

Report

Report to:	Climate Change and Sustainability Committee
Date of Meeting:	17 September 2020
Report by:	Executive Director (Community and Enterprise Resources)

Subject:	Carbon Management Update 2019-2020
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1. Purpose of Report

1.1. The purpose of the report is to:-

- ♦ update the Committee with the final carbon management position for 2019-2020

2. Recommendations

2.1 The Committee is asked to approve the following recommendations:

- (1) that the final carbon emission position for 2019-2020 be noted;
- (2) that the review of carbon reduction targets in line with new national targets be noted; and
- (3) that the delayed publication of the Carbon Management Plan update report be noted.

3. Background

- 3.1. The Council's first Carbon Management Plan (CMP) was published in July 2008. This was following the Council's participation in the Carbon Trust's Local Authority Carbon Management Programme and its signing of Scottish Climate Change Declaration in 2006. The Council's carbon footprint has been measured and reported annually since 2005-2006.
- 3.2. The Council's carbon footprint has been reported in the same way since the original baseline year of 2005-2006. The carbon conversion factors were set at that date and have remained the same up to 2018-2019. This has allowed the annual data to accurately reflect the impact of carbon reduction measures without the external influence of fluctuating carbon factors over which the Council has no control, eg. how clean the grid is.
- 3.3. The annual climate change report submitted to Scottish Government includes information on the Council's carbon footprint and uses updated conversion factors each year which are calculated by using the most recent data on the composition of the electricity and gas grid, petrol, diesel and other fuel types. It is now proposed that, from 2019-2020, our carbon footprint is also reported using updated carbon factors each year. This ensures that a more accurate and up to date carbon position is calculated and is in line with national reporting and other public sector organisations.
- 3.4. The carbon conversion factors fluctuate each year, most noticeably for electricity. As the grid becomes cleaner and greener, the carbon associated with generating electricity reduces. Factors for gas, petrol, diesel and oil also fluctuate but not to the same degree. Carbon associated with our waste has also seen significant changes as more is known about the mix of waste collected and what happens when recycling or disposing of it.

- 3.5. The current Carbon Management Plan was published in 2018, and an update report was due to be published at the end of 2020. However, due to the quickly changing landscape of climate change and the UK and Scottish Governments' climate emergency declarations, this has been delayed to take account of new targets set by the Scottish Government.
- 3.6. Following a recommendation from the UK's Committee on Climate Change (CCC), the Scottish Government announced, on 2nd May 2019, plans to amend the Climate Change Bill and commit to a legally binding target of reaching net zero carbon emissions by 2045 at the latest. The Climate Change Plan was due to be published in May 2020 but this has been delayed due to the Covid pandemic. Indications are that this should be published in December 2020.
- 3.7. Publication of the Carbon Management Plan update report has been delayed until the Climate Change Plan has been published and the new public sector carbon reduction targets are known.

4. Carbon Management 2019-20

- 4.1. The Council's carbon emissions in 2019-2020 are detailed in the table below which shows that they have reduced by over 56% compared to the baseline year of 2005-2006. The data for 2019-20 has used the most up to date conversion factors as detailed in 3.3 and so a proportion of the reduction is due to the much reduced electricity conversion factor.

Table 1

Emissions source	Baseline 2005-06	2019-20	Variance	% Variance
Buildings (Electricity, Gas, Oil)	69,427	38,219	-31,208	-45.0%
Waste (Household)	61,320	18,279	-43,041	-70.2%
Fleet	10,418	8,418	-2,000	-19.2%
Street Lighting	13,005	1,862	-11,143	-85.7%
Employee Travel	1,795	504	-1,290	-71.0%
Totals	155,965	67,282	-88,682	-56.9%

- 4.2. The table below demonstrates what the reductions would have been for the last year had we updated our conversion factors in 2018-2019. This allows us to see the effects our actions have had on our carbon footprint without the outside influence of fluctuating carbon conversion factors.

