



NORWICH City Council

Committee Name: Cabinet

Committee Date: 13/10/2021

Report Title: Climate and environment update

Portfolio:	Councillor Hampton, Cabinet member for climate change and digital inclusion
Report from:	Executive director of community services
Wards:	All Wards
OPEN PUBLIC ITEM	

Purpose

To consider the climate and environment update.

Recommendation:

To note the report, the appended climate and environment update, note planned further work as set out in this cover report and endorse the revised city vision target regarding areawide emissions.

Policy Framework

The Council has three corporate priorities, which are:

- People living well
- Great neighbourhoods, housing and environment
- Inclusive economy

This report meets the great neighbourhoods, housing and environment corporate priority.

This report addresses the following strategic actions in the Corporate Plan:

- Maintain a clean and sustainable city with a good local environment that people value
- Ensure our services mitigate against any adverse effects of climate change and are efficient to reduce carbon emissions
- Improve the quality and safety of private sector housing

- Continue sensitive regeneration of the city that retains its unique character and meets local needs

This report helps to meet the climate change and green economy objective of the COVID-19 Recovery Plan.

Report Details

1. The Council has been at the forefront of action on the environment over many years. It was one of the first to benchmark its carbon footprint in 2007, and has reduced its emissions by 70.1% since then. Ambitious targets have been agreed for the council to reach net zero by 2030.
2. Through its award-winning carbon management plan, the council has made impressive strides towards decarbonising its own operations, purchasing 100% renewable power for internal use, switching some petrol and diesel ground fleet for electric vehicles (EVs) and retrofitting buildings across its estate to boost energy efficiency.
3. It continues to promote issues such as: water reduction, food waste, sustainable transport, domestic energy efficiency and recycling, amongst others through our annual One Planet events and social media campaigns. This has resulted in achieving a recycling rate of 38.8 per cent.
4. But there is more to do. The council declared a climate emergency in 2019 and since then, the evidence of climate change, and the real impact it will have on our communities and our City, has become ever more apparent. The findings of the recent Intergovernmental Panel on Climate Change report are stark.
5. The upcoming UN Climate Change Conference (COP26) in Glasgow is a critical moment and further action must be taken at national and international level. Funding at a local level also needs to be commensurate with the size of the challenge.
6. Nonetheless, local councils can play a significant role in realising the benefits and opportunities of climate action in their areas. Councils are ideally placed to bring agendas together to ensure 'win-win' outcomes for the local communities we serve. In this sense, climate action is not a 'new' or 'different' agenda. For example - co-ordinating action to retrofit homes can help address fuel poverty, create local jobs, cut carbon and make homes more resilient to the effects of severe weather. And since climate impacts cannot be tackled by one organisation alone, the "convening" role of local authorities is critical: bringing partners together to understand how they can contribute, supporting communities to understand and adapt to the changes, and removing barriers to change where possible.

An updated assessment

7. The Council's most recent Environmental Strategy (2020-2025) was published in 2020 and sets out the Council's approach to reducing its own carbon emissions; supporting residents, businesses and organisations in Norwich to reduce their emissions; and helping the city adapt to the predicted changes in climate by adaption or increasing resilience.
8. Since publication, the strategy and action plan, with input from stakeholders, has been reviewed to include reference to opportunities emerging from the covid 19 crisis and articulates environmental objectives during the recovery

phase. However, the environmental landscape continues to change at pace, along with the impacts of covid. This, together with the recent Intergovernmental Panel on Climate Change report, the upcoming COP26, a new Norwich Climate Commission and the future Environment Act requires us to regularly reflect and review our approach to tackling the climate and environmental emergency.

9. Therefore, the council is undertaking a comprehensive assessment, across all service areas, of our response to the climate and environmental emergency and the wider sustainability agenda. The intention is to identify actions already taken, where further action is required, to consider the costs and benefits of new proposals, and develop a clear plan for future work across this agenda which sets out the council's climate change and sustainability commitment. As part of this work it will be necessary to review where the council's environmental resources are focused, including to ensure effective support for the Norwich Climate Commission.
10. This work is being undertaken in three stages:
 - Stage 1 - Identification of actions already taken - July to September 2021
 - Stage 2 – Identification of new opportunities, gaps and risks – to include a review of the Environmental Strategy Action Plan – September 2021 to February 2022
 - Stage 3 – Options assessment and development of a forward plan – January 2022 to March 2022 (final date to be confirmed depending on volume of options presented).
11. The first phase of work, identifying actions already taken, is complete, and detail on how we are creating low-carbon and climate-resilient communities, as well as facilitating and encouraging coordinated action on sustainability is included in the Appendix A of this report.
12. Alongside the analysis described in paragraph 10, detailed work is ongoing on key priority areas, including updating our Carbon Management Plan, developing a biodiversity Strategy, developing plans for improved energy efficiency and carbon reduction of our own council homes, and partnership working via the City Vision to deliver a Sustainable City. More detailed reports on these will be presented to Cabinet over the coming months.

Retrofitting

13. Reducing domestic energy use has important environmental, social and economic benefits and therefore clearly contributes to Norwich city council's corporate priorities. It also helps to meet both national and international targets to reduce carbon dioxide emissions. The Government's ambition on retrofitting is often not matched by the funding made available to local government. This has not stopped the council continuing its efforts to improve the condition of its housing stock.
14. The council has a strong history of investing in our homes, with our council housing having an average SAP rating of 70.9 (EPC Band C), which is

higher than both the national average (65) and the private stock (63) in Norwich. We have invested £129 million over the past six years in our existing homes and our current Housing Revenue Account capital programme contains an £18.5 million commitment to maintaining and improving the condition of existing council housing.

