



CABINET – 26 APRIL 2022

LEICESTERSHIRE NET ZERO 2045 STRATEGY AND ACTION PLAN

REPORT OF THE DIRECTOR OF ENVIRONMENT AND TRANSPORT

PART A

Purpose of the Report

1. The purpose of this report is to:
 - a) Advise of the key findings from the Net Zero Carbon 2045 Roadmap for Leicestershire research (see Appendix A) which provides a baseline assessment of greenhouse gas emissions from Leicestershire and models a number of scenarios to illustrate possible pathways to net zero carbon by the 2045 target.
 - b) Provide an overview of the content, format and proposed consultation approach for the Leicestershire Net Zero Strategy and Action Plan.
 - c) Seek approval to consult on the draft Leicestershire Net Zero Strategy and Action Plan.

Recommendations

2. It is recommended that the Cabinet:
 - a) Notes the findings of the “Net Zero Carbon 2045 Roadmap for Leicestershire” research;
 - b) Approves the draft Leicestershire Net Zero Strategy and Action Plan for consultation.

Reasons for Recommendation

3. To ensure Members are made aware of the evidence base provided by the Net Zero Carbon 2045 Roadmap for Leicestershire research which is intended to inform the local response to the climate emergency for both the Council and its partners.

4. The approach to consultation and engagement will help to ensure that diverse and representative views on the draft Net Zero Strategy and Action Plan are heard and can shape the final version of the documents.

Timetable for Decisions (including Scrutiny)

5. The Environment and Climate Change Overview and Scrutiny Committee considered a report on the development of a Leicestershire Net Zero Strategy and Action Plan on 26 January 2022, as part of the initial engagement process to shape the draft Strategy. Its comments, as set out in paragraph 92 below, helped with the development of the draft Strategy and Action Plan.
6. It is intended that the Environment and Climate Change Overview and Scrutiny Committee will receive a report on 21 June 2022 as part of the consultation exercise.
7. The consultation period will extend from May to July 2022.
8. It is intended that the final draft of the Net Zero Strategy and Action Plan will be presented to the Cabinet on 25 October 2022.

Policy Framework and Previous Decisions

9. The County Council declared a climate emergency on 15 May 2019 with unanimous cross-party support. The declaration committed the Council to achieving carbon neutrality for its own emissions by 2030 and to working with others and lobbying the Government to support delivery of this commitment.
10. A Carbon Reduction Roadmap for the Council to achieve net zero emissions from its own operations by 2030 was presented to the Cabinet in April 2020 and was approved by the full Council on 8 July 2020. "Net zero" refers to the balance between the amount of greenhouse gas (GHG) produced and the amount removed from the atmosphere.
11. The climate emergency declaration includes a commitment to support the limiting of global warming to less than 1.5°C, in line with the Paris Agreement. This in effect means achieving carbon neutrality for Leicestershire by 2050 or before and achieving significant reductions by 2030.
12. The Council's Strategic Plan and Environment Strategy 2018-30 were updated to reflect the targets in the climate emergency declaration and were both approved by the Council on 8 July 2020.
13. In December 2020 the County Council signed up to a UK 100 pledge to achieve net zero for Leicestershire by 2045 (UK 100 is a network for UK local leaders focused on climate, clean energy and clean air policy).

14. The County Council has recently revised its corporate plan and the draft Leicestershire County Council Strategic Plan 2022 – 26 was subject to a public consultation between November 2021 and February 2022.
15. The Plan is based on five strategic outcomes that outline the end results that the Council wants to see for Leicestershire. Amongst the five outcomes, is the Clean, Green Future outcome.

Resource Implications

16. There are no resources implications arising directly from the recommendations in this report. The Cabinet approved a budget of £450,000 in September 2019 to facilitate the review of the Environment Strategy, the development of the Net Zero Roadmap, and to take immediate action to implement measures to reduce carbon emissions.
17. The development of the Net Zero Strategy and Action Plan has been delivered from the existing resources allocated to the Climate Emergency declaration. A resourcing plan will be developed to support implementation of the Net Zero Strategy and Action Plan.
18. The actions outlined in the net zero pathways will require action across society, all areas of the Council's operations and will need both private and public investment. The Council working alone cannot deliver all the change required, although it has some direct control and significant influence over many areas that can support the transition to net zero.
19. The Net Zero Strategy and Action Plan provide a high-level overview of the action required in Leicestershire to achieve net zero emissions by 2045. To ensure that future action is targeted where it will have the greatest impact, further work will be required to define the costs and carbon reduction impacts of specific interventions in more detail.
20. Where appropriate, business cases will be developed for individual projects to deliver the Net Zero Action Plan to provide an assessment of the carbon, financial and other benefits of proposals to ensure they positively contribute to the Council's objectives. A £2m Environment Fund which will support carbon reduction schemes has been created as part of the 2022–26 Medium Term Financial Strategy, access to which will be subject to business cases.
21. Existing resources will be utilised where possible with external resources being sought through the submission of funding bids for grants and working with external partners where appropriate to leverage investment to support any costs associated with, for example, public engagement and programme delivery. In addition, there will be a drive to pursue opportunities to secure revenue income from carbon reduction projects.
22. The Director of Law and Governance and Director of Corporate Resources have been consulted on the content of this report.