Table 2

Emissions source	2018-19 updated factors	2019-20 updated factors	% Variance
Buildings (Electricity, Gas, Oil)	38,752	38,219	-1.4%
Waste (Household)	40,643	18,279	-55.0%
Fleet	8,718	8,418	-3.4%
Street Lighting	2,191	1,862	-15.0%
Employee Travel	535	504	-5.7%
Totals	90,839	67,282	-25.9%

4.3 Buildings

- 4.3.1 Electricity consumption decreased by 2% which is due to successful PV and LED installations as well as the ongoing Caird Street decommissioning. Gas consumption increased very slightly due to the cooler weather in 2019-2020 which has been corroborated by local degree day data which shows that there would have been a 1.4% reduction if not for the outside temperature variance. Oil consumption showed a significant increase but this is because of new reporting arrangements making this year as accurate as it has ever been.
- 4.3.2 Overall, despite the reductions due to the updated conversion factor, the data shows good energy performance in our buildings throughout 2019-2020.

4.4 Waste

- 4.4.1 The emissions from waste have been shown to have reduced significantly in both of the tables above. In addition to using updated carbon factors each year, it is now proposed that emissions associated with all of our collected waste is applied. Since the baseline year, a carbon factor has been applied to the amount of waste sent to landfill only. However, there have been updates to how carbon emissions are associated with the waste which is segregated for recycling. The process of recycling our waste still produces carbon emissions.
- 4.4.2 In 2018-2019, a factor was applied to the waste sent to the energy from waste plant and it was agreed that, from 2019-2020, a carbon factor is applied to the paper, plastic, garden/food and metal recycle.
- 4.4.3 The data for 2019-20 has been further updated to match with the Council's annual mandatory report to SEPA where we report on household waste only. We were previously required to report on 'municipal' waste which contained a very small element of waste collected from parks and street sweepings, and so this was measured when we set our carbon footprint. As SEPA no longer collects this data and report on a calendar year basis rather than financial year, the data for carbon reporting has been updated too which ensures a more consistent reporting process.

4.5 Fleet

- 4.5.1 Emissions from fuel used within our fleet has continued to reduce as demonstrated in both tables. The fleet has continued to downsize in relation to the size of vehicles, which has resulted in smaller, more efficient vehicles and a reduced fuel consumption.

4.6 Street Lighting

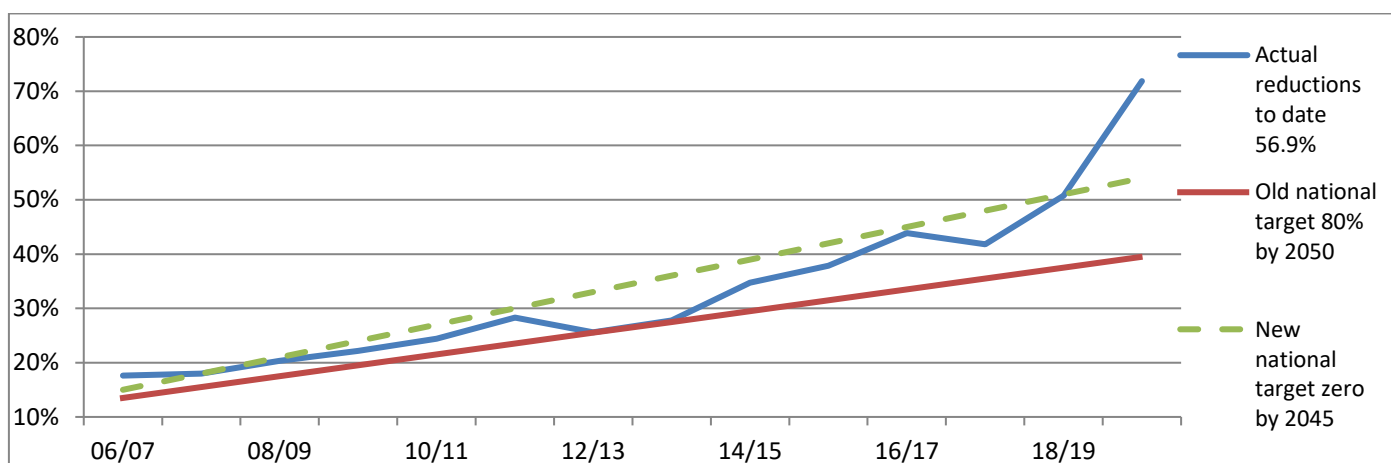
- 4.6.1 The final year of the LED street lighting replacement programme has achieved further savings. The ambitious project which started in June 2015 has achieved significant consumption savings of over 68%.