15. Through our Cosy City initiative, we have been able to help people living in the private sector make improvements to their homes too. As grant assisted funding is either removed or reduced however, less homes have been able to benefit from the installation of loft and cavity wall insulation, boilers and controls and external wall insulation. Further details on measures delivered to both private housing and council housing can be found at Annex A.
16. The Council has secured funding from the Public Sector Decarbonisation Scheme to install a 38kW solar and 60 kW battery storage system at the Norwich City Services' new depot. The system, subject to planning and structural surveys, will considerably lower CO2 emissions whilst also preparing the site for the transition towards electrification of its fleet.
17. We are proud of the progress we have made so far in reducing Norwich's carbon emissions and work to tackle fuel poverty and we are committed to continuing this in the future. However, we recognise that we need to be realistic and understand that we are operating in times of financial insecurity where future funding streams are not guaranteed. Without a long-term funding commitment from central Government many improvement schemes have to focus on individual measures rather than a whole house approach which can deliver higher savings.
18. Using BRE's stock modelling data we have been able to model the approximate cost of retrofitting all homes in Norwich with an EPC rating below band C. Retrofitting with wall and loft insulation could cost between £295 and £511 million with a 20-to-35-year payback. Energiesprong¹, which would deliver far higher energy savings, would cost £1.5 billion (million million) with a 40-year payback. Solar Photovoltaics systems on all eligible homes would cost £238 million with a 17-to-24-year payback. These figures seek to illustrate the scale of investment required to bring all homes in the city up to an EPC rating of band C.
19. Our Solar Together programme does encourage homeowners to invest in solar panels. However, with current regulations capping how much landlords have to spend on upgrades, the incentive can often be low. We have ongoing work to fit solar PV on our own council homes.
20. Reviewing our Housing Revenue Account financial capacity over the next financial year and our investment priorities will be key to developing a planned programme of continued investment in our own homes.

¹ . Energiesprong is a whole house approach to retrofit - homes are fully insulated in conjunction with pre-assembled 'energy pods' providing low-carbon, high efficiency heating, hot water and renewable energy production. The end result is homes that are brought up to a minimum net-zero energy standard.

Adaptation

21. Since 2010 the council has used the Met Office UK climate impact projections to model future impacts on NCC service provision from predicted climate change. Adaptation is an essential part of addressing the impacts of our changing climate. The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as: “adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderate harm or exploit beneficial opportunities”. Despite efforts to limit the man-made causes of climate change, a level of change in our climate is unavoidable. Adaptation is vital in reducing the risks of climate change impacts on our wellbeing, business and society.
22. Despite changes to the UK climate pathways the overall predicted changes remain the same – warmer, drier summers and warmer, wetter winters. In the main we expect the risks to arise mainly from increased precipitation and storminess, and an increase in mean temperature and frequency and intensity of heatwaves, which will impact all areas of service. Our modelling covers 2020, 2050 and 2100 using a range of climate pathways. The council will continue to monitor and adapt services in accordance with the risks.

Transport and remodeling the city centre

23. Securing significant Town Deals and Transforming Cities funding will help to boost the local economy, enhance local transport links in Norwich, and remodel city centre areas to make them better for cycling and walking, transforming how residents use and access the city. It will also support the delivery of jobs, homes, skills and action to reduce our carbon emissions. Projects include activities which ensure all our residents directly benefit from the proposed investment.
24. Consultation feedback is being reviewed on each of the project areas that form the Connecting the Lanes proposal which considers how the Norwich Lanes area functions and feels. The projects aim to make it safer and easier to get around on foot or by bike, support outdoor hospitality and boost the local economy, and improve air quality.
25. We are also urging Norfolk County Council to make major improvements to the Transport for Norwich Strategy before it's formally adopted later this year. The council is proposing ambitious and progressive measures that need to be included and will continue to put pressure on the county council to deliver what is best for Norwich, transforming the city into a cleaner, safer, fairer and more sustainable city for everyone.
26. Some of the improvements the city council is urging the county council to include or expand on in the strategy are:
- a. more ambition to control vehicle speed in the city by making 20mph the default speed limit across Norwich
 - b. additional infrastructure to support the move to emission free vehicles and the take up of electric buses, taxis, and cars

- c. a greater focus on ensuring that public transport remains an affordable option for travel and measures to improve reliability are brought forward
- d. commitments regarding spending more on schemes to enable cycling and walking than what is being dedicated to road building
- e. maintenance of footpaths and cycleways to be improved and county council to make it easier for trees to be incorporated within transport schemes and new developments
- f. detailed action plan and further monitoring information to be published prior to the strategy being adopted.

Areawide emissions

27. Norwich City Council has been invited to sign UK100's Net Zero Pledge and join their network of 65 of the most ambitious local leaders in the UK ahead of COP26. The council is an UK 100 legacy member. We made a previous commitment to reach 100% Clean Energy by 2050 and this is reflected in our City Vision targets. To be able to continue our membership, sign up to the pledge and join the network, we now need to reach an areawide zero emissions target by 2045 at the latest.

28. When the City Vision was being developed the UK's target for emissions reduction was 80% of their 1990 levels by 2050. So the City Visions level of ambition was set higher than national policy as the City Vision target is carbon-neutral by 2050. *"A Liveable City: The city takes pride in being a place with a great local environment that people value. We are committed to shifting to clean energy by 2040 and carbon-neutral by 2050. We will support and promote sustainable living – where today's citizens meet the needs of the present without compromising future generations"*.

29. Net Zero for the whole community by 2045 is achievable only with technology and transformations, however much of what needs to be delivered or the structures required are out of our control, or we have limited influence. We are already leading in many aspects of the net zero agenda, but we could go so much further and faster if given the scope to do so. National policy and regulatory frameworks must be revised and co-ordinated to enable the local authorities to work more effectively in partnership towards net zero and adapting to climate change.

30. With an amended target, the actions and ambitions that Norwich needs to strive for are unchanged. Our vision targets are mixed with broader 2040 goals which means that remaining a UK100 member and signing up to the pledge works for Norwich. We have received endorsement from the City Vision and Covid-19 Recovery Steering Group to move to a revised 2045 target date for areawide emissions.

31. In addition, the council will continue to review the resources needed to focus on the highest priority issues in regard to the climate, environmental and sustainability agenda, taking account of the work and recommendations by the Norwich Climate Commission.

COP26

32. The United Nations Climate Change Conference (COP26) hosted by the UK Government in Glasgow will take place at the end of October. This conference will be the most important convention since COP21 which saw the drafting of the historic Paris Climate Accords in 2015.