23. In June 2019, the Government passed laws requiring the UK to bring all greenhouse gas emissions to net zero by 2050. It has been acknowledged by the National Audit Office, UK Climate Change Committee that local government has a critical role in reaching net zero carbon, as they are the closest form of government to local people and know best what works in the local area. However, there is still the need for a clear yet flexible framework to clarify the expectations and priorities for local government action on net zero whilst leaving them free to determine what climate action is most appropriate for their areas, along with the resources to plan for the long-term with confidence.

Circulation under the Local Issues Alert Procedure

24. This report will be circulated to all Members.

Officers to Contact

Ann Carruthers
Director, Environment and Transport Department
Tel: 0116 305 7000
Email: Ann.Carruthers@leics.gov.uk

Joanna Guyll
Assistant Director, Environment and Waste Management
Tel: 0116 305 8101
Email: Joanna.Guyll@leics.gov.uk

PART B

Background

International climate change commitments

25. In November 2021, the UK hosted COP 26 - the 26th Conference of the Parties. The 'Parties' are the signatories of the United Nations Framework Convention on Climate Change (UNFCCC), a treaty agreed in 1994.
26. United Nations climate change conferences are among the largest international meetings in the world. The negotiations between governments are complex and involve officials from almost every country in the world as well as representatives from civil society and the global news media.
27. The Paris Agreement was agreed at COP 21 in 2015. For the first time ever, it saw almost every country around the world enter a legally binding commitment to reduce emissions.
28. Under the Paris Agreement, every country involved – no matter how big or small – signed up to cutting carbon emissions to limit global warming to well below 2°C and ideally to 1.5°C above pre-industrial levels (1850-1900). The Agreement left room for each individual country to decide how they would get there, via Nationally Determined Contributions.
29. The Paris Agreement also set out ambitious goals on adaptation and on finance, recognising that many people around the world are already experiencing the impacts of a changing climate, and that support - financial, technical and capacity building - would be needed.
30. At the 2021 Glasgow Conference of the Parties (COP 26) nations adopted the 'Glasgow Pact'. The Pact consist of a range of agreed items, including strengthened efforts to build resilience to climate change, to curb greenhouse gas emissions and to provide the necessary finance for both. Nations reaffirmed their duty to fulfil the pledge of providing one hundred billion dollars annually from developed to developing countries. Nations also collectively agreed to work to reduce the gap between existing emission reduction plans and what is required to reduce emissions, so that the rise in the global average temperature can be limited to 1.5°C. For the first time, nations are called upon to phase down unabated coal power and inefficient subsidies for fossil fuels.

National climate change commitments

31. The Climate Change Act, as amended in 2019, commits the UK to net zero carbon emissions by 2050. The original Act, passed in 2008, committed the UK to an 80% reduction of greenhouse gas emissions by 2050, compared to 1990 levels. In 2019, the Climate Change Act 2008 (2050 Target Amendment) Order 2019 was passed, which increased the UK's commitment to a 100% reduction in emissions by 2050.

32. On 20 April 2021, the Government announced that it “will set the world’s most ambitious climate change target” to reduce emissions by 78% by 2035 compared to 1990 levels as part of its sixth carbon budget. The UK’s carbon budgets place a restriction on the total amount of greenhouse gases the UK can emit over a five-year period.
33. In response to rising global energy prices, provoked by surging demand after the Covid-19 pandemic, as well as Russia’s invasion of Ukraine, the UK Government has published a British Energy Security Strategy. The Strategy aims to transition energy supply away from fossil fuels, which are subject to volatile gas prices set by international markets, and to boost diverse sources of homegrown energy for greater energy security in the long-term. The Council will watch these developments closely to ensure that its plans complement national Government policy and programmes and make the most of local opportunities from new technologies.

