

BANES Council Climate Action Plan & Route Map

This document is an overview of priority actions which the Council is taking to tackle the climate emergency.

The route map is a high-level visualisation of key actions planned from now until 2030. The table that follows contains key actions categorised by strategic priority, noting progress and next steps. It is organised by the three priority areas for action:

1. **Decarbonising Buildings – making energy efficiency improvement** of the majority of existing buildings (domestic and non-domestic) and zero-carbon new builds
2. **Decarbonising Transport:** a major shift to mass transport, walking and cycling to reduce transport emissions
3. A rapid and large-scale increase in **Local Renewable Energy Generation**
4. **Net Zero Council – the Council's own operations and where it has influence**

The final table lists the Council's strategies and policies that are supporting delivery of the strategic priorities.

This document is updated annually.



Each action tile includes a progress bar:

1= action/strategy still in formation

2= action/strategy in place, but with no current outputs

3= action/strategy well underway with current outputs

4= action/strategy mature, with plans for redevelopment or additions

5= Bespoke action/strategy now complete and considered finished

Strategic Priority for action:

1. Decarbonising Buildings

1.1 Development of strategic approach to home energy efficiency retrofit (private sector)

PROGRESS UPDATE

Strategy and Projects Manager recruited to the Climate and Environmental Sustainability team to assess the role the council is best placed to play, and which stakeholders we need to engage with, to enable rapid development of the private sector retrofit market in Bath and North East Somerset, including maximising the benefits to the area from the WECA Retrofit Accelerator Hub project.

NEXT STEPS

Junior energy policy and projects officer to be in post April 2023. In conjunction with the Energy Strategy, 3.3 strategic approach to retrofit will be assessed and recommendations made on the favoured approach.



1.2 Energy profiling of the housing stock in BANES and analyse cost effective interventions

PROGRESS UPDATE

Training in use of the Parity Projects Pathway Analysis tool has been delivered to selected staff and an initial report profiling the housing stock in BANES has been produced which analyses the measures and costs that would be required to meet two Net Zero investment scenario targets: achieving net zero with and without 'disruptive' measures.

NEXT STEPS

Use tool to analyse and cost potential interventions in communities with high proportion of people living in energy poverty, housing stock with shortest payback periods for retrofit interventions. Analysis of most impactful retrofit interventions to inform supply-side training provided by retrofit hub, etc.



1.3 Roll out grant funding schemes for low income households

PROGRESS UPDATE

In partnership with BCC and NSC, BANES are rolling out Bright Green Homes; an affordable warmth grant for low income, low energy-efficient households which don't have gas heating, with mechanisms to encourage take-up from owner-occupier and private rented properties.

NEXT STEPS

Continue to bid for further Government funding for affordable warmth grants as they become available. The Council is currently working with BCC and NSC again to secure further funding to continue the Bright Green Homes Scheme for 2 years to March 2025. The proposed scheme will offer insulation, low carbon heating and solar PV to 500 low income households across the consortium.



Strategic Priority for action:

1. Decarbonising Buildings

1.4
Develop communication strategies to drive public interest and access to information about retrofit work.

PROGRESS UPDATE

- Updated Energy at Home website to provide basic retrofitting and low-carbon heating information to households.
- Successful completion of a Climate and Biodiversity Festival in 2021 and 2022, including a platform for talking about energy efficiency advice in the context of a cost of living crisis.

NEXT STEPS

Review scope for uploading bespoke estimated retrofit costings for individual households to the Energy at Home website to allow access to more detailed and nuanced information.



1.5
Develop planning policies and guidance to enable energy efficiency improvement of buildings

PROGRESS UPDATE

Energy Efficiency, Retrofitting & Sustainable Construction SPD published. The Local Plan Partial Update adopted which updates parts of Core Strategy and Placemaking Plan to ensure planning decisions better address the climate emergency. The first in the country to have this type of net zero new build policy. Finalist in Regen Green Energy Awards 2023, Public Sector Local Leadership category for this work.

