



Meeting: **Environment and Climate Change Overview and Scrutiny Committee.**

Date/Time: **Wednesday, 26 January 2022 at 2.00 pm**

Location: **Sparkenhoe Committee Room, County Hall, Glenfield**

Contact: **Ms. C. Tuohy (cat.tuohy@leics.gov.uk)**

Email: **0116 305 5483**

Membership

Mr. T. J. Pendleton CC (Chairman)

Mr. G. A. Boulter CC Mr. B. Harrison-Rushton CC
Mr. N. Chapman CC Mrs. R. Page CC
Mrs. A. J. Hack CC Mr. M. Frisby CC

**Please note: this meeting will be filmed for live or subsequent broadcast via the Council's web site at <http://www.leicestershire.gov.uk>
– Notices will be on display at the meeting explaining the arrangements.**

AGENDA

<u>Item</u>	<u>Report by</u>
1. Minutes of the meeting held on 9 November 2021.	(Pages 5 - 10)
2. Question Time.	
3. Questions asked by members under Standing Order 7(3) and 7(5).	
4. To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.	
5. Declarations of interest in respect of items on the agenda.	



6. Declarations of the Party Whip in accordance with Overview and Scrutiny Procedure Rule 16.
7. Presentation of Petitions under Standing Order 35.
8. To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.
9. Medium Term Financial Strategy 2022/23 - 2025/26 Director of Corporate Resources and Director of Environment and Transport (Pages 11 - 28)
10. Net Zero Carbon 2045: A Roadmap for Leicestershire Director of Environment and Transport (Pages 29 - 46)
11. Greenhouse Gas Emissions Report 2020-21. Director of Environment and Transport (Pages 47 - 66)
12. Environmental Performance Report 2020-21. Director of Environment and Transport (Pages 67 - 84)
13. Date of next meeting.

The next meeting of the Committee is scheduled to take place on Tuesday 1 March 2022 at 2.00pm.

QUESTIONING BY MEMBERS OF OVERVIEW AND SCRUTINY

The ability to ask good, pertinent questions lies at the heart of successful and effective scrutiny. To support members with this, a range of resources, including guides to questioning, are available via the Centre for Governance and Scrutiny Website <https://www.cfgs.org.uk/>

The following questions have been agreed by Scrutiny members as a good starting point for developing questions:-

- Who was consulted and what were they consulted on? What is the process for and quality of the consultation?
- How have the voices of local people and frontline staff been heard?
- What does success look like?
- What is the history of the service and what will be different this time?
- What happens once the money is spent?
- If the service model is changing, has the previous service model been evaluated?
- What evaluation arrangements are in place – will there be an annual review?

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Minutes of a meeting of the Environment and Climate Change Overview and Scrutiny Committee. held at County Hall, Glenfield on Tuesday, 9 November 2021.

PRESENT

Mr. M. Frisby CC (in the Chair)

Mrs. A. Hack CC

Mr. G. A. Boulter CC

Mrs. R. Page CC

Mr. B. Lovegrove CC

Mr. B. Harrison-Rushton CC

Mr. N. Chapman CC

Apologies

Mr. T. Pendleton CC

In attendance

Mrs. P. Posnett CC, Lead Member for Communities, minute 21 refers.

Mr. B. Pain CC, Lead Member for the Green Agenda

14. Minutes.

The minutes of the meeting held on 3 September were taken as read, confirmed and signed.

15. Question Time.

The Chief Executive reported that no questions had been received under Standing Order 34.

16. Questions asked by members under Standing Order 7(3) and 7(5).

The Chief Executive reported that no questions had been received under Standing Order 7(3) and 7(5).

17. To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.

There were no urgent items for consideration.

18. Declarations of interest in respect of items on the agenda.

The Chairman invited members who wished to do so to declare any interest in respect of items on the agenda for the meeting.

No declarations were made.

19. Declarations of the Party Whip in accordance with Overview and Scrutiny Procedure Rule 16.

There were no declarations of the party whip.

20. Presentation of Petitions under Standing Order 35.

The Chief Executive reported that no petitions had been received under Standing Order 35.

