

**Environment and Sustainable
Communities Overview and
Scrutiny Committee**

30 April 2019

Carbon Management Plan



Joint report of Lorraine O'Donnell, Director of Transformation and Partnerships and Ian Thompson, Corporate Director of Regeneration and Local Services

Electoral division(s) affected:

Countywide

Purpose of the Report

- 1 To provide Members of the Environment & Sustainable Communities Overview & Scrutiny Committee with a progress report on the Carbon Management Plan.

Executive Summary

- 2 The Environment and Sustainable Communities Overview and Scrutiny Committee at its meeting on the 13 July 2018 agreed to include a further progress update on the Carbon Management Plan in its 2018/2019 work programme.
- 3 The committee receives on an annual basis an update on how DCC is performing in relation to reducing its carbon emissions with the last progress update provided to the committee in November 2017.
- 4 The report provides members of the committee with detail of DCC's emissions, ongoing projects, future work to be undertaken and financial savings.
- 5 Arrangements have been made for members of the Low Carbon Economy Team, Regeneration and Local Services to attend the meeting on the 30 April 2019 and provide a presentation focusing on:
 - Environment OSC – Carbon Management Plan Report – Progress in 2018/19
 - Projects delivered
 - On-going projects
 - Future work.

Recommendations

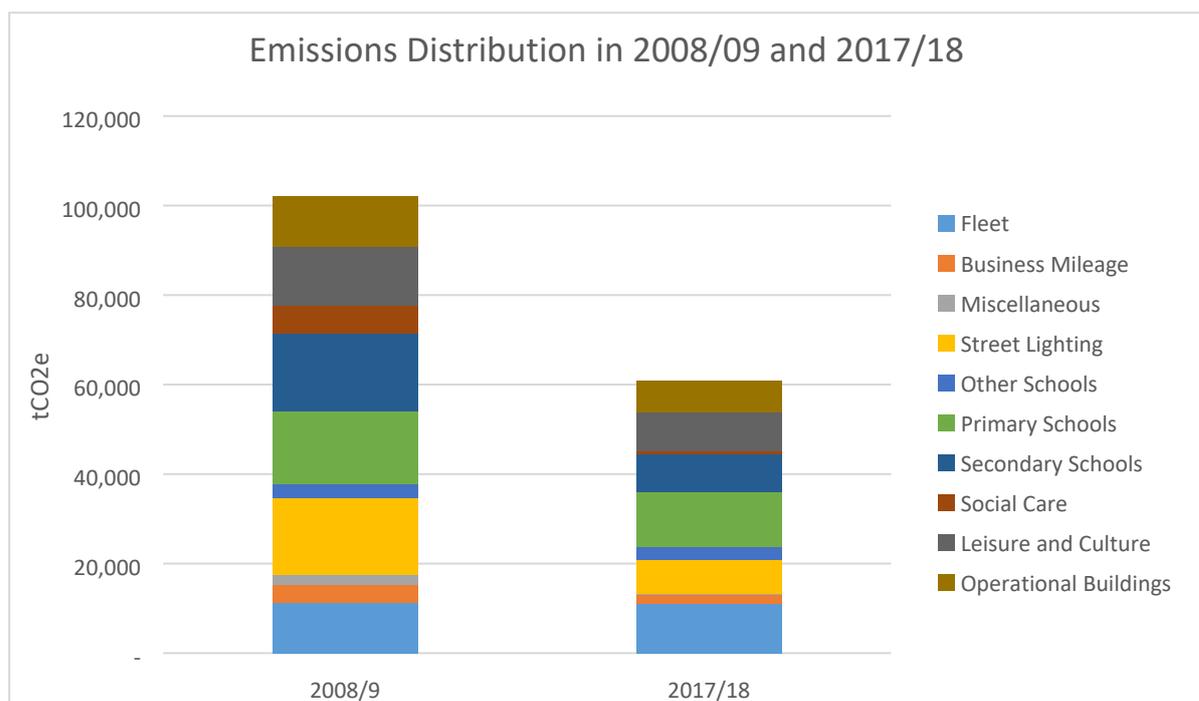
- 6 That the Environment and Sustainable Communities Overview and Scrutiny Committee note and comment on the content of the report and presentation.
- 7 That the Environment and Sustainable Communities Overview and Scrutiny Committee includes in its future work programme for 2019/2020 a further progress update on the Carbon Management Plan.