NEXT STEPS

Develop updates to the full Strategy and Placemaking Plan for the period 2024-34 which further improve the sustainable construction policies to continue reducing energy demand and use, whilst also integrating adaptation elements robustly into building design requirements.



1.6
Maximise benefits to B&NES residents from WECA Retrofit Accelerator Hub

PROGRESS UPDATE

Helped shape the WECA Retrofit Accelerator Hub: a three year programme that will encourage, support and guide homeowners from initial thoughts about retrofit, through surveying, advice on measures to signposting to capable installers to carry out works. The Hub will fund consortium members to increase capacity and provision of retrofit services across the region. Region wide marketing and awareness raising campaign in 2023. CSE appointed as consortium lead in October 2022.

NEXT STEPS

WECA and CSE developing first phase of the Hub for first outputs in 2023. Council will ensure maximum benefit for B&NES residents.



Strategic Priority for Action:

2. Decarbonising Transport

2.1

Development of a suite of capital programmes to reduce car use by 25% in B&NES

PROGRESS UPDATE

Developed the Journey to Net Zero strategy, which sets out how the council will deliver sustainable transport for the next eight years through a suite of approved capital programmes and potential future programmes, including: building public transport options; providing for travel on bike and foot; creating improved places to live and work; cleaner, greener school travel; supporting future mobility and improved rural connectivity.

NEXT STEPS

Delivery of transport improvements identified in the Journey to Net Zero through £540m of City Region Sustainable Transport Settlement, and liveable neighbourhood programme. Funding awarded from DfT in combination with the Bus Service Improvement Programme funding of £105m. **1** **2** **3** **4** **5**

2.2

Increasing ability to estimate whole-life carbon emissions of transport impact from development projects

PROGRESS UPDATE

Developing a new West of England Regional Transport Model which allows us to model the impact of transport schemes and provides a framework for estimating the impact of projects on transport emissions to allow for better cost-benefit analysis and mapping of emissions reductions against carbon targets.

NEXT STEPS

Complete and gain approval of the West of England Regional Transport Model during Spring 2023. **1** **2** **3** **4** **5**

2.3

Work to increase grid capacity in BANES to allow for faster rollout of EV fast chargers

PROGRESS UPDATE

The council is consulting with the National Grid to set aside significant funds to upgrade the grid in next funding period, beginning in 2023, to ensure grid capacity to allow for faster rollout of fast/rapid charge points for electric vehicles in the area.

NEXT STEPS

Continue quarterly operational engagement meetings with WPD and attend Draft Ofgem Determination workshops in anticipation of final determination expected by early 2023.

NB Overlap with Renewable Energy section on the grid constraint issue **1** **2** **3** **4** **5**

Strategic Priority for Action:

3. Increasing Local Renewable Energy Generation

3.1

Develop an evidence base to inform new Local Plan and future workstreams regarding potential deployment of renewable energy in BANES

PROGRESS UPDATE

Completing a bottom-up assessment of potential renewable, low and zero carbon energy technologies, at different scales and locations across Bath and North East Somerset. Enabling decisions to be taken based on policies supporting and facilitating deployment these energy systems and to aid officers and developers when assessing applications for new development sites or for larger-scale new generation schemes.

NEXT STEPS

Initiate work to develop renewable energy policy approach and evidence base for the new Local Plan. The primary goal will be to further enable renewable energy generation schemes, with a holistic focus on community benefit and biodiversity integration.



3.2

Develop communication strategies to drive public interest and access to information and expertise about renewable energy

PROGRESS UPDATE

Promoted innovative new group-buying programme led by WECA called Solar Together. Scheme gave participants reassurance that they were buying high-quality solar photovoltaic (PV) panels and battery storage, access to competitive prices, and guidance and information at every stage through the process.

NEXT STEPS

Review Solar Together with WECA and investigate running another round following high demand of initial offer. Develop a district-wide energy strategy. Continue work with CSE on the community Renewable Energy Conversations project.



