

CABINET

28 MARCH 2024

NET ZERO CARBON PLAN - COUNTY COUNCIL EMISSIONS 2023 - 2025

Relevant Cabinet Member

Mr R. Morris Cabinet Member for Environment

Relevant Chief Officer

Mr J Hobbs Director for Economy and Infrastructure

Recommendation

- 1. The Cabinet Member with Responsibility for the Environment recommends that Cabinet:**
 - a) approves the updated the Net Zero Carbon¹ Plan 2024- 2025**
 - b) agree that a progress report be returned to Cabinet in Autumn 2025.**

Background

2. The impact of climate change is evident on both a global and local scale, from hotter and drier summers to a significant increase in extreme weather events, from flooding to heatwaves and wildfires.
3. Reducing carbon emissions is key to slowing the impact of climate change, and Worcestershire County Council (WCC) acknowledges it has a significant role to play, not only in reducing its own emissions but also in influencing the reduction of countywide emissions working with partners and stakeholders and supporting wider adaptation.
4. Worcestershire County Council's first Net Zero Carbon Plan, approved by Cabinet in October 2020, was produced in direct response to the Notice of Motion agreed at the Council meeting on 16 May 2019. At this meeting WCC reaffirmed its commitment to tackle climate change.
5. A further Notice of Motion was agreed at the Council meeting on 15 July 2021, noting that:

¹ Net zero carbon means the amount of carbon dioxide equivalent (CO₂^e) or other carbon compounds emitted into the atmosphere is reduced to zero because it is balanced by actions to minimise or offset these emissions, thereby achieving an overall balance between emissions produced and emissions removed from the atmosphere.

Carbon emissions - includes carbon dioxide and other carbon compound gases in terms of CO₂^e – carbon dioxide equivalent. Also known as Greenhouse Gases (GHG) including methane, that have the property of absorbing infrared radiation (heat energy) emitted from Earth's surface and re-radiating it back to Earth's surface, thus contributing to the greenhouse effect.

“Climate change is already causing a serious problem for our communities across Worcestershire and society across the world. The Inter-Governmental Panel on Climate Change’s (IPCC) 2018 Special Report on Global Warming of 1.5% called for urgent action within 12 years to protect people from the consequences of irreversible climate change. All governments, national, regional and local have a duty to act”.

6. WCC agreed to declare a climate emergency and commit to the following:
 - Endorse the Council’s ambitious Net Zero Carbon Plan.
 - Continue to work with our partner authorities to review and update all relevant strategies.
 - Establish a Member Advisory Group to assist with the future revision of plan and report annually on actions taken.
 - Reaffirm the target of reaching net carbon neutral by 2050 in line with the Government’s target.
7. The UK government has pledged to reduce carbon emissions to net zero by 2050, with a 78% reduction by 2035 from 1990 levels. To support this, the government has announced a number of strategies, including aims to decarbonise the power sector by 2035 and phase out new fossil-fuelled vehicles by 2035.