Background

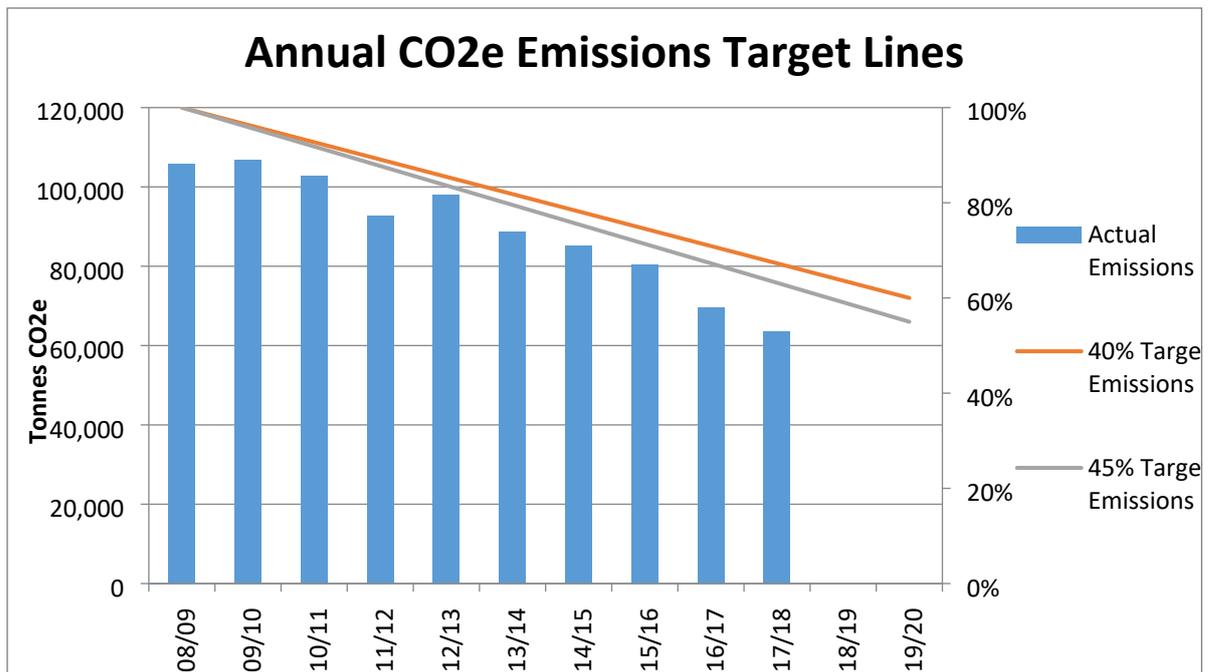
- 8 The County Council's first Carbon Management Plan covered 2010-15 and it has been succeeded by a second plan covering the years to 2020. This second plan aimed to meet 40% by 2020. In January 2019 Real Management Team gave approval for the 40% target to be uplifted to 45% by 2020, given that we met the 40% target in 2018.