33. As we get closer to the conference, we know there will be significant media coverage and political activism in climate change and lobbying for ambitious action on the pathway to Net Zero. To that end the council is developing a communications plan to promote local narratives, projects and success stories.

Consultation

34. Not applicable

Implications

Financial and Resources

35. Any decision to reduce or increase resources or alternatively increase income must be made within the context of the council's stated priorities, as set out in its Corporate Plan 2019-22 and Budget.

36. There are no proposals in this report that would reduce or increase resources. Resource implications of specific actions recommended through the analysis being described in paragraph 10, above, will be considered in decisions around those actions.

Legal

37. There are no legal implications.

Statutory Considerations

Consideration:	Details of any implications and proposed measures to address:
Equality and Diversity	This report looks at what has already happened and therefore does not have any direct equalities implications. However, any future work we carry out could have equalities implications and equality impact assessments will be carried out as and when proposed changes are considered.
Health, Social and Economic Impact	There are a number of positive health, social and economic impacts as detailed throughout Annex A of the report. Any future work we carry out is likely to have health, social and economic implications and relevant impact assessments

	will be carried out as and when proposed changes are considered.
Crime and Disorder	The report and Annex A do not highlight any implications in regard to crime and disorder.
Children and Adults Safeguarding	The report and Annex A do not highlight any implications in regard to children and safeguarding adults.
Environmental Impact	There are positive impacts associated with a number of projects as detailed throughout Annex A of the report.

Risk Management

Risk	Consequence	Controls Required
Operational, financial, compliance, security, legal, political or reputational risks to the council	These risks are considered on a project specific basis.	
Environmental risk	<p>In order to update the council's risk register in regard to environmental risk, an analysis has been completed which identifies the new predictions of climate and environmental impacts on the council and the city.</p> <p>The next phase of the comprehensive assessment of the council's approach to climate change and sustainability will help to identify any further possible environmental risks.</p> <p>Once complete, the council's risk register will be updated taking account of the analysis which has already taken place and the new climate change and sustainability commitment.</p>	

Other Options Considered

38. Not applicable

Reasons for the decision/recommendation

39. To note and comment on the progress made in the climate and environmental update and the main actions contained within it.

40. To endorse the revised city vision target regarding areawide emissions.

Background papers:

[Norwich Environmental Strategy](#)

Appendices:

Appendix A - Climate and Environment Update, October 2021

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Norwich City Council, Climate and Environment Update, October 2021

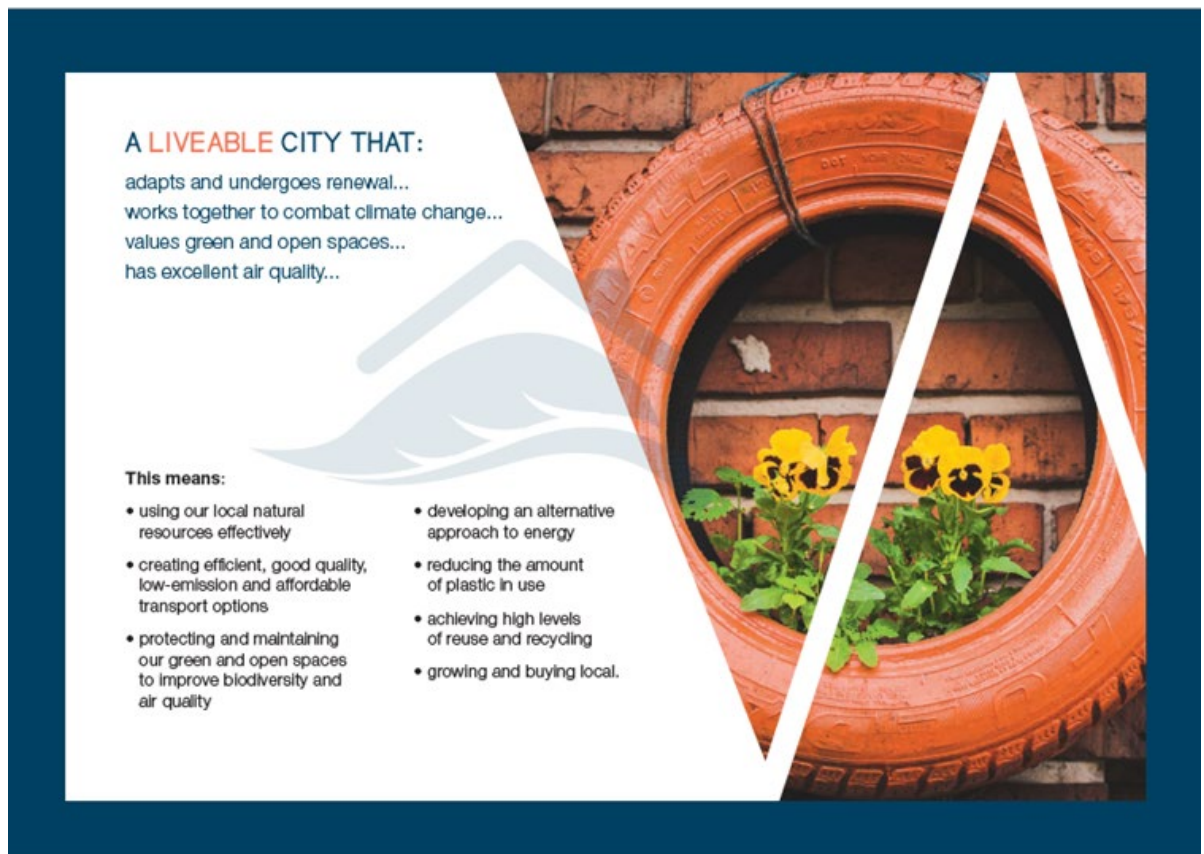
Introduction

1. Norwich City Council has a long history of innovation, and an excellent track record for leading change. Over many years, this has helped to improve and protect the environment of our fine city, one in which so many people appreciate living, working and visiting. Cities, and the council, have a vital role to play in the fight against climate change, alongside a range of partners.
2. Pre-covid, it was predicted that more people will be living in urban areas in the future, so the population and scope of the city would be likely to grow. Since covid, while many people have adapted smoothly to working from home, the benefits of face-to-face interaction are hard to replicate and working remotely means that we miss out on the spontaneous flow of ideas and the sense of camaraderie that being in an office creates.
3. We will continue to need spaces to come together, collaborate and build relationships. Offices and co-working spaces are natural places to do this and city centres remain the most convenient places to locate them.
4. The council firmly believes that if everyone pulls together and plays their part, the goals of dramatically reducing carbon dioxide emissions, reducing waste, protecting biodiversity, improving air quality, creating green jobs and moving towards a circular economy can be achieved.
5. This paper outlines some of our achievements to date in creating low-carbon and climate-resilient communities, as well as facilitating and encouraging coordinated action on sustainability.

