

# Carbon Management Report 2015/16

Solihull Council is committed to reducing its contribution to the impact of climate change ensuring its resources, including energy, are used efficiently and in a responsible manner. The Council is taking the lead from the Climate Change Act 2008, which has set legally binding national targets for reducing carbon emissions of 34% by 2020 and 80% by 2050.

Carbon Management is the process used by the Council to monitor and reduce its carbon (carbon dioxide) emissions. The Council reports on the emissions from; schools, corporate buildings, street lighting, strategic environment contract, transport.

**The Council emitted 26,750 tonnes in 2015/16, and this is a reduction of 18% on the 2009/2010 baseline.**



## CRC – Carbon Reduction Commitment

The Council continues to meet its CRC obligations. Key information is summarised below:

- 2015/16 CRC emission was 12,311 tonnes down from 14,633.
- The submission for 2015/16 was internally audited and an Internal Audit Certificate issued.
- The 2015/16 carbon allowances cost £192,052 for the year, all purchased at the lower forecast sales price, leaving the Council 1,944 tonnes in credit.
- The Council's CRC submission for 2014/15 was audited by the regulators, the Environment Agency on behalf of DECC, and the data and process passed.
- The Council, lead by the Property Service Team with the Sustainable Development Team providing guidance, completed the West Midlands Police CRC submission.
- CRC Compliance Team includes members of Property Services Team, Finance and Audit, overseen by Policy and the Spatial Planning Team through the Carbon Management Group, with support from Leisure Services and Street lighting Teams.

## Schools

**Emission—13,647 tonnes.**

Schools emissions reduced 1% overall compared to 2014/15. This was equivalent to 126 tonnes of CO<sub>2</sub> and approximately £20,500.

Within this overall reduction, schools within SMBC's portfolio were responsible for an increase of 0.22%, whilst Academies showed an overall reduction of 3%.

The schools portfolio has this year seen the addition of properties to the portfolio such as Coleshill Heath and Fordbridge schools, which will have unduly affected the emissions figures, as some consumption remained for the old schools whilst the new ones were being finalised.

The overall reduction in consumption for 2015/16 equates to a 16% total reduction compared to 2010, the first data set available.

## Strategic Environment Contract (SEC)

**Emission—2,203 tonnes.**

The Council's collection partner Amey is responsible for this element of the carbon reduction plan and is committed to reducing the amount of carbon produced as a consequence of delivering the refuse and recycling collections, street cleansing and grounds maintenance services across the borough.

During 2015/16 Amey achieved further reductions in its carbon emissions, and has achieved a reduction of 213 tonnes of CO<sub>2</sub>e during the past 4 years, which equates to almost 9%.

Further reductions are expected following the planned introduction of new more fuel efficient and cleaner burning vehicles towards the end of 2016/17, and new targets have been set as part of the Strategic Environment contract for the next 2 years.

## Street lighting (updated 240616)

**Emission—5,750 tonnes.**

Stage 1 of the Council's street lighting strategy is now complete, with over 6,000 obsolete MBFU lamps having been replaced with LED lighting.

Over £120,000 of energy costs and 1,000 tonnes of carbon has been saved per annum and the project has been extremely well received by residents and those who use the Borough's roads.

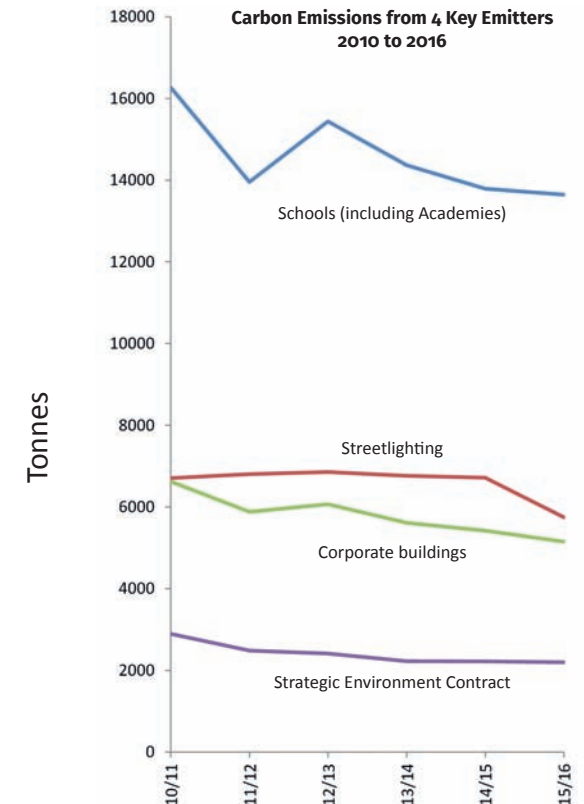
## Corporate Buildings

**Emission—5,150 tonnes.**

Emissions from Corporate properties reduced by 5% compared to 2014/15. This was equivalent to 227 tonnes of CO<sub>2</sub> and approximately £46,000.

Closure of buildings reduced emissions by approximately 13 tonnes, however, this is somewhat balanced by newer properties that have come on to the portfolio.

