



Climate and environment emergency executive panel

Date: Thursday, 17 December 2020

Time: 09:00

Venue: Meeting will be held remotely

Committee members:*

Councillors:

Maguire (chair)
Stonard (vice chair)
Carlo
Giles
Lubbock
McCartney-Gray
Osborn

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Agenda

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1 **Apologies**

To receive apologies for absence

2 **Declarations of interest**

(Please note that it is the responsibility of individual members to declare an interest prior to the item if they arrive late for the meeting)

3 **Minutes**

1 - 6

To approve the accuracy of the minutes of the meeting held on 1 July 2020

4 **Natural Capital Evidence Compendium Norfolk and Suffolk November 2020 - Presentation**

Presentation by Professor Andrew Lovett, University of East Anglia

5 **Carbon Footprint Report 2019 -20**

7 - 16

To consider the council's carbon footprint report for 2019 - 2020

Date of publication: **Wednesday, 09 December 2020**



Climate and environment emergency executive panel

09:30 to 11:30

1 July 2020

Present: Councillors Maguire (chair), Stonard (vice chair), Carlo, Giles, Lubbock, McCartney-Gray and Osborn

1. Declarations of interest

There were no declarations of interest.

2. Minutes

RESOLVED to approve the accuracy of the minutes held on 12 February 2020.

3. Environmental Strategy 2020-25

The chair introduced the report. He explained that this was the fourth environmental strategy and it had been near completion but had been delayed by 18 weeks due to the restrictions on public consultation surrounding the four elections that were held last year. He commended the environmental strategy manager and team for the production of this “superb plan” and the collation of the 107 responses whilst being redeployed to other duties and working at home due to the Covid-19 pandemic. He reminded members that the panel had considered the environmental strategy at a previous meeting and that the panel now had an opportunity to consider the consultation responses and to make recommendations to cabinet. The previous environmental strategy had been regularly monitored and this work contributed to the draft environmental strategy that was before the panel. He commended the environmental strategy team for the detailed analysis and response to the comments received during the consultation.

The environmental strategy manager presented the report and highlighted the consultation responses and the officer response, as set out in Appendix 2. The changes to the environmental strategy arising from the consultation were listed in the covering report. During the presentation he referred to the council’s carbon reduction campaigns and programmes over the last 10 years (appendix 2, paragraph 8.9) and said that the 45 per cent reduction had been revaluated at 48.5 per cent by last week, demonstrating that the council was on track for net zero target.

During discussion the environmental strategy manager, together with the director of place, answered members’ questions. Members generally welcomed the environmental strategy and thanked the environmental strategy manager and team.

A member suggested that given the length of time that it had taken to produce the strategy, the chair's foreword should be updated to reflect the current Covid-19 experience and provide more information about the changes that it had brought about and the opportunities that it had been presented. Ideally the strategy should be rewritten but she acknowledged that this would not be fair on the work that had already been undertaken but it would be an out-of-date strategy if it did not contain a reference to Covid-19 as going forward it would be a changed world. The environmental strategy manager pointed out where references to Covid-19 had been made in the strategy and said that the action plan had been updated to reflect that the council's Covid-19 recovery plan would inform the environmental strategy. Other members agreed with the chair that Covid-19 should be explicit in the foreword and that it presented opportunities for environmental improvements that should be taken forward.

A member also pointed out that the reference on page 27 of the strategy to a former sheriff in 2008 as Lord Mayor was inaccurate and should be amended. She also considered that the reference to an event 12 years ago was unnecessary. The vice chair said that the people's assembly had set the strategy in motion and that the council had declared a climate emergency and the actions set out in the strategy should be taken forward without delay.

A member referred to the ranking of the priorities and welcomed the opportunity to work with partners, both in the private and public sectors, and in the community. She said that there was a real opportunity to work with grass root communities which had emerged during the pandemic. Another member said that speaking of partners, it was his understanding that the Tyndall Centre had stated in January that it could not endorse the council's environmental strategy and asked for all references to the centre to be removed from the document before it was adopted by cabinet. The chair said that the Tyndall Centre would be contacted to investigate the councillor's comments. The environmental strategy manager confirmed that where the Tyndall Centre disagreed with the council, there had been an appropriate reference made in the strategy.

