

2022-23

# **Environmental Performance and Progress Update Report**



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#### Introduction

- 1. For 2022-23 reporting, a new report format and approach has been introduced. This is to provide a single report which gives a clear and comprehensive update on the Council's wider environmental performance, and on progress in delivering its commitments to net zero.
- 2. The report is divided into two main sections. Section 1 provides details of the environmental performance and progress for Leicestershire County Council, as an organisation, while Section 2 provides details of performance and progress for Leicestershire as a county, accepting that there are some areas of overlap.
- Section 1a focuses on performance and progress in relation to the Council's commitment to net zero, in particular, on the progress of the 2030 net zero target for Council operations. Part 1 of the report provides a contextual overview of performance across a range of greenhouse gas emitting activities within the Council for 2022-23.
- 4. These greenhouse gas emitting activities feed into Part 2 of the report which provides a summary of the Council's Greenhouse Gas Report for 2022-23, setting out the overall figure and the key sources of emissions.
- 5. Part 3 of the report provides an update and a review of progress on delivering the actions within the 2030 Net Zero Council Action Plan.
- 6. Section 1b provides details on performance across a range of other environmental aspects which contribute to Leicestershire County Council becoming a greener council (Part 4). Section 1b also provides an assessment of performance against the Council's Environmental Management System for 2022-23 (Part 5).
- 7. In Section 2 of the report, Part 6 provides details of progress towards meeting the 2045 net zero Leicestershire target, and also progress in delivering the Net Zero Leicestershire Action Plan. Firstly, Part 6a sets out the greenhouse gas emissions for Leicestershire, based on the latest figures for 2021, as provided by the Government. In addition, some contextual figures are provided setting out how the County is performing in terms of several activities that influence greenhouse gas emissions within Leicestershire.
- 8. Part 6b provides a summary of how the Council scored on the Carbon Disclosure Project (CDP) Climate Scorecard.
- Part 6c provides an update and review of progress on delivering the actions within the 2045 Net Zero Leicestershire Action Plan. In addition, updates on the Council's Net Zero Engagement Plan and Funding Plan are provided.
- 10. Part 7 provides details of performance on several other environmental aspects, such as nature, resource use and air quality. These provide some wider contextual information on progress towards creating a greener county.

- 11. The report finally provides a set of conclusions, firstly on performance and progress for Leicestershire County Council, secondly for Leicestershire and thirdly on additional overall conclusions that can be taken from the performance results and the progress made.
- 12. The report is supported by several appendices that provide more detailed or background information, that expands on the information provided in the body of the report.
- 13. For the 2022-23 report changes have been made to some of the key performance indicators (KPIs) used in the reporting. The main changes of note are:
  - Switching all the Council's greenhouse gas emission KPIs from carbon only (CO<sub>2</sub>) to carbon equivalent (CO<sub>2</sub>e), to be in alignment with the Council's Greenhouse Gas Report.
  - Switching to the 'Local Authority territorial emissions full dataset' instead of using the 'Local Authority territorial emissions within the scope of influence of Local Authorities dataset', to be in alignment with the figures used in the Net Zero Leicestershire Strategy.

#### **Executive Summary**

- 14. For 2022-23 reporting, a new report format and approach has been introduced which provides a clear and comprehensive update on the Council's wider environmental performance and on progress in delivering its commitments on net zero within a single report, as an organisation and for Leicestershire as a county.
- 15. In terms of Leicestershire County Council's environmental performance for 2022-23, the report shows that the Council's net greenhouse gas emissions were 9,395 tCO<sub>2</sub>e, a fall of 7.2% compared to 2021-22. Emission reductions were seen across all major sources except for business travel. Emissions from fleet vehicles, which remains the second largest proportion at 29%, showed the smallest reduction of only 2.6%. Direct emissions from buildings are also a concern with only a 7% reduction on last year's figure (the second smallest change). This is due to a continued reliance on gas heating and inconsistency in the performance of the biomass boiler system. This is likely to improve in subsequent years as new parts have been fitted.
- 16. Overall, the Council's emissions have reduced by almost **74%** since the 2008-09 baseline year. However, while good historic progress has been made, more recently there has been a slowdown in progress, with most of the easy win actions having been taken. The Council now **needs to achieve an average of 1,342 tCO<sub>2</sub>e per year** in order to meet its net zero target by 2030. The 2022-23 emissions reduction **fell short of this by 45%**, meaning the Council is currently off track to meet net zero by 2030.
- 17. In December 2022, the Council adopted the **2030 Net Zero Council Action Plan** which set out how the Council aims to achieve net zero for its own operational emissions by 2030. This report provides an update on progress in delivering the action plan and refreshes the actions where needed (Appendix D).
- 18. Progress has been made in delivering a number of the Council's carbon reduction actions, in particular, the completion of £3.6m in energy efficiency and renewable energy upgrades funded by the Public Sector Decarbonisation Scheme. In addition, the initial trial of some of the Council's hard to electrify fleet vehicles to HVO (hydrotreated vegetable oil) fuel, and support and encouragement of low carbon commuting for Council staff.
- 19. Progress has also been made on a number of the Council's enabling actions including, the launch of the £2m Carbon Reduction Fund, embedding carbon pricing within business cases and decision making, launch of the Net Zero Leicestershire webpages, and reporting to the world's leading environmental reporting platform, the CDP.
- 20. The review of the 2030 action plan identified a number of **key risks** to the Council achieving net zero by 2030 including, **access to funding** and a **shortfall in staff capacity and resources.**

- 21. The first year of the action plan lays the foundations for some of the key actions that will support the Council's net zero by 2030 commitments, in particular, the development of the decarbonisation plans for the Council's fleet and buildings. The plans are expected to be completed in 2024 and delivery will be dependent on the approval of appropriate business cases and staff resources to enable them to be delivered.
- 22. The Council continues to make progress in taking action on nature with 97% of suitable Council land in better management for nature. This is through the activities taking place on Council land such as country parks, county farms and on the roadside verges, with the Wildlife Verge Scheme winning a Department for Environment, Food and Rural Affairs (Defra) Bees Needs Champion Award in July 2023.
- 23. The Council's recycling rate for office waste is struggling to recover after the Covid-19 pandemic, with a recycling figure of **51.2%** in 2022-23. This is mainly due to a reduction in the amount of recyclable waste being produced, most notably, a 65% reduction in the amount of waste paper, largely driven by a fall of 5.5m A4 sheets in the amount of paper used in photocopiers since 2019-20. More importantly, there has been a 30% drop in the annual amount of waste produced since 2019-20, with only **250 tonnes** of office waste produced in 2022-23.
- 24. In terms of **environmental compliance**, the Council is performing relatively well, with one environmental complaint upheld, one environmental incident reported, no enforcements or prosecutions, two minor non-conformities found during the external ISO14001 audit, and four minor non-conformities found during the internal environmental audit process in 2022-23.
- 25. At the end of 2022-23 there were two environmental high risks and eight climate change high risks. Due to limited staff capacity, it has not been possible to undertake significant work to address the **climate change risks**. Insufficient action on the climate change risks will expose the Council to the risk of harm from future extreme weather events. Work will be undertaken to see if the reprioritisation of workload and reallocation of staff resources could enable action to be taken to reduce the risks identified.
- 26. In relation to the Council's Environmental Management System (EMS), a number of aspects have been noted such as the ongoing uncertainty in relation to the creation of the Office of Environmental Protection, the full implications of the Environment Act 2021 and whether any further legacy EU legislation will be repealed. Also noted was the risk of the Council's financial position and the current staff capacity issues making it more difficult to achieve some of the Council's environmental targets and maintain its environmental performance.
- 27. Some 78 new or updated general environmental Acts, legislation, regulations, consultations, and guidance released during 2022-23 were identified as possibly relevant to the County Council. This included **new statutory duties** in relation to Local Nature Recovery Strategies, Biodiversity Net Gain, the strengthened biodiversity duty, Simpler Recycling reforms including mandatory

- food waste collections and the Extended Producer Responsibility for Packaging.
- 28. The development and delivery of the **2030 Net Zero Council Action Plan** and the **2045 Net Zero Strategy and Action Plan** will present opportunities for improving the environmental performance of the Council and producing possible financial savings in some cases.
- 29. According to the latest Government data, **Leicestershire's greenhouse gas emissions** for **2021** were **4.85 MtCO<sub>2</sub>e.** While this was an increase compared to 2020, this was due to the expected bounce back from the Covid-19 pandemic. The 2021 emissions were 3.6% lower than the 2019 pre-pandemic levels. Emissions have reduced across Leicestershire by 28% since 2005, while per capita emissions have reduced by 37% to 6.8 tCO<sub>2</sub>e.
- 30. Within Leicestershire there were increases in electric vehicle charging locations, electric vehicle ownership, renewable energy generated and capacity, and most significantly, in the proportion of existing domestic properties with an energy performance certificate of C or above. The launch of the Green Living Leicestershire Warms Homes schemes, in collaboration with the district councils, which provides support to vulnerable households and those at risk of fuel poverty to make energy efficiency improvements to their homes, will have contributed to this improvement.
- 31. During 2022-23, the Council commenced work on preparing a report to the world's leading environmental reporting platform, the **CDP**. The submission was made in July 2023, with the Council **scoring 'B'**. This means the Council has been recognised for having an emissions inventory, having implemented a mitigation plan and for taking action to reduce emissions, alongside having an awareness of the main local risks and impacts of climate change.
- 32. The 2045 Net Zero Leicestershire Strategy and Action Plan was adopted in December 2022 which sets out how the County Council intends to collaborate with others to deliver the action plan over the next 5-year period. An update of the Action Plan has been carried out and provides a commentary on progress. However, if the net zero target dates change, the Strategy and Action Plan will require refreshing to reflect any such changes.
- 33. Several projects have already been delivered successfully including Solar Together, the Warm Homes scheme, and the Net Zero Town and Parish Council Toolkit. In addition, the Council and partners has been successful in securing funding from Innovate UK for the Pathfinder Place project.
- 34. Some initial work has taken place to progress an Engagement Plan and a Funding Plan. The report includes updates on their progress and next steps.
- 35. In terms of the **wider environmental position** for Leicestershire, the data shows that, like the rest of England, the County's rivers are not in a very good

ecological or chemical status. Leicestershire remains in the 4<sup>th</sup> quartile<sup>1</sup> relative to comparative English authorities, for air pollution from fine particulate matter, while no nitrogen dioxide exceedances were recorded. The amount of household waste per household has fallen by 74.2kg in 2022-23 to 939.4kg, while recycling performance is still below the 50% target at 41.8%. Both figures were affected by the fall in green waste, due to the heat wave in the summer of 2022.