Valuing the city's environment

6. The council's ongoing commitment to the city's environment is a key theme running through many of our key strategic plans and activities. We continue to be transparent and ambitious about our environmental agenda; from publishing our operational emissions via Cabinet since 2008, through to the publication of our revised Environmental strategy and Carbon Management Plan via Cabinet for cross party discussion.
7. Our current Corporate plan and Covid-19 blueprint for recovery both contain strategic priorities which focus on the environment, sustainability and the green economy by which we aim to:
 - a. maintain a clean and sustainable city with a good local environment that people value
 - b. ensure our services mitigate against any adverse effects of climate change and are efficient to reduce carbon emissions
 - c. improve the quality and diversity of jobs
 - d. consider opportunities to further promote sustainable travel in the city, building on the well-advanced measures already in place

- e. work to ensure that future housing and regeneration schemes are subject to the highest possible environmental standards
- 8. Last year we published our latest environmental strategy, with a vision to being recognised as one of the best councils in the country for addressing the issue of climate change through community leadership, service provision, buyers of goods and services, and estate management. The strategy's 10 priorities are closely aligned with our corporate plan, blueprint for covid recovery and the city vision, and have a strong focus on partnership working, community engagement and the three Rs (reduce, reuse, recycle).
- 9. In 2018, the River Wensum Strategy was adopted. The Strategy was developed by the River Wensum Strategy Partnership who work together to revitalise the river corridor. The group is led by Norwich City Council, working alongside the Broads Authority, Norfolk County Council, the Environment Agency, and the Norwich Society. The partnership, along with input from other stakeholders, including the BID and the Norfolk Wildlife Trust as well as public engagement, produced the Strategy and a three-year action plan.
- 10. A Delivery Plan is currently being produced which will set out project priorities for the next two years. The document will also provide an update on projects that have been completed or progressed since the adoption of the original strategy and action plan. Projects completed as part of this Strategy include the new eel pass at New Mills, two new canoe portages either side of New Mills, and public realm and access improvements at Barn Road gateway to Marriots Way. Progress is also being made on a project to complete a missing link of riverside walk between Duke's Palace and St George's Street Bridges, adjacent to Norwich University of the Arts, with feasibility work progressing.
- 11. In November 2018 the Norwich 2040 City Vision was published. It was developed by the council in partnership with key stakeholders from across the city, and informed by a significant amount of engagement and consultation activities commissioned by the council. The vision contains five themes, with the Liveable City theme making a commitment for the city to shift to clean energy by 2040 and being carbon-neutral by 2050. At the time of publication, this was more ambitious than government's 80% reduction target.



12. The City Vision has never been more important in shaping our future as a city, for the benefit of all our citizens. Considering the additional challenges presented by Covid-19, the council has been working more intensively with vision partners over the last 18 months to ensure that together we achieve the ambitions set out in the vision. The work of the group compliments and supports other partnerships in the delivery of the vision, for example:
- Norwich Good Economy Commission
 - Norwich Business Climate Leaders Group
 - Norwich Opportunity Area
 - Norwich Town Deals Programme
 - Transport for Norwich
 - New Anglia Local Enterprise Partnership
13. Vision partners acknowledge the need to address not just climate change impacts but the wider agenda of sustainability, and are keen to bring about change at pace as well as setting some medium to long term ambitious objectives. A working group was convened in order for a number of partners to work together to help us maintain a liveable city and to consider how to keep us on track to reach the sustainability objectives linked to the vision. The executive director for the Tyndall Centre for Climate Change Research, University of East Anglia is a key member of this group, providing members with world-leading expertise.
14. Since its formation the group has reviewed a number of delivery frameworks including the Place based Climate Action Network's (PCAN) model and are moving at pace to set up a newly independent Norwich Climate Commission which is due to launch in November 2022. The commission will:

- a. cover the geographical area of Norwich
 - b. be an independent advisory body set up to bring actors from the public, private and third sectors together to support, guide and track the impact of ambitious climate and sustainability actions across the city
 - c. focus on the transition to net zero carbon emissions, with a particular focus on energy, housing, commercial buildings, public buildings, transport, land-use, flooding and nature - the focus on net zero carbon emissions will consider not only direct emissions from fuel and electricity use within the area (scope 1 and 2 emissions), but also the significance of goods and services imported into or exported from the area (scope 3 emissions)
 - d. inform and work with other initiatives across the city rather than duplicating existing efforts
 - e. work with other commissions including those in the Place-based Climate Action Network (PCAN)
 - f. be established for three years in the first instance, with a review of its contribution and value-added in year three to establish whether it should continue.
15. Shortly before Covid-19 hit, the Norwich Business Climate Leaders group was formed, following a request by the council for the Norfolk Chambers of Commerce to lead the way on bringing businesses together to share best practice, increase knowledge, and support and enable any business to choose and implement their specific path to Net Zero. Following a pandemic-related hiatus, business leaders are again beginning to come forward with the resources to focus more on their climate agenda.
16. The Norwich Good Economy Commission was established in March 2020 as an innovative, partnership-based approach to developing a 'good' economy - one which is inclusive, multi-dimensional and sustainable - within Norwich. It is a partnership between Norwich City Council, the University of East Anglia and a range of other key partners in the local economy with the key aim to work collaboratively to explore and address current and future economic issues in Norwich, promoting research, innovative thinking, broad engagement and trialling new ideas and interventions that push at the boundaries of conventional approaches.