County Council climate emergency initiatives to date

34. In April 2020 the Cabinet was presented with a roadmap to achieve net zero carbon emissions from the Council’s own operations by 2030 – the Tranche 1 Carbon Reduction Roadmap. This is being delivered through a programme of projects to address the Council’s own emissions and to build on the Council’s ongoing commitment to carbon reduction for its own operations. The Council had delivered a 73.6% reduction in its emissions by the end of 2020/21 compared with the 2008/09 baseline year and is currently on track to deliver the Council net zero target by 2030.
35. The Environment Strategy 2018-2030 Action Plan included an action to develop a Net Zero Roadmap for Leicestershire to illustrate the pathways to net zero for the County. The completion of the Net Zero Leicestershire 2045 Roadmap research delivers on this action and provides a comprehensive evidence base to inform action on carbon reduction across Leicestershire.
36. The Net Zero Roadmap research addresses the greenhouse gas emissions from the whole County and is intended to provide an evidence base to inform climate action plans of the Council (and other organisations), identify gaps in policy and resources, and to support partnership working.

Net Zero Carbon 2045 Roadmap

37. The Net Zero 2045 Roadmap for Leicestershire research was commissioned by the County Council to:
 - a) Provide a comprehensive assessment of area-wide sources of carbon emissions and pathways to net zero in Leicestershire as a resource to be used by all partners for future action plans.
 - b) Inform the Council’s response to the climate emergency through the development of strategy and action plans based on evidence.

- c) Support and encourage engagement with other organisations to develop their own climate commitments and action plans.
38. The Net Zero 2045 Roadmap for Leicestershire research report (Appendix A to this report), compiles into a single document:
- a) An understanding of the baseline carbon emissions for Leicestershire, the progress made to date and the future emissions reduction trajectory based on existing local and national policy.
 - b) Emissions pathways for three more ambitious scenarios, Council-influenced, Balanced and Tailwinds (from the UK Climate Change Committee's Sixth Carbon Budget), to identify the interventions with the highest impact.
 - c) A supplementary analysis of the wider context of achieving net zero i.e., costs, co-benefits, key partners and gaps in policy and resources.
 - d) Proposals for a high-level action plan for Leicestershire.
39. The production of the Net Zero Roadmap has been overseen by an officer Net Zero Roadmap Working Group, which included senior managers from across the Council.

Key findings and conclusions from the research

40. A summary of the findings from the Roadmap research is included in the following paragraphs and the full report is included as Appendix A.
41. The key findings to note are:
- a) The total annual greenhouse gas emission baseline (2019) for Leicestershire is estimated as 8.5m tonnes of carbon dioxide equivalent (MtCO₂e¹). This includes territorial emissions arising from the use of energy and fuel within the County (4.5 MtCO₂e per year) plus consumption emissions (an additional 4 MtCO₂e per year) occurring out-of-boundary as a result of County activities (for example through the purchase of goods and services).
 - b) The predominant emission sources for Leicestershire are road transport (1.9 MtCO₂e), domestic energy use (1 MtCO₂e) and industrial and commercial energy use (1.1 MtCO₂e).
 - c) The Net Zero Roadmap study has modelled four scenarios (the existing policy pathway and three additional more ambitious pathways) to understand the impact of different interventions on decarbonisation.

¹ "Carbon dioxide equivalent" or "CO₂e" is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ (carbon dioxide) which would have the equivalent global warming impact.

- d) The Balanced and Tailwinds Pathways both achieve notable reductions in emissions by 2045 (91% and 95% respectively). The Tailwinds Pathway is also notable in that it is the only pathway that delivers 50% reduction in carbon emissions by 2030, the definitive decade for climate action.
- e) None of the pathways modelled are Paris Agreement compliant pathways, although the Balanced and Tailwinds Pathways approach the 2045 net zero target. This gap has also been acknowledged in the UK Climate Change Committee modelling and leads to the dependence of national carbon budgets and targets on removals and negative emissions technologies to meet Paris Agreement goals (these are not modelled in the Leicestershire Net Zero Pathways).
- f) Under all emissions pathways, Leicestershire is left with some annual residual emissions. The largest residual emissions categories in both the Balanced and Tailwinds Pathways are road transport, industry (including agriculture) and building emissions.

42. In order to meet Leicestershire's net zero target by 2045 in a fair and equitable way the report recommends that future actions include:

- a) a massive reduction in demand for energy;
- b) a countywide switch to low carbon fuel;
- c) significant reduction in material demand;
- d) public and stakeholder engagement to ensure that wider co-benefits for society and the economy are maximised;
- e) a commitment that net zero is progressed within the context of other environmental objectives to enhance biodiversity and support resilience;
- f) carbon capture and storage; and
- g) offsetting carbon only as a last resort.

43. The conclusions drawn from the research to note are:

- a) **The net zero carbon 2045 target for Leicestershire cannot be delivered by the Council working alone.** Public and stakeholder engagement and action will be essential and integral to any future action plan. With this in mind, there could be a role for the County Council to lead, convene partners and inspire commitment and action for net zero, beginning with the development of a Council Net Zero Strategy and Action Plan.
- b) **The pathway to net zero is challenging but feasible** if all available policy levers are employed at pace and scale. This would require near total retrofit of buildings, full roll out of electric vehicles and decrease in vehicle mileage, very high PV installation, industrial heat sources switched to electricity or hydrogen and total reduction in embodied carbon in new buildings.