- 36. The key conclusions of the report are as follows:
  - i) The Council is currently **not on track to meet its 2030 Council operations net zero target**.
  - ii) The Council is currently not on track to meet its 2045 County-wide net zero target. Though the delivery of the 2045 net zero action plan has only recently started, so this more highlights the scale of the challenge than progress.
  - iii) Particularly, there is a need to target action on reducing emissions from transport, domestic, industry and agriculture sources, with a focus on actions to increase electric vehicle take up, encouraging more active travel, increasing renewable energy generation, and improving the energy efficiency of existing buildings.
  - iv) There will be a **significant amount of work needed** to implement the Collection and Packaging Reforms, that contribute to meeting the **national 65% recycling target by 2035**.
  - v) The insufficiency of action on climate adaptation is a concern.
  - vi) The current workload and staff capacity issues are a concern.
  - vii) The current **financial position of the Council is a concern** in terms of resourcing action on the environment.
  - viii)There is a need to **prioritise actions on the environment** and the use of staff and financial resources. Within which there is also the need to decide how best to allocate resources between meeting the Council's own and the County net zero targets.
  - ix) The uncertainty regarding Government policy on the environment and implications of recent environmental legislation is a concern.
  - x) There is a need to be aware of the **increased public interest and scrutiny** of local authority action on the environment.

<sup>1</sup> The Council's performance is benchmarked against 33 English authorities which cover large, principally non-urban geographical areas. Where it is available, it is indicated which quartile Leicestershire's performance falls into. The 1<sup>st</sup> quartile is defined as performance that falls within the top 25% of relevant comparators (the best). The 4<sup>th</sup> quartile is defined as performance that falls within the bottom 25% of comparators (the worst). Quartile positions are updated annually.

#### **Section 1: Leicestershire County Council**

#### Section 1a: Net Zero Council

37. This section of the report provides details of the Council's performance and progress regarding its commitment to achieving net zero carbon emissions for Leicestershire County Council, as an organisation by 2030.

#### Part 1: Greenhouse gas emitting activities

- 38. Part 1 of the report provides some of the contextual performance data in relation to the Council's greenhouse gas emitting activities, which contribute to the figures set out in Part 2 and the Council's Greenhouse Gas Report for 2022-23.
- 39. It covers performance in the following areas:
  - Electricity consumption
  - Gas/Biomass consumption
  - Business mileage
  - Waste produced
  - Water consumption
  - Renewable energy generated

#### C2a - Electricity consumption per m<sup>2</sup> in LCC buildings

- 40. This KPI looks at the efficiency of electricity use in Council buildings. Only buildings that have been in the Council's portfolio for six years (currently 76 sites) are included, so changes in energy consumption should reflect actual changes in energy efficiency.
- 41. Some revisions and updating to the methodology were undertaken this year which has led to some changes to previous figures, although trends are similar. Note this KPI does not currently include renewable electricity generated and used on-site.
- 42. The electricity consumption per square metre for 2022-23 was **63.2 kWh/m²** compared to the target of 75 kWh/m², therefore ahead of target (low is good). This was an improvement on the 2021-22 figure of 77.3 kWh/m² and is in line with the long-term trend.

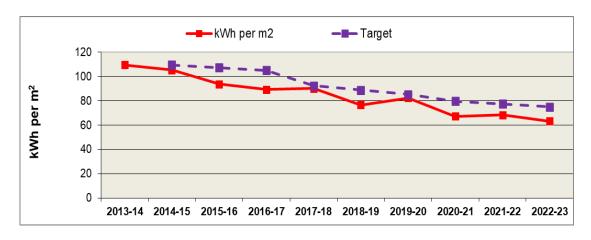


Figure 1: Electricity consumption per m<sup>2</sup> 2013-14 to 2022-23

43. This positive performance reflects lower grid electricity usage, which remains over 1GWh per year less than before the pandemic. This is believed to reflect a combination of lower building occupancy, reduction in non-seasonal ventilation, energy efficiency measures and increased solar PV output.

#### C2b – Gas/biomass consumption (weather corrected) per m<sup>2</sup> in LCC buildings

- 44. This KPI looks at heating efficiency in Council buildings. Only the buildings that have been in the Council's portfolio for six years (currently 76 sites) are included so that any annual reductions seen in both electricity and gas consumption represent genuine efficiency improvements.
- 45. Gas/biomass consumption per square metre for 2022-23 has reduced slightly to **155 kWh/m²** compared to the figure for 2021-22 of 156.9 kWh/m². This is still noticeably above the target of 110.1 kWh/m².
- 46. This reflects the fact that heating demand has not always fallen in line with milder weather. In addition, the biomass boiler was out of action during January and February 2023, meaning more reliance on gas heating. Improvements to the biomass heating system are expected to improve the position in 2023-24.

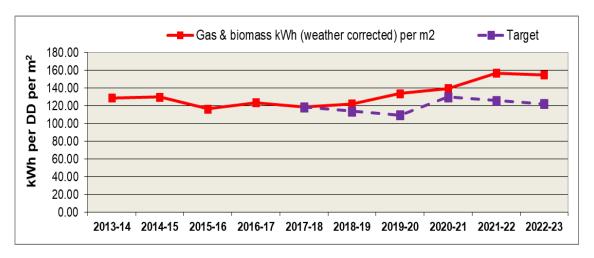


Figure 2: Gas and biomass consumption per m<sup>2</sup> 2013-14 to 2022-23

#### C18 - Total business mileage

- 47. Annual business mileage claims rose by almost **6%** in 2022-23 compared to 2021-22 with total business mileage of about **4.3m miles**. This slight rise was likely due to the ongoing bounce back following the Covid-19 pandemic as Council services continued to return to some form of normality. Note business mileage claims do not include commuting to and from work and only include mileage claimed by staff in carrying out Council business.
- 48. Business mileage claims are still 22% (almost 1.2m miles) less than the prepandemic level in 2019-20. This can largely be attributed to many Council staff taking advantage of smarter working policies, such as online and hybrid meetings, and flexible working.
- 49. Work is planned to take place on developing an additional KPI that sets a target for reducing emissions from business mileage in line with the net zero commitment. This should encourage both a reduction in mileage, as well as an increase in the use of lower emission vehicles. The recently introduced financial controls which will restrict non-essential spend on travel, including business mileage, are likely to reduce emissions from December 2023 onwards.

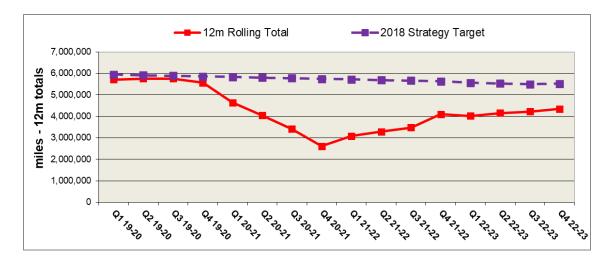


Figure 3: Rolling 12-month business mileage 2019-20 to 2022-23

#### <u>LW1 - Total waste from LCC sites</u>

50. The rolling annual total waste figure reduced by over 8% (23 tonnes) in 2022-23 compared to 2021-22. The figure of **250 tonnes** is in line with expectations as more staff returned to the office and Council service returned to a new normal. The figure follows the downward trend since 2012-13. This figure is 30% (108 tonnes) less than the pre-pandemic level in 2019-20.