WCC Net Zero Carbon Plan

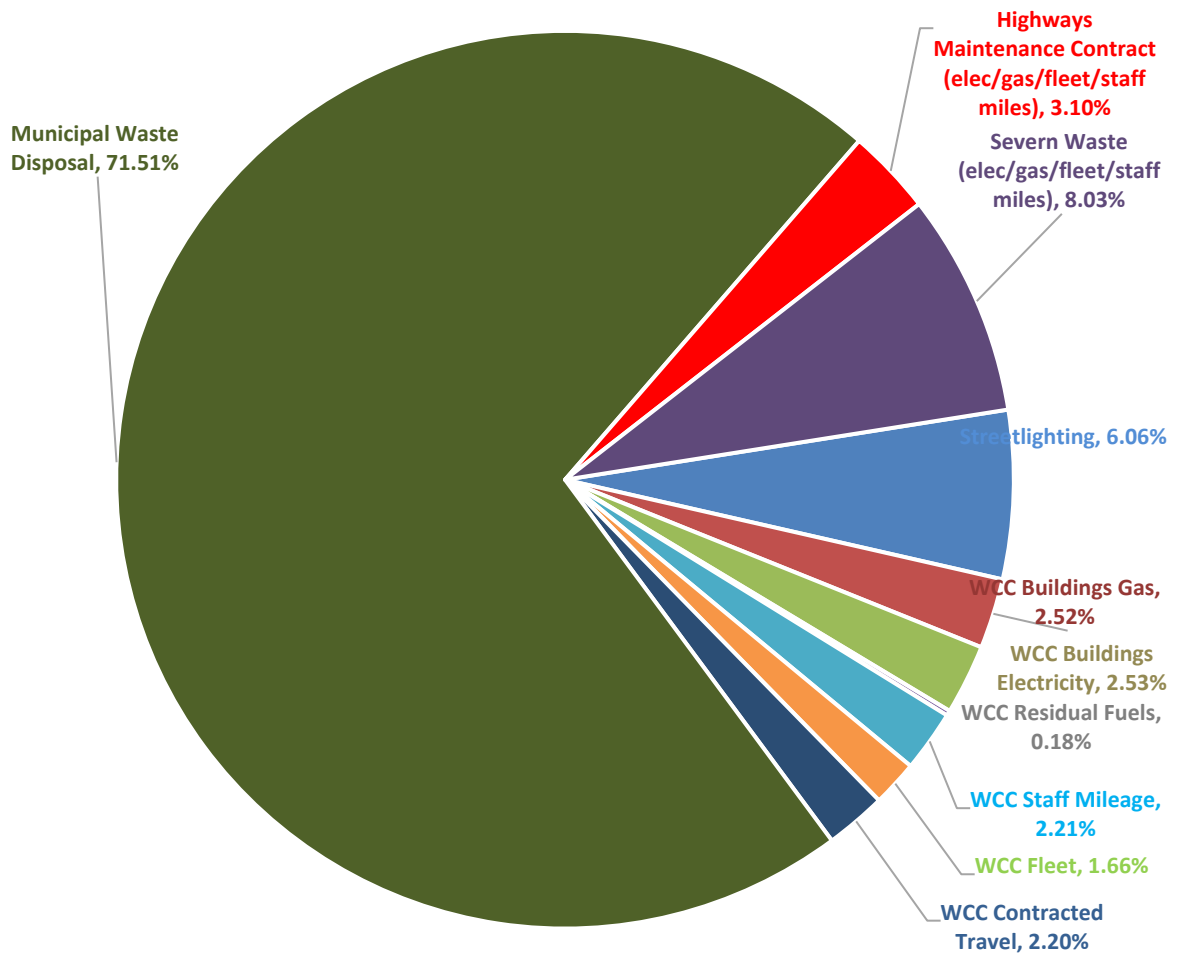
8. The Council has direct responsibility for cutting carbon emissions from its own operations and activities, and this is the focus of the Net Zero Carbon Plan. Through its own operations, WCC emits at least 1% of Worcestershire’s total emissions and influences many more. The Council also plays a fundamental role in addressing countywide carbon emissions, the impact of climate change on the county and how we adapt to future climate. The council is already taking a range of actions on this and is looking to develop this work further with partners. As part of the Climate Emergency declaration the Council committed to setting up a Member Advisory Group on Net Zero Carbon, which is chaired by the Council’s Cabinet Member for the Environment. The mandate of this group was expanded in January 2022 to also include biodiversity as the Council recognises there is a clear link between climate change, reducing carbon emissions and protecting biodiversity.

9. The Council currently accounts for emissions from its own buildings, street lighting, fleet, staff travel and some major contracts, such as highways maintenance and household waste management. In the last decade there has been an overall net emissions reduction of 45%.

10. This reduction has been achieved through measures including investment in energy efficiency and renewable energy on the Council’s estate, increase in remote working, contraction of estate and fleet, reduction in the carbon intensity of UK grid electricity and the move from the landfilling of household waste to disposal through the Hartlebury Energy from Waste facility - EnviRecover.

11. WCC’s accounted absolute carbon emissions (not accounting for any offsetting) were c.46,000 tonnes CO₂^e in 2022/23. The chart below illustrates the sources of these

emissions: 71.5% of which were attributed to the Council’s role as waste disposal authority. The next largest source was Severn Waste Contract at 8% followed by Street lighting at 6%.



12. The proposed updated Net Zero Carbon Plan 2024-2025 (Appendix 1) outlines how the Council could reduce the above emissions to Net Zero and achieve its pledge of carbon neutrality within its own estate and operations by 2050. The target for net zero by 2050 for WCC buildings, street lighting and fleet will be reviewed prior to the next revision of the Net Zero Carbon Plan.

13. The plan has been developed by the Council’s Sustainability Board which has cross-directorate representation.

14. The proposed plan sets out progress to date, provides a baseline carbon emissions assessment and outlines the strategy the Council could take to deliver on its commitments.