21. Engagement on the Council's Strategic Plan.

The Committee considered a report of the Chief Executive, the purpose of which was to seek the Committee's views on the draft Strategic Plan (2022-2026) as part of the 12-week public consultation period. A copy of the report marked 'Agenda Item 8' is filed with these minutes.

The Chairman welcomed Mrs. P. Posnett CC, the Cabinet Lead Member for Community and Staff Relations, to the meeting for this item.

Arising from discussions the following points were noted:

- i. A concern was raised regarding the installation of new gas boilers under the Warm Home Grants. Officers agreed to clarify the matter with Public Health and provide more information on the programme, which was funded by Government.
- ii. Arising from a query on the lack of reference to wood burning stoves, Members were informed that the Strategic Plan was high-level and addressed such issues with an action that looked to influence communities to reduce their carbon emissions. Further detail on the Council's approach and the specific behaviours which it would aim to encourage within communities would be outlined in relevant supporting strategies underpinning the Strategic Plan, such as the Council's Environment Strategy.
- iii. In relation to the commitment to 'support environmentally sustainable farming practices that support the maintenance and enhancement of biodiversity and the condition of natural capital features', Members queried how the Council would look to encourage this, noting the impact ploughing had on the release of carbon dioxide. The Lead Member for the Green Agenda stated that farms leased by the Council were tenanted, and that the Authority had a legal obligation to uphold its contracts. Whilst it was not considered appropriate to tell farmers how to farm on the land they leased, members were assured that officers in Corporate Property worked with farm tenants to consider their sustainable practices and how they could support the Council's Action for Nature plan.
- iv. Officers offered to meet with community groups and partners to go through the Strategic Plan if they wished. Furthermore, the online survey offered options which allowed responders to only answer on certain aspects which were of particular interest to them thereby minimising the burden on members of the public and encouraging responses. Officers offered to develop an Executive Summary of the Plan.

- v. In response to a query about missing figures in section 5.4 of the sub-outcome to ensure the 'economy and infrastructure are low carbon and environmentally friendly', Members were informed that the figures related to the fact that while commercial CO2 emissions and industrial emissions had reduced significantly, transport emissions had not. Officers would add the missing figures to the Plan.
- vi. Regarding quality of water in waterways within the county, Members felt it was important that these were highlighted within the Plan, to ensure they were protected and looked after. It was noted the responsibility for water quality however rest with other agencies such as Environment Agency. Officers advised that they would aim to highlight the issue of waterway quality in the Plan.
- vii. The Council had a road map to achieve carbon neutrality from its own emissions by 2030, and is developing a road map for wider Leicestershire emissions by 2045. Carbon neutrality meant that any CO2 released into the atmosphere was balanced by an equivalent amount being removed. Within the Council's own emissions, the most recent assessment suggested there was between 4,500 and 8,500 tonnes it would be unable to remove; therefore, some offsetting would be necessary with initiatives such as tree planting.

RESOLVED:

- a. That the update on the work undertaken to review and refresh the Council's Strategic Plan be noted.
- b. That the Chief Executive be requested to give consideration to the comments now raised as part of the consultation on the Council's Draft Strategic Plan (2022 – 2026).

22. Environment and Climate Change Annual Performance Report 2020/21.

The Committee received a report of the Director of Environment and Transport and the Chief Executive on the annual Environment and Climate Change Performance Report 2020/21. A copy of the report marked 'Agenda Item 9' is filed with these minutes.

Arising from the discussion the following points were noted: -

- i. The Director advised that the County Council's 'renewable energy generated as a percentage of consumption' was 17%, which missed the 23% target. While the Authority had put as many solar panels across the estate as space allowed, it was evident that the energy output could be affected by numerous factors, such as reduced efficiency over time, cleanliness of a panel, or an increase in energy consumption. It was suggested that there may have been gaps in the collection of data from the panels and the Director undertook to investigate this.
- ii. There had been a 28% increase in electric vehicle charging to 20.33 charging points per 100,000 population. This data was provided by the National ChargePoint Registry, but was limited as it did not include privately funded charge points.

- iii. The data on fine particulate matter was collected annually and details would be provided at a future meeting.
- iv. Concerns were expressed over the low numbers of rivers deemed to be in good chemical status both within Leicestershire and nationally. The Director advised that responsibility for surface water bodies fell to the Environment Agency.