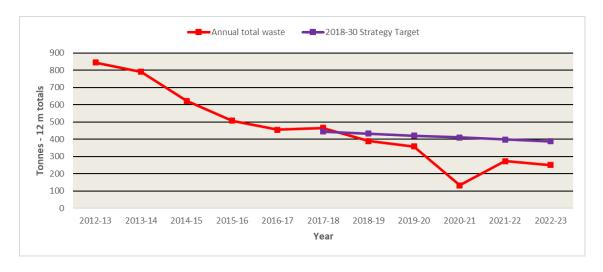


Figure 4: Annual total waste 2013-14 to 2022-23

#### WA1 - Total water consumption per FTE

- 51. The data for 2022-23 shows reported consumption of water falling to **51,593** m<sup>3</sup> from the high of 74,046 m<sup>3</sup> in 2021-22. This level of water usage is closer to the average for the last five years. The number of full time equivalent (FTE) staff was broadly stable, so that the water consumption per FTE member of staff fell from 15.23 m<sup>3</sup> in 2021-22 to **10.61** m<sup>3</sup> in 2022-23. This means that performance once again was ahead of the target of 11.2 m<sup>3</sup> (low is good).
- 52. It is believed that the figure for 2021-22 was overstated due to a change in the water provider and the significant use of estimated billing. Discussions will be held with relevant parties to seek to improve the quality and reliability of readings in future.

# C17a - Renewable energy generated as a percentage of consumption on County Council land and properties

- 53. The amount of renewable energy generated as a percentage of total energy consumed was **10.9%** at the end of 2022-23, significantly under the 27.8% target. The targets for this indicator reflect the Strategic Property Energy Strategy 2020-30, which has a target of 50% on-site renewable or zero carbon energy generation as a percentage of annual consumption at corporate Council buildings. The figure is slightly up from the 2021-22 figure of 10.3%.
- 54. The largest contributor to renewable energy generation is the biomass boiler at County Hall, which provides approximately three-quarters of the total renewable energy generated. During 2022-23 there was a mixed picture across the year, with higher energy production in quarter 3 offset by technical issues in quarter 4, causing two months of lost energy production. Total annual biomass generation fell from 2.2m kWh last year, to around 1.5m kWh. During 2021-22, works took place as part of the Public Sector Decarbonisation Scheme to expand the biomass network and install a thermal heat store. This will enable use of the biomass boiler all year round and will significantly increase energy output once it is up and running correctly.

55. Solar energy generation at corporate sites showed a strong recovery in 2022-23 to a record **568,469 kWh**. This follows a disappointing 2021-22, when production fell to a five-year low of 413,000 kWh due to faults and upgrades. Much of the recovery is attributable to new rooftop systems at County Hall, which contributed over 150,000 kWh. As a result of further upgrades in early 2023-24, along with a new maintenance contract, additional increases in solar energy generation are expected in the future.

#### Part 2: Greenhouse Gas Report

- 56. Part 2 provides a summary of what the performance figures set out in Part 1 above, as well as the other sources of emissions, have meant for the Council's overall greenhouse gas emissions as an organisation.
- 57. Leicestershire County Council's net greenhouse gas emissions for 2022-23 decreased by 7.2% (732 tCO<sub>2</sub>e) compared to 2021-22 to 9,395 tCO<sub>2</sub>e. This is equivalent of 1.93 tCO<sub>2</sub>e per full-time equivalent employee (0.15 tCO<sub>2</sub>e decrease compared to 2021-22). The reduction in Council emissions is welcomed following the Covid-19 pandemic bounce back experienced in 2021-22.
- 58. Emission reductions have been found across all major sources, except business travel, which continues to see a bounce back in emissions following the pandemic. Emissions from fleet vehicles which remains the second largest proportion at 29% showed the smallest reduction of only 2.6%. Direct emissions from buildings are also a concern with only a 7% reduction on last year's figure (the second smallest change). This is due to a continued reliance on gas heating and inconsistency in the performance of the biomass boiler system (this was offline due to repair work for part of the year). It is hoped that this will improve with the boiler being fully functional in future years.
- 59. Overall, Council emissions have now reduced by 73.7% since the 2008-09 baseline year. Table 1 below provides more details of the figures behind the Council's greenhouse gas emissions for 2022-23.
- 60. On-site renewable energy generation, including solar power and biomass heating, avoided **355 tCO<sub>2</sub>e** of greenhouse gas emissions in 2022-23 (equivalent to 3.8% of net emission), compared to if gas and grid electricity were consumed.
- 61. The Council now needs to achieve an average of **1,342 tCO₂e per year** reduction to meet net zero by 2030 (77 tCO₂e more per year than in 2021-22). The 2022-23 emissions reduction rate falls short by 45% compared to the required annual average reduction needed to meet net zero by 2030 (Figure 6).
- 62. The Council's full 2022-23 Greenhouse Gas Report is attached to this report as **Appendix B**.

| Greenhouse gas emissions data for period 1 April 2022 to 31 March 2023 (tCO₂e)          |  |         |         |          |                      |          |  |  |
|---|--|---------|---------|----------|----------------------|----------|--|--|
|   | Sector   | 2022-23 | 2021-22 | % Change | Base Year<br>2008-09 | % Change |  |  |
| Scope 1 – Direct emissions e.g.,<br>boilers, owned transport, air<br>conditioning gases | Buildings  | 1,860   | 2,000   | -7.0%    | 4,317                | -56.9%   |  |  |
|   | Fleet vehicles                                   | 2,685   | 2,756   | -2.6%    | 4,358                | -38.4%   |  |  |
|   | Fugitive gases                                   | 60      | 44      | 35.1%    | -                    | -        |  |  |
|   | Sub-total  | 4,605   | 4,800   | -4.1%    | 8,675                | -46.9%   |  |  |
| Scope 2 – Energy indirect e.g.,<br>purchased electricity                                | Buildings  | 1,297   | 1,567   | -17.3%   | 6,562                | -80.2%   |  |  |
|   | Streetlighting and traffic signals               | 2,009   | 2,228   | -9.8%    | 15,581               | -87.1%   |  |  |
|   | Sub-total  | 3,306   | 3,795   | -12.9%   | 22,143               | -85.1%   |  |  |
| Scope 3 – Other Indirect e.g.,<br>business travel and water<br>supply/treatment         | Business travel                                  | 1,193   | 1,131   | 5.5%     | 3,237                | -63.1%   |  |  |
|   | Electricity transmission and distribution losses | 302     | 336     | -10.0%   | 1,722                | -82.4%   |  |  |
|   | Water supply and treatment                       | 17      | 84      | -79.7%   | -                    | -        |  |  |
|   | Waste  | 5       | 6       | -9.3%    | -                    | -        |  |  |
|   | Sub-total  | 1,518   | 1,557   | -2.5%    | 4,959                | -69.4%   |  |  |
| Total Gross Emissions   |  | 9,428   | 10,152  | -7.1%    | 35,778               | -73.6%   |  |  |
|   | Carbon offsets                                   | 0       | 0       | -        | 0                    | -        |  |  |
| Renewable energy exports  |  | -33     | -25     | 35.4%    | 0                    | -        |  |  |
| Total Location-based Net Emissions  |  | 9,395   | 10,127  | -7.2%    | 35,778               | -73.7%   |  |  |
| Full time equivalent (FTE) employees  |  | 4,864   | 4,860   | 0.1%     | 6,880                | -29.3%   |  |  |
| Intensity measure: tCO <sub>2</sub> e/FTE   |  | 1.93    | 2.08    | -7.3%    | 5.2                  | -62.8%   |  |  |
| Renewable electricity tariff  |  | 3,306   | 3,795   | -12.9%   | -                    | -        |  |  |
| Total Market-based Net Emissions  |  | 6,123   | 6,357   | -3.7%    | 35,778               | -82.9%   |  |  |
| Petrol and diesel (outside of scope)  |  | 0.16    | 0.15    | 11.5%    | -                    | -        |  |  |
| Woodchip (outside of scope)   |  | 694     | 711     | -2.3%    | -                    | -        |  |  |

Table 1: Council 2022-23 greenhouse gas emissions, with a comparison to 2021-22 and the 2008-09 baseline year

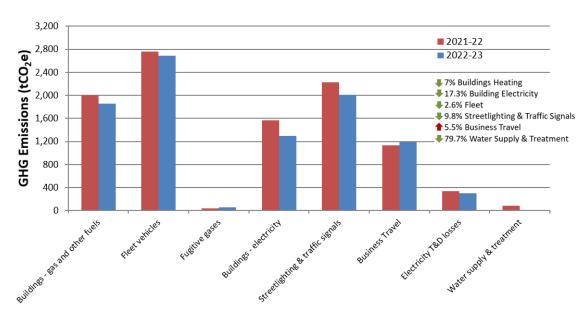


Figure 5: Council 2022-23 greenhouse gas emissions by source, compared to 2021-22

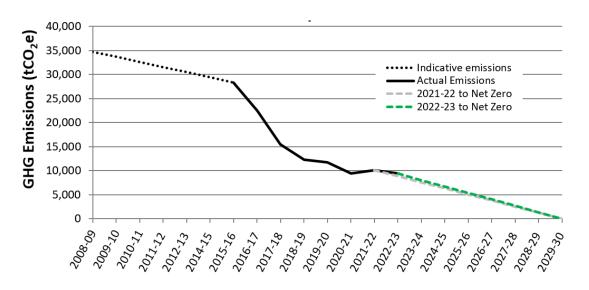


Figure 6: Council net greenhouse gas emissions compared to 2030 net zero

#### Part 3: Net Zero Council Action Plan progress update

- 63. In December 2022, the County Council adopted the 2030 Net Zero Council Action Plan. This action plan outlines how the County Council aims to achieve net zero for its own operational emissions by 2030. Activity within the plan is separated between the main sources of emissions (estates, fleet, business travel and streetlighting) and actions needed to enable the successful delivery of net zero (i.e., finance, decision making, engagement and reporting).
- 64. Appendix D of this report provides a progress update and refresh of all the actions within this plan, ensuring the plan stays up to date and the Council remains informed about its progress towards delivering net zero by 2030.
- 65. The following actions are currently in delivery or have been completed:
  - a) Carbon Reduction Actions:
    - i. Completed £4.3m energy efficiency and renewable energy upgrades to Beaumanor Hall, County Hall and Embankment House, £3.6m of which was funded by the Public Sector Decarbonisation Scheme.
    - ii. Phase 1 future wind and solar feasibility study has been completed, with phase 2 being underway.
  - iii. Whole estate buildings decarbonisation plan is under development (66 surveys complete).
  - iv. Electric Vehicle Fleet Transition plan is under development.
  - v. Part HVO transition (£110,000) for hard to electrify fleet vehicles is under procurement.
  - vi. Future streetlighting dimming and trimming. Pilot project is to start in early 2024.
  - vii. Ongoing support and encouragement for low carbon commuting (e.g., bike loans, Dr Bike, Betterpoints, Cycle to Work scheme).

