

BUDGET STRATEGY GROUP

18 NOVEMBER 2019

3. CARBON REDUCTION EMISSIONS ‘BUDGET’

3.1 Our Carbon reduction journey

3.1.1 The purpose of this report is to;

- Give the background to the recent net zero carbon motion resolution agreed at Full Council;
- Inform the group of carbon emissions reduction work to date and progress against current targets;
- Outline the plans on how we will work towards net zero carbon by 2030;
- Recommend a net zero carbon ‘budget’ to Full Cabinet and subsequently Full Council as part of the budget setting process;
- Detail the current funding available to support carbon initiatives.

3.2 Introduction

3.2.1 The Climate Change agenda has increased in profile in the last few years, with carbon reduction being a key element to the response. Nationally, the UK Government has set legally binding targets to achieve net zero carbon emissions by 2050. Regionally, the West Midlands Combined Authority has set a target to be net zero carbon emissions by 2041. On the 8th October the Council passed at motion to recognise the gravity of the Climate Change emergency and as part of it pledged to ‘become net zero carbon, as a Council, by 2030.’

3.2.2 The net zero carbon target is in addition to the current reported targets to reduce emissions by 45% by 2021, and ‘at least 50%’ by 2025, from the baseline year 2009/10.

The Government’s definition is ‘Net zero means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases* from the atmosphere, such as planting trees or using technology like carbon capture and storage’.

*Greenhouse Gas Emissions are a suite of gases that include carbon dioxide (‘carbon’ is used as shorthand for carbon dioxide), and also gases such as methane and ozone. Carbon emissions are either directly emitted as a result of burning gas or transport fuel, or indirectly through the generation of electricity using fossil fuels.

3.3 Scope of carbon reduction initiatives to date

3.3.1 The Council has been managing its carbon emissions for over 10 years. It has well developed processes in place for monitoring and managing data, and for reporting emissions. Annual Carbon Reports have been published on the Council’s website since 2014.

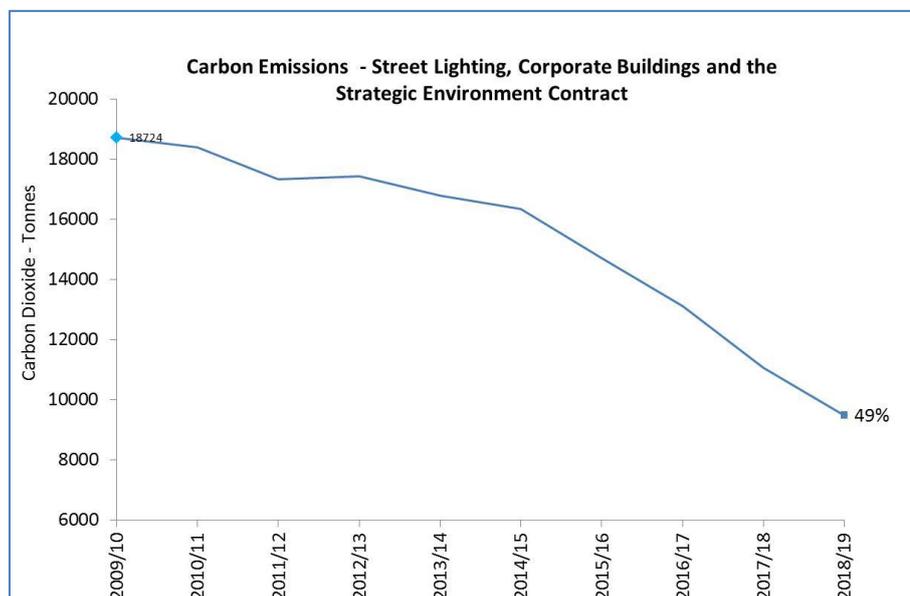
3.3.2 The Council has focussed on reducing emissions from the three main areas outlined below which account for approximately 90% of all our emissions:

- Street lighting – the operation of street lights on all roads managed by the Council – A' roads and smaller, including residential roads;
- Corporate properties – Council offices (including some SCH offices) public buildings such as libraries, operational areas such as depots, and leisure facilities;
- Strategic Environment Contract – the collections of domestic waste and recycling, and manages parks, verges and open spaces.