The Lead Member placed on record thanks to the Department and officers who were working hard to achieve the environmental goals of the Council through the multiple initiatives set out in the appendix to the report.

Members were asked to suggest any indicators they wished to see in future performance reports, as the content of these report were being revised in line with the Strategic Plan 2022-2026.

RESOLVED:

That the report be noted.

23. Leicestershire Country Parks and Open Spaces Strategy and the Effects of Covid-19.

The Committee received a report of the Director of Corporate Resources regarding Leicestershire County Parks and Open Spaces Strategy and the impact of Covid-19. A copy of the report marked 'Agenda Item 10' is filed with these minutes.

Arising from the discussion the following points were noted:-

- i. Biodiversity across the county was poor as a result of historic farmland use. The County Council's grass land management schemes looked to introduce wildflower coverage where possible, such as the scheme at Market Bosworth Country Park.
- ii. Members questioned why Woodland Management Plans, which managed biodiversity and amenity within specific sites, were only 'mostly' in place. Officers clarified that Woodland Management Plans covered all Leicestershire County Council owned parks where land parcels were above a certain size, however it did not cover smaller parcels of land and land that the County Council was not responsible for.
- iii. District councils owned their own parks which were also well looked after. The County Council worked in partnership with district councils and others through the regional Midlands Parks Forum.
- iv. While there were no current plans to create a new country park, the Country Parks and Open Spaces Strategy reflected the desire to do so if an opportunity arose.
- v. Officers clarified that Bradgate Park was not listed within the County Council's country parks as it was managed by an independent charitable organisation. The County Council did however have representation on the Management Board.

RESOLVED:

That the report be noted.

24. Tree Management Strategy Update.

The Committee received a presentation updating Members on the Tree Management Strategy. A copy of the presentation marked 'Agenda Item 11' is filed with these minutes.

Arising from the discussion the following points were noted:-

- viii. The Authorities target to plant 700,000 trees would require a rapid increase in planting, as set out within the Action Plan, delivery of which would include trees planted to replace trees lost through Ash Dieback.
- ix. Recognising the benefits of tree planting the County Council would be reviewing its current policy which did not allow tree planting on highway verges, due to the impact on underground utility service and the potential safety risk of creating a hard barrier for cars.
- x. A comment made about the importance of increasing orchard space within Leicestershire and the contribution this would make to biodiversity was noted..
- xi. Members recognised the work undertaken by volunteer Tree Wardens, an important group in the ongoing maintenance of the trees within communities.
- xii. The Authority was taking part in a study alongside the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), with the support of the Rees Jeffreys Road Fund, to develop an approach to re-establish and grow its tree stock on the Council's road network and in new developments. The study would look at the ecosystem and benefits trees could provide in both rural and urban areas.
- xiii. The County Council would communicate widely on its plan and produce a website that would include detailed information on tree planting and what native species would be used. It was also intended that an interactive map would be developed where residents could record any tree they had planted, and this would enable Members to see the where trees had been planted in their division.

RESOLVED:

That the presentation be noted.

25. To advise of any other items which the Chairman has decided to take as urgent elsewhere on the agenda.

There were no urgent items for consideration.

26. Date of next meeting.

RESOLVED:

It was noted that the next meeting of the Committee would be held on 26 January 2021 at 2pm.

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**ENVIRONMENT AND CLIMATE CHANGE OVERVIEW AND
SCRUTINY COMMITTEE - 26 JANUARY 2022**

MEDIUM TERM FINANCIAL STRATEGY 2022/23 – 2025/26

**JOINT REPORT OF THE DIRECTOR OF ENVIRONMENT AND
TRANSPORT AND THE DIRECTOR OF CORPORATE RESOURCES**

Purpose of Report

1. The purpose of this report is to:-
 - a) Provide information on the proposed 2022/23 to 2025/26 Medium Term Financial Strategy (MTFS) as it relates to the Environment and Waste Management Services within the Council's Environment and Transport Department; as well as Climate Change and delivery of the Council's Green Agenda; and,
 - b) Ask the Committee to consider any issues as part of the consultation process and make any recommendations to the Scrutiny Commission and the Cabinet accordingly.