#### b) Enabling Actions:

- i. Launch of the £2m Carbon Reduction Fund, including embedding carbon pricing within business cases and decision making.
- ii. Launch of Net Zero Leicestershire webpages.
- iii. Reported to the environmental reporting platform CDP (paragraphs 151-154 of this report).
- 66. The first annual progress review has identified key areas of risk and gaps to enable net zero, including:
  - a) Funding to enable the delivery of the building decarbonisation and fleet Electric Vehicles transition plans at the pace and scale needed.
  - b) Limited progress on business mileage decarbonisation (13% of emissions) due to staff resources over the last 18 months.
  - c) Staff resources to support development and delivery of relevant carbon awareness/management training and practices to different levels of staff.

- d) Influencing and reducing out of scope emissions (i.e., purchase goods and services, commuting and investments) due to limited staff resources available.
- e) Staff capacity overall, to deliver projects at the scale and speed required.
- 67. The first year of delivery lays the foundations for what is needed from the Council to enable net zero by 2030, including the development of two key decarbonisation plans for fleet and buildings. Once complete, the findings of these plans will advise on the required delivery approach and timescales to support the Council's 2030 commitments. However, they are dependent on the availability of significant funding to enable them to be delivered (e.g., investment in electric fleet vehicles, electric heating in buildings etc).
- 68. With the current resources available to the Council (both financial and staffing), delivery of these key initiatives will not be possible at the scale and speed required to enable it to meet net zero by 2030. The figures for 2022-23 emissions reductions demonstrate this falling short by 45% compared to the required annual average reduction needed to meet net zero by 2030.

#### **Section 1b: Greener Council**

69. This section of the report sets out the Council's performance as an organisation on a range of environmental areas, as set out below. It also provides an assessment of performance against the Council's EMS.

#### Part 4: Wider Environmental areas

- 70. Part 4 of the report provides details on the Council's performance across a range of environmental areas, which are not covered in Part 1, in particular:
  - a. Nature
  - b. Resources
  - c. Staff perception
  - d. Compliance
  - e. Risks

#### a. Nature

#### B3a Hectares of LCC land in better management for nature

- 71. At the end of 2022-23, there were **3,854 hectares** of Council land in better management for nature. This is an increase of 10 hectares compared to 2021-22. This change can be explained by any acquisitions or disposals that have happened since and the fact that the data has been updated (categories changed and GIS extents amended where discrepancies have been found).
- 72. This figure includes a combination of Council land including country parks, rural and urban highway verges, county farms and playing fields.

#### B3b % of suitable LCC land in better management for nature

73. At the end of 2022-23, **97%** of suitable Council land was in better management for nature, the same as 2021-22.

#### Wildlife Verges

- 74. At the end of 2022-23, there were a total of **69 wildlife verges** and **51 parish councils** included in the Wildlife Verge scheme. The total area of wildlife verges was **37,185m**<sup>2</sup>.
- 75. Up to the end of 2022-23, a total of **3,986 volunteer hours** were spent undertaking verge baseline surveys and **3,038 wildlife records** were generated.
- 76. In July 2023, the Wildlife Verge scheme won the Defra **Bees Needs Champion Award** under the Community Category. The award recognises and celebrates examples of exceptional initiatives undertaken by local authorities, community groups, farmers, and businesses to support pollinators.

#### Tree Wardens

- 77. In March 2023, Leicestershire celebrated **40 years** of running the Tree Warden network in the County, in partnership with the Tree Council. Currently, there are 124 **Tree Wardens** in the network. There are 78 parishes and one independent organisation (Harborough Woodland) which manage volunteer Tree Wardens.
- 78. The role of a Tree Warden is diverse and involves maintaining trees (watering, weeding, minor tree work like coppicing); checking for pests and disease; looking for places to plant trees; encouraging schools to educate pupils about trees; interpretation of trees through guided walks; checking planning applications to identify impacts on designated; and non-designated trees.
- 79. The Leicestershire Network has a clear process for recruiting, supporting, and offering strategically beneficial training to its Tree Wardens, which has been replicated in other parts of the UK. Leicestershire is well regarded by the Tree Council which refers new networks for advice and best practice.
- 80. Tree Wardens have supported access to Treescape grants by providing evidence of the demand for trees in Leicestershire. They have also helped with data collection for Local Wildlife Sites, Ancient Trees and assessing trees for Tree Preservation Orders, as well as helping in the delivery of the Council's target to plant 700,000 trees by 2030.

#### b. Resources

#### LW2 - % Recycled from LCC sites

- 81. The recycling figure for 2022-23 was **51.2%**, falling from 58.7% in 2021-22. This is below the target of 64% for 2022-23. The current target is to achieve a 70% recycling rate by 2030.
- 82. The level of recycling performance is struggling to recover after the Covid-19 pandemic. One of the reasons for this is that there is less recyclable and compostable waste being produced. Examples of this include a 65% (47 tonnes) reduction in the amount of paper waste produced and the ceasing of the kitchen compost collection scheme, resulting in a reduction of about 20 tonnes of compostable waste. The latter is also resulting in this waste (though likely of a lesser tonnage) going into the residual waste stream. In addition, there is also anecdotal evidence of higher levels of contamination and improper use of the waste bins in County Hall since 2019-20.

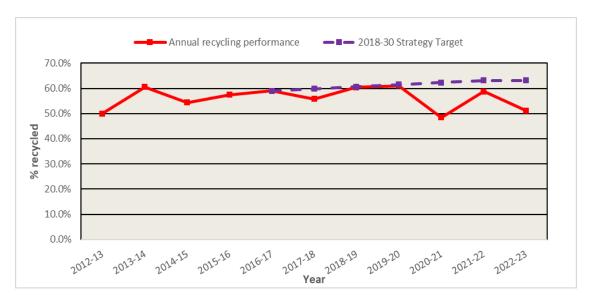


Figure 7: % waste recycled 2013-14 to 2022-23

#### P1a - Total office paper purchased

- 83. The data is received directly from the Council's primary paper supplier.
- 84. The amount of paper purchased at the end of 2022-23 was about **2.7m A4** sheets. This was an increase of about 12% on 2021-22, but still significantly less than the pre-pandemic figure of 8.2m A4 Sheets.
- 85. This reflects the persistence of changes arising during the pandemic, including the move to digital service delivery, and working from home (now part of the Council's new ways of working). Work is and will take place to maintain the reduction in paper usage where possible. The reduction in paper use in part contributes to the fall in recycling performance, as there is less paper to recycle.

#### <u>LW10 - % of recycled aggregates used in highways</u>

- 86. The proportion of recycled aggregates used over 2022-23 was **89%**, an increase from 63.5% the previous year. The amount of recycled aggregate used varies from quarter to quarter, but there were two quarters where the amount of recycled aggregate used was 100%.
- 87. Use of recycled aggregates is affected by availability and feasibility (e.g., not suitable for base layers) and is not always the best environmental option when processing, logistics and energy use are factored in. However, use of recycled aggregates in certain schemes can significantly reduce transportation and waste costs, and therefore, it is encouraged where suitable and locally available.

#### c. Staff perception

E1 - Proportion of staff supporting the statement "I believe the Council is doing enough to reduce its impact on the environment" and E2 - Proportion of staff agreeing with the statement "I understand how I can contribute to green issues at work"

- 88. As part of a refresh of the mandatory Environmental Awareness E-Learning training in 2017-18, a survey was included in the module to gather data for this KPI.
- 89. Of the staff that completed the survey in 2022-23, **90%** agreed that the Council was doing enough to reduce its impact on the environment and **94%** agreed they understood how they can contribute to green issues at work.
- 90. While these results are positive, a slight downward trend has been observed. This may reflect the new ways of working and the fact that many staff are working from home, so feel less able to contribute to green issues in the workplace. In addition, with most staff working from home, there is less scope for staff engagement. The results may also reflect an increased public awareness and concern about the environment, and a recognition that more and urgent action needs to be taken.
- 91. The staff behavioural change scheme Go Green has been revamped and improved as Greener Together. As part of the new scheme, initiatives will be undertaken to support staff, tenants and building users to reduce the Council's environmental impact. As the scheme is rolled out through information provision, training, and opportunities for staff to learn and work together on reducing the Council's environmental impacts, it is hoped that it will address this decline.