The overall reduction in consumption for 2015/16 equates to a 22% total reduction compared to 2010, the first data set available.



# Carbon Management – present and future activity

## Corporate Carbon Programme

The PST Team supported:

- Display Energy Certificate (DEC) & energy air conditioning inspection provision.
- Sites to manage their energy, including;
- Monitoring information sent to sites with exceptions.
- Creating AMR reports that now include energy cost
- Energy management in the new data centre with separate metering.
- The delivery of energy air conditioning inspection.

## Plans for the future

The programme will continue with developing good energy management practices, including:

- Reviewing properties with no AMR to accurately monitor.
- Identifying properties to review further survey requirements.
- Continued delivery and promotion of AMR training.
- Continuing to circulate quarterly reports and AMR exceptions.
- Feasibility for LED lighting at Lode Lane Car Park.

Add a number of projects will have an impact on the emissions:

- New, more efficient data centre.
- Refurbishment of Council house.
- Replacement of the cremators with more efficient ones.

## Street lighting Strategy

The street lighting team are now in the process of beginning Stage 2 of the strategy, which will see the replacement of approximately 5,000 lighting units on the Borough's strategic road network.

This project is estimated to save a further 1,200 tonnes of carbon by 2021/22.

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

## Transport

The Council has 68 vehicles that it runs for the purposes of Adult Social Care, SMBC Stores, Neighbourhood Services, Street Lighting and Tanker Services, These emit in the region of 300 tonnes of carbon.

The Council's Core fleet procurement process now includes the investigation of 'all electric' vehicles and MPV's alongside petrol and diesels (excluding Social Services vehicles).

We have recently replaced some of the Highways Services' vehicle fleet which includes new tankers and street lighting vehicles. All of the vehicles have the latest Euro 6 engines fitted. Compared to the Euro 4 standards met by vehicles they replace, emissions of NOx (oxides of nitrogen) are reduced by almost 90% and particulate matter (soot) by 66%. The vehicles are also equipped with fuel saving technologies and in doing so reduce the emissions of CO2 and running costs.

## Schools

Current Activity

- Solihull schools asset management and individual schools asset management plans now address energy and carbon.
- Engagement with the schools collaboratives and the schools forum on reducing emissions.
- Ashden – 'Less CO2' programme. This one year programme is working with schools to reduce emissions. This includes workshops, events and site surveys.

Assistance to schools with management of energy includes:

- Monitoring information sent to sites with exceptions.
- Continued ad-hoc AMR training.
- Presentation to business managers and site managers.
- New AMR reports now including cost information.
- Support of the St Alphege Junior Photo Voltaic installation.

Plans for future:

- Collaborative working with Birmingham to produce energy booklet. Nearing completion (communications & procurement).
- By year-end almost every school will have their own bespoke asset management and development plan in place; part of which has a section on carbon reduction.
- Promote Council Loans to support programmes of low-cost building improvements emanating from carbon/energy surveys.
- Ensure that major capital projects ring-fence funds for consequential improvements that improve energy efficiency.

## Strategic Environment Contract (SEC)

Current Activity

Over 2015/16 there was slight increase in emissions following the loss of the local landfill site and an increase in the distances this waste needed to be transported.

However, following improvements to working practices at the Bickenhill HWRC site operations, Amey have been able to divert waste away from landfill and reduced the number of loads sent to landfill. As a consequence they have not only recovered their performance but have improved on the position achieved at the end of 2015/16 by almost 0.75%.

## Future targets 2016/18

Last year the SEC Board permitted the target to remain unaltered whilst Amey finalised their vehicle re-fleeting arrangements and also agreed that future targets should be set utilising known changes to services vehicles etc.

Amey have now agreed the specifications for the new refuse and Recycling fleet and are therefore able to calculate it future targets based on the vehicle delivery timetable and manufacturers performance data.

Last SEC Board at its meeting in April 2016 agreed revised targets of -9.0% for 2016/17 and -9.5% for 2017/18 (on a baseline of 2011/12 emissions). This is subject to the new vehicles being delivered no later than the start of January 2017 and a review of the vehicles performances utilising in operation data as apposed to manufacturers theoretical performance figures.



## Future emissions – predictions and targets

The Council has effective systems in place for monitoring its emissions, and it is turning the attention on the future emissions working on predictions of how the emission will change into the medium term – looking forward 10 years.

This work has just started and will be challenging with many changes happening within the Council and how it delivers services.

In the absence of any specific targets for local authorities, the Council can look to contribute to those set out by Government in the Climate Change Act 2008, which are 34% by 2020, 57% by 2030 and 80% by 2050 using a 1990 baseline.

The Council achieved the 34% target in 2012/13, however this is largely due to the decarbonisation of the electricity supply which accounts for around 29% of the 34% reduction. This should not overshadow the Council's efforts, with the current reduction in its emissions being 3% per year. At this trajectory we would hit the Governments 2030 target of 57% reduction early by 2027/28. However there is no guarantee that this 3% reduction will continue, hence the importance of modelling future emissions and comparing it against national targets and the Council's overall ambitions to be sustainable.