3.3

Development of Energy Strategy to provide strategic framework and outline of short- and longer-term actions

PROGRESS UPDATE

Progress Update: Review underway and strategic framework and recommendations for actions emerging. Senior officer and member engagement to take place during December 2022 – Feb 2023, with view to approval of an Energy Strategy by the end of 2023. Will encompass both retrofit and renewables, direct delivery, influencing and partnership work.

NEXT STEPS: Research options that will facilitate more rapid increase in renewable generation across the district. Exploring opportunities for innovation of the council's energy supply.



Strategic Priority for Action:

4. Net Zero Council

4.1
Develop council knowledge and capacity for increasing renewable generation on council properties

PROGRESS UPDATE

Renewable Action Group formed to coordinate development of a pipeline of council renewable projects and spending of the renewable energy development fund. Ensure that all the council is positioned to apply for all relevant national public sector grants. The P&R sites have been removed from the Green Belt through the Local Plan Partial Update. C. 400kW of solar PV installed capacity on council estate; 1.3mW in pipeline; 8.3mW in potential pipeline.

NEXT STEPS

Completion of sites in pipeline and feasibility work of potential pipeline sites including solar canopies on P&R car parks and 4MW ground mounted site. Energy strategy work following on from Aecom Strategy Options report and AECOM RERAS.

See 3.3



4.2
Put in place the framework and policies for measuring and reducing the council's Scope 3 emissions

PROGRESS UPDATE

A new Procurement strategy has been published which formalises the council's need to: consider the carbon footprint and environmental impact of products and services bought. A study has been commissioned from Spherics data company produce a first comprehensive estimate of council scope 3 procurement emissions.

NEXT STEPS

Development of method for integrating sustainable procurement strategy into procurement bid and scoring documents. Dialogue with the largest emitters in the council's suppliers to review strategy for reducing supply chain emissions.



4.3
Waste Services action to reduce operational carbon emissions

PROGRESS UPDATE

Waste Services redevelopment of Keynsham Recycling Hub at the Pixash Lane site has been designed to bring the operational carbon emissions from the main waste management and recycling depot in Keynsham close to zero. The redevelopment is now well underway and includes a solar array of 783 kWp, energy efficiency building fabric, EV charging, waste-water recycling for vehicle washing and at least 10% bio-diversity net gain.

NEXT STEPS

The development is expected to be top-performing in relation to sustainable build features and future-proofed with capacity to increase recycling.



Strategic Priority for Action:

4. Net Zero Council

4.4
Property Services projects to reduce carbon emissions from the Council's corporate estate

PROGRESS UPDATE

Work completed on Charlton House Care Home in Keynsham including solar roof, energy efficiency improvement, LED lighting and a heat pump. Work underway to do the same for two more care homes: Combe Lea and Cleeve Court, due for completion end of 2022 for solar and LED lighting.

NEXT STEPS

A new funding bid had been submitted to Public Sector Decarbonisation Fund to pay for heat pumps in the care homes above which if successful will be completed by 2024. A pipeline of projects in the Corporate estate to decarbonise buildings and increase renewables.



4.5
Decarbonising Council fleet programme

PROGRESS UPDATE

Converting our fleet from petrol and diesel to electric when alternative models are available, that are feasible and affordable. 30 electric vehicles currently in fleet; small vans and street cleansing pedestrian machines and sweepers. We trialed an electric waste collection truck.

NEXT STEPS

6 more vehicles due for replacement this year. We are in the process when replacement is due to convert to alternatives for hand-held/small powered pieces of kit – strimmers, leaf-blowers, hedge-trimmers, chain-saws and are prioritising use of these in the CAZ and other noise and emissions sensitive areas/uses.



4.6
Aligning council policies and plans

PROGRESS UPDATE

The council's Corporate Strategy to 2024, adopted in 2019, has tackling the climate and ecological emergency as a core policy and sets out a series of specific actions to help deliver our net zero commitments. Updates on projects that deliver the core policy are reported in the council's [newsroom](#)

NEXT STEPS

Work is underway on planning for the council's corporate planning frameworks following the current Corporate Strategy period. One of the options being considered for this is to adopt the "doughnut" model which places the environmental ceiling alongside social outcomes as the key decision-making framework.