#### d. Compliance

#### M1 - Environmental complaints

92. There was **one** environmental complaint upheld during 2022-23 compared to three in 2021-22. The complaint related to blocked drain works that had not been completed. The works have subsequently been undertaken.

#### M2 - Environmental incidents

93. There was **one** environmental incident reported in 2022-23. This related to a fire at the former Birkett House School. This caused some fire damage asbestos contamination, which was removed by HSE licensed asbestos contractors and monitored by accredited consultants, under the control of Council Operational Property Services.

#### M5 - Environmental enforcements/prosecutions

94. There were no enforcement notices or prosecutions logged in 2022-23.

#### External and Internal Audit results

- 95. External audits are carried out annually by BM Trada to ISO14001 EMS Standard, with a full re-certification audit every three years. A full re-certification audit is due in 2024.
- 96. An external ISO14001 EMS recertification audit was carried out in February 2023. **Two minor non-conformities** were found at Beaumanor Hall, relating to an out-of-date environmental risk register and an out-of-date environmental checklist. Corrective action has since been taken on both non-conformities.
- 97. Only those Council services externally certified to ISO14001 are subject to external audits. Namely, Strategic and Operational Property Services County Hall operations and Beaumanor Hall operations; Central Print Services; Countryside Services and the Environment Policy and Strategy team. Internal audits may be carried out on any service but are focussed on those previously identified as potentially having high environmental risks.
- 98. A set of internal audits was carried out during 2022-23 as part of a rolling 3-year programme. These covered Hard Facilities Management, Multi-Agency Travellers Unit, Beaumanor Hall and Bosworth Battlefield. No major non-conformities were recorded. One minor non-conformity was recorded at Beaumanor Hall relating to the availability of pesticide training records. Three minor non-conformities were recorded at Bosworth Battlefield in relation to non-availability of keys for utility enclosure on site, printer paper not conforming with the Council's Timber Products Policy and a piece of electrical equipment incorrectly disposed of in the general waste bin. A total of 19 observations (potential opportunities for improvement) were recorded across all the service areas.

#### e. Risks

i) Environment Risk Register

#### M3 - Environmental risks scoring >15

- 99. At the end of 2022-23, there were a total of **two** environmental risks scoring 15 or more. These environmental risks relate to areas where the Council is not meeting legal requirements or Council policy is significantly failing to address Environment Strategy objectives.
- 100. The remaining risks sit within the Environment and Transport Department (previously three risks, now two) and are summarised as follows:
  - a) Biodiversity considerations not sufficiently taken into account in Highways mowing regimes (**one risk**).
    - Urban verge trials are continuing and expanding, but still make up only a small proportion (less than 1%) of the verge network. These are being used to inform possible changes to mowing regimes. There is an increasing public interest in having wildlife verges, but further systematic change is needed. This risk will continue to be reviewed to determine if sufficient progress has been made to reduce this risk.
  - b) Operational risks at Recycling Household Waste Sites (one risk). The risk relates to inadequate access to waste disposal outlets due to infrastructure closures.
    - Since the end of 2022-23, a new long-term contract for residual waste treatment and disposal has come online. This change has reduced the risk score, meaning this is no longer a high risk.
- 101. The previous high risk in relation to compliance with the Cleaner Vehicle Regulations has been reduced to a medium risk due to the steps that have been taken by the Fleet team to procure more environmentally friendly vehicles, and the fact that the enforcement risk is low.

#### ii) Climate Change Risk Register

#### R1 - Outstanding actions on climate change risk register

- 102. There are **eight high risks** on the climate change register following the completion during 2021-22 of a review and assessment of the risks to the Council from climate change. The identified risks relate primarily to highways and property assets, business continuity and flood risk.
- 103. Due to capacity issues within the Environment Policy and Strategy team, it has not been possible to undertake significant work to address these risks. Work will be undertaken to see how re-prioritisation of workload and reallocation of staff resources could enable action to be taken to reduce the risks identified.

#### **Part 5: Environmental Management System**

- 104. Part 5 of the report provides an update on a range of aspects in relation to the Council's EMS. Many of these aspects relate to requirements within the ISO14001 standard, for which some service areas in the Council are certified to. It covers the following:
  - a. External and internal issues relevant to the EMS;
  - b. Needs and expectations of interested parties;
  - c. Changes to statutory duties;
  - d. Changes to environment legislation;
  - e. Environmental risks and opportunities;
  - f. Adequacy of resources;
  - g. Relevant communications from interested parties;
  - h. Opportunities for continual improvement.

#### a. External and internal issues relevant to the EMS

- 105. A number of uncertainties persist such as the implications of the creation of the Office of Environmental Protection, the detail of the regulations and guidance that are to follow the Environment Act 2021 and whether any further legacy EU legislation will be repealed.
- 106. Key recent Government policies and draft legislation, which may affect the environment and be relevant to the EMS and/or Council services, include:
  - Environment Act 2021 and subsequent regulations;
  - Environmental Improvement Plan 2023;
  - Retained EU Law Act;
  - Levelling Up and Regeneration Bill;
  - UK Chemicals Strategy.
- 107. Recent and current Government consultations on environmental policy, which may be relevant to the EMS and/or Council services, include:
  - Consultation on the draft Producer Responsibility Obligations (Packaging and Packaging Waste) Regulations 2024;
  - New approach to environmental assessments;
  - Draft Packaging Waste (Data Reporting) (England) Regulations 2023;
  - Amendments to the persistent organic pollutants regulation;
  - Review of Net Zero: call for evidence:
  - Landfill tax grant scheme: call for evidence;
  - Household waste recycling centres: DIY waste disposal charges and booking systems;
  - Environment Act 2021: environmental targets;
  - Nature recovery green paper;
  - Review of the Local Air Quality Management Policy Guidance.

108. During 2022-23, work was completed on the 2030 Net Zero Council Action Plan, which sets out how the Council plans to achieve net zero as an authority by 2030. In addition, work was also completed on developing the 2045 Net Zero Strategy and Action Plan which sets out how the County could achieve net zero by 2045. Both were approved by the County Council in December 2022.

# b. <u>Needs and expectations of interested parties, including compliance obligations and changes in political priorities/direction</u>

- 109. The 2021-22 report identified some concerns about the Government's pledge to its various environmental policies and commitments following the changes in the Government in October 2022. While there has been some positive action, particularly in relation to the Environment Act 2021 and action in relation to nature, there has also been, especially in recent months a rowing back on the pace of action in relation to net zero, moves to more sustainable transport solutions through support for public transport but also a signalling of more support for driving through the launch of the "Plan for Drivers", improvements in the management of waste and improving water quality.
- 110. The Council Strategic Property team require new environmental data from the Environment Policy and Strategy team on energy usage and cost to support its annual report for the Corporate Asset Management Plan.
- 111. The rise in inflation over the last two years is increasing costs and putting pressure on the budgets of the Council and residents. This is making it more difficult to take action on the environment and progress identified projects. This situation is further exacerbated by the difficult financial position that the County Council finds itself in, like many councils across the country. This will mean that tough decisions have to be made about how the Council spends its resources to deliver its statutory duties and priorities.
- 112. During 2022-23, the Council responded to data and information requests from Climate Emergency UK as part of their scoring of councils on the action they are taking on climate change. The results of this scoring were released in October 2023, with Leicestershire County Council achieving a score of 46%. This was the fourth highest score for a county council in the UK. The average county council score was 35% and the highest county council score was 53%. More information on the scores can be found in this link: <a href="https://councilclimatescorecards.uk/scoring/county/">https://councilclimatescorecards.uk/scoring/county/</a>

#### c. Changes to statutory duties

- 113. The Environment Act 2021 and subsequent regulations resulted in changes to the Council's statutory duties in relation to the environment. The Act introduced a requirement that local authorities within England should produce a **Local Nature Recovery Strategy**.
- 114. During 2022-23, Leicestershire County Council was appointed as the provisional 'responsible authority' for developing a strategy for Leicestershire, Leicester City and Rutland. Subsequently, in June 2023, the County Council

was appointed as the 'responsible authority'. For more information on what a Local Nature Recovery Strategy is and what is taking place locally follow this link: <a href="https://www.leicestershire.gov.uk/environment-and-planning/local-nature-recovery-strategy/what-a-local-nature-recovery-strategy/what-a-local-nature-recovery-strategy-is">https://www.leicestershire.gov.uk/environment-and-planning/local-nature-recovery-strategy/what-a-local-nature-recovery-strategy-is</a>

- 115. In addition, the Environment Act 2021 also introduced a requirement that all planning permissions granted in England (with a few exceptions) will have to deliver **10% Biodiversity Net Gain** from January 2024. This placed a new statutory duty on local planning authorities, including the County Council, to support the delivery and administration of this new requirement.
- 116. Furthermore, the Environment Act 2021 also introduced a **strengthened legal** duty for public bodies to conserve and enhance biodiversity and new biodiversity reporting requirements for local authorities.
- 117. In addition, the Environment Act 2021 introduced several new statutory duties relating to waste which are due to come into effect over the coming years. These were concerning the Simpler Recycling reforms including mandatory food waste collections, which is due to come into force in 2025 for businesses and non-household municipal premises and in 2026 for households, the Extended Producer Responsibility for Packaging which is due to come into force in 2025 and a Deposit Return Scheme for drink containers which comes into force from October 2025.