- c) **Investment will be required from all sectors** but there are benefits to be accrued for the economy, society and the environment if the transition is just and fair.

Engagement on the Net Zero Strategy and Action Plan

44. A number of existing engagement mechanisms have been used to inform the development of the Net Zero Strategy and Action Plan. A summary of these is included below.
45. Climate Assembly UK brought together over 100 people from all walks of life with diverse opinions to discuss how the UK should meet its 2050 net zero carbon target.
46. The findings of the Climate Assembly UK, and particularly the principles which they recommended should guide action for net zero, have been incorporated into the Leicestershire Net Zero Strategy.
47. The County Council has recently revised its corporate plan and the draft Leicestershire County Council Strategic Plan 2022 – 26 was subject to a public consultation between November 2021 and February 2022.
48. The ‘Clean, Green Future’ outcome aims for the environment to be protected and to tackle climate change, biodiversity loss and unsustainable resource usage. There was a high level of support for this outcome, as well as for the specific aims which the Council intended to achieve by 2026 to progress towards it. Over 90% of survey respondents rated each of the aims as either ‘fairly important’ or ‘very important’.
49. The Leicestershire Community Insight Survey has been commissioned to collect regular information on public perceptions and attitudes to issues of importance to the Council.
50. The most recent results of the survey give a powerful mandate for action on the environment but suggests the Council could do more to inform, engage and involve people in their action on the environment. The Net Zero Strategy and Action Plan therefore prioritises public communications and engagement under a Climate Friendly Communities theme.
51. The scale and pace of change required means it is essential to work with and inspire action amongst other stakeholders. To support this engagement, the Council has continued to work through existing partnerships in the first instance to gain initial feedback and to map the commitments and action plans of key partners.
52. This has included working with the District Council Environment Group, health partners through the Integrated Care System Green Board, the Leicester and Leicestershire Enterprise Partnership (LLEP), Leicestershire Rural Partnership and Parish and Town Councils with support from Leicestershire and Rutland Association of Local Councils. In time, it may be desirable to establish new structures, this will be the subject of a review and recommendations for

partnership delivery to be included in the final Net Zero Strategy and Action Plan following stakeholder consultation.

53. This engagement has confirmed a number of themes for consideration. These are:
- a) **Equality** – there was some concern that some people could be negatively impacted by action on climate change.
 - b) **Sustainability** – there was strong support for actions that had multiple benefits, particularly for nature recovery, the economy and health.
 - c) **Affordability** – the initial cost of sustainable choices was raised as a challenge to uptake.
 - d) **Concerns regarding infrastructure** – many felt there was not sufficient infrastructure to support switching to more sustainable choices, for example, electric vehicle chargepoint infrastructure and installers for building retrofit measures.
 - e) **Knowledge and evidence** – in some areas, a deficit of research and evidence was highlighted, for example, carbon capture and storage through natural systems required more research. Others highlighted an ambition to act but the lack of capacity and capability in their organisation to make change happen.
 - f) **Gap between ambition and resources/policy** – many raised the gap between the ambition to be net zero by 2045 and the lag in supporting policy and resources, both nationally and locally.
54. These issues have been addressed in the Net Zero Strategy and Action Plan.

Overview of draft Net Zero Strategy

55. The draft Net Zero Strategy outlines the strategic approach to delivering the Council's ambitions to achieve net zero carbon emissions in Leicestershire by 2045 or before: "net zero" means that greenhouse gas (GHG) emissions that are released from energy use, such as heating, electricity and transport, would be equal to or less than the emissions removed from the environment, either from natural carbon storage, such as tree growth, or by man-made carbon capture and storage.
56. The draft Strategy outlines the County Council's proposed approach to achieving the net zero target for Leicestershire and confirms that a broader collaborative approach is essential.
57. The Strategy supports local and national objectives and maximising the co-benefits for economic prosperity, health, wellbeing and other environmental objectives such as nature recovery and climate resilience.
58. The Strategy takes a long-term view to 2045 and will be reviewed regularly (every 4 years) while the Action Plan will take a short-medium term approach

(<5 year) to direct and prioritise delivery and will be reviewed annually to provide updates on progress and to renew actions to keep pace with policy and technology changes.

59. The opening section of the Strategy includes an overview of climate change science and issues such as climate justice and co-benefits and outlines the progress to date with carbon reduction both for the County and the Council's own operations.