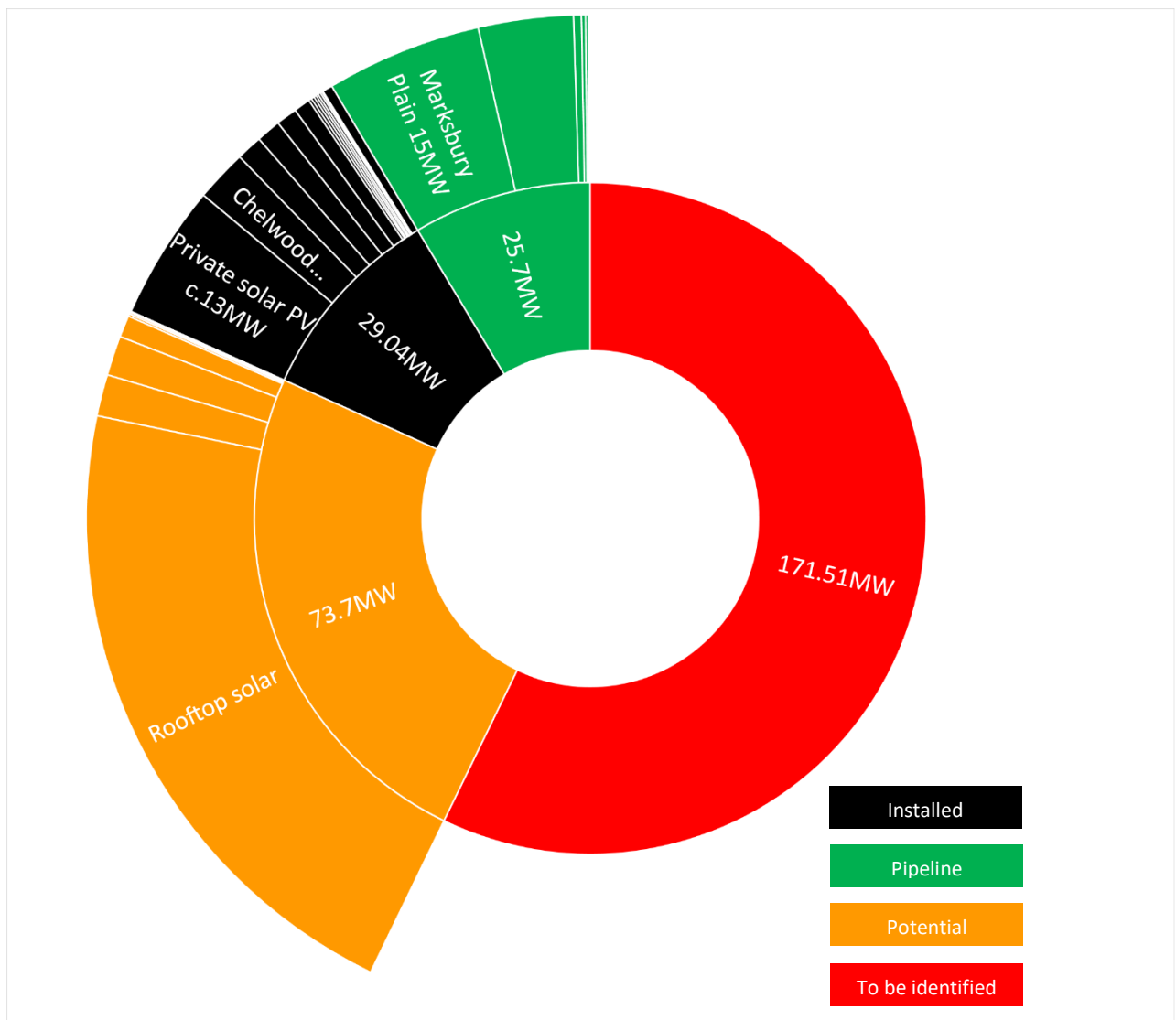
Strategic priority	Strategies and plans enabling delivery
Transport	West of England Local Cycling and Walking Infrastructure Plan West of England Joint Local Transport Journey to Net Zero Local Cycling and Walking Implementation Plan Bus Service Improvement Plan City Region Sustainable Transport Settlement Low Traffic Neighbourhood Strategy On-street Electric Vehicle Charging Strategy
Energy Efficiency and Renewable Energy	Local Planning Policies Energy Efficiency, Retrofitting and Sustainable Construction Supplementary Planning Document
Council	<i>Waste Strategy (available early 2023)</i> <i>Corporate Estate Management Strategy (available end of 2023)</i>