#### d. Changes to environment legislation

- 118. There were a range of new or updated general environmental Acts, legislation, regulations, consultations, and guidance released during 2022-23, with **78** identified as possibly being relevant to the County Council. A full list can be found in **Appendix C** of this report.
- 119. The main areas included were in relation to waste, natural environment, and energy performance of buildings. Of most significance to the County Council were the regulations coming out of the Environment Act 2021 in relation to new national environmental targets, Local Nature Recovery Strategies and Biodiversity Net Gain, the Government's updated Environmental Improvement Plan 2023, and new guidance on the managing of waste containing persistent organic pollutants.
- 120. The Environment Policy and Strategy team have access to a specialised Environmental Legislation Information and Register Service, which provides a database, alerts and training on energy and environmental law and regulations. The supplier also provides a regular quarterly update of the Council's legislation register, including notification of new potentially relevant legislation.

#### e. Environmental risks and opportunities

121. During 2021-22, a comprehensive review and assessment of the risks to the Council from climate change was carried out. This assessment identified eight high risks and 56 medium risks from climate change on Council services, with

- the report putting forward seven recommendations. Since then, three of the recommendations have been completed as part of the process of approving the report.
- 122. Due to limited staff capacity and the need to progress other priorities, it has not been possible to make significant progress on the other recommendations. Some work has taken place on defining what would be involved in developing an area wide climate adaptation and resilience strategy, and discussions have taken place with neighbouring authorities and partners. More recently, some research support has been secured from De Montfort University to assist with work in this area.
- 123. The Government will soon be releasing guidance to local authorities on climate adaptation reporting, including how to undertake a climate change risk assessment and to develop an action plan.
- 124. Insufficient action on the climate change risks will expose the Council to the risk of harm from future extreme weather events. Work will be undertaken to see how re-prioritisation of workload and reallocation of staff resources could enable action to be taken to reduce the risks identified.
- 125. The new ways of working and the financial pressures on the Council are making it more difficult to achieve some of the Council's environmental targets. This is particularly the case for the 2030 and 2045 net zero targets as well as the target to achieve 70% recycling of the Council's office waste by 2030.
- 126. On the other hand, the new ways of working are helping some of the Council's other environmental targets, in particular those in relation to electricity consumption, business mileage, paper use, and total office waste produced.
- 127. There is a combined risk and opportunity in relation to the increased public awareness of and activism on environmental issues, particularly with the increasing concern about climate change and the loss of nature. This could provide an opportunity in terms of the public support for the Council in taking action on the environment but could also be a risk in terms of greater public scrutiny and expectations of the scale and nature of any actions taken.

#### f. Adequacy of resources

- 128. During 2022-23, there was a vacancy in the Environment Policy and Strategy team until September 2022. The vacancy and the need for the new member of staff to be trained up and get acquainted with their role had an impact on the team's capacity. Vacancies in the Waste Data team also meant they were unable to process the environmental data meaning this task was undertaken by the Environment Policy and Strategy team further effecting the team's capacity. This resulted in a need to prioritise workload and to stop or reduce activity in some areas.
- 129. During 2022-23, the post of Carbon Reduction Team Manager was vacant which resulted in the Senior Carbon Reduction Officer taking on some elements

- of the Team Manager role in addition to their current job while a recruitment exercise was carried out. This resulted in capacity issues within this small team and the need to prioritise workload and to stop or reduce activity in some areas.
- 130. More broadly across the Council, difficulties with retaining and recruiting staff as well as increased workloads have put pressure on some teams to maintain service levels and ensure continued positive environmental performance.

#### g. Relevant communications from interested parties

131. No relevant communications were received.

# h. Opportunities for continual improvement (EMS, including opportunities for improved integration with other business processes or environmental performance)

- 132. The development of the 2030 Net Zero Council Action Plan and the 2045 Net Zero Leicestershire Strategy and Action Plan, both adopted in December 2022, present opportunities for improving the environmental performance of the Council and producing possible financial savings in some cases.
- 133. Access to the legislation update service that was procured in 2020-21 continues to support the ongoing work to improve the robustness and effectiveness of the EMS.
- 134. Work continues on implementing the new environmental sustainability performance monitoring and reporting software, with a view to replacing large elements of the current spreadsheet-based system. The new Rio system will eventually provide a more effective and stable system for monitoring the Council's environmental performance.
- 135. Work is ongoing with colleagues to better understand the impact of severe weather events on the Council and the County by improving the use of existing Council data from sources such as flooding, property and highways. This work will inform updates of the Climate Change Risk Registers as well as the planned high risk service areas climate adaptation action plans.
- 136. The Climate Change Risk Review and Assessment report and the recommendations therein provide an opportunity to improve how the Council responds to the threats from the environment in the form of the impacts from climate change.

#### **Section 2: Leicestershire**

#### Part 6: Net Zero Leicestershire

137. Part 6 of the report provides details of how Leicestershire is performing as a county in relation to the Council's commitment to work with others to achieve net zero by 2045 for the County area. Data is presented based on the figures provided by the Government for 2021 on the levels of greenhouse gas emissions attributed to Leicestershire, as well as other contextual data on how Leicestershire is performing in relation to activities that can contribute to reducing the County's emissions.

#### a. Greenhouse Gas Emission Figures for Leicestershire

138. Using the latest available Government datasets<sup>2</sup>, Leicestershire's emissions during 2021 were **4.85 MtCO<sub>2</sub>e**. Figure 8 below provides a breakdown of these emissions into eight key sources and demonstrates transport emissions contribute the greatest proportion (38%) of Leicestershire emissions, followed by domestic (22%), industry (18%), agriculture (12%), waste management (5%), commercial (3%), public sector (3%) and land-use, land-use change and forestry (LULUCF) helped remove, by carbon sequestration, 1% of emissions.

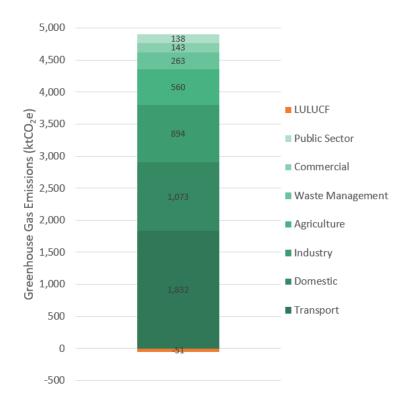


Figure 8: Leicestershire's 2021 greenhouse gas emissions by source

https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021

139. Since 2005, greenhouse gas emissions across Leicestershire have reduced by 28%, meanwhile per capita emissions have reduced by 37% to 6.8 tCO<sub>2</sub>e. Emissions in 2021 increased for the first time since 2012, which was expected because of the significant impact on emissions of the Covid-19 pandemic in 2020, which led to a bounce back in emissions during 2021. Despite the increase, emissions remain 3.6% lower than the Net Zero Leicestershire 2019 baseline year (pre-pandemic levels) and the average change in emissions over the last five years is a 1.8% reduction per year.

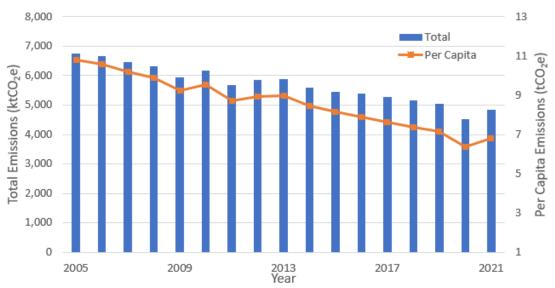


Figure 9: Leicestershire's total and per capita greenhouse gas emissions 2005 to 2021

140. The following paragraphs provide other contextual data on how Leicestershire is performing in relation to activities that can contribute to reducing the County's emissions.

#### Electric vehicle charging locations per 100,000 population

- 141. At the end of 2022-23, there were **41.1 electric vehicles charging locations per 100,000 population** in Leicestershire. This was an increase from the 33.5 figure for 2021-22. However, Leicestershire still sits within the **4**<sup>th</sup> **quartile** relative to comparative English authorities.
- 142. Following a successful bid to the Government for funding to deliver an initial 100 public electric vehicle chargepoints across all seven districts through the Local Electric Vehicle Infrastructure (LEVI) pilot, the County Council continues to work proactively with Midlands Connect and a number of other local authorities to bid for further LEVI funding. This would bring hundreds of additional public electric vehicle chargepoints to Leicestershire, to help meet the needs of the growing electric vehicle market. The locations of these chargepoints have not yet been identified and the County Council will now look to gather information about charging requirements across the County and develop a suitable delivery plan.

- 143. To this end, during October and November 2023, the County Council carried out a County-wide electric vehicle consultation survey, together with an Interactive Chargepoint Map, providing an opportunity for current and future electric vehicle owners to share information about their charging habits and potential charging concerns, and place markers on a map in locations where they would like to see a chargepoint.
- 144. The results of the survey will allow the Council to better understand charging requirements and start to plan a network of chargepoints that works for Leicestershire communities.