A member said that he was disappointed that the target had not been amended in the strategy and "was still business as usual" given that the Labour party and Green Party nationally sought a carbon zero target by 2030 for the UK. He recommended how the SCATTER pathway tool could be used more efficiently to assess how the council achieved reduced emissions. In Norwich emissions needed to be cut by 12.7 per cent year on year, which was better than average for the UK. He suggested that the SCATTER pathway tools should be used to create a quantifiable action plan to show the specific impact of actions on achieving the council's target. He said that this was what the tool was designed to do. He said that it was difficult to judge the impact of the action plan without information about the number of houses, etc. The chair said that he was concerned about setting year on year targets and preferred an incremental change over the period of the strategy. The vice chair said that the council should look at the overall target, which would not be a smooth curve but would be achieved within the period covered by the plan. The environmental strategy manager said that using the SCATTER tool to assess retrofitting of private sector housing would highlight where emissions needed to be reduced but did not provide the funding to carry it out.

A member said that the action plan was key. The city council's own emissions were less than 2 per cent of all emissions in Norwich as a whole. Some measures in the action plan would be expensive, such as retrofitting homes, but others would not be. She suggested that if the city council was to withdraw its support of the Western Link, it would not cost anything, but would send out a big signal of the council's support for the environment. She had asked two years ago there should be an adaptation strategy incorporated into the environmental strategy and said it was important that a strategy was developed. It was her view that it should be included in the environment strategy. Heat waves would be more frequent, and an adaptation strategy was therefore critical. The chair accepted the councillor's comment that she would write to the cabinet to explain her reasons for not being able to support the environmental strategy.

The environmental strategy manager said that the council would be updating its adaptation strategy using the new Met Office data set UKCIP18. This data set provided the latest data on the Met Office's predictions for the short, medium and long-term weather risks related to climate change. The council would use this data for a new LCLIP (Local Climate Impacts Profile) which would identify how climate change would affect council services and help inform the council's adaptation strategy. This report would be presented to the panel later in the year. He added that the SCATTER tool was in its first year of operation and it was unclear whether the Department for Business, Energy and Industrial Strategy would provide further funding to track progress.

(Councillor Stonard had left the meeting at this point.)

A member said that the council did need a quantifiable target plan based on year on year targets which had been provided by the Tyndall Centre who could provide the data. It was not about criticising the council but to check the scale of action that was needed. He suggested that the council use the same financial model as Solar Together for the retrofitting of private sector housing which should be self-funding. The chair said that this was part of the action for housing and was part of the integrated approach set out in the recovery plan. The environmental strategy manager said that there was eco-aggregator in the action plan. He said that there was a difference between the power of aggregation and a reverse auction, but he would look into it. The member also recommended that with regard to the new food economy, there should be a reference to Covid-19 to include a green recovery of the economy as we transition and proposed that there should be an expert on the project board.

Discussion ensued on the members' third recommendation that the council should use its commercial investments to transition to a greener economy. He suggested that other local authorities were doing this and there were opportunities to invest in sustainable energy such as solar energy and battery storage. It was noted that there had been a proposal at budget council on investment in battery storage. The environmental strategy manager said that the technology was improving but the commercial regulation changes and state aid rules could undermine the expected payback on the investment, and advised caution to ensure that investments were as solid as possible. The director of place said that the council's commercial property investment strategy already supported the environmental strategy by restricting investment in properties associated with unsustainable or unethical businesses. He said the council's commercial property investment activities had been paused and

the strategy would need to be reviewed in the light of the outcome of a government consultation on the use of finance from the Public Works Board. Any review of the commercial property investment strategy would examine further how to support ethical investment, to take into account the impact of Covid-19, and, look at a more sustainable investment strategy, both financially and environmentally, going forward. This was an action that the council would do and was not dependent on the environmental strategy's action plan.

A member referred to the comments that the city council was not doing enough for sustainable transport and pointed out that the council operated car parks in the city centre. She suggested that the council should consider alternative uses for the car parks. By removing the car parks, it would make it easier to introduce a car free city centre which would benefit health and equality of opportunity and reduce emissions. She said that the environmental strategy should promote more sustainable travel and go further than the 20mph suggested. The chair referred to pages 24 and 25 of the environmental strategy and said that the 2040 Vision would also improve sustainability. He also pointed out that the environmental strategy was to 2025 and that it included plans for public transport. A member also suggested that the car parks sites could provide alternative sources of revenue for the council.