Policy Framework and Previous Decisions

2. The County Council agreed the current MTFS in February 2021. This has been the subject of a comprehensive review and revision in light of the current economic circumstances. The draft MTFS for 2022/23 to 2025/26 was considered by the Cabinet on 14 December 2021.

Background

3. The MTFS is set out in the report to Cabinet on 14 December 2021, a copy of which has been circulated to all Members of the County Council. This report highlights the implications for the Environment and Waste Management Services within the Council's Environment and Transportation Department as well as Climate Change and delivery of the Council's Green Agenda including green spaces.
4. Reports such as this one are being presented to the relevant Overview and Scrutiny Committee. The views of this Committee will be reported to the Scrutiny Commission on 31 January 2022. The Cabinet will consider the results of the scrutiny process on the 11 February 2022 before recommending an

MTFS, including a budget and capital programme for 2022/23, to the County Council on the 23 February 2022.

Proposed Revenue Budget

5. Table 1 below summarises the proposed 2022/23 revenue budget and provisional budgets for the next three years thereafter for the Council's Environment and Waste Management Services as well as Climate Change and delivery of the Council's Green Agenda. The proposed 2022/23 revenue budget is shown in detail in Appendix A – Revenue Budget 2022/23.

Table 1 – Revenue Budget 2022/23 to 2025/26

	2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000
Original prior year budget	31,894	32,202	31,012	30,782
Budget transfers and adjustments	323	0	0	0
Add proposed growth (Appendix B – Growth and Savings 2022/23 – 2025/26)	235	-15	-35	-45
Less proposed savings (B)	-250	-1,175	-195	-50
Proposed/Provisional budget	32,202	31,012	30,782	30,687

6. Detailed service budgets have been compiled on the basis of no pay or price inflation, a central contingency will be held which will be allocated to services as necessary.
7. The central contingency also includes provision for an increase of 1% each year in the employers' pension contribution rate, in line with the requirements of the actuarial assessment.
8. The total proposed expenditure budget for the Council's Environment and Waste Management Services as well as Climate Change and delivery of the Council's Green Agenda in 2022/23 is £36.26m with contributions from grants, service user income, recharges to the capital programme and various other income totalling £4.05m. The proposed net budget for 2022/23 of £32.20m is distributed as shown in Table 2 below:

Table 2 - Net Budget 2022/23

	£000
<u>Environment & Transport Department</u>	
E&W Management	420
E&W Commissioning	2,228
E&W Waste Management Delivery	26,729
Departmental & Business Management	2,409
Total	31,786
<u>Chief Executives Department</u>	

<u>Growth Unit</u>	135
Total	135
<u>Corporate Resources Department</u>	
Forestry	86
Country Parks	195
Total	281
Net Budget	32,202

Budget Transfers and Adjustments

9. A number of budget transfers (totalling a net increase of £0.63m) were made during the 2021/22 financial year. These transfers include: -
 - £0.62m for running cost/contract inflation for waste management from the central inflation contingency;
 - £0.05m for additional costs associated with an increase in fuel duty on red diesel;
 - -£0.03m to Corporate Resources for the centralised management of mobile phones, end user devices and photocopiers under the Ways of Working programme.
10. Adjustments were made across the Environment and Transport Department and Corporate Resources Department to manage the budget within the overall funding envelope. This has resulted in an overall increase of £0.28m for Environment and Waste Management Services and £0.04m for Forestry and Country Parks.
11. Growth and savings have been categorised in the appendices under the following classification: -
 - a) * - item unchanged from previous MTFS,
 - b) ** - item included in the previous MTFS, but amendments have been made,
 - c) no stars - new item.
12. This star rating is included in the descriptions set out for growth and savings below.
13. Savings have also been classified as 'Eff' or 'SR' dependent on whether the saving is seen as efficiency or service reduction or a mixture of both. 'Inc' denotes those savings that are funding related and/or generate more income.

GROWTH

14. The overall growth picture for Environment and Waste Management Services as well as Climate Change and delivery of the Council's Green Agenda is presented below.

