

Bath & North East Somerset Council		
MEETING MAKER:	Council	
MEETING DATE:	10 October 2019	
TITLE:	Climate Emergency Progress Report	
WARD:	All	
AN OPEN PUBLIC ITEM		
List of attachments to this report: <ul style="list-style-type: none"> • Climate Emergency Study: Synthesis of Evidence, September 2019 		

1 THE ISSUE

1.1 The Council declared a Climate Emergency in March 2019, committing the Council to provide the leadership to enable Bath and North East Somerset to achieve carbon neutrality by 2030. The resolution included a requirement to deliver a progress report to Council six months later and annually thereafter. This is the first progress report. It explains the work that has taken place since March, and highlights the results of the first phase of research into the area's carbon footprint, including recommending three immediate priority areas for action and demonstrating the scale and speed of ambition needed. The report also outlines plans for a new place-based partnership to provide district wide leadership, to oversee action planning and community engagement and outlines next steps.

2 RECOMMENDATIONS

The Council is asked to:

- 2.1 Recognise the Council's key leadership role and the significant and fundamental culture shift required, politically and organisationally, to rise to this challenge;
- 2.2 Recognise that the first phase of research has enabled a clear definition of three immediate priorities for action for the Bath and North East Somerset area and

the scale and speed of ambition needed to achieve the 2030 target. In summary, these are:

- I. Energy efficiency improvement of the majority of existing buildings (domestic and non-domestic) and zero carbon new build;
 - II. A major shift to mass transport, walking and cycling to reduce transport emissions;
 - III. A rapid and large-scale increase in local renewable energy generation.
- 2.3 Recognise that further work is needed and that a progress report will be produced each year that will: review the context, new data and evidence; the results of community dialogue; monitoring of progress and will recommend changes and further action;
- 2.4 Recognise that whilst the Council will provide leadership, the emergency cannot be tackled without active participation and leadership from all sectors in B&NES and wide and deep community engagement and that a new B&NES Climate Emergency, Environment & Place Partnership is being established to enable that;
- 2.5 Recognise that business as usual is not an option and that the Council and all our partners and contractors need to review all existing strategies and plans to re-align to the Climate Emergency, as does the rest of the public sector and the private sector;
- 2.6 Recognise that meeting our Climate Emergency commitments is about major system change and can only be delivered by the combined action of national, regional and local government, other institutions, and alongside action in the private and community sectors. Local government has a key influencing, convening and enabling role, but does not have the powers or resources to deliver these ambitions on our own.
- 2.7 Recognise that individual citizen action is also important and that whilst there are things that everyone can do, it is constrained by current systems and that in order to engage as much of the community as possible, blame-laying on individuals is unhelpful.

3 THE REPORT

3.1 Introduction

- i. This is the first progress report to Council, as required by the Climate Emergency Resolution in March 2019. Hereafter, an annual progress report will be brought to Council.
- ii. This is a high level strategic report, based on the first phase of research undertaken by the Council on the Bath and North East Somerset area's carbon footprint. The research has enabled us to identify where the area's direct (gas, oil, petrol, diesel – also known as Scope 1) and indirect (ie electricity – also known as Scope 2) carbon emissions are coming from.
- iii. The research provides the evidence that enables us to identify the three priorities for action in B&NES and indicates the scale of ambition that is needed to deliver a rapid reduction in carbon emissions from the main known

sources in our area, in line with the resolution target of carbon neutrality by 2030.

- iv. The Climate Emergency Study: Synthesis of Evidence report, attached, draws together and explains the evidence from the research that supports the content of this report. (The studies from the two sets of consultants are also available as Background Papers.)
- v. Although this report includes an outline of the Council's next actions, it is more a response to the commitment to provide leadership to the community as a whole on how to deliver the resolution's target. It sets out three priority areas for action and a mechanism – a new place-based partnership – which will oversee the next phase of action planning across the public, private and community sectors, as well as overseeing the development of the community engagement programme (including citizen juries).