15. An action plan at annex 1 of the Net Zero Carbon Plan outlines the projects identified to assist with reaching Net Zero. This is a live ongoing plan that will evolve as actions are completed, updated and added. The delivery of these actions within the plan will be dependent on financial resources available through the Councils own existing resources, external funding and partner contributions. The Sustainability Board will use the action plan to monitor progress on a regular basis.

16. It is proposed an annual monitoring report will be written to assess progress and changing government policy and priorities, this will be presented to a future Cabinet in Autumn 2025.

17. The Council's proposed approach to achieving net zero emissions includes:

- The reduction of carbon emissions associated with the Council's estate and activities as far and as fast as practically possible within the financial resources available.
- The requirement for carbon reduction measures to be cost effective.
- The prioritisation of local carbon offsetting projects with environmental and/or social benefit, where offsetting is necessary.
- Continuation of the requirement to assess the environmental impact of all proposed Council projects, including carbon emissions and the impact of severe weather and climatic change (through the Joint Impact Assessment process).
- The continuation of the Council's role in cutting carbon emissions and promoting environmental improvement across the county, working together with partners to achieve this aim.
- Raising awareness of staff and residents for the need to cut carbon emissions, the Council's role in this and how everyone can play their part.

18. Measures to achieve net zero emissions from the Council's estate and operations include the following: (measures are subject to financial resources, external funding opportunities and value for money assessment)

- An ambition to continue purchase of 100% REGO accredited renewable electricity for street lighting where the current contract runs to March 2026, at which point this will be reviewed.
- Annual review of options to purchase 100% REGO accredited renewable electricity for all Council buildings based on the best value option.
- Production of a fleet replacement schedule compliant with Government transport decarbonisation plans²
- Aims to make an average 3% annual improvement in property energy efficiency³ Further investment in generation of renewable energy at WCC properties, where possible within existing internal resources or with external funding opportunities The council will seek to invest/obtain external funding to implement energy efficiency measures in WCC properties to achieve reduction in energy consumption.
- Review of existing and future contracting requirements and development of a procurement policy to address how WCC's supply chain will address the councils net zero ambitions.

19. The current emission trajectory in the Net Zero Carbon Plan requires offsetting to bring WCC emission to net zero by 2050. Projected net emissions for 2049/50

² Cars and vans (under 3.5t): all new cars and vans significant zero emissions from 2030 and 100% zero emissions at the tailpipe from 2035. Heavy Goods Vehicles (above 3.5t): new trucks up to and including 26t to be zero emissions from 2035, with above >26t zero emission by 2040

³ to be achieved via rationalisation of the estate and reduced energy demand

currently stand at 3,603T CO₂^e, these will primarily be from the disposal of municipal waste.

20. The Council has already committed to the planting of 150,000 trees, which is on target to offset circa 27,000T CO₂^e over a period of 100 years⁴. Other additional options to offset should also be investigated.

21. The ability of the Council to achieve net zero carbon emissions from estate and operations by 2050 is in line with government policy and based on a number of assumptions, some included above and also:

- i. Fully decarbonised electricity grid by 2035
- ii. Phasedown of gas network from 2035 to 100% by 2050
- iii. Aspiration to achieve 3% annual emissions reduction of contracted services and additional reductions resulting from UK grid decarbonisation and ULEV targets.
- iv. Carbon capture and storage retrofitted to energy from waste plant.

22. There is recognition that some carbon reduction solutions may not yet be available, or market ready or cost effective, but may become so in the future. The Council will keep a watching brief to enable adoption of such solutions at the optimum time against a full value for money assessment.

Constraints

23. The ability of WCC to achieve net zero carbon emissions from its own estate, operations and activities will be influenced by:

- i. resource constraints, which relate to finance and staff resource.
- ii. technological development, for example the complete decarbonisation of the UK's grid electricity
- iii. the availability of ultra-low emission HGVs, including gritter lorries
- iv. and the viability of carbon capture and storage (CCS) technology for energy from waste plants.
- v. the ability to offset carbon emissions. As the Council reduces its carbon emissions, offsetting requirements will be subsequently reduced.

24. There will also be external factors outside of the Council's direct control which could affect the implementation of the Net Zero Plan including, for example, the rate at which fossil fuelled vehicles are replaced with ULEVs by contractors for staff for business travel.