A member commended the strategy and said that the details would be set out in individual projects on the action plan. He suggested that for future consultations, consideration was given to the difficulty presented to respondents in being asked to prioritise items from 1 to 10. He also asked the environmental strategy manager to check that the ENGIE was still operating, pointing out that post Covid-19 there would be a recession. He suggested that the government should provide funding and assist councils to achieve net zero earlier.

A member said that as a key part of the strategy was working with partners and there should be reference to the stakeholders. He also asked whether there could be a report to this panel on what the council and cabinet were doing to lobby government, the New Anglia Local Enterprise Partnership (LEP) and other organisations to increase funding for its carbon reduction plan and to achieve targets by 2030 rather than 2050. He also asked that the stakeholder's responses were published as part of the strategy. The director of place said that officers would investigate this request to ensure information released complied with relevant legislation and any assurances that had been given to the respondent. The member suggested that this could be as simple as writing to the partner stakeholders to seek their agreement.

During discussion, the chair listed the possible recommendations arising from the discussion. The director of place suggested that the recommendations were divided into comments on the environmental strategy and the other recommendations for actions arising from the debate, for instance the review of the commercial investment strategy. During discussion the panel debated the issues raised above. The chair took up the issue of using tools for quantitative assessments but suggested that rather than use these to assess actions against the action plan it should be part of environmental impact assessments made at the appropriate time during the decision-making process. Members also noted the governance arrangements for monitoring progress on the environmental strategy: through the terms of reference of this panel; reports to cabinet that were subject to scrutiny committee call-in and council; and, that there would be bi-annual and annual reporting of key performance indicators. In reply to a suggestion, the chair said that the council was lobbying the

government and the LEP for funding to achieve carbon reduction and that he did not consider that there needed to be reports on this. After some discussion it was noted that grass root groups were included in the strategy and therefore it did not need to be included in the foreword but that behavioural change arising from Covid-19 by increasing walking and cycling should. It was also suggested that “place making” needed an explanation in the glossary for members of the public. The director of place said that a huge proportion of council activities influence the current or future environment in Norwich. The environmental strategy manager confirmed that he would add something to explain this in the glossary. The chair said that he had also spoken to the environmental strategy manager about other explanations to be included in the glossary.

The chair agreed to that the panel would vote on each recommendation separately:

RESOLVED to:

- (1) on the chair’s casting vote, with 3 members voting in favour and 3 members voting against, to recommend the environmental strategy to cabinet for adoption, subject to an amendment to the chair’s foreword to contextualise the development of the strategic document within the events of the Covid-19 pandemic and the resulting behavioural changes leading to an increase in walking and cycling;
- (2) with 1 member abstaining from voting, to request cabinet that when conducting environmental assessments, the council applies SCATTER tools or other environmental assessment tools as appropriate to quantify the environmental impact of decision making;
- (3) unanimously, to request cabinet that if and when the council’s commercial property investment strategy is revised that CEEEP is involved in its preparation to ensure that opportunities to stimulate the green economy are maximised;
- (4) with 1 member abstaining from voting, to note that in accordance with the terms of reference of this panel, request that reports on the environmental strategy action plan are considered regularly, note the governance arrangements in place to monitor the effectiveness of the strategy and to reaffirm that the council is committed to lobby the government for funding to achieve the carbon neutrality as soon as possible.

CHAIR

Report to	Climate and environment emergency executive panel	Item
	17 December 2020	
Report of	Director of place	5
Subject	Carbon Footprint Report 2019 -20	

Purpose

To consider the council's carbon footprint report for 2019 - 2020

Recommendation

To note the outcomes of the carbon footprint exercise.

Corporate and service priorities

The report helps to meet the corporate priorities for great neighbourhoods, housing and environment, inclusive economy and people living well.

Financial implications

No new financial implications. Funding for specific proposals would be subject to a separate approval process at the appropriate time.