3.2 Summary of Council Action

- i. Prior to the Climate Emergency resolution, a range of carbon reduction work has already been undertaken by the Council, under the leadership of the B&NES Environmental Sustainability Partnership (2009 – 2019). Highlights include:
 - a) The first local authority to roll-out LED street-lighting to main roads;
 - b) Ground-breaking work to enable the development of one of the UK's leading community energy enterprises, Bath & West Community Energy;
 - c) An award-winning exemplar low carbon office building – the Keynsham Civic Centre – including the largest solar PV array in any new UK public sector building, at the time of installation;
 - d) The Energy @ Home retrofitting scheme that dispersed c £800k in grants to local people to improve the energy efficiency of their homes.
- ii. Since declaring a Climate Emergency in March 2019, the Council has:
 - a) Created a new Climate Emergency Cabinet post;
 - b) Created the Climate Emergency & Sustainability Policy, Development and Scrutiny Panel;
 - c) Changed the Council decision-making report template to ensure that every proposal is aligned with the Climate Emergency commitments;
 - d) Directed additional resources to enable the research that informs this report and which provides: more sophisticated analysis of the sources of carbon emissions in B&NES; pathway analysis on how to make real progress towards the 2030 carbon neutrality target; analysis of the Council's carbon footprint; a first look at 'consumption' emissions for the area and an initial equalities assessment based on looking at carbon emissions against household income;
 - e) With work contributed by the University of Bath, we have explored citizen engagement mechanisms. And, we have commenced community engagement work with key community groups and local activists, as well as with the Community

Forums and Parish Liaison Committee to begin the dialogue and gain input into our thinking and planning;

- f) Delivered presentations on the Climate Emergency and what it means for the Council and the area to directors, managers and staff through the Council's Organisational Development programme;
- g) Created a new Climate Emergency webpage providing information on the Council's initial response and some basic advice for individuals and businesses on what they can do now.

3.3 Research Results; Priorities, Scale and Speed of Ambition, Pathway to 2030

- i. Current Bath and North East Somerset district-wide direct emissions (eg from gas, oil, petrol, diesel) and indirect emissions (ie electricity), also known as Scope 1 & 2, are: **766,876 tCO₂e** (tonnes of carbon equivalent) per year. (see Fig 1 in Synthesis report)
- ii. B&NES district consumption emissions, based on an analysis of what local people spend on good and services bought and used in the district, including outsourced emissions from goods and services manufactured or created outside the district and abroad are: **1,271,578 tCO₂e** (tonnes of carbon equivalent) per year. (see Fig 3 in Synthesis report)
- iii. The consumption emissions are higher than the direct/indirect emissions according to these figures, but there will be some overlap due to the calculation method, so the figure is bound to include some of the direct/indirect emissions. This figure also needs to be treated with caution because consumption emissions are notoriously difficult to unravel. So this is an acknowledgment of the issue and its complexity and of the need to explore further what more can be done to inform local action planning.
- iv. The direct and indirect emissions (Scope 1 & 2) break down as follows:
Energy use in buildings: **66%**, (of which homes produce 38% and industry, commerce and institutions 28%); **Transport:** **29%**; and Other **5%**, of which waste is 4% and agriculture, forestry and other land use is 1%.
- v. The carbon reduction target for B&NES is to achieve **carbon neutrality by 2030**.
- vi. Taking into account current national policy and nationally led decarbonisation of the electricity grid, which assumes some local action, the consultants calculate that the **business as usual pathway** would reduce carbon emissions in the district by **38% by 2030** from 2016.
- vii. Based on present day evidence and judgment, the consultants have calculated how action in B&NES across both energy demand reduction and local energy supply could reduce carbon emissions beyond that. Using the SCATTER modelling tool, they have produced a 'Stretch Pathway' for B&NES showing how a **72% cut in emissions can be made by 2030** from 2016.(See Section 2 of Synthesis report)