Legal, Financial and HR Implications

25. Financial implications:

There are no additional revenue or capital implication arising from this report. Any future capital and / or revenue requirements to deliver the plan will be assessed on a project-by-project basis. Prior to approval, this will require demonstrable evidence of:

⁴ Based on current New Farm planation projection of 8,986T CO₂^e

- funding sources, which could include WCC's existing revenue/capital budget, external grant and partner income
- funding availability for external consultant support where necessary to deliver actions within the action plan
- maximum pay back threshold assessment for energy efficiency and renewable energy investments as part of the council's Energy Efficiency Spend to Save programme. Payback should be within 7 years, although where there is grant or match funding available for a scheme the payback could possibly be longer, dependent upon the terms of the grant.
- Payback assessments to include consideration of cost avoidance (e.g. future energy cost rises)

26. Legal Implications

The Climate Change Act 2008 places national targets on the reduction of emissions by 2050. In 2019, the UK became the first major economy in the world to legislate binding targets to reach net zero emissions by 2050. The Council has general powers of competence under section 1 of the Localism Act 2011. This enables the Council to do anything which an individual can do, and this therefore includes taking steps to reduce Council emissions, which contribute to the local and national targets this may be supported through the Council entering into funding agreements and contracts.

By implementing the Net Zero Carbon plan the Council will be in a stronger position to deliver this commitment and the priorities associated with it. The recommendations proposed within the report, if approved, will facilitate the Council's vision as set out in the Corporate Plan to achieve 50% carbon emissions reduction by 2026. Where additional funding is to be sought from external sources, any grant funding arrangements and agreements will duly need to be assessed for implications and risks.

Further, where relevant, project related contracts will also need to be procured in accordance with the Council's Contract Standing Orders Procedure Rules and the Public Contracts Regulations 2015. The Council is also subject to the Duty of Best Value to make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness (Section 3 of the Local Government Act 1999 (as amended by s137 of the Local Government & Public Involvement in Health Act 2007). Cabinet has the power to exercise executive functions pursuant to s9E of the Local Government Act 2000 and arrange for the discharge of any of those functions by an officer of the authority.

Joint Equality, Public Health, Data Protection and Sustainability Impact Assessments

The JIA screening has been carried out in respect of these recommendations. It identified that further impact analysis was required in respect of Equality and Public Health, and Environmental Sustainability

Full Impact Assessments have been carried out for Equality and Public Health, and Environmental Sustainability.

The full Equality and Public Health assessment identified neutral potential impacts on protected groups.

The full Environmental Sustainability assessment noted the many positive environmental impacts associated with the delivery of the plan; including improved air quality and increased biodiversity as well as reduced carbon emissions. There is potential for an increase in emissions through the supply chain, but the procurement process must mitigate this by ensuring emissions are reduced where possible, and notes that the Council is also trying to improve its accounting of scope 3 (supply chain) emissions, to accurately monitor the impacts of our contracts and procurement activity. The Council's Planning Team and County Ecologists will be involved in the assessment of any potential impacts upon wildlife and biodiversity when the Council is considering installation of carbon reduction measures and renewable energy on Council buildings and land e.g., solar panels. The Council will ensure all relevant surveys and planning prerequisites are met.

Supporting Information

- Appendix 1 - Draft Net Zero Carbon Plan 2024-25
- Appendix 2 – Joint Impact Assessment Screening (Available online)
- Appendix 3 – Equality & Public Health Full Assessment (Available online)
- Appendix 4 – Environmental Sustainability Full Assessment (Available online)

Contact Points

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Background Papers

In the opinion of the proper officer (in this case the Strategic Director for Economy & Infrastructure) the following are the background papers relating to the subject matter of this report:

- [WCC Climate Action Timeline](#)
- [United Nations Intergovernmental Panel on Climate Change Report 2018](#)
- [16 May 2019 WCC's commitment to tackle climate change](#)
- [Worcestershire Energy Strategy 2019-2030](#)
- [22 October 2020 Cabinet Agenda and Minutes – WCC Net Zero Carbon Plan 2020](#)
- [Worcestershire County Council Net Zero Carbon Plan](#)
- [United Nations Intergovernmental Panel on Climate Change Report 2021](#)

- [WCC GHG Emissions Report 2009-10 to 2022-23](#)
- [15 July 2021 WCC's Climate Emergency Declaration](#)
- [UK Government Net Zero Strategy: Build Back Better 2021](#)