Making it happen

17. Local authorities have had their funding reduced by an average of 60 per cent in the last 10 years and operate within the constraints of continuing financial challenges. Despite this, our strategic approach has delivered, enabled and influenced a multitude of achievements for the city, whilst also responding to unforeseen events: such as severe weather events due to climate change, and the Covid-19 pandemic. The Covid-19 crisis has shown the resilience of our city, and that mass behaviour change is possible and can attract widespread support.

Awards, funding and firsts

18. Over recent years the council's innovative approach and ongoing commitment to the city's environment has been recognised at a national level by winning awards, securing funding and leading the way with a number of firsts:

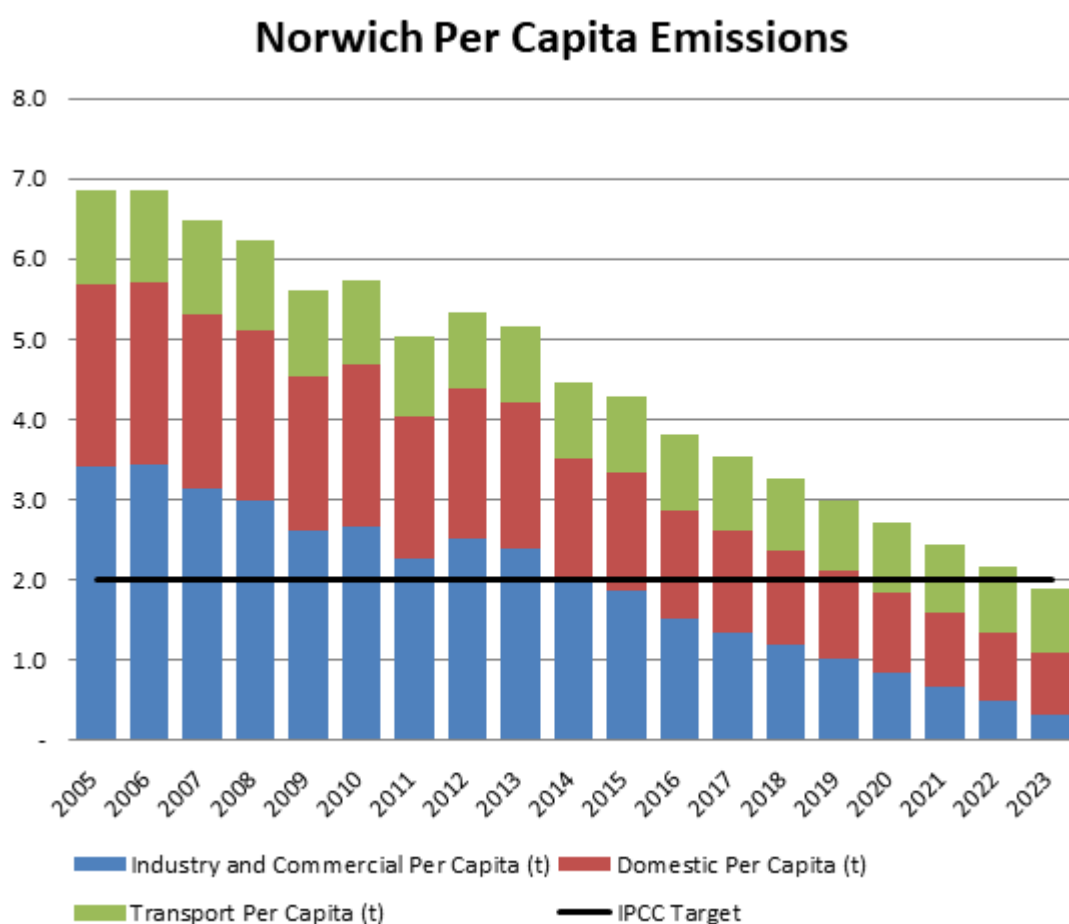
- a. At the United Nations Environment Programme's LivCom Awards in 2010 we received recognition as being regarded as a Gold standard in the management of our environment.
- b. In 2013 Norwich City Council became the first city in the UK to run a collective energy switching programme, helping households across Norwich to easily get the best deal for their energy. The overall average saving per household has been £171 a year with 66% of those signing up being offered a saving on their utility bill, saving an estimated £615,000 in excess energy costs. The project now only supplies renewable electricity.
- c. The City Council successfully applied for Cycle City Ambition status in 2013 and subsequently secured £14m of government investment in three of the pedalways, which are strategic cycle routes that cross the city. This contributed to a 45% increase in cycling at automatic count locations between 2012 and 2019, and a 31% increase at the crossing the inner ring road and 46% crossing the outer ring road between 2013 and 2018. The council continues to have a significant involvement in shaping the county's thinking and design work to promote cycling in the city since the ending of the highways agency agreement.
- d. In September 2014 Norwich was voted the top place in the country for children to grow up due to the combination of parks, open spaces, play and safe roads. More recently, a study conducted by Electric Ride on Cars analysed over 100 of the most populated towns and cities in England, with Norwich coming out as the second best place to raise a family.
- e. In 2014 we also received a £440,000 Department for Energy and Climate Change Green Deal Communities Fund Grant to finance home improvement grants to private householders.
- f. Norwich City Council was the first UK council to run a reverse public solar auction in 2015, with businesses competing to buy clean power generated by rooftop solar arrays on residential and commercial properties. To date, we have installed more than 3,400kW of solar capacity across the city, enabling homeowners and businesspeople to benefit from low group purchase prices.
- g. In March 2017 the council-owned Rose Lane car park won the British Parking Award 'Best New Car Park'. Being the UK's first carbon-negative car park which sequesters 59 tonnes of CO₂e annually, it has 530m² of solar panels on the roof and is fitted with modern Electric Vehicle charging infrastructure, encouraging residents to change their behaviour and travel more sustainably within the city.