References		2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000
GROWTH					
ENVIRONMENT & TRANSPORT DEPARTMENT					
Demand & cost increases					
* G16	Waste tonnage increases (temporary growth removed)	-100	-100	-100	-100
** G17	Contribution to Regional Waste Project (temporary growth removed)	0	-15	-50	-50
G18	HGV Driver Market Premia	45	45	45	0
G19	Hydrotreated Vegetable Oil to replace bunkered diesel (CO2 saving)	55	55	55	55
		0	-15	-50	-95
CHIEF EXECUTIVES DEPARTMENT					
G24	Carbon Reduction Programme	135	135	135	135
		135	135	135	135
CORPORATE RESOURCES DEPARTMENT					
G33	Investment in Tree Nurseries	100	100	100	100
		100	100	100	100
TOTAL		235	220	185	140

15. For 2022/23 the net effect of removing temporary growth for Environment and Waste Management Services represents no change compared to the original prior year budget. The tapered removal of prior years' growth in later years, however, means by 2025/26 these budgets will reduce by £0.10m. Additional on-going funding totalling £0.24m has been made available within Chief Executive's and Corporate Resources Department to support the Climate Change and Green Agenda. More details on each growth line are provided in the following section.

Demand & Cost Increases

G16(*) Waste Tonnage Increases – Temporary growth removed: -£0.1m in 2022/23

The underlying assumption is for 1% growth in waste tonnages per year which is consistent with historical trends in housing growth and remains unchanged from previous years. A further 3.2% was built into the base budget in 2021/22 to address the ongoing impact of the Covid-19 pandemic, specifically the growth in household waste as a result of increased working from home and unemployment due to anticipated recession. It is assumed this would taper to 2% in 2022/23; 1% in 2023/24 and zero in 2024/25. Whilst data indicates waste tonnage is to remain above pre-Covid levels it is expected that measures proposed by the Environment Act will help to create a lasting downward pressure on waste arisings by 2025.

G17() Contribution to Regional Waste Project – Temporary growth removed: -£0.02m in 2023/24 rising to -£0.05m by 2024/25**

Temporary growth was provided in 2021/22 and 2022/23 to allow options for the Authority's longer-term waste treatment disposal approach to be explored and developed in partnership with nearby authorities in the East Midlands. Delays due to Covid-19 and the post 2020 procurement challenge requires the removal of the growth to be delayed by one year.

G18 HGV Driver Market Premium – Temporary growth: £0.05m in 2022/23 to be removed by 2025/26

Time limited funding to cover costs associated with awarding market premia to specialist waste HGV driver roles with longer-term implications to be reassessed as part of future MTFS.

G19 Hydrotreated Vegetable Oil To Replace Bunkered Diesel: £0.06m in 2022/23

Use of Hydrotreated Vegetable Oil (HVO) as a direct replacement for diesel fuel to significantly reduce emissions from our vehicle fleet.

G24 Carbon Reduction Programme: £0.14m in 2022/23

There is a requirement to co-ordinate the Council's activity in relation to the Green Agenda and to provide direct support to the Lead Member for the Environment and the Green Agenda, ensuring political commitments are reflected in the Council's actions. As a result of increased political interest coupled with a growing complexity and breadth of activity in the programme, there is a need for additional resources within the Chief Executive's Department.

G33 Investment in Tree Nurseries: £0.10m in 2022/23

The need for increased tree cover is, both globally and nationally is well documented as a major action to mitigate climate change. This £100,000 growth is to make investments in tree nurseries as per the Tree Management Strategy and Tree Action Plan.

SAVINGS

16. The overall savings picture for Environment and Waste Management Services as well as Climate Change and delivery of the Council's Green Agenda is presented below.