Ward/s: All Wards

Cabinet member: Councillor Maguire - Safe and sustainable city environment

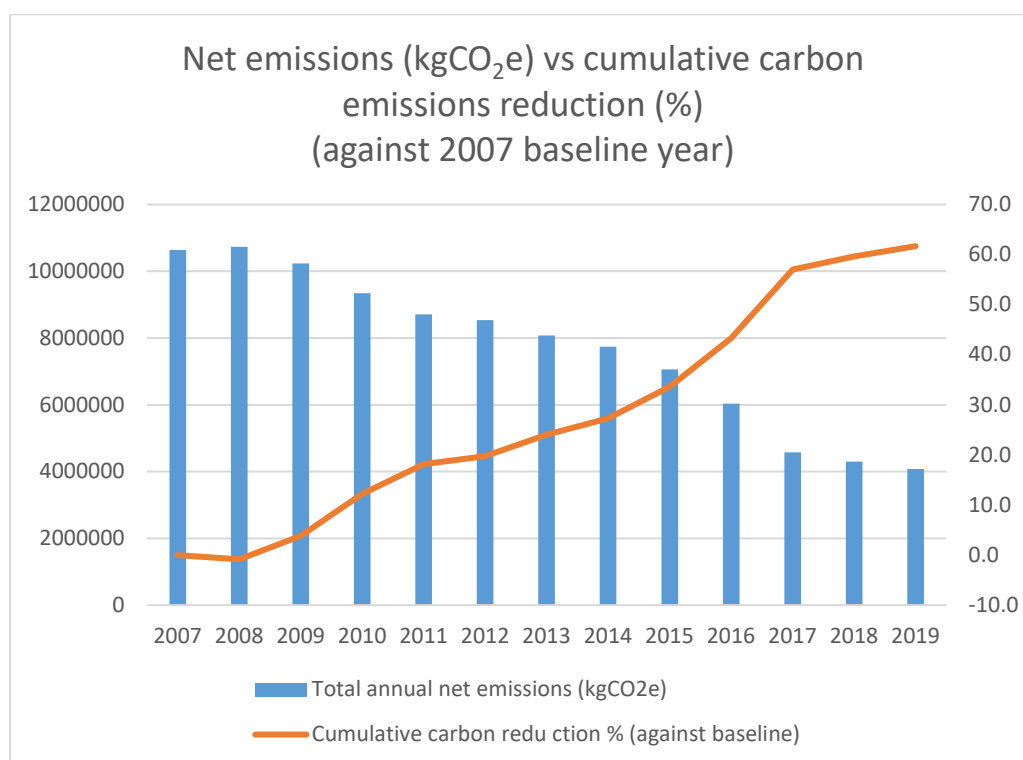
Contact officers

Richard Willson – Environmental strategy manager 01603 989634

Claire Tullett – Environmental strategy officer 01603 989606

Report

- 1 For the period 1 April 2019 to 31 March 2020 a further reduction of 2.5% in the council's carbon footprint was achieved. This takes the total reduction in carbon emissions to 62.1% (against the 2007 baseline). Graph 1 shows the annual reduction in net carbon emissions (kgCO₂e), against the percentage reduction in carbon emissions over time.



Graph 1: Net Emissions vs cumulative emissions

- 2 Carbon emissions data is collected from a variety of sources, and in various units e.g. litres fuel used, km travelled, and kWh energy consumed. These are converted using a set of conversion factors provided by the Department of Business, Energy and Industrial Strategy (DBEIS). This allows all data to be expressed as kg of carbon dioxide, or kgCO₂e. This year the council reduced its carbon emissions by a further 266,396kgCO₂e or 266.4 tonnes. The carbon emissions are broken down into 3 Scopes:

Scope 1:

Gas consumption in council assets (kWh)
Gas consumption in contractor assets (kWh)
Fuel use in council assets (litres)

Scope 2:

Electricity consumption in council assets (kWh)
Electricity consumption in contractors' assets (kWh)

Scope 3:

Grey fleet (km)

Public transport (km)
Contractor fuel use (litres)

2019/20 in context with 5 year average data:

- 3 There have been requests in previous years that officers present the council's energy consumption (kWh, litres/km) alongside the carbon emissions figures (kgCO₂e). Therefore, both sets of figures have been provided below in Table 1. It should be understood, that although these figures are related, they are not directly comparable, due to the use of carbon conversion factors, which are influenced by external aspects at a national level. Since we are bound to use the conversion factors provided by DBEIS, their influence is also outside of our control.
- 4 The third column of Table 1 shows the amount of energy use either in kWh, litres of fuel used or km travelled. The fourth column shows this year's figures as a percentage increase or decrease against a 5 year average from 2014-19. This is in order to smooth the impact of one-off anomalies in reporting. The fifth column shows the amount of carbon emissions produced by each factor of each scope in the 2019-20 period. Finally, the sixth column shows this year's figures as a percentage increase or decrease against a 5 year average from 2014-19

Table 1 - Data by scope:

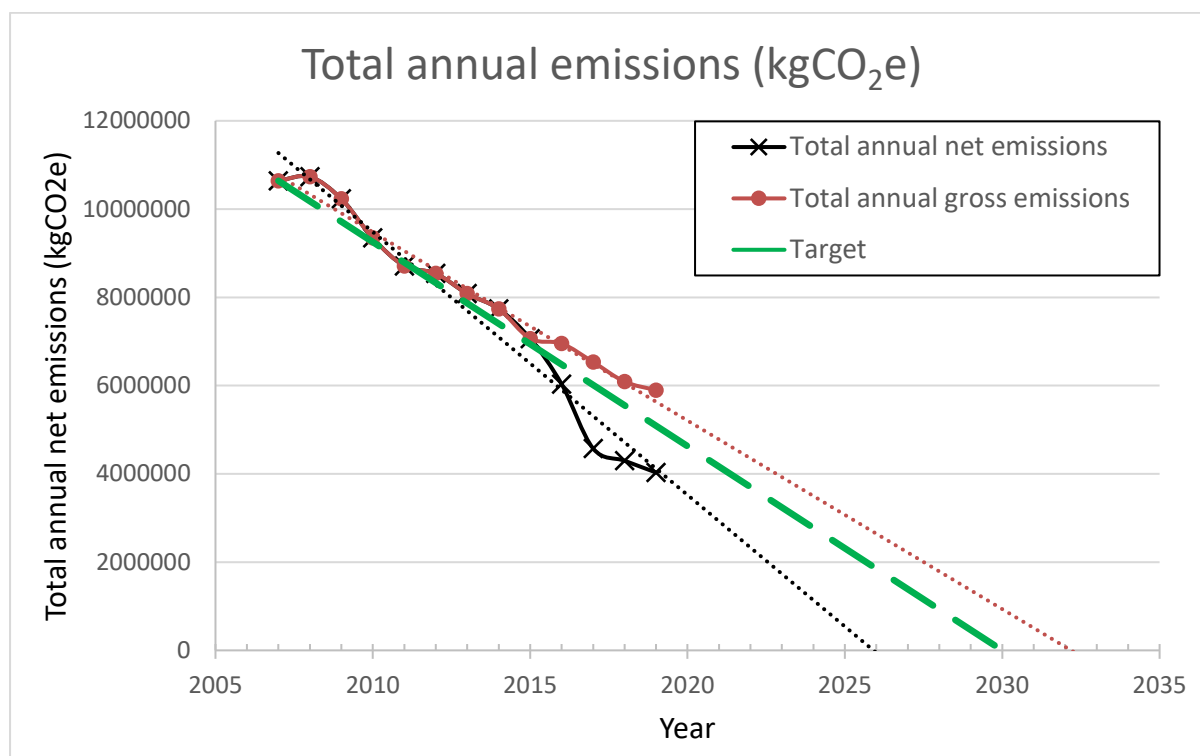
Scope	Detail	2019-20 energy use	Inc/ dec on 5 year average (2014- 19)	2019-20 carbon emissions (kgCO ₂ e)	Inc/ dec on 5 year average (2014- 19)
1	Gas council owned buildings	12,998,072 (kWh)	Decrease (6.67%)	2,389,696 (kgCO ₂ e)	Decrease (7.1%)
	Gas contractors	144,102 (kWh)	Increase (24.42%)	26,493 (kgCO ₂ e)	Increase (24.1%)
	Fuel council managed vehicles	12,041 (litres)	Decrease (15.85%)	2,932 (kgCO ₂ e)	Decrease (14.3%)
	Total Scope 1 emissions (kgCO ₂ e)			2,419,121	
2	Electricity council owned buildings	7,107,092 (kWh)	Increase (7.02%)	154,224 (kgCO ₂ e)	Decrease (92.0%)
	Electricity contractors	547,842 (kWh)	Increase (72.8%)	140,028 (kgCO ₂ e)	Increase (7.8%)
	Total Scope 2 emissions (kgCO ₂ e)			1,956,601	
3	Grey fleet (km)	80,221 (km)	Increase (5.6%)	14,882 (kgCO ₂ e)	Decrease (2.6%)
	Public transport (km)	45,261 (km)	Decrease (4.19%)	3,031 (kgCO ₂ e)	Decrease (19.1%)
	Contractors data (km)	584,467 (km)	Decrease (26.9%)	1,501,664 (kgCO ₂ e)	Increase (3.2%)
	Total Scope 3 emissions (kgCO ₂ e)			1,519,577	
	Total emissions – All Scopes (kgCO ₂ e)			5,895,299	