3.3.3 In total, the Council's Emissions from the above areas have reduced by 49% between 2009/10 and 2018/19, as seen in Table 1 below from 18,724 tonnes to 9,494 tonnes. The remaining 10% of our emissions which equates to approximately 1,200 tonnes is from transport, including corporate vehicles and vehicles used by contractors on council services.

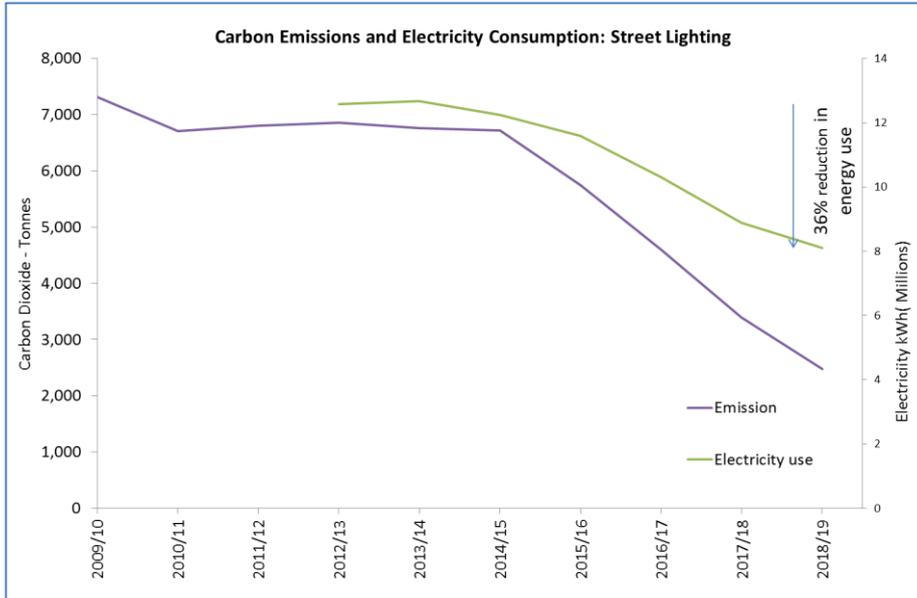
3.3.4 Progress has also been made nationally, with the decarbonisation of the electricity grid resulting in a 40% reduction in carbon emissions, which contributes to the above reductions.

Table 1



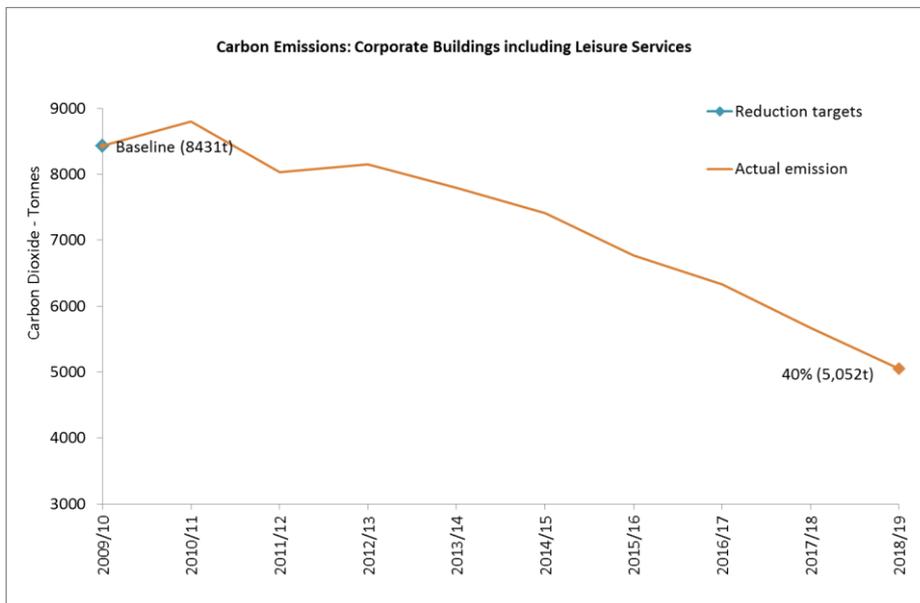
3.3.5 Street lighting emissions have seen a 66% reduction as seen in Table 2 overleaf from 7,313 tonnes to 2,472 tonnes. The Street Lighting Strategy 2012 to 2022 is responsible for over half of this, with the rest due to changes in the national carbon factor, which coincidentally started to reduce in 2014.

