimum time to re-fleet the vehicles, but also which vehicles and new technologies can be incorporated into the intended re-fleet.

The Environmental Services section has a number of carbon reduction aspirations which might be realised in the next decade, these are:

- The introduction of gas and electric powered vehicles, potentially in the next phase 2016 to 2022, and most likely as part of the next contract re-fleet in 2022, subject to the outcome of the current Amey re-fleet assessment.
- The possible participation in trials of new and emerging technologies, with investment in the supporting infrastructure, subject to working with Amey.

Corporate Carbon Programme

In addition to the routine energy efficiency measures rolled out over the portfolio, the closure and demolition of buildings reduced emissions by a further 100tonnes. The demolition of Orchard House and the Priory will result in approximately 300tonnes reduction.

Council House refurbishment will reduce carbon emissions through:

- Active facades and a new heating system with reductions of 60tonnes per year predicted.
- Energy efficiency measures, including the installation of energy efficient lighting controlled centrally.
- The new Data Centre will reduce emissions by 60 tonnes on current usage, through better design and the use of lower energy technology and cooling
- The cultural change of agile working that will impact on how the Council uses buildings.

Other key projects include the replacement of the cremators at Robin Hood Cemetery and this will reduce energy demand and increase the efficiency of the service that currently emits 390tonnes per year.

Transport

The core transport holding is presently 68 vehicles during 2014/15 generating approximately 335 tonnes of carbon emission.

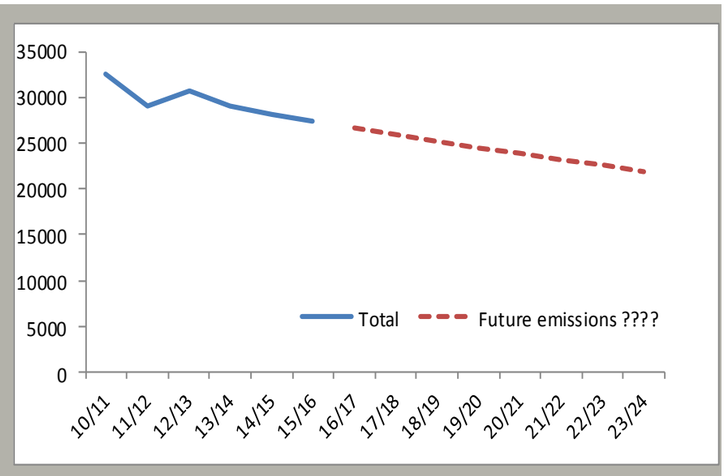
Core fleet procurement now includes the investigation of 'all electric' vehicles alongside petrol and diesels (excluding Social Services vehicles). An electric Nissan NVe-200 van is now used by Neighbourhood Activity Programme reducing emissions by 1tonne per year.

There are a number of opportunities to procure low emission vehicles in the future.

Future emissions—predictions?

The Council's approach to managing carbon is:

- To focus on the most energy/carbon intensive service areas.
- To develop and deliver effective behavioural, education and training programmes.
- To exploit and, where possible quantify, energy efficiency and carbon reduction opportunities offered through maintenance and refurbishment programmes, new build activity, new contracts and agile working.
- To promote funding opportunities, including the council's investment loan fund.



The Carbon Management Group brings all the contributing stakeholders and their strategies together, seeking to influence the selection to ensure the lowest environmental impacts, for example the lowest carbon emissions, and seeks to manage and predict future emissions, overseeing the 'plan' to reduce carbon.