Vision and goals

60. The vision for the Net Zero Strategy is that **“In 2045 Leicestershire has ended its contribution to global heating and has adapted to climate change. The just transition to net zero carbon emissions has improved the local environment for people and nature, increased prosperity and supported resilient communities”**.

61. As a key place leader, the County Council will:

- a) Achieve net zero carbon emissions for the Council's operations by 2030.
- b) Enable carbon reduction across the County by delivering and facilitating the required infrastructure.
- c) Inspire partners and the public to develop a joined-up approach that delivers net zero carbon emissions across Leicestershire by 2045.

Targets

62. The Council has adopted an end target in advance of the national net zero target of net zero carbon by 2050. The Strategy includes an interim target in line with the national Government carbon budgets to reflect the need to support the Paris Agreement and demonstrate the steep reduction trajectory needed in the next decade to limit cumulative greenhouse gas emissions up to 2045 which will determine overall global heating.

63. The **Council's countywide net zero targets to 2045** are to:

- a) Achieve net zero greenhouse gas emissions for Leicestershire by 2045 or before.
- b) Achieve a 78% reduction in greenhouse gas emissions for Leicestershire by 2035 compared with 1990 levels, which equates to a 42% reduction from 2019-2035.

64. There is no national guidance on defining the scope and parameters for area wide net zero carbon targets. The recommended bespoke scope below (Figure 1) for the Leicestershire Net Zero 2045 target is based on best practice, data availability to ensure it is possible to provide annual public progress reports and aims to reflect the areas where the Council has control or significant influence.

65. However, the draft Strategy and Action Plan seeks to address all emissions where possible including consumption emissions not included in the target. Exclusions from the Roadmap research scoping exercise include food, drink, water and embodied carbon in new builds due to issues with double counting and data availability.

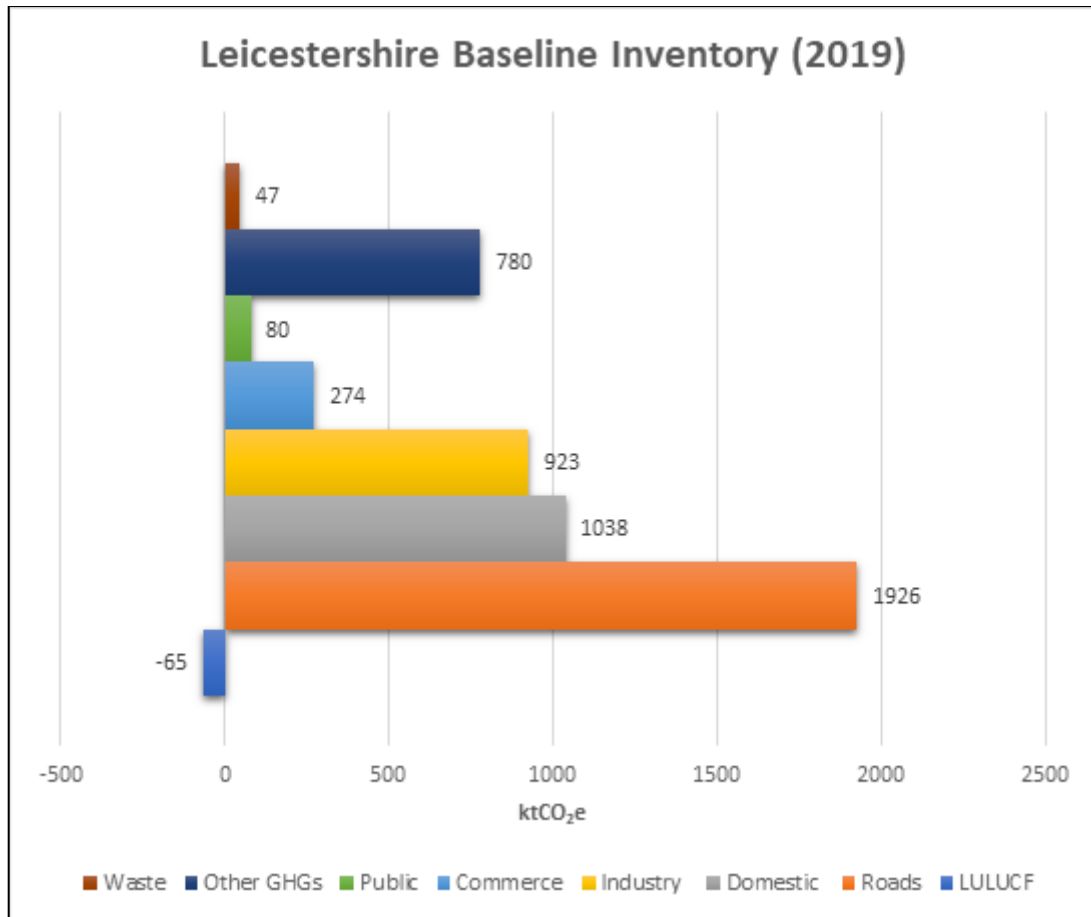


Figure 1 - Recommended scope and baseline inventory for Leicestershire 2045 net zero target