- viii. These pathways and figures are not set in concrete. They are based on a range of assumptions about technology and market readiness that will change over time. What this means is that, based on current knowledge, we don't know exactly how to get to carbon neutrality. But this doesn't mean we won't continue to aim resolutely at that target.
- ix. We will be reviewing the pathway and updating the assumptions each year and expect to see the gap narrowing as, for example, renewable energy technologies develop and cost tipping points are reached, or if national policy or regulation causes a rapid market shift in either demand management or zero carbon energy supply.
- x. More work will also be done in the future on how we can increase the amount of carbon being absorbed locally by the natural environment (soil, trees, grassland), which will also play a key role in achieving carbon neutrality.
- xi. **Three clear priorities** for action emerge from the research data and Stretch Pathway modelling for cutting emissions from the biggest chunks of the B&NES carbon footprint. This analysis identifies potential measures for each priority area. The figures shown below are NOT concrete targets for these measures, but indicate the scale and speed of ambition we need to have in B&NES to realise our 2030 goal. The measures outlined below are packages of actions that need to be taken together to deliver the reduction identified in the Stretch Pathway. Further detail on these packages of measures can be found in the attached Synthesis report, Section 2, Tables 1 & 2). The priority areas for action are:
 - a) **Energy Efficient Buildings** - For example: retrofitting the majority of homes (all tenures) with a range of energy saving measures by 2030 (eg 14,739 solid wall insulations, 33,436 super-glazing installations, 43,339 loft insulations, 66,473 draught-proofing measures); switching 40% of homes to modern electric heating from gas by 2030; switching 76% of gas cookers to electric. This includes new homes and development needing to be being zero carbon or net positive carbon from now;
 - b) **Transport** – A major shift to mass transport, walking and cycling to reduce emissions. For example: a 25% cut in car and van mileage per person per year by 2030, coupled with a 76% switch to electric cars, 14% to petrol/EV hybrid, leaving 10% petrol/diesel on the road by 2030, and, full electrification of passenger rail by 2030.
 - c) **Local Renewable Energy** – Local installation needs to be developed rapidly and at scale, including for example, 50% of existing homes having a solar PV roof by 2030 (currently only 3.1% do), plus around 116 football pitches worth of solar PV on commercial roof space and ground mounted sites, plus around 28 large (2.5 MW) wind turbines. (The study analysed the full range of renewable technologies, all of which will need to be developed to some degree over time.)
- xii. It should be noted that electric vehicles are not a panacea for personal transport, as they emit harmful pollution from tyres and brakes, whilst the essential elements needed to make them are not available in sufficient quantity.

- xiii. In B&NES we have a strong track record on local community energy, with the community enterprise Bath & West Community Energy a leader in the field. Community energy will have a key role to play in helping to deliver this target through engagement with local neighbourhoods and enabling projects, with all the benefits that community ownership brings.
- xiv. However, this level of ambition, across all three priorities, in terms of scale and speed, requires strong leadership to enable major system change, including action across the public, private and community sectors in B&NES, working together to find solutions and overcome barriers.

3.4 Council's Carbon Emissions

- i. The analysis of the **Council's own carbon emissions** demonstrates that the direct and indirect carbon emissions (Scope 1 & 2) are now 0.7% of the district's Scope 1 & 2 carbon emissions.
- ii. The consultants have undertaken some initial work on the Council's Scope 3 emissions, ie those arising from contracted service. This includes schools, which are no longer in the Council's control, and the commercial property estate, occupied by tenants. It also includes all the building related and transport emissions from running a range of health and social care services, such as care homes, run by contractors procured by the Council. These emissions are much larger.
- iii. More work needs to be done to analyse this further, but in the meantime the Council has recognised how important tackling the Scope 3 emissions is and has started work to develop a Climate Emergency Commissioning and Procurement Strategy. This will ensure that all future contracts must deliver against the Climate Emergency Declaration and current contractors and service providers are being urged to commit to the 2030 target and undertake their own action planning to achieve rapid carbon reduction.

3.5 A Just Transition

- i. A piece of work has been undertaken to analyse household carbon footprints against income deciles, looking at: home energy use; transport (cars) and air travel in more detail through a Bath and North East Somerset area lens.
- ii. This demonstrates that those in the top income decile are emitting 16.14 tCO₂e per annum per household, which is over three times the amount that those in the bottom income decile emit, at 5.03 tCO₂e per annum per household.
- iii. The Council is committed to ensuring that the transition to a zero carbon future is a just one. The research we have undertaken so far, which will be developed further, is a useful contribution to the debate that will be needed across the community about where responsibility for action lies and about how we can support the vulnerable and those on a low income, a higher proportion of whom live in the inefficient homes, for example.

3.6 The Ecological Emergency

- i. The Ecological Emergency is part and parcel of the Climate Emergency and includes species extinction, loss of habitat and the connectivity of habitats,

decline in the pollinators that are crucial to food supply, and the loss of and decline in the health, fertility and quantity of soil, on which we all depend for food. Both emergencies are the result of the over-exploitation of the earth's resources coupled with poor land management and intensive, industrialised agriculture.