Increasing Local Renewable Energy Generation Update 2022

There has been significant progress in the development of the pipeline of renewable energy installations in 2022.

The chart below shows the installed capacity across Bath and North East Somerset (black); pipeline (green); potential pipeline (orange) and capacity yet to be identified (red) of a total of 300MW energy capacity level that includes both heating and electricity.

The 300MW is an indication of the scale needed across the district to help meet the target for Bath and North East Somerset to become net zero by 2030, based on a Scatter stretch pathway illustrated in the Climate Emergency Study 'Synthesis of Evidence'¹.



Installed capacity (black)

The installed capacity is illustrated in black and in the chart is shown as 29.04MW. This total is made up of existing ground mounted solar farms at Chelwood, Wilmington Farm as well as a number of roof mounted solar PV installations across the Council's corporate and commercial estate and community energy roof mounted solar PV across a number of academized schools. The figure includes anaerobic digestion (2.5MW); biomass (2.03MW); sewage gas (0.63); landfill (1.6MW) and incineration (0.06MW). It should be considered therefore that >2.5MW of capacity is from combustion renewables as opposed to clean renewables at the point of generation.

A significant proportion of the installed capacity (13MW) is estimated to be on domestic solar rooftops, however there is a significant degree of uncertainty associated with this figure and it is therefore considered provisional. The Department for Business, Energy and Industrial Strategy have acknowledged the problem in the document in this link: <https://www.gov.uk/government/publications/renewable-energy-statistics-data-sources-and-methodologies>: *'For many technologies, especially electricity, no single data source can provide complete coverage, therefore, several data sources are used. However, between the data sources, there is duplication of data for some sites.'* The Microgeneration Certification Scheme data, for example, provides an indication of the number and size of installations of rooftop solar but is reliant on installers inputting the correct figures. It's also known that not all solar installations are required to be registered with the Microgeneration Certification Scheme and as such the actual level of installed capacity may be higher. A higher estimate of installed rooftop solar capacity from a file provided by MCS suggested approximately 40MW. However, this is thought to be unrealistically high at this stage and due to errors with data entry. All data sources are going through a process of validation and reconciliation with the other District Network Operator (Distribution Future Energy Scenarios) and the Department of Business, Energy and Industrial Strategy data in order that we get to interoperability of sources; remove duplication and predict the higher estimate based on survey data.

It should be noted that the West of England Combined Authority Solar Together scheme that B&NES were a partner in resulted in 1MW of domestic rooftop solar installation across approximately 280 properties.

Pipeline (green)

The pipeline value is 25.7MW. There is a much higher level of certainty associated with this figure as it is made up large ground mounted solar sites (Marksbury Plain and Howgrove Farm) that have this year acquired planning consent; and a number of rooftop solar sites on the academised schools and corporate estate including care homes; sports centres and a waste recycling facility at Pixash Lane in Keynsham.

Revised Dec 2022

new

Revised Dec 2022

Potential Pipeline (orange)

The potential pipeline value is estimated at 73.7MW. This includes a community ground mounted solar farm at Fairy Hill near Compton Dando; as well as leased leisure facilities and car park solar canopies at the Council's park and ride sites for which feasibility work is currently underway. Most of this figure is made up of the identified rooftop solar PV potential identified by Camco in https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Planning-and-Building-Control/Planning-Policy/LP20162036/bnes_renewable_energy_resource_update_report_2018_publication_version.pdf as totalling 76.6MW. Approximately 13.3MW is thought to have been installed and therefore 63.3MW rooftop potential remains. The latest MCS data indicates that annual installation of rooftop solar capacity may now be as high as 2MW or more. This is thought to be as a result of increased demand relating to the energy and cost of living crisis.