#### Electric vehicle ownership rate per 10,000 population

145. At the end of 2022-23, the electric vehicle ownership rate was **154.1 per 10,000 population** in Leicestershire. This was a significant increase of about 60% compared to the figure of 96 for 2021-22. Leicestershire sits in the **3<sup>rd</sup> quartile** relative to comparative English authorities. Local figures show that 32% of the electric vehicles owned in Leicestershire are in Harborough District (while containing 13.7% of the County's population) while only 5% are in Oadby and Wigston (while containing 8% of the County's population). These results are highlighting an uneven distribution of electric vehicle ownership across the County.

#### Renewable electricity generated in the area (MWh)

146. The latest available figures (2022) show that **355,263 MWh** of renewable electricity was generated in Leicestershire. This was more than the figure for 2021 of 326,437 MWh. Leicestershire sits in the **3<sup>rd</sup> quartile** relative to comparative English authorities for 2022.

#### Renewable electricity capacity in the area (MW)

147. The latest available figures (2022) show that the renewable electricity capacity for Leicestershire was **340.2 MW**. This was a slight increase from 2021 when the figure was 333.4 MW. Leicestershire sits in the 3<sup>rd</sup> quartile relative to comparative English authorities. The Council has limited influence over Countywide renewable energy capacity, which tends to change in response to Government incentive schemes and the wider energy market.

# % Domestic properties with Energy Performance Certificate rating C+ (new properties)

148. At the end of 2022-23, **97.7% of new properties** in Leicestershire had an Energy Performance Certificate rating of C or greater. This was in line with the previous year's figure. Leicestershire sits in the **1**<sup>st</sup> **quartile** relative to comparative English authorities.

# % Domestic properties with Energy Performance Certificate rating C+ (existing properties)

- 149. At the end of 2022-23, **52.6% of existing properties** in Leicestershire had an Energy Performance Certificate rating of C or greater. This was an increase on the figure for 2021-22 of 41.4%. Leicestershire sits in the **1**<sup>st</sup> **quartile** relative to comparative English authorities.
- 150. The Council launched "Green Living Leicestershire" in partnership with the district councils, which supports vulnerable households and those in or at risk of fuel poverty to reduce their bills by installing cavity wall insultation, loft insulation, solar panels, air source heat pumps and other energy efficiency measures. The Council also worked with Solar Together to provide residents with the opportunity to reduce their energy costs by investing in solar panels. Between March 2021-22 and March 2022-23 there was a 27% increase in the energy efficiency of existing homes in Leicestershire (those with an Energy Performance Certificate C+ rating).

#### b. Carbon Disclosure Project Reporting

- 151. During 2022-23, the Council commenced work on submitting a report to CDP for the first time, with the submission being made in July 2023.
- 152. As the world's leading environmental reporting platform, CDP enables the Council to publicly disclose Leicestershire's climate change mitigation and adaptation risks, plans, actions, and impact. Leicestershire's disclosure is evaluated by CDP to help identify gaps, benchmark its performance against peers and find areas of opportunity to help deliver its environmental commitments.
- 153. Through reporting to CDP, Leicestershire is helping to inform policy and decision making far beyond the County boundary, including within the United Nations, the IPCC, World Health Organisation, and the World Bank, helping to shape national and international climate policy and initiatives.
- 154. Leicestershire County Council's progress towards climate mitigation and adaptation was scored as being at Management Level, scoring a B. This means the Council has been recognised for having an emissions inventory, implemented a mitigation plan and is taking action to reduce emissions, alongside having an awareness of the main local risks and impacts of climate change. The Council's 2023 disclosure is available through the CDP Open Data Portal (<a href="https://data.cdp.net/">https://data.cdp.net/</a>).

#### c. Net Zero 2045 progress

- i) Net Zero 2045 Action Plan
- 155. In December 2022, the County Council adopted the 2045 Net Zero Leicestershire Strategy and Action Plan. These documents outline how the County Council intends to work with others to achieve the net zero target for

- Leicestershire by 2045. The Net Zero Action Plan was developed to demonstrate how the Council can work with others to deliver this target over the next five years.
- 156. Tackling climate change for the County is too big a job for any one organisation, therefore, the County Council aims to encourage a team effort with its partners and stand as a community leader in the fight to reduce global warming.
- 157. Appendix E of this report provides a list of all actions within the plan and an update on each of these actions including the current delivery status of the action and whether it is on track or due to start at a later point within the 5-year plan. Many actions are only deliverable with others such as partner organisations. Such actions are labelled with 'Ask' or 'Influence' from a County Council perspective. Updates have been sought from partner organisations where possible to help update and refresh these actions as necessary.
- 158. Since the Action Plan was adopted in December 2022, there have been staff capacity issues within the Carbon Reduction team which has put a strain on the team's ability to drive forward actions within the plan. However, work has progressed well in some areas.
- 159. Several actions have been successfully progressed, including the Solar Together project (Action B34, Appendix E), which in 2022 saw 460 solar panels installations across the County, saving an estimated 7,385 tCO<sub>2</sub>e over the next 25 years. The solar panels were purchased as part of a group buying initiative and cost 27% less than typical market prices. The project created a total contribution to renewable energy production of 1.6MW in Leicestershire through £4.3m of investment.
- 160. In addition, the Warm Homes scheme delivered £2.5m of Sustainable Warmth funding to 250 households across the County. The scheme was also successful in a further funding bid to deliver £6m of Home Upgrade Grant funding to offgas households through to March 2025. The impact of the promotion of national funding and the consistent delivery of multi-million-pound energy efficiency schemes locally has had a demonstrable impact on the number of homes now meeting an above average Energy Performance Certificate rating of band C or higher in the County, having accelerated over the period of delivery from a rolling average of 29% in June 2019 to 53% in June 2023 (GOV.UK Live Tables 2023).
- 161. The Warm Homes service is currently working to develop a County-wide Flexible Eligibility mechanism to widen access to national Energy Company Obligation funding (through to March 2026) and the Great British Insulation Scheme to low-income households. A comprehensive Warm Homes advice booklet has been created to circulate in community and health settings, which has been well received. It is updated annually and published on the energy grants webpages <a href="https://www.leicestershire.gov.uk/home-energy-grants">www.leicestershire.gov.uk/home-energy-grants</a>.

- 162. The Green Living Leicestershire group launched the Net Zero Parish and Town Toolkit in July 2023 to enable local parish and town councils to act on carbon reduction through information and training (Action C16, Appendix E). The parish toolkit includes case studies of community action for others to learn from and replicate.
- 163. To support the delivery of the 2045 Net Zero Leicestershire Action Plan with partners, the County Council led a funding bid to the Innovate UK fund as part of the Pathfinder Places initiative. The County Council and partners were successful in early 2023 in phase 1 of this funding and received £64,000 for investigation into the barriers to progressing net zero activity in the County. This money was used to pay for expert consultants 'Energy Systems Catapult' to investigate these barriers and the key requirements for the County in collaborating to deliver net zero. Key findings included the need for an effective governance structure to drive activity forward and support delivery of the 2045 Net Zero Leicestershire Action Plan.
- 164. In September 2023, the Carbon Reduction team subsequently led partners through a second larger round of funding, which required significant staff resources to develop the bid. This funding bid was announced as successful on 30 November 2023 and will provide the Council and its partners with £2.56m of funding to support net zero activity across Leicestershire. The project will commence from 1 February 2024 and last for 21 months. It will deliver four distinct work packages which will be delivered across a consortium of partners including National Grid, Energy Systems Catapult, the Universities Partnership and local experts Green Fox Energy. These work packages will include:
  - a) Development of a stakeholder governance model to support net zero delivery for the County:
  - b) Development and delivery of a County-wide decarbonisation pathway plan;
  - c) Establishment of new community energy projects and support for the delivery of community energy organisations within each district (Actions B23-B25, Appendix E):
  - d) Development and delivery of a net zero advisory service to support County businesses and organisations to act.

#### ii) Engagement Plan

- 165. The 2045 Net Zero Leicestershire Action Plan identifies development of an Engagement Plan as a key priority. The purpose of this plan is to create meaningful engagement with residents, businesses, and other stakeholders in order to educate and inspire change to support Net Zero Leicestershire.
- 166. This would be achieved through the following objectives:
  - a) Providing science-based climate change information and education.
  - b) Sharing the range of actions that individuals and organisations can take to support Net Zero Leicestershire.
  - c) Motivating others to act by promoting the co-benefits of climate action.

- d) Gaining a better understanding of climate action that is underway and any barriers to delivery or uptake.
- e) Supporting others to shape just and inclusive climate policy.
- 167. The Carbon Reduction team have started work on shaping the engagement activity including setting up of an internal focus group to undertake a stakeholder mapping exercise as well as assessing possible engagement opportunities.
- 168. As part of the next steps, support would be sought from the Council's Engagement team to further shape the engagement plan. This will consider the stakeholder mapping work, and plan the engagement activities going forward, within the resources available. This plan will also need to consider and engage with the work of the Pathfinder Places project (as described in paragraph 163-16 of this report) and ensure any communication activity is complimentary and does not duplicate efforts.
- 169. Further work on the Net Zero Engagement Plan has been paused to allow the Pathfinder Places project to develop further and ensure comms activity complements and supports the work of the project. In addition, given the Council's difficult financial position and the proposal to reconsider net zero commitments, planned future engagement activity will need to be tailored to the resources available.