- ii. As has been recognised by the IPCC and the UK's Climate Change Committee, we need to not just be finding ways to reduce carbon from fossil fuels, but to be finding ways to increase carbon absorption, also known as sequestration, by the natural environment. This is through tree planting and restoration of peatland, for example, or through different methods of land management and agriculture that enable carbon to be drawn down into the soil on a large scale.
- iii. Bath and North East Somerset has an opportunity, given its large rural areas, to address the issue of increasing the sequestration of carbon from the atmosphere by trees, grassland and soil. We also have a long and strong history of work on bio-diversity, landscape and ecology and a range of current strategies, partnerships and projects, both at local and West of England level that are relevant to these aspects of the emergency.
- iv. However, this is a complex set of issues and will require a further piece of work involving key stakeholders across the area, including farmers and land-owners, and involving a wide range of expertise in order to balance the following issues:
 - a) Increasing carbon sequestration;
 - b) Increasing bio-diversity and the protection of habitats and species, including key pollinators and other insects;
 - c) Increasing soil quality and quantity, reducing chemical fertilisers and pesticides and preventing soil erosion – all of which increases the soil's ability to absorb carbon;
 - d) Increasing local food production, utilising local productive capacity, through less intensive agricultural methods, as a number of local farmers already do and increasing access to fresh, seasonal, local produce;
 - e) Increasing flood defence, natural flood mitigation measures and natural shading as the climate changes;
 - f) Protecting the beauty of our natural landscape, and enhancing the natural capital and ecosystem services it provides, whilst enabling sensitive renewable energy development, for example, and enabling more people to benefit from time spent in nature.
- v. The Government's Climate Change Committee has set a target of doubling tree cover in the UK by 2050 to help increase carbon sequestration. The West of England Nature Partnership, which includes B&NES, through its Nature Recovery Network, has a target of doing so by 2060 and is currently reviewing how that could be brought forward to 2050 (taking account of ash die-back), so that it is in harmony with the objectives above.

- vi. Through the Bathscape Partnership, led by the Council, work is underway on a woodland project to look at the best ways of managing and increasing tree cover in the Bathscape area. The Council will also produce a Tree and Woodland Management Plan covering the whole of the district.

3.7 Analysis, Challenges and Next Steps

- i. This is an initial progress report on how to respond to the Climate Emergency in B&NES, based on the first stage of research. This work has enabled us to identify three priority areas for action for carbon emission reduction and the scale and speed of ambition needed. The figures given are a snapshot in time and will change, but they are sufficient to illustrate the scale and urgency of the challenge we must face together.
- ii. Tackling the Climate Emergency means creating a different vision for all parts of Bath and North East Somerset, including the World Heritage Site of Bath itself.
- iii. The Council is committed to providing the leadership to enable this scale of ambition to be realised and recognises that this requires a significant and fundamental cultural shift, both politically and organisationally. This means that we will be challenging ourselves from the top down to work out exactly what we need to change and how to reorganise to achieve it.
- iv. The Council's next stage of work to address this challenge and the three priorities that have emerged from the research includes:
 - a) An in-house carbon literacy project targeting key services and officers to enable zero carbon future service planning and business case analysis;
 - b) A review of the capital programme with a view to stimulating large-scale investment as well as an investigation of other financial delivery mechanisms to enable renewable energy development, for example, in line with the Stretch Pathway;
 - c) Further development of the Climate Emergency Commissioning & Procurement Strategy to ensure all future contracts align with the Climate Emergency;
 - d) A review of current major contracts, especially in health and social care, working with partners to achieve rapid alignment in how those services are delivered in order to cut carbon emissions;
 - e) Commission the next stage of research and/or stakeholder enquiries into: district consumption emissions; Council Scope 3 emissions; land use, biodiversity, soil health and carbon sequestration issues; further development of household and citizen carbon foot-printing; roadmap development of the three priorities, exploring how to create the conditions for change, an analysis of who can do what and a local strengths, weaknesses, opportunities and threats (SWOT) exercise;
 - f) Continued development of local transport planning to align with the ambition of the Stretch Pathway;