Overview

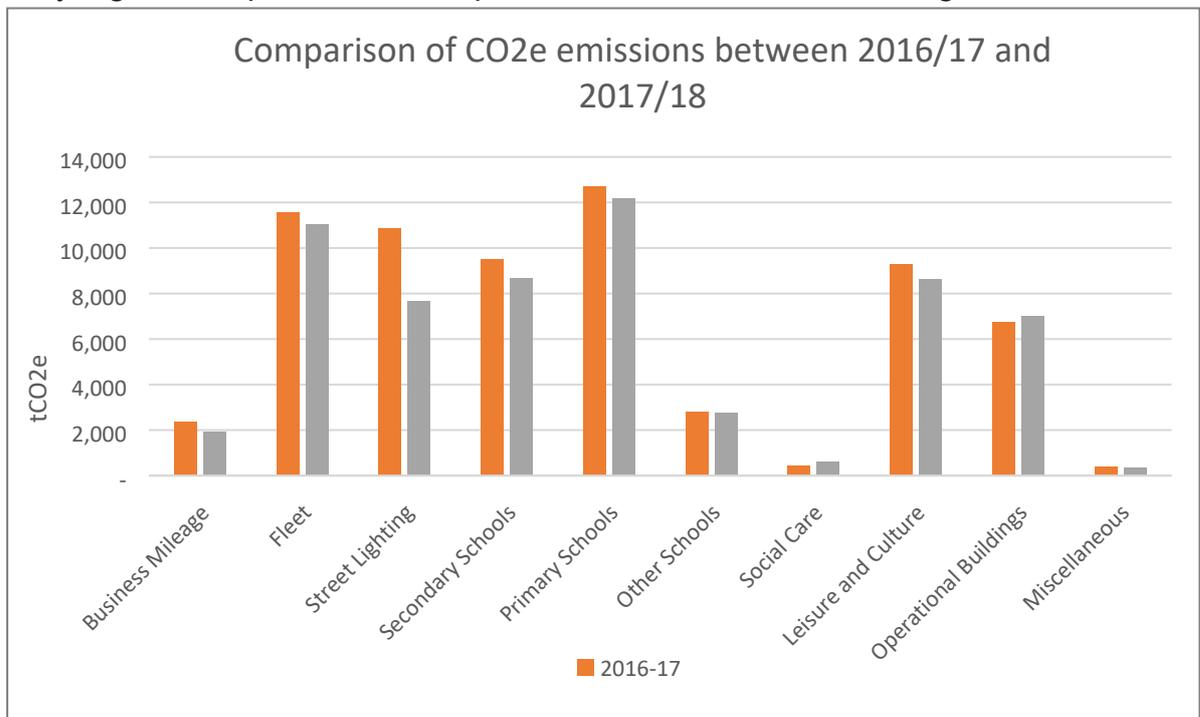
- 9 The Carbon Management Plan covers emissions from the operations of the Authority and includes carbon emissions from electricity used and heating from buildings and from fuel used in transporting staff as part of their duties.
- 10 The Carbon Programme Board has continued to direct carbon reduction activities, supported by the Revenue and Capital Boards which lead on project activities.
- 11 The Council is continuing to make carbon savings across its portfolio with reductions coming from behavioural changes, building improvements and a rationalising of the estate. The following chart show progress to date and a breakdown by source.



- 12 The graph below shows our progress since the baseline year of 2008/09. In March 2018 the 40% reduction target was achieved, and in January 2019 the increase to a 45% target was agreed. Figures on our carbon footprint for 2018/19 will be published in July 2019.



- 13 This comparison graph shows the change in carbon emissions between 2016/17 and 2017/18. It is clear that the street lighting replacement project has made a huge contribution to our carbon reduction. It is also clear that a very significant part of our footprint is from our school buildings.