- h. In 2019, Norwich City Council won the Edie Carbon Reduction award for its all-encompassing approach to reducing its own carbon emissions and those accounted for by its residents. The award recognises sustainability leaders for their ability to combine science with innovation, setting an example for other local authorities and helping to drive equally ambitious action from businesses and homeowners within the area.
- i. In October 2019 the Royal Institute of British Architects named Goldsmith Street, our newly built Passivhaus housing development, the winner of the 2019 Stirling Prize, the annual prize awarded to the UK's best new building. It was the first social housing scheme to secure the title in the prize's 23-year history. In the same year, the scheme also won the first Neave Brown Award for Housing for the best new example of affordable housing in the UK.
- j. Also in October 2019, Norwich City Council was named as the top local authority in Norfolk and one of the best in the country on a number of issues related to climate change. In a wide-ranging survey by environmental organisation Friends of the Earth, the city council was ranked joint-15th nationally (out of 350 local authorities surveyed) and first in Norfolk, with a performance score of 80 per cent.
- k. In September 2020 the city council won the Gold award in the 'Climate Action of the Year' category at The Global Good Awards - which focuses on success stories of those with effective carbon reduction programmes (our carbon emissions have fallen by 62.1% since 2007). We were the only local authority to have won, or been shortlisted for, a trophy at the event.
- l. In October 2020 the council won Green Flag Awards for Eaton Park (fifth year in a row) and Mousehold Heath, with Waterloo Park narrowly missing out. The Green Flag Award scheme is managed by environmental charity Keep Britain Tidy under licence from the Ministry of Housing, Communities and Local Government, and represents the standard for well maintained public places with biodiversity and environmental part of the assessment criteria.
- m. In February 2021 the city council was awarded further funding from the Government as well as accessing the rolling Salix loan fund to support efforts to further reduce our carbon emissions. The aim is to be operationally carbon neutral by 2030, with plans for the city to follow suit by 2050 or sooner. The funding will be used for:
 - i. £740,000 will go towards renewable heating at City Hall, three major LED lighting retrofitting programmes, and a large solar system at the our new environmental services depot at Hurricane Way
 - ii. £88,000 will go towards LED lighting retrofitting for St Giles car park and Blackfriars Hall.
 - iii. £36,000 + on more energy-efficient servers.

- iv. £715,000 from the £500m Green Homes Grant Scheme and will see 50 homes receive solid wall insulation/cladding, and a further 30 will receive solar PV. This project is expected to save over 30,000kg CO₂e of carbon due to improved energy efficiency of properties.

Plans in action

19. Between 2005 and 2019 Norwich reduced its carbon dioxide emissions by 52.9 %, whilst experiencing an increase in its population of 12.3%, with its emissions being considerably lower than both county and national levels. This represents a significant reduction, dropping from 6.8 tonnes per capita of carbon dioxide to 3.2 tonnes per capita 14 years later. The graph below shows the progress made to date and that as a city, Norwich is on track to achieve two tonnes of CO₂ per person by 2023/24 and based on trajectory data the city will achieve carbon neutrality before 2050.



20. Through our award-winning carbon management plan, the council has made several impressive strides towards decarbonising its own operations, purchasing 100% renewable power for internal use, switching some petrol and diesel ground fleet for electric vehicles (EVs) and retrofitting buildings across its estate to boost energy efficiency.

21. As with many local authorities, our carbon emissions have fallen significantly over the last year as a result of the pandemic, with pre-covid emissions standing at 61.1%. For the year 2020/21, using the 2021 Department for Business, Energy and Industrial Strategy (DBEIS) conversion factors, Norwich City Council has made an additional 9% reduction in its carbon emissions, taking the total reduction to 70.1% saving since 2007/08, against its target of net zero carbon by 2030. However it is likely that emissions will increase again as people return to offices.
22. Decarbonisation, both within and outside of our own operations, has been a key focus for the council in recent years, as has air quality and biodiversity. Measures and steps taken include:
- a. the construction of a “floating” solar array at City Hall and retrofitting programme. Taking the building from an EPC Grade G to a C.
 - b. the installation of modern insulation, lighting and air handling at our medieval friary complex used by Norwich University of the Arts.
 - c. promoting issues such as: water reduction, food waste, sustainable transport, domestic energy efficiency and recycling, amongst others through our annual One Planet events and social media campaigns.
 - d. achieving a recycling rate of 38.8 per cent in 2020/21
 - e. the supply of renewable energy to our landlord lighting services since 2015 which helps our estates to reduce their carbon footprint.
 - f. switching to 100% renewable power on our operational estate and implementing an energy efficiency recycling fund programme funded via SALIX finance. Leading to our annual energy bill decreasing from £2.4m in 2008 to £1.7m in 2018.
 - g. using ECO/ CERT funding to improve the energy efficiency of over 8,000 private homes across the city (since 2005) through our Cosy City programme, which continues to support energy efficiency retrofitting in our communities.
 - h. setting up the renewable energy company, for Norwich and Norfolk, Roar Power which is a real alternative to the big six energy providers, offers long term value renewable energy and reinvests locally to reduce fuel poverty
 - i. allocating investment for woodland improvement projects to improve the woodland for biodiversity at Netherwood Green, Acre Wood, and Bunkers Hill Woodland, including the planting of 900 native species trees and a further 2,000 low growing woodland edge trees
 - j. Average ECP C on our council homes via the delivery of various works (Solid Wall Insulation (SWI), Heating upgrades, new windows and doors etc)

k. Other woodland work includes:

- i. the willow trees at Earlham Millennium Green being repollarded around the pond and windblown trees coppiced and pollarded
- ii. the hazel trees at Whitlingham Marshes and Charter Wood being recoppiced and guarded to protect from deer damage, and increase biodiversity by bringing light onto the woodland floor
- l. putting in place grassland and grazing land management plans for the various marshes, commons and ponds across the city which manages for wildflowers and winter wading birds
- m. incorporating advice on biodiverse planting into all agreements on community land use (gardens, housing land, and highways)
- n. converting a small grant into continuing some collective plant growing with a consortium of community groups which makes biodiverse plants available for community planting following the loss of the sponsorship income from Norfolk Highways which used to fund plant growing
- o. maintaining the Outdoor Projects Network which brings together 30 to 40 groups working on green space projects as a route for peer sharing, collective purchasing and giving advice and training
- p. introducing enforcement powers for engine switch off offences when idling within the air quality management area is helping to bring about more immediate beneficial impacts on air quality
- q. enabling the retrofitting of 24 of the worst polluting buses with devices to clean up their emissions, leading to a reduction in nitrogen emissions of around 100 tonnes and a reduction in carbon of around 200 tonnes over five years, and the continuing trend of falling nitrogen dioxide concentrations within the city centre.