Yet to be identified (red)

It is expected that this figure of 171.51MW is likely to reduce as more larger generation schemes acquire planning consent, for example it is possible that a number of wind turbine proposals may emerge as a result of changes to the planning framework through the Local Plan Partial Update currently in process. No figures have been included in the chart above for potential wind generation as the current planning framework largely prevent wind development. The Anthesis report (https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Environment/anthesis_bnes_climate_emergency_discussion_pack_final.pdf) identifies a potential of 70MW by 2030, although no sites or proposals have yet come forward.

A 2018 Regen report² estimated that '3% of homes having PV totalling 8MW of domestic capacity and around 81 roof-mounted commercial and industrial projects totalling 2.5MW of capacity' existed in the authority area. It is expected that there will be a substantial growth in this area of energy generation, giving the relatively low proportion of homes with solar PV and current context of high electricity costs.

The potential hydro power resource is very low at 0.4MWe as the waterways in B&NES have insufficient 'head' i.e. power, to make hydro-power viable. However, Bath and West Community Energy are enabling a rapid increase in rooftop solar across the district, particularly on public sector and commercial rooftops.

The MCS data suggests that the rate of domestic and business solar PV installed capacity has approximately doubled since we declared a Climate Emergency in 2019.

The proportion of installed capacity that is provided by community energy is very high at 40% when compared to other areas across the country. This allied with enabling planning policy work and engagement with the DNO suggest that there is likely to be an increasing rate of growth in renewable energy installations up to and beyond 2030.

There is still no national methodology to report on installed renewable energy capacity across the full range of technologies. Therefore, these figures are subject to change in the future as the methodology and data sources improve.

Route Map: Projected Milestones*

2022



March 2019 - B&NES Council declares a Climate Emergency



Partnership working through 'One Shared Vision' to deliver climate action



30 additional new public EV charge points installed by the council



Local Plan Partial Update adopted

Gov Targets
Future Homes :
No fossil fuel heating in new builds
2025

Gov Targets
Ofgem to invest 300m in grid and 3500 EV charge points
2023

Gov Targets
Environmental bill to come into force
2023

Gov Targets
All HMOs will have EPC C, MEES require EPC D
2023



Low carbon Keynsham recycling centre construction



Partnership actively accelerating impact across all priority areas



First Liveable Neighbourhood areas implemented



'Towards Zero Waste 2030' Strategy adopted

Gov Targets
Aim for 1GW hydrogen production capacity
2025

Gov Targets
Expected decision on long term decarbonisation of heat
2025

Gov Targets
Up to 3k jobs created through increased public transport
2025



£1.5m B&NES capital invested in yield generating renewable energy



Full update of Local Plan planning policy



6-10MW installed on corporate estate



Projected 19K B&NES residents targeted by retrofit accelerator

*Milestones are all based on expected outcomes from ongoing workstreams, they are subject to change and will be reviewed annually.



Phases 1&2 of Planning Offset Fund directed to most needed energy efficiency upgrades



5000 Retrofit surveys completed in WECA area



Est 100MW district-wide renewable capacity installed



Estimated c.40 West of England jobs created by the WECA Retrofit Accelerator hub

2025

Gov Targets
Achieve sales of 600,000 heat pumps per year 2028



Tool to maximise climate action in every decision we take embedded Council-wide



New Reuse shop and public Recycling Centre open at Keynsham Recycling Hub



300MW installed renewable energy capacity

Gov Targets
End sales of new petrol and diesel vehicles 2035

Gov Targets
Enable businesses and industry to improve energy efficiency by 20% 2030

2030



Major new cycle and pedestrian paths in Bath, Keynsham and the Somer Valley



65,000 homes will have had some form of energy efficiency improvement



25% reduction in car use