4.7 Staff Travel

- 4.7.1 Emissions from staff travel have also continued to reduce. Emissions associated with staff mileage claims reduced despite the number of miles travelled increasing slightly. This is due to improvements in the types of personal vehicles being driven by employees and the proportion of small vehicles is now far more than medium or large vehicles. Pool car travel also reduced resulting in reduced emissions. Future agile working may affect the amount of staff travel required, however, it should be noted that any potential carbon savings in pool car travel could be offset by personal car usage and heating and lighting in employees' own homes.

5. Future Carbon Targets

- 5.1 The Scottish Government is committed to reach net zero emissions by 2045, with interim reduction targets of 56% by 2020, 75% by 2030 and 90% by 2040 (based on 1990 levels). The Council has an obligation to contribute to these targets and fulfil its duties under the Local Government (Scotland) Act 2003 and the Climate Change (Scotland) Act 2009.
- 5.2 Indications are that, although Scottish Government's targets are to reach net zero, public sector is being asked to commit to meeting 'zero direct emissions'. There needs to be more clarity on what specifically this would mean, as there are differing approaches across the public sector in relation to what falls within a carbon footprint and what exactly 'direct' emissions means in this context. More information is expected when the Climate Change Plan is published in December 2020.
- 5.3 It was agreed by the Council in 2019 that 2019-2020 would be the year to 'reset' the Council's carbon journey. The current carbon reduction target of 10% between 2015 and 2020 brought our target in line with the old national target of 42%, with aspirations to meet the new target of 56% by the end of 2020.
- 5.4 As the national targets are using a baseline of 1990, which is prior to when the Council started measuring carbon emissions, we made an assumption that we could have saved 1% each year since 1990 to our own baseline of 2005. Based on these figures, the table below shows our progress to the old and new national targets. It will be noted that the Council progress has been shown as 71.9% (56.9% plus 15%).



- 5.5 New carbon reduction targets will be set for 2020-2021 within the Climate Change and Sustainable Development Strategy action plan. This will require to be considered and determined by the Committee by March 2021. A specific target is useful for the Council to gauge performance but there needs to be consideration given for how carbon sequestration could play a part and how good partnership working on an area wide basis can contribute to the national targets.

6. Employee Implications

- 6.1 All Resources are required to contribute to the implementation of the Sustainable Development Climate Change strategy and Carbon Management Plan to ensure that actions and targets are met. The sustainable development officer and carbon management officer monitor and report the Council's progress.

7. Financial Implications

- 7.1 Carbon reduction has been achieved within current budgets and from additional capital funds but further financial investment will be required for the Council to contribute to the challenging national net zero and zero direct carbon targets and global sustainable development goals.
- 7.2 The capital programme is a crucial part of being able to achieve carbon emission reductions. There is potential for new or refurbished buildings to be carbon neutral but there may be an initial financial outlay in order to achieve savings over the lifetime of the building.

8. Climate Change, Sustainability and Environmental Implications

- 8.1. The carbon management process demonstrates the council's commitment to contribute to national targets and to the global sustainable development goals.

9. Other Implications

- 9.1 There are no risk implications in terms of the proposals contained within this report

10. Equality Impact Assessment and Consultation Arrangements

- 10.1 This report does not introduce a new policy, function or strategy or recommend a change to an existing policy, function or strategy and, therefore, no impact assessment is required.

Michael McGlynn

Executive Director (Community and Enterprise Resources)

01 September 2020

Link(s) to Council Objectives and Values

- ♦ Work with communities and partners to promote high quality, thriving and sustainable communities

Previous References

- ♦ None

List of Background Papers

- ♦ Carbon Management Plan 2018
- ♦ Sustainable Development Strategy 2017-2022

Contact for Further Information

If you would like to inspect the background papers or want further information, please contact :-

Name: Julie Richmond

Designation: Carbon Management Officer

Ext: (Tel: 01698.454286)

E-mail: julie.richmond@southlanarkshire.gov.uk