Commentary:

- 5 Some of the most notable changes are increases in contractors' energy use, both gas and electricity. Officers have checked with contractors and the reason for the increase has been given as more robust and accurate reporting methods. As the council brings more contractors in-house it is hoped that it will be possible to facilitate greater emissions reporting accuracy as the council will have more access and control over the sources of data.
- 6 There has been a drop in contractor fuel use, which it has been suggested by one contractor is due to a drop in miles covered during the period, and a suggestion that this trend will continue significantly in the next reporting year, where contractors have been subject to Covid-19 restrictions. Another contractor has also reported that they are switching away from diesel vehicles early in 2021 to hybrid vehicles. If this is seen across other contractors, as we draw closer to the government's target to ban all new petrol and diesel vehicles from 2030, we should expect to see a reduction in all fuel emissions over time. (The government is to consult the heavy goods vehicle (HGV) industry further before making a decision on bringing in a diesel ban for those vehicles from 2030).
- 7 There has been a 7.2% decrease in gas use in council owned assets. Sheltered housing schemes, by the very nature of the needs of their residents, are one of our largest gas consumers. We continue to upgrade boiler houses and retrofit energy efficient technology wherever possible. Many schemes have had variable speed pumps, loft space pipework insulation, boiler upgrades, smarter controls, and valve and flange insulation fitted, and some have had underground pipework insulation retrofitted too. We continue to work with our asset management team to seek out new opportunities to use Salix funding to finance these works where possible.
- 8 This period is the first time that the council has opted to use carbon offsetting to support its carbon emissions reduction journey. This is a recognition of two things.
 - (a) Norwich City Council began reducing its carbon emissions in 2008, and has been successful at doing this for 12 years. However, it is more difficult to go on saving carbon year on year as the ease of project implementation diminishes.
 - (b) The council has elected to achieve net zero carbon by the year 2030, in recognition of the global climate emergency.
- 9 In order to achieve net zero carbon by the year 2030 retrofitting our assets will not be sufficient, even if it were economically viable. Some assets, such as City Hall, have extreme technological challenges to the adoption of renewable energy and therefore may struggle to become a net zero asset. A similar rationale would apply to the Halls which is a difficult asset to retrofit due to its age and listed status.