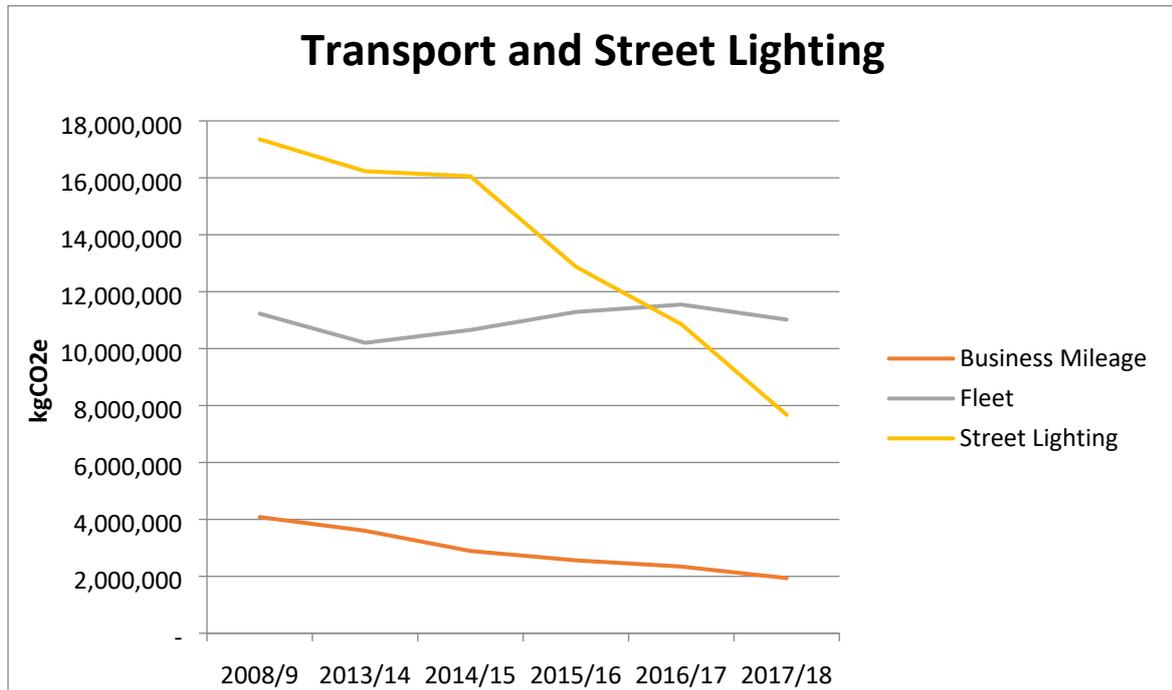


- 14 In 2017/18 emissions from Council operations reduced significantly and we are on schedule to meet our new 2020 target. This is as a result of a number of factors including;
- Decarbonising of the electricity grid - Electricity is not as carbon intensive as it was;
 - Street lighting LED replacements - Results of project are now visible;
 - Portfolio rationalisation - Reduction in the number of properties;
 - Energy efficiency projects in retained buildings;
 - Renewable electricity generation;
 - Monitoring and targeting work;
 - Relatively mild winters.

On-going projects

- 15 Since the last report a number of work packages have been delivered. The fourth phase of the Building Energy Efficiency Retrofit (BEER) project has been completed at Spectrum 8, the Education Development Centre, the Gala Theatre, and Teesdale and Woodhouse Close Leisure Centres. LED lighting and improved insulation have been installed, saving approximately £50,000 per year and reducing our annual carbon footprint by 160 tonnes.
- 16 Following a rebrand, the ECO2Smart Schools Programme (formerly Schools Carbon Reduction Programme) has been continuing, with schools who have bought into the energy management SLA. A new [website](#) has been launched containing a wealth of information and resources for the schools.
- 17 LED lighting installations DCC buildings – Light BEER. First phase of 11 building buildings is underway, with installations at Annand House and Clayport Library complete. This will save annually 120 tCO₂e and £60,000.
- 18 The Street Lighting LED Retrofit programme has delivered significant savings and the first phase of it has now concluded. The programme has been very successful in reducing energy use across our highway network. The following chart shows the carbon savings that have been realised up to the end of 2017/18.

- 19 The chart shows the carbon footprint associated with our road use. While street lighting used to be the biggest source of carbon emissions, it is now fleet which holds that title.



Future work

- 20 The programme includes a number of actions that are speculative in nature and not all proposed projects progress to completion. The following are projects from the Low Carbon Economy Team;
- Working with fleet to introduce electric vehicles.
 - Tanfield Solar Farm will provide electricity directly to Comeleon House. Work is due to be completed on this project in summer 2019.
 - Following the success of the solar photovoltaic array projects (SPA), we are revisiting solar PV on DCC buildings.
 - We are working to develop and deliver a LED lighting replacement scheme for DCC maintained schools, which will be known as Enlighten.
 - Investigating a bid to ERDF for the development of a zero carbon depot, which could include battery storage, solar PV, EV charging, heat retrofit projects and EV's
 - A project is being explored for the Louisa Centre, which is plans to deliver an innovative energy efficiency retrofit. It will include a mine water source heat pump, solar photovoltaics, LED lighting, and improved insulation.
 - Heat recovery and storage will be essential to meet our carbon targets. Renewable heat is harder to deliver than electricity, but we are

investigating the possibility of storing waste heat in innovative batteries and using it when there is greater demand. Heat recovery from some sources can also be used to provide direct heating to buildings.

Conclusion

- 21 Members of the committee will be aware of the various projects and initiatives undertaken by Durham County Council to reduce carbon emissions and how they are performing. The committee will also have received detail of projects which are being developed with the aim of reducing DCC's carbon emissions further.
- 22 The committee will continue to monitor the progress of DCC in reducing emissions in the future by including in its 2019/2020 work programme a further progress report on the Carbon Management Plan.

Background Papers

Durham County Council Carbon Management Plan 2015-2020

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Appendix 1: Implications

Legal Implications

Not applicable

Finance

The Carbon Reduction Programme has made significant financial savings for the authority Consultation

Consultation

The proposal is for a series of stakeholder engagement meetings and workshops on the plan to take place from autumn 2019

Equality and Diversity / Public Sector Equality Duty

A changing climate will impact on everyone, across the world, but research suggests that the poorest people are likely to suffer the worst impacts, so reducing carbon emissions now will contribute to future equality

Human Rights

Not applicable

Crime and Disorder

Not applicable

Staffing

Within the remit of the Low Carbon Economy Team to develop

Accommodation

Not applicable

Risk

Durham County Council has declared a climate emergency and set targets against a backdrop of national and international protest and will mitigate any risk by undertaking detailed planning and consultation.

Procurement

Not applicable