- g) A review of the Council's planning policy framework to enable delivery of the three priorities by 2030, including the development of the Local Plan, and to demonstrate that B&NES is open for business in terms of retro-fitting, zero carbon new build, sustainable transport and renewable energy in particular;
 - h) A review of the Council's housing strategy to enable delivery of large-scale and rapid home energy efficiency across all tenures, in conjunction with key partners.
 - i) Request that the Climate Emergency & Sustainability Policy, Development and Scrutiny panel conduct a review of existing Council strategies and plans for alignment with the Climate Emergency.
 - j) Design the citizen engagement programme, utilising and building on current work with the Community Forums, the Parish Liaison Committee and the parish councils; hold a Climate Emergency all-day event for the community in early 2020; develop a citizen jury or juries on key issues related to the priorities; develop a public communications campaign;
 - k) Set up a cross-party group to provide advice and support for the development and delivery of the plan, working with the lead Cabinet member and the Climate Emergency & Sustainability Policy, Development and Scrutiny Panel. Members, one per party, to be nominated by the group leaders;
 - l) The new Corporate Strategy will incorporate the Climate Emergency priorities and work programme, which will be reflected in the Budget for the rest of the administration and will be brought to full Council in February 2020, commensurate with the commitments made in the March 2019 resolution.
- v. The Council will lead the establishment of a new district-wide partnership, which will be called the **B&NES Climate Emergency, Environment and Place Partnership**. It will encompass work from relevant existing local and West of England partnerships, strategies and projects.
- vi. The Board of the new Partnership will play a key role in enabling the development of action planning against the three priorities identified, as well as further phases of research, analysis, planning and development to provide further input to the wider community. The research and the questions and challenges it raises for the community will inform the agenda for the new Partnership.
- vii. The new Partnership will also oversee the **Citizen Engagement Programme** to deliver deeper and wider engagement in all aspects of the issue. Leadership in this context means setting out the strategic framework, convening all the necessary key players and maximising influence across all sectors. It is also about enabling well-informed community dialogue to consider difficult issues, tease out detailed solutions and gain consensus for action. Citizens' juries will be used to enable engagement and consensus building around key issues.
- viii. We are in dialogue with the **West of England Combined Authority (WECA)**, which has now also declared a Climate Emergency, on how its planning and

resource allocation needs to change. We will develop an approach to lobbying central government for the changes needed to enable us to achieve our goals in B&NES. We know that, for example, changes in government policy and regulation can lead to rapid change in the renewable energy or retrofitting markets, but this is an emergency and we cannot wait for that to happen. We will lobby government, whilst doing our best to find ways to deliver action in B&NES now.

4 STATUTORY CONSIDERATIONS

- 4.1 The Council is committed to ensuring a just transition to carbon neutrality in B&NES, and has commissioned a first look at household carbon emissions by income decile to contribute to the debate that will be needed and to help us to identify the support that will be needed for the vulnerable and those on a low income.

5 RESOURCE IMPLICATIONS (FINANCE, PROPERTY, PEOPLE)

- 5.1 Reserves of **£102k** have been approved for the work carried out so far. Of this sum £49,100k has been utilised to date with a further £52,900k remaining to complete further work this year.
- 5.2 Depending on the approach taken there could be significant impacts for revenue and capital budgets arising from the recommendations and priorities for action explained in this report. Further work is required to model this in the longer term within the Council's overall Medium Term Financial Strategy. Resourcing for 2020/21 for capital schemes and revenue will be identified and reported within the budget to be approved in February 2020.

6 RISK MANAGEMENT

- 6.1 A risk assessment related to the issue and recommendations has been undertaken, in compliance with the Council's decision making risk management guidance.

7 CLIMATE CHANGE

- 7.1 This report is the Council's first progress report to full Council on how to respond to the Climate Emergency resolution passed in March 2019, as required by the resolution.

8 OTHER OPTIONS CONSIDERED

- 8.1 None

9 CONSULTATION

- 9.1 This report had been developed with the input of a range of relevant officers and overseen by the Climate Emergency Senior Advisory Group. It has been signed off by the S151 Officer and the Monitoring Officer.

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Background papers	<p><i>Climate Emergency Study Discussion Pack, September 2019 (Anthesis)</i></p> <p><i>Climate Emergency Study, Carbon emissions from households and citizens, September 2019 (Centre for Sustainable Energy)</i></p> <p><i>Both are available on the Climate Change webpage;</i> <u>https://www.bathnes.gov.uk/climate-emergency</u></p>
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