Table 2



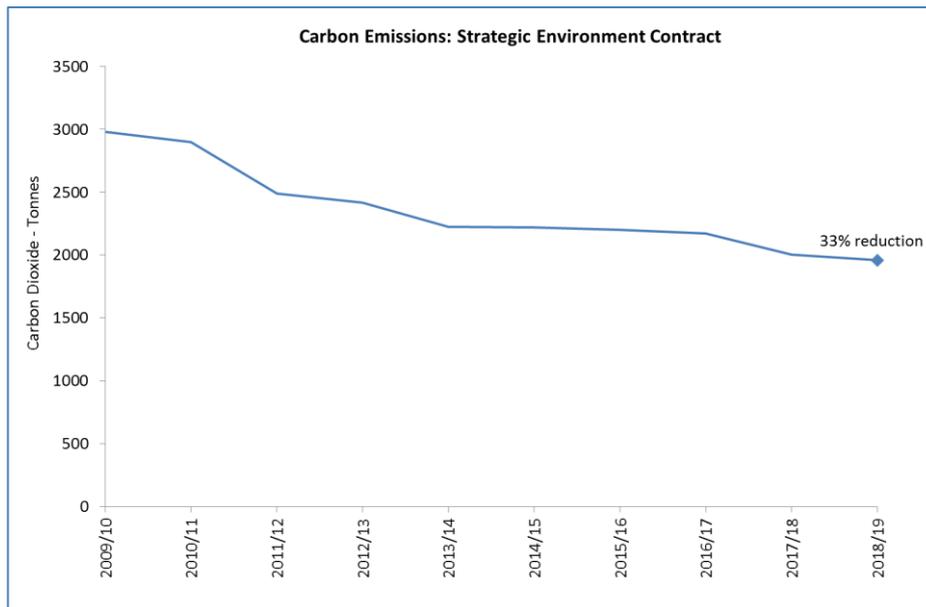
3.3.6 Emissions from corporate properties have reduced by 40% as per Table 3 below from 8,431 tonnes to 5,052 tonnes. This has been as a result of a number of actions, including energy efficiency works and reduction in portfolio, but also due to changes in the carbon factor since 2014, accounting for about half the reduction.

Table 3



3.3.7 Emissions from the Strategic Environment Contract have reduced by 33% as shown in Table 4 overleaf from 2,981 tonnes to 1,996 tonnes. This is largely due to the introduction of new vehicles; however operational changes have also contributed.

Table 4



3.3.8 Recently the above areas have started to model future emissions. Appendix A shows the 2009/10 baseline, actual emissions to 2018/19 already detailed in this report, targets for 2020/21 and 2024/25 and the latest 5 year annual forecast reductions in emissions against those targets. This shows that the Council will meet its 45% and 'at least 50%' targets early.

3.3.9 However, it is worth noting that both the decarbonisation of the grid is likely to slow and the street lighting replacement programme is near completion, so reductions to date are not an indication of likely future progress. More work is needed to refine the 2025 forecasts and work to develop the 2025 to 2030 carbon budget informing how we will achieve the net zero carbon target which is outlined below.

3.4 Governance, Data and Intelligence

3.4.1 The Council is building on over 10 years' experience in Carbon Management, overseen by a Carbon Management Group. The group is chaired by the Assistant Director for Environment and Highways, and has representatives from the corporate buildings, street lighting, Strategic Environment Contract, (SEC) transport, finance and procurement colleagues.

3.4.2 In that time the group has collected data on the three main emitters, and now has over 5 years of robust data. Data for corporate buildings and street lighting has also been audited internally annually, and twice externally by the Environment Agency, as part of the submissions for the Carbon Reduction Commitment scheme.

3.4.3 The annual emissions from Council operations have been publically reported online since the first Carbon Report in 2014. To support the collection of data, the Council has:

- Installed 'automatic meter reading' technology and invested in supporting analytical tools for managing the energy data;
- Commissioned a consultancy to manage annual energy use and carbon missions, and forecast impact of street lighting replacement programme;
- Required the contractor to provide data on the SEC, including forecasts and targets.