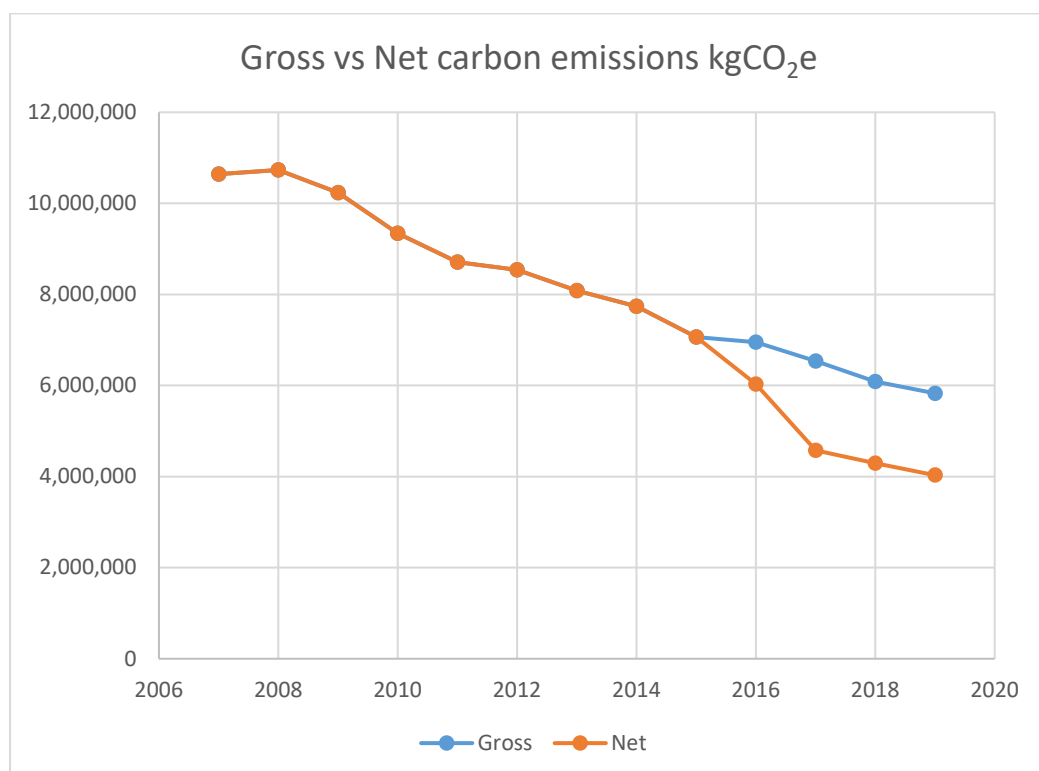
- 10 In 2016, the council moved to an OFGEM approved Green Tariff for electricity provision and this saw a significant reduction in the carbon emissions produced from electricity use. We are still required to report carbon emissions associated with transmission and distribution of electricity, and we report our contractors' energy use, which is often not supplied via a certified Green Tariff. But nevertheless, the reduction in carbon associated with the council's own use of electricity has been slashed thanks to the introduction of the Green Tariff. See Graph 3. Hopefully advances in the use of grid sourced green gas, district heating or progresses in hydrogen space heating will facilitate similar carbon reductions in the future.
- 11 Carbon offsets, through a reputable source, are vital in achieving rigorous carbon emissions reduction targets. Accepted best practice is to use them further down the carbon reduction pathway as a tool to bridge potential technological shortcomings. Therefore, without carbon offsetting it may be that net zero is not possible by 2030 as the assets the council use are old and represent some considerable retrofitting challenges in terms of their age or listed nature and ability to use renewables. This year the council has offset 21 tonnes CO₂e. The scheme selected is independently verified for quality assurance and meets BSI PAS 2060. The scheme supports tree planting in the east of England, which in turn creates valuable habitats for wildlife, whilst sequestering carbon emissions.

Graph 2 below, shows the path the council needs to follow in terms of year on year carbon emissions reduction in order to achieve the target of net zero carbon by 2030.



- 12 The dashed green line (Target) shows the path we need to take in order to achieve net zero carbon by 2030. If we go above this line, we will not achieve the target date.
- 13 The red line shows the council's gross carbon emissions journey: that is without the Green Tariff and without carbon offsetting. We have extrapolated from the data a trendline which suggests that if the council was able to continue as we have been, that we may achieve net zero by 2032. However, this would suppose that we could continue making large energy efficiency improvements to assets by retrofitting, as we did in the early years of the Carbon Management Programme, and this is simply not sustainable, when our assets are limited in terms of renewable generation capacity.
- 14 The black line shows net carbon emissions, and again, using previous data, a trendline has been extrapolated forwards and suggests we could become net zero in 2026. Again, this also would suppose that we can go on making the same emission savings indefinitely, which would be unlikely.
- 15 In order to achieve the target year of 2030 we need to stay on or below the green line. Part of being able to achieve this will include using carbon offsetting to support our carbon emissions reduction journey.

Graph 3 below, represents this is a different way.