#### iii) Funding Plan

- 170. A priority action in the 2045 Net Zero Leicestershire Action Plan is the production of a Funding Plan. The Funding Plan would inform the Council of different sources of funding and finance for the delivery of the Leicestershire 2045 Net Zero Action Plan. It would also explore a range of solutions and planning for how the Council can successfully secure and encourage ongoing funding and investment to deliver its net zero commitments.
- 171. The aim of the Funding Plan is 'To increase the deliverability of the Net Zero Action Plan by maximising funding and investment into the County for net zero delivery.'
- 172. The key objectives of the draft funding plan are as follows:
  - a) Identify financial requirements for key priority areas needing investment, to help support the delivery of the 2045 Net Zero Leicestershire Action Plan.
  - b) To explore different funding and financing sources to help the delivery of 2045 Net Zero Leicestershire Action Plan, using both tried and tested approaches which are being delivered successfully by the Council and other local authorities, as well as innovative approaches which could be developed and adopted.
  - c) To identify the required resources (including any necessary verification standards e.g., Woodland Carbon Code) and steps needed to attract or deliver different funding and financing mechanisms.

- d) Produce clear actions for how the Council and Net Zero Leicestershire stakeholders will deliver the Funding Plan within the 3-year period.
- 173. The Chief Executive's Department is leading on the development of the Funding Plan, where existing and potential approaches to funding are being researched and explored. The next stage will involve reviewing and appraising each approach, before developing an action plan for taking forward preferred options. Acknowledging the level of specialist staff resource available, progressing this work will require the commissioning of specialist consultancy support. Taking forward the next stages will need to be considered in the context of other priorities and any changes to the net zero commitments.

#### Part 7: Greener County

- 174. Part 7 of the report includes details of performance across several environmental aspects for Leicestershire, namely:
  - a) Nature
  - b) Resources
  - c) Air quality
  - d) Public perception
- 175. These are intended to provide a picture of the wider environmental situation across the County, in addition to that set out above in relation to greenhouse gas emissions.

#### a. Nature

#### % of Leicestershire rivers (excluding Leicester) in good ecological status

176. The latest available figures (2019) show that the **9.4%** of Leicestershire rivers (excluding Leicester) were **in good ecological status**. The figure for England was 14%; therefore, Leicestershire's rivers are in a poorer ecological status than the England average. This was an improvement for Leicestershire compared to the previously available figure from 2016 when just 0.67% of the County's rivers had good ecological status.

#### % of Leicestershire rivers (excluding Leicester) in good chemical status

- 177. The latest available figures (2019) show that the **0%** of Leicestershire's rivers (excluding Leicester) were **in good chemical status**. This reflected the figure for England which also showed that no rivers in England had a good chemical status. This was a significant decline for Leicestershire compared to the previously available figure from 2016 when 99.6% of the County's rivers had good chemical status.
- 178. It should be noted that the main reason for this significant decline is that for the 2019 assessment there were new substances added to the assessment list and new standards were developed for substances in aquatic wildlife. This resulted

in a more sensitive and accurate assessment of the chemical status of England's rivers.

#### A Tree for Every Person – Number of trees planted

179. At the end of 2022-23, there were a total of **248,342 trees planted** (equivalent to 71 hectares) in Leicestershire, since July 2021, under the Tree for Every Person initiative, which aims to plant 700,000 trees by 2030. A total of **192,708 trees** (20 hectares) were recorded as planted during 2022-23. As of December 2023, there were 356,011 trees recorded as planted, the equivalent of 244 hectares.

#### b. Resources

#### HW1 – KG of household waste per household

- 180. During 2022-23, the amount of household waste per household in Leicestershire fell to **939.4kg**; a fall of 74.2kg compared to 2021-22.
- 181. It is believed that some of this drop can be attributed to the significant hot spell during 2022, which resulted in lower than usual green waste being collected. In addition, the continuing trend in less newspapers and magazines and packaging light weighting and use of substituted packaging is resulting in a reduction in household waste tonnage.

#### HW2 - % Household waste reused, recycled, and composted

- 182. The annual household waste recycling figure was **41.8%** for 2022-23. This is below the 50% recycling target which is in line with the Waste Framework Directive. Recycling performance reduced by 1.8% compared to the previous year.
- 183. Recycling performance was also affected by the fall in green waste, the continuing trend in less newspapers and magazines and packaging light weighting and the use of substituted packaging and possibly by the cost-of-living crises, which can result in changes to purchasing habits.
- 184. The Leicestershire Waste Partnership reviewed and adopted the Leicestershire Resources and Waste Strategy during 2022-23. The Strategy includes a range of initiatives to reduce waste sent to landfill and to promote waste prevention, reuse, and recycling. It includes a commitment to reduce waste to landfill to less than 5% by 2025, well in advance of the national target of 10% by 2035. The Strategy also includes a pledge to 'put in place collection systems to contribute towards the achievement of the national 65% recycling target by 2035'.
- 185. Recent Government announcements on three packaging reforms (a Deposit Return Scheme for drinks containers, the Extended Producer Responsibility for Packaging and Simpler Recycling) are being introduced with the intention to reduce waste and increase recycling within the UK.

#### Annual percentage of municipal waste sent to landfill

- 186. At the end of 2022-23, **23.7%** of Leicestershire's municipal waste was sent to landfill. This was less than in 2021-22 when the figure was 25.3%. Leicestershire sits in the **4**<sup>th</sup> **quartile** relative to comparative English authorities.
- 187. The new energy from waste contract started in April 2023 and this will result in the amount of municipal waste being sent to landfill falling significantly further in 2023-24.

#### Total fly-tipping incidents per 1,000 population

188. The latest available figures are for 2021-22 and they show that there were **5.6 fly-tipping incidents per 1,000 population in Leicestershire.** This was down from the recent high of 8.6 in 2020-21. Leicestershire sits in the **1**<sup>st</sup> **quartile** relative to comparative English authorities. Overall, the trend has been relatively static since 2017-18.

#### c. Air quality

#### PM2.5 Air pollution – fine particulate matter

189. The latest available figures (2022) show that the amount of PM2.5 was **7.7** μg/m³. This was the same as the figure for 2021. Leicestershire sits in the **4**<sup>th</sup> quartile relative to comparative English authorities. Overall, the trend is downwards since 2017 when the figure was 9.7 μg/m³, however, there has been a slight increase since a low of **7μg/m³** in 2020.

#### NO<sub>2</sub> exceedances in Leicestershire

190. The latest available figures (2021) show that there were **no NO<sub>2</sub> (Nitrogen Dioxide) exceedances** in Leicestershire. This was a reduction from 2020 when there were two exceedances. Overall, the trend is downwards since 2017 when the figure was 11 exceedances.

#### d. Public perception

#### % of residents who feel protecting the environment is important

191. Taken from the Community Insight Survey, the figure for 2022-23 was **94%.** This was a slight drop from 2021-22 when the figure was 98.4%.

#### % of residents who think the Council should do more to help protect the environment

192. Taken from the Community Insight Survey, the figure for 2022-23 was **67.3%**. This was a slight rise from 2021-22 when the figure was 60.3%.

#### **Conclusions**

#### a. Leicestershire County Council

- 193. The following key conclusions for Leicestershire County Council have been identified:
  - i) While emissions have continued to reduce by almost 74% since the 2008-09 baseline, the County Council needs to continue to achieve an average reduction of 1,342 tCO<sub>2</sub>e per year to meet the 2030 net zero target. However, the reduction in emissions for 2022-23 fell 45% short of what is needed. This shows that the Council is not currently on track to meet its 2030 net zero target.
  - ii) While generation of renewable energy on Council sites is not currently on target, there is an expectation that there will be an increase going forward, as the repaired and new solar panel arrays and the improvements to the biomass boiler take effect.
  - iii) The new ways of working are overall helping to reduce the Council's environmental impact, though some of the environmental impacts will have been shunted to the homes of staff.
  - iv) While some good activity is taking place on biodiversity such as tree planting and the wildlife verge scheme, the need to demonstrate how the Council is meeting the new strengthened biodiversity duty, will highlight if there is more to do going forward.

#### b. Leicestershire

- 194. The following key conclusions for Leicestershire have been identified:
  - i) The Council is currently not on track to achieve the net zero 2045 target, but action in this area is in the early stages and will need ongoing review. At the moment, this highlights the scale of the challenge more than lack of progress.
  - ii) Particularly, there is a need to target action on reducing transport, domestic, industry and agriculture emissions, with a focus on actions to increase electric vehicle take up, encouraging more active travel, increasing renewable energy generation, and improving the energy efficiency of existing buildings.
  - iii) Significant amount of work was needed to engage with partners on the delivery of projects within the 2045 Net Zero Leicestershire Action Plan.
  - iv) There are concerns about the water quality of the County's rivers.

v) There will be a significant amount of work needed to implement the collection and packaging reforms, that contribute to meeting the national 65% recycling target by 2035.

#### c. Overall

- 195. The following additional overall key conclusions have been identified:
  - i) The insufficiency of action on climate adaptation is a concern.
  - ii) The current workload and staff capacity issues are a concern.
  - iii) The current financial position of the Council is a concern in terms of resourcing action on the environment.
  - iv) There is a need to prioritise actions on the environment and the use of staff and financial resources. As part of doing this, there is also a need to decide how best to allocate resources between meeting the Council's own and the wider County net zero targets.
  - v) The uncertainty regarding Government policy on the environment and implications of recent environmental legislation is a concern.
  - vi) There is increasing public interest and scrutiny of local authority action on the environment.