3.5 Net Zero Carbon emissions target 'budget' for 2030

3.5.1 To achieve net zero carbon by 2030 we will reduce our emissions by 8,544 tonnes from the three main areas detailed above, plus approximately 1,200 tonnes from the remaining 10%. This will require a new and more challenging strategy, which would involve further, actual reduction or the offsetting of our carbon impact detailed in the below hierarchy of actions;

- Firstly, **reduce the energy consumption** of Council operations through energy efficiency or systemic changes (redesigning services).

This ensures the cost of the following actions are minimised;

- Investigate and develop the Council's ability to **generate our own energy**, ensuring a low carbon supply and energy security;
- **Buy green tariffs** for 'grid supplies';
- **Buy carbon offsets** for remaining emissions.

3.5.2 Where dependence remains on fossil fuels (e.g. where we still have gas boilers that need phasing out), the Council will need participate in carbon offsetting schemes, where the carbon is removed from the atmosphere by a third party, and sells these as carbon credits.

3.5.3 The estimated impact of the above actions has been modelled in the final column in Appendix A which is the emissions target net zero 'budget' for 2030. In line with the budget process these figures will be reviewed annually as we get closer to the date and the plans are refined.

3.5.4 The proposed steps to get the Council in a position to be able to have a robust plan for Solihull's Road Map to net zero carbon are set out overleaf, subject to Member approval;

	Target Completion Date
Phase 1	
<ul style="list-style-type: none"> Present new approach to Carbon Management – deliver facilitated workshop to challenge and benchmark our approach and feed into a new Carbon Management Plan – ‘Solihull’s Road to Net Zero’. 	31 March 2020
<ul style="list-style-type: none"> Develop annual emissions reduction budgeting process for emitters to feed into the Budget Strategy Group process. 	31 March 2020 onwards
<ul style="list-style-type: none"> Consider and implement more robust approach to carbon reporting, for instance the Carbon Trust Carbon Standard. 	31 March 2020
<ul style="list-style-type: none"> Identify carbon emissions reduction budgets for each area to 2025 and identify carbon reserve usage and any other funding priorities. 	From April 2020 onwards and to be reviewed as part of the annual budget process
Phase 2	
<ul style="list-style-type: none"> Develop 10year road map to 2030 (and beyond) with key points e.g. opportunities such as contract changes, or challenges - such as fossil fuel dependant assets. 	(draft 31 March 2020) March 2021
<ul style="list-style-type: none"> Challenge the Council to relook at operations to develop low carbon services through service changes. 	Dec 20
Phase 3	
<ul style="list-style-type: none"> Deliver quick wins – e.g. short payback projects. 	2021 - 25
<ul style="list-style-type: none"> Identify larger energy savings projects and investigate funding. 	2022onwards
<ul style="list-style-type: none"> Annually reassess carbon emissions reduction budgets for each area for 2025 to 2030 and identify carbon reserve usage and any other funding priorities. 	From April 2021 onwards and to be reviewed as part of the annual budget process

3.6 Carbon funding available

3.6.1 Over the last few years the Council has been able to contribute a modest sum to a Carbon reserve after the Carbon Reduction Commitment scheme commitments were funded. This currently stands at £90,000. Further contributions of £190,000 for 2019/20 and 2020/21 will be made following the cessation of the Carbon Reduction Commitment Scheme which will see the reserve balance grow by £380,000 to a maximum of £470,000 by the end of 2020/21.

3.6.2 Some of this funding may need to be used to help the Council secure the necessary support from an organisation like The Carbon Trust which

would help us work towards achieving their Carbon Standard, or an equivalent, as well as developing our net zero carbon plans.

- 3.6.3 The first budget strategy group meeting report identified £2million worth of funding for various place-making initiatives including environmental protection and climate change, aligning Solihull's strategy with that of the Combined Authority, so some of this funding could be used for initiatives to work towards achieving the net zero carbon target.
- 3.6.4 In addition, there are further business rates windfall monies available for 2019/20 and 2020/21 which for further investment to support invest to save schemes on the basis of the investment being made resulting in a payback in the form of contributing towards the achievement of our net zero carbon target, and also the achievement of financial savings.
- 3.6.5 Annually, as part of the Councils budget setting process, carbon emission reduction budgets will be updated in line with the three year plan as well as reviewing the use of the carbon reserve and identifying any further investment requirements in order to deliver on the net zero carbon target.