23. In leading by example in our approach to decarbonising the built environment, transport and energy, the council has spurred a 52.9% reduction in the amount of carbon emitted by each resident between 2008 and 2019, with emissions figures falling from 6.8 to 3.2 tonnes of CO₂e per capita over this 14 year period.

24. This reduction has led the council to begin setting an approved science-based target in line with the trajectories outlined in the Paris Agreement. The council continues to model area wide emissions reductions via the use of the SCATTER (Setting City Area Targets and Trajectories for Emissions Reduction) tool and/or other emissions tools being developed via various specialists.

Retrofitting

25. Reducing domestic energy use has important environmental, social and economic benefits and therefore clearly contributes to Norwich city council's corporate priorities. It also helps to meet both national and international targets to reduce carbon dioxide emissions. Increasing the energy efficiency of homes can also

work to reduce fuel poverty and increase health. Since the introduction of the Home Energy Conservation Act in 1995 the council has been working to try to combat fuel poverty across the city and to mitigate the effects of fuel poverty wherever possible via a coordinated range of programmes which promote energy efficiency to our residents and tenants. These programmes have helped to flatten fuel poverty in the City. Whilst fuel poverty has increased nationally, it has not increased since 2011 in Norwich.

26. Norwich City Council has a strong history of investing in our stock, with our council housing having an average SAP rating of 70.9 (EPC Band C), which is much higher than both the national average (65) and the private stock (63) in Norwich. While being mindful of the challenging financial landscape we have a robust programme of investment planned for our housing stock in the city, having invested £129 million over the past six years. Our current Housing Revenue Account capital programme contains an £18.5 million commitment to maintaining and improving the condition of existing council housing.

27. The tables below provide a brief overview of the work delivered in the private sector through our Cosy City initiative and to council homes. As grant assisted funding is either removed or reduced however, less homes have been able to benefit from the installation of loft and cavity wall insulation, boilers and controls and external wall insulation.

Measures delivered via Cosy City project

GDAR and EPC assessments	350
Solid wall insulation	68
Boiler replacements	72
Cavity wall and Loft insulation	270
Heating Upgrades	9
Boiler repairs	8
Small insulation measures	497
Total	1254

Renewable technologies in council stock

Applied Renewable Technologies	Total Installations to date	What the technology does
Photovoltaics	139	Free electrical power from the sun
Solar Thermal	8	Free hot water from the sun
Voltage Optimisation	363	Lowers domestic electrical consumption
Air source heat pump	2	Creates energy efficient central heating

Applied Renewable Technologies	Total Installations to date	What the technology does
Loft insulation - over 200mm	6220	Helps to stop warmth escaping through the loft
External Wall Insulation	426 installed, 472 programmed	Helps to stop warmth escaping through the walls of a house, where there is no cavity in pre1920's houses
Gas condensing boilers	10846	Energy efficient gas fired central heating boilers
Thermal dynamic hot water systems	547	Provides very low cost, energy efficient 24 hour a day, every day, hot water.

28. The table below provides an overview of the funding we have bid for during 2020/21 and 2021/22.

Category	Amount	Notes
Green Home Grants – Local Authority Delivery	£775,000	Currently delivering until end March 2022. Mix of private and social housing.
Public Sector Decarbonisation Scheme	£750,000	Has been used for the depot and City Hall retrofitting
Off gas funding (Templemere)	£1.1 million (£322,000 in new heating systems, £800,000 in mains gas installations)	Via the Warm Homes Fund partnership which we are part of.
ECO spend (previous 12 months)	£385,290	External grant to private homeowners facilitated by NCC. Mainly focused on loft and cavity wall insulation
Sustainable Warmth Competition	Approximately £2.8 million	Focused on improving low energy efficiency fuel poor homes. We are awaiting the outcome of our bid.
Social Housing Decarbonisation Fund	TBC	Specifically focused on social housing and we are hoping to deliver EWI and Wimpey homes. Currently in the bid writing process.

Collaboration

29. The council works closely with its partners and people across the city to bring about change at pace to help protect the city's environment. This is not a new

approach but, now more than ever, collaboration is key to tackling the impacts of climate change and protecting our fine city securing all it has to offer for generations to come.

30. In partnership with Biffa, the council has implemented a new fleet of waste collection vehicles and made routing changes to improve efficiency. The new fleet includes dedicated food waste collection vehicles and has the capacity to adapt to alternative collection routines in the future.
31. The city council continues to work closely with the county council on transport matters and is closely involved in the roll out of the Transforming Cities Programme, which secured £32m of investment designed to promote sustainable travel and the review of the Transport for Norwich Strategy which will be subject to consultation later in the year. This partnership has enabled the rollout of the bike sharing scheme Beryl Bikes, and Charge Collective, a pilot project being launched by UK Power Networks with local authorities to end electric vehicle blackspots via the delivery of on street EV chargers.
32. Through the work of the Town Deals Board, Norwich City Council was awarded £25m at the end of 2020 from the Ministry of Housing, Communities and Local Government to deliver eight key projects. Developed in partnership with the city vision group, local communities, partners and public/private investors; these projects will provide a highly significant boost to deliver major regeneration alongside much needed skills infrastructure and jobs at a time when we are facing an unprecedented challenge to the future prosperity of the city, its residents and business community. Eight core projects will support the delivery of jobs, homes, skills and action to reduce our carbon emissions. Projects include activities which ensure all our residents directly benefit from the proposed investment.
33. A 'green industrial revolution' is recognised as a fundamental necessity to reach net zero and stave off the worst effects of climate change. How we go from our current business as usual scenario to a local economy founded on green jobs and zero or negative emissions, and within the timescale required, is a topic of enormous debate. The Good Economy Commission's 'Green Jobs for Norwich: a participatory event' was held in conjunction with Green New Deal UK's Norwich hub to allow representatives from across the city—social entrepreneurs, business leaders, councillors, educators, manufacturers, managers of transportation and capital assets—to provide their perspectives on the need and feasibility of creating green jobs in the short term.
34. Following the event, a report collecting possible future actions identified within the break out room discussions was circulated, providing the attendees with the information required to progress the conversation. The learning from this event will also be included in the Good Economy Commission's final report, again providing a clear path forward for individuals or organisation who feel they are placed to progress any aspect of the agenda forward.
35. The city vision sustainability working group are undertaking or have oversight of various projects including:
 - a. conducting a mapping exercise of sustainability activities across the city