66. The final recommended scope for the baseline annual emissions in 2019 for the Leicestershire target are 5,003 ktCO₂e. This includes:
- Domestic, commercial, industrial and public building emissions,
 - Road and rail transport,
 - Municipal waste management²,
 - Other greenhouse gases (non-carbon dioxide),

² Note: this figure relates to the greenhouse gas emissions from waste disposal and does not include a whole life analysis of the carbon emissions impact of waste management as included in the Leicestershire Resources and Waste Strategy 2022 - 2050 options appraisal

- e) Land use, land use change and forestry to reflect the rural nature of the County and the potential for sequestration.

67. The ability to deliver on these ambitious targets is reliant on equally ambitious long-term policy and funding commitments by the Government. The Council will review these targets in line with future Government targets and monitor progress against these targets in line with the Action Plan delivery.

Net Zero Approach

68. The Council's proposed approach to delivering net zero is based on a framework for action that includes:
- a) **Principles** – this includes values and priorities that will be at the heart of the Council's approach to delivering net zero.
 - b) **Prioritisation** - the transition to net zero will include approaches which follow the 'carbon reduction hierarchy'. This outlines prioritised steps that lead to the best outcomes for people and nature. These steps are Eliminate, Reduce, Substitute and Compensate/Neutralise (or offset). Although all policy levers will need to be used to achieve net zero by 2045, the focus will be on those actions which have the largest impact on emissions and the greatest returns on investment.
 - c) **Power** – the Council has various statutory duties, roles and responsibilities. The Strategy and Action Plan will reflect the County Council's areas of control and influence and where it will seek support from other organisations and the citizens. Actions are categorised under the headings Lead, Ask, Influence to reflect this.

Action Plan

69. As identified in the UK Net Zero Strategy: Build Back Greener, to achieve net zero carbon emissions it will be necessary to support the transition through cross cutting action to create the right environment and culture for reducing emissions whilst also taking action to reduce carbon emissions released into the atmosphere and to remove and store carbon.
70. The draft Net Zero Action Plan has been developed to include a comprehensive programme of work needed to deliver net zero and identifies the actions where the Council can lead, work in partnership with others and use its influence.
71. This approach reflects the strong place leadership ambition of the Council but will allow the Council to progress its own initial plans quickly without wider partner governance in the first instance. The Council has areas of direct control and significant influence, but other areas will require action from other stakeholders and wider governance to proceed, for example, within other tiers of local government, business, commerce and industry and individuals

Cross cutting action to support net zero

72. These cross-cutting action themes are:

- a) **Leadership** – providing and demonstrating leadership by achieving net zero carbon emissions from Council operations by 2030, enabling action and inspiring others to act.
- b) **Collaboration** - Working with partners to build a local network of net zero carbon organisations to deliver the ambitious targets for the county and combine resources for this shared mission.
- c) **Research and Innovation** – working with others, the Council will seek to fill gaps in knowledge to provide a robust evidence base for decisions and actions. The Council will work to identify solutions in partnership with others to maximise local benefits, attract investment to Leicestershire and pilot and showcase new approaches.
- d) **Informing, engaging and involving** – supporting informed choices for sustainable lifestyles and practices through regular communications and campaigns. Listening to the voice of local stakeholders and the public to shape net zero plans.
- e) **Finance** – financing net zero will require investment from across society, the Council will prioritise initiatives with multiple benefits and income generation, maximise grant support to Leicestershire and seek to unlock investment from private sources and attract green business to the County.

Carbon reduction

- 73. The Action Plan has been developed under themes that reflect the main emission sources and the priority areas for action; these are: Decarbonised Transport, Green Economy, Net Zero Infrastructure, Climate Friendly Communities and Nature and Land Use Carbon Stores.
- 74. The aims and objectives under each theme have been listed below, the Action Plan also includes opportunities and benefits of the transition to low-carbon solutions in each theme.

Decarbonised Transport

- 75. Transport emissions in Leicestershire, including rail transport, A roads, minor roads and motorways account for 46% of all Leicestershire’s territorial emissions. This is a significant figure and is above average when compared with the UK, resulting from the key role of Leicestershire roads as through-routes and interchanges in national logistics and distribution networks due to its central location and excellent transport links.
- 76. Tackling transport emissions requires a combination of efforts to reduce overall demand energy for transport and shifting to zero carbon alternatives such as active travel and lower carbon options such as passenger transport and ultra-low emission vehicles such as electric cars.
- 77. The overall aim for this theme is “To deliver sustainable, affordable transport choices for all that minimise carbon emissions”.