References			2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000	
SAVINGS							
ENVIRONMENT & TRANSPORT DEPARTMENT							
**	ET9	Eff/Inc	Recycling & Household Waste Sites service approach	-30	-80	-190	-190
**	ET10	Inc	Trade Waste income	-45	-75	-105	-105
**	ET11	Eff	Future residual waste strategy- reduced disposal costs	0	-985	-985	-985
*	ET12	Eff	Procurement savings from contract renewals	-30	-30	-30	-30
**	ET4	Eff/Inc	E&T Continuous Improvement Programme - review of processes and potential income across a range of services	-50	-50	-50	-50
	ET13	Eff	Ashby Canal maintenance	-15	-15	-15	-15
				-170	-1,235	-1,375	-1,375
CORPORATE RESOURCES DEPARTMENT							
**	CR2	Eff/Inc	Forestry & Country Parks	-30	-140	-195	-245
*	CR3	Eff	Environment improvements - energy and water	-50	-50	-50	-50
				-80	-190	-245	-295
TOTAL				-250	-1,425	-1,620	-1,670

17. Environment and Waste Management Services expect to be able to deliver £0.17m savings in 2022/23. This amount is projected to rise to £1.38m by

2025/26 subject to the delivery of a number of reviews and initiatives. A further £0.08m is expected to be delivered from environment improvements within Corporate Resources Department in 2022/23 increasing to £0.30m over the four period.

****ET8 (Eff/Inc) Recycling & Household Waste Sites service approach: -£0.03m in 2022/23 rising to -£0.19m by 2024/25**

Ongoing cost reductions through insourcing Whetstone Recycling and Household Waste Site (RHWS) which took place in April 2021 and increasing income from the sale of items for reuse collected at the RHWS. This saving has been reprofiled to account for the impact of Covid-19 pandemic on the service and re-use market.

****ET9 (Inc) Trade Waste Income: -£0.05m in 2022/23 rising to -£0.11m by 2024/25**

Increased income arising from rates charged for trade waste at Whetstone Transfer Station and the district trade collected waste disposed of through Leicestershire contracts.

****ET10 (Eff) Future Residual Waste Strategy – Reduced disposal costs: -£0.99m in 2023/24**

Projected savings arising from increasing the use of an existing waste treatment facility and the procurement of option(s) for waste treatment, replacing an existing residual waste contract for up to 60,000 tonnes of kerbside collected waste and 5,000 tonnes of bulky waste. Also included are savings arising from switching use of third-party (contracted) “waste to transfer” to the Council’s in-house operated site at Bardon once open late spring 2022.

***ET11 (Eff) Procurement Savings from Contract Renewals: -£0.03m in 2022/23**

Waste Management Delivery manage the contracts with various suppliers for waste disposal. The existing contract for disposal of wood waste has been renegotiated by the service. The first variation contract commenced in 2021 delivering £0.40m saving. This saving relates to the final stage of the wood contract variation. Circa 12,000 tonnes of wood waste per annum are processed through the contract with the price per tonne reducing from c.£40 to c.£10 per tonne.

****ET12 (Eff/Inc) E&T Continuous Improvement Programme – Review of processes and potential income across a range of services: -£0.05m in 2022/23**

Small scale opportunities have been identified to generate savings. These have been captured under the remit of a continuous improvement programme, which for Environment and Waste includes Business Management digital payments.

ET13 (Eff) Ashby Canal Maintenance: -£0.02m in 2022/23

Removal of contribution in lieu of proposed transfer of part of the canal to Ashby Canal Association.

CR2 (Eff/Inc) Forestry and Country Parks: -£0.03m in 2022/23 rising to -£0.25m by 2025/26

As part of the Leicestershire Traded Services offering, the structures, spending and income opportunities will be evaluated for efficiencies and increased income for the forestry and Country Park Services. Additional income is expected from increased visitors to country parks and potential investment in automated number plate recognition in country parks' car parks is an opportunity to ensure all visitor car parking revenues are collected.

*CR3 (Eff) Environment Improvements – energy and water: -£0.05m in 2022/23

These are the next phase of savings identified as part of the Strategic Property Energy Strategy 2020-2030 to drive reductions in annual energy consumption, savings on energy bills and investment in the provision of renewable energy.

These savings will arise from investments already made in greener sources of energy across the County Council's property estate as well as achieving returns from the Schools Collaboration on Reducing Energy (SCORE+) partnership.