- 16 This graph shows very clearly the impact of switching to the Green Tariff in 2016. Since we started in 2008, we have reduced the council's carbon

footprint, year on year, taking it from 10,800 tonnes of CO₂e in 2008, to 4,000 tonnes CO₂e in 2020. This is a fantastic achievement. We now have 10 years to reduce 4,000 tonnes per year, or 4,000,000 kgCO₂e, to 0 tonnes per year. Because we cannot go on indefinitely upgrading and retrofitting our assets to make them more energy efficient, we must look to other methods to help achieve our target of net zero by 2030.

- 17 In addition to the green tariff, and the use of carbon offsetting, we will continue to seek opportunities to implement energy saving technologies on our assets. We will also continue to work with our contractors to encourage them to reduce the carbon emissions they produce whilst carrying out work on council contracts.

Anticipating the impact of Covid-19 on the next reporting period and beyond:

- 18 Through our contact with contractors in seeking their carbon emissions data, it has become apparent that many staff have been placed on furlough during the greater part of 2020, and that work carried out by various contracts has been reduced. This will likely impact the carbon footprint during 2020/21.
- 19 For example, Riverside Leisure Centre has been closed for many months of 2020, as has St Andrews and Blackfriars Hall, and staff numbers at City Hall have also been greatly reduced. Because of this, we might expect to see a reduction in the amount of energy consumed at these sites. With many staff working from home, we might also expect to see a corresponding reduction in grey fleet miles covered, where staff use their own vehicle for work, and are recompensed accordingly. However, the reductions are unknown as some plant requires to be operational to avoid damage and heating systems can't be completely switched off over winter. Therefore, emission savings are likely to result from electrical load reductions and reduced travel.
- 20 One contractor has suggested that their diesel figures may likely be reduced for the period 2020/21 due to the impact of Covid-19, and this may be similar for other contractors. This may result in a possible drop in carbon emissions that is due to Covid-19 and may not be replicable in future years. And there may be a corresponding increase in contractor carbon emissions in the year 2021/22, but the rate of recovery remains to be seen.

Future projects and project development:

- 21 The council has committed significant funding to the retrofitting programme since 2008. The range of energy saving projects have been innovative and diverse. From IT auto shutdown software to intelligent low energy LED retrofitting and renewables, as well as a building rationalisation programme, these projects have reduced carbon emissions as well as cost.
- 22 The council has received grant funding from the decarbonisation fund to further develop energy savings projects at City Hall and the new Depot. These include the use of renewables. In addition, plans are in place for the following:

- Installing EV charges for fleet use
- New energy efficient servers
- New smart LED connected lighting at St Giles MSCP
- Further LED retrofitting at the halls
- Further LED retrofitting in landlord lighting/ parks
- Continued development of renewables and battery storage.

Appendix A – Norwich city council carbon emissions by scope since 2007 baseline year.

	GHG emission data for period 1 April 2019 to 31 March 2020 (previous years restated)												
	Global kg of CO ₂ e												
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Scope 1	2,419,120	2,576,804	2,714,763	2,593,049	2,499,724	2,640,453	3,121,775	3,446,651	3,136,959	3,549,707	3,745,825	3,873,933	1,682,048
Scope 2	1,956,601	2,012,976	2,239,942	2,462,896	3,432,985	3,836,556	3,478,538	3,644,381	3,774,122	3,972,326	4,311,715	4,691,648	6,603,828
Scope 3	1,519,577	1,499,753	1,579,869	1,897,304	1,131,715	1,261,406	1,480,944	1,449,823	1,800,339	1,821,824	2,173,565	2,167,385	2,355,434
Total gross emission	5,895,298	6,089,533	6,534,574	6,953,249	7,064,424	7,738,416	8,081,257	8,540,855	8,711,420	9,343,857	10,231,105	10,732,966	10,641,310
Carbon offsets	201,770	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Green tariff	1,662,529	1,792,138	1,959,434	920,543	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total annual net emission	4,030,999	4,297,395	4,575,140	6,032,706	7,064,424	7,738,416	8,081,257	8,540,855	8,711,420	9,343,857	10,231,105	10,732,966	10,641,310

To 31 March 2020, Norwich City Council has achieved a net 62.1% carbon reduction since 2007. It remains in advance of its target to become zero carbon by 2030.