78. The objectives for the decarbonising transport theme are to:
- a) Encourage changes to travel behaviour;
 - b) Reduce the need to travel by car;
 - c) Encouraging and enabling more cycling, walking and other active travel;
 - d) Supporting people to choose passenger transport;
 - e) Supporting the transition to ultra-low emission vehicles for example, electric and hydrogen fuelled; and
 - f) Reducing the impact of freight movement within and across the County.

Net Zero Infrastructure

79. Leicestershire buildings, including domestic, public, industrial and commercial buildings, contribute a significant proportion of the County's emissions – 47% of the scoped 2019 emissions. Net zero infrastructure and development involves the need to decarbonise buildings, deliver low carbon and carbon capture and storage infrastructure, alongside extracting, using and disposing of resources in a sustainable manner.
80. The overall aim for this theme is to “Reduce demand for energy, support the switch to low carbon energy and heat, increase renewable energy generation and the sustainable use of natural resources”.
81. The objectives for the Net Zero Infrastructure theme are to:
- a) Change behaviour to reduce demand for energy.
 - b) Improve the energy efficiency of homes and other buildings.
 - c) Decarbonise the heat supply.
 - d) Modernise the grid and ensure capacity is available to support net zero.
 - e) Increase local renewable energy capacity.
 - f) Minimise emissions from new builds in construction and use.
 - g) Support the transition to a circular economy including the sustainable extraction, use and end of life management of natural resources.
 - h) Engage with the Government and business to unlock joint solutions and investment.
 - i) Increase carbon removals by supporting the development of carbon capture and storage solutions.

Green Economy

82. The Leicester and Leicestershire Low Carbon and Environmental Goods and Services (LCEGS) sector was worth £2.8bn to the economy in 2019-20, generated by sales from over 1,000 businesses employing over 21,000 people

in the sector. The largest sub-sectors in the LCEGS include wind (£474m), building technologies (£394m), alternative fuels (£384m) and photovoltaic solar systems (£296m).

83. Achieving net zero will bring about structural changes to Leicestershire and the UK's economy, entirely new economic sectors will be created. This will require low-carbon training capacity to be expanded across the County to enable a net zero transition.
84. The overall aim of this theme is to "Grow the County's low carbon economy and increase demand for low carbon goods and services"
85. The objectives for the Green Economy theme are to:
 - a) Support existing businesses to go green and benefit from the low-carbon economy.
 - b) Attract low-carbon business, industry and investment and develop local supply chains and circular economy.
 - c) Identify and develop skills to support the net zero transition.
 - d) Stimulate demand for low-carbon goods and services.
 - e) Encourage the uptake of green tourism and opportunities for green spending.

Climate friendly communities

86. Climate change is one of the greatest threats faced today. It is important that everyone is aware of how they contribute to climate change through the things they do and the things they buy. Achieving the net zero targets will require transformational change across our energy, building and transport systems but these technological solutions alone will not be enough. Businesses, organisations, communities, and residents all have a part to play, and the Council recognises the power of local people to make change happen.
87. The overall aim for this theme is "To inform, engage and involve our residents in identifying and delivering local solutions to achieve net zero carbon".
88. The objectives of the Climate Friendly Communities are to:
 - a) Raise awareness of the climate emergency and the net zero targets.
 - b) Promote sustainable consumption and behaviours that reduce carbon emissions.
 - c) Deliver a fair and just transition to net zero carbon emissions that maximises the co-benefits for health, the economy and nature.
 - d) Deliver inclusive information, engagement and consultation to help everybody to have their say on the Council's plans.

- e) Enable individual behaviour change and sustainable choices.
- f) Enable community climate action.
- g) Embrace innovative models of providing community information, public involvement and action.

Nature and land use carbon stores

89. Leicestershire is predominantly a rural county, dominated by farmland, valuable grasslands, woodland and gardens, with just less than a tenth of the land area classed as ‘built’³. The way land is used and managed affects the effectiveness of carbon sequestration, currently it is estimated that ecosystems across the County sequester 65 ktCO₂ per year. There is an opportunity to increase this removal of carbon through changes in land use and its management whilst also benefiting nature and increasing climate resilience.
90. The overall aim for this theme is to “Develop a growing and resilient network of land and water that is richer in plants and wildlife, optimises carbon storage and supports climate resilience”.
91. The objectives for the Nature and Land Use theme are to:
- a) Develop and maintain high quality data to inform decisions and action for nature and carbon storage.
 - b) Promote land management practices that benefit nature and increase carbon storage.
 - c) Protect and enhance existing spaces for nature that may also remove and store carbon as an additional benefit.
 - d) Create new, well-connected spaces for nature that provide the greatest opportunity for nature recovery and other public goods.