- b. overseeing a research project into the opportunities for 'Urban Greening' in Norwich – the internship is funded by the UEA, hosted by the BID, and supported by city council
- c. the European project UpCycle Your Waste, led by the BID, which explores how we can reduce landfill, and create a more sustainable city via a circular economy
- d. establishing a new independent Norwich Climate Change Commission that affiliates itself to Place Based Climate Action Network PCAN, using a transparent application process (PCAN provide a framework for translating climate policy into action 'on the ground' in our communities. It's about engagement, impact, and the co-creation and sharing of knowledge)
- e. working with the city vision steering group to connect young people to the vision workstreams and in particular the climate change and sustainability agenda

36. The Norfolk Climate Change Partnership comprises of representation from all the local authorities in Norfolk, the Broads Authority and the LEP. The group work to identify opportunities for collaborative working on issues of emission reduction and sustainability. The city council has offered support to other district colleagues who have just started on the carbon reduction pathway.

37. The group has recently applied to the Community Renewal Fund for two net zero projects:

- a. SHIFT (Sustainable Hydrogen Infrastructure for Transport); analysis of the transport sectors local needs to increase resilience to anticipated change. The project will enable new partnerships to be formed to enable greater understanding of the use of hydrogen as an alternative HGV fuel
- b. Norfolk Community Energy Kickstarter - to develop a community energy business model to help transform our local energy system. To identify a range of suitable assets in Norfolk which would be suitable for solar private wire, funded by a not-for-profit energy provider.

38. The UK Community Renewal Fund is an additional £220 million of investment for 2021-22 and aims to help support local areas to pilot imaginative new approaches and programmes which will prepare them to take full advantage of the UK Shared Prosperity Fund when it launches in 2022, which has been set up as a result of the UK leaving the European Union, to help with the levelling up agenda across the country.

39. The council has also applied to the Community Renewal Fund for its 100-day challenge proposal. If successful, we will commission a series of 100 workshops aimed at understanding residents' desires for improving local green spaces and neighbourhood assets to inform future work, 25 digital refurbishment and 25 green space workshops. These will link skills development to motivation of beneficiaries to transform neighbourhoods, which is evidenced in Norwich, plus transferable skills like digital literacy, for up to 600 people.

40. The council is working with Norfolk County Council and UK Power Networks UKPN, on the 'Charge Collective' electric vehicle (EV) project, the aim of which is

to ensure that everyone has the confidence to switch to EVs, regardless of where they live or what parking space they have. By sharing data and expertise, the local authorities involved from across the country will help UKPN to identify 45 plus EV charging locations in Norwich. The locations have been selected to support citizens with no off-street parking provisions, for example terraced streets and flats. Homes with off-street parking can access charging via a simple fuse upgrade and an outside EV charging plug.

41. Before Covid-19, volunteers contributed a recorded more than 10,000 hours to environmental projects and conservation work in the city's natural areas, parks, open spaces and allotments. We have helped and supported 'Friends of' groups with 15 site groups and two council run groups now in existence who have achieved a huge amount in recent times including:
 - a. working with Friends of Waterloo Park to develop a site management plan and support the development of the group to make improvements, concentrating on biodiversity and an area to relax and feel safe, accessible to all
 - b. working with the Wensum Residents Association for Parks to deliver a £47,000 project to upgrade the current lighting, increase biodiversity, provide a space where small events can be held and an ongoing opportunity for the community to get hands on with the management of the gardens
 - c. assisting the Trust for Conservation Volunteers with applications for National Lottery 'Awards for All' funding for site improvements. Three groups were successfully awarded £30,000
 - d. working with Trust for Conservation Volunteers to deliver 40 days of volunteer work benefiting and enhancing the biodiversity on some of the council's natural areas
42. We have delivered, enabled and supported a hive of activity at Mousehold Heath including:
 - a. community action days to improve access and biodiversity
 - b. involving members of the community in ecological surveys, which support the work being undertaken to conserve and increase biodiversity and increase community understanding and enjoyment of the site.
 - c. weekly Butterfly Conservation and Butterfly Monitoring Scheme surveys on the heath – starting in 1976 these are part of the longest running and largest biological surveys in the world and provide important site management and national data to inform government about ecosystem health and climate change
 - d. school and college work days to engage with school students and improve access to and biodiversity on the heath
 - e. provided environmental activities for over one hundred George White School students

- f. facilitated and supported two children's environmental education/play community activity groups, which regularly use the heath
- g. supervised six Goodgym community work sessions to involve people and highlight the work being undertaken to improve Norwich's largest green space and nature reserve for people and wildlife.

43. We also support community groups through our Outdoor Projects Network and Sustainable Living Initiative by:

- a. helping them to adopt pieces of council land to plant on or use
- b. providing small amounts of funding for plants and kit
- c. helping those who work on growing projects on private spaces i.e. not council land.

Conclusion

44. We have developed this update in preparation for refreshing the Environment Strategy, Carbon Reduction Plan, and ahead of COP26, to demonstrate that the collective achievements and progress made over the past 15 years on the city's journey towards net zero are significant. The update is not about 'resting on our laurels' we know that the challenge ahead is greater than 15 years ago.

45. We will continue our journey to net zero through an ambitious, refreshed agenda, by challenging ourselves to develop innovative projects and initiatives and driving carbon reduction in all areas where we have direct impact.

46. We will continue to work across the city with our partners, facilitating and encouraging coordinated action to create a sustainable, low carbon and climate resilient city and by being bold in our decisions to reduce the impact of climate change.