Implementation, monitoring and reporting progress

92. The final section of the Strategy and Action Plan includes information on how progress against the Plan will be monitored, including a commitment to produce regular public reports on greenhouse gas emissions from the Council’s operations and the County’s emissions.

Environment and Climate Change Overview and Scrutiny Committee comments on the Net Zero Strategy and Action Plan approach

93. The Environment and Climate Change Overview and Scrutiny Committee considered a report of the Director of Environment and Transport at its meeting on 26 January 2022. The report updated Members on the Council’s response to the climate emergency, advised on the key findings from the Net Zero Carbon

³ High-level strategic assessment of the natural capital assets of Leicester and Leicestershire (Holt et al, 2021).

2045 roadmap and provided an overview of the approach to develop the Council's Net Zero Strategy and Action Plan.

94. During the discussion, the following points arose:
- a) The County Council's pledge to achieve net zero across the County by 2045 could not be achieved by the Council alone and that it would work with existing partnerships and look to support other organisations in the transition. This approach was welcomed by the Committee as it was recognised that resources are limited and that working collaboratively was most efficient.
 - b) Members were assured that the Authority would consider where gaps existed in its partnership work and use other mediums, such as the potential development of a Citizen's Assembly, to engender awareness and action with the public as well as local organisations.
 - c) A Member emphasised that the drive to net zero was not only about carbon reduction but had overall health benefits too. It was agreed that clear communications and engagement campaigns with the public that emphasised the benefits and good practice already happening in Leicestershire should be promoted as priorities for consideration in the plan.

Proposed Consultation Approach

95. Informing, engaging and involving the public is a priority objective in the Net Zero Strategy and Action Plan and will be further developed over time to raise awareness and enable sustainable choices by individuals and their communities. It is intended the process will facilitate an ongoing, two-way dialogue which will persist over the long-term to shape the Council's climate action plans and programmes of work. This is intended to explore innovative methods of engagement such as Citizens' Assembly and crowdsourcing suggestions for climate action.
96. It is vital that the public and Council stakeholders are consulted on the draft Net Zero Strategy and Action Plan and are inspired and empowered to make sustainable pledges and choices in line with the County net zero 2045 target.
97. A formal public and stakeholder consultation will be conducted on the content of the draft Strategy and Action Plan through the 'Have Your Say' webpage. The consultation process will be conducted in line with best practice guidance for a period of 12 weeks, expected to extend from May to July 2022.
98. There will also be targeted consultation with key stakeholders via meetings and existing networks and partnerships wherever possible. This will include the Leicestershire Equalities Challenge Group, health partners, district and parish councils, business and representative organisations, environmental organisations, voluntary sector and community groups and local universities.

99. An extensive communication and engagement campaign will be conducted to include diverse and inclusive representation including social media campaigns, school engagement and attendance at public events.
100. The Environment and Climate Change Overview and Scrutiny Committee will receive a report on the draft Net Zero Strategy and Action Plan as part of the consultation on 21 June 2022.

Equality and Human Rights Implications

101. A draft Equality and Human Rights Impact Assessment (EHRIA) screening exercise has been undertaken, which was informed by the outcome of the engagement exercise and information on climate justice. The screening identified an overall neutral impact from the Net Zero Strategy and Action Plan and suggests a full EHRIA will not be required. However, the final EHRIA will be further informed by the consultation feedback.
102. The Strategy and Action Plan is a high-level, strategic document. Where appropriate, EHRIAs will be completed as specific schemes are developed.
103. The Council is committed to delivering a fair and just transition to net zero carbon and protecting the most vulnerable from the impacts of climate change. It is intended that the consultation and an ongoing dialogue with residents and stakeholders will help to identify solutions that will benefit all regardless of their protected characteristics or circumstances.

Environmental Implications

104. The Net Zero Strategy and Action Plan outlines the high-level environmental challenges that are faced because of climate change. There are many co-benefits for the environment from a well-managed transition to net zero.
105. Where relevant, the appropriate environmental impact assessment will be completed as specific schemes are developed.

Background Papers

Environment Strategy 2018 – 2030: delivering a better future - <https://bit.ly/3M339uv>
 Leicestershire County Council Climate Emergency Declaration - <https://bit.ly/37bhxBS>
 Leicestershire County Council's Carbon Reduction Roadmap - <https://bit.ly/37HSbeJ>
 Leicestershire County Council's Strategic Outcomes Framework and Plans 2018-22 - <https://bit.ly/3uBEIE4>

Appendices

Appendix A – Net Zero Carbon 2045 Roadmap for Leicestershire full report
 Appendix B – Leicestershire County Council Net Zero 2045 Strategy and Action Plan