Savings under Development

18. There are a number of savings which are not yet currently developed enough to be quantified and built into the detailed savings schedules:

- a) Expansion of Continuous Improvement Approach: The existing continuous improvement saving is primarily based on a pilot that was carried out within Highways Delivery. The Department Management Team has agreed to roll out the approach to the other branches of the department to identify further savings within individual teams across the department. Workshops with individual team managers in Environment & Waste and Development & Growth are currently underway, with a proposed £400,000 target for opportunities identified as a result. Opportunities will be assessed, prioritised and scheduled for delivery over the life of the MTFs.
- b) Green Driver Training: The Energy Savings Trust, following the Council's Green Fleet Review, estimate that 5-10% reduction in fuel use could be achieved through a programme of driver training.
- c) Conversion to Electric Vehicles: Work is underway looking at the potential for switching to electric vehicles (EV). The installation of EV infrastructure and adoption of EV vehicles will be subject to a business case. This will require up-front investment, but it is anticipated that through switching the volume of liquid fuels will decrease, reducing carbon, and it will also lead to reduced expenditure on fuel.

- d) Future Waste Transfer Station and Trade Waste Commercial work: The County Council operates a Waste Transfer Station (WTS) at Loughborough RHWS. With the insourcing of Whetstone RHWS and WTS from 1 April 2021, and the construction of Bardon WTS planned for completion in April 2022, there is an opportunity to look at maximising these assets in terms of opportunities for income generation.
- e) Impact of Defra Resources & Waste Strategy: Three major consultations on statutory reforms that will impact on the Authority's existing operations and arrangements have been undertaken during 2021 that could lead to savings:
- Extended Producer Responsibility (to be launched 2023): making producers pay the full net cost of managing the packaging they place on the market, setting more ambitious targets for producers and introducing clear and consistent labelling for recycling;
 - Deposit Return Scheme (to be launched late 2024): charging consumers a deposit on most drinks' containers redeemable on return to designated return points;
 - Consistency in household and business recycling collections: effective through a standardised core set of dry recyclable materials for collection; separate weekly food waste collections and free green waste collection. Underpinning this will be an increase in recycling rates to encourage more recycling.

Other Factors influencing MTFS delivery

19. Services are facing significant challenges in recruiting and retaining sufficiently skilled and qualified staff. Competition with the private sector means that it is difficult to retain and recruit internal Council staff but also to secure contractors. HGV drivers for waste sites are in short supply as are site operatives. To meet needs, the department currently relies heavily on buying in support at augmented prices. This practice is likely to grow as emphasis is placed on delivering initiatives and recruitment remains extremely challenging.
20. The department retains exposure to fluctuations in market prices. Over the last few months the department has witnessed a substantial increase in the general cost of construction materials with unprecedented price increases of over 30% compared to this time last year for some materials. Electrical components, timber, paints and concrete products are also in short supply not to mention HGV drivers which impacts both the service delivery as well as the capital projects across the waste service. Whilst it is assumed that this will not continue, it is not clear at this stage how long prices will remain at these levels and the overall impact to the delivery of services and works as contracts and rates are renewed and/or agreed.
21. Household waste has grown significantly because of increased working from home, school closures and people self-isolating. This has generated higher costs in terms of disposal and dry recycling. Further changes in resident's lifestyle and consumption patterns could impact beyond the usual underlying

assumptions of 1% growth year on year. Coupled with this is the uncertainty surrounding the recyclable and reuse market. Future market price fluctuations could limit income generation and impede the delivery of anticipated savings.

22. The ambition to deliver the Government's carbon and environment agenda highlight the financial risk to the Council of being able to sufficiently resource and progress the expanding range of workstreams. There is also an increasing need to mitigate risks of potentially conflicting priorities, for example the ambition to reduce carbon could conflict with ambitions for growth more generally. Some emerging priorities have been incorporated into this MTFS as growth requests, but it is anticipated that these will increase over time.

Other Funding Sources

23. For 2022/23, a number of additional funding sources are expected and allowed for within the budget outlined in Appendix A – Revenue Budget 2022/23. These funding sources include external grants and other contributions from external agencies towards the cost of schemes delivered by the department. The key ones include:-

- Capital fee income - £0.01m for staff time charged in delivering the capital programme. Should elements of the capital programme not be delivered as planned this could have an impact on the amount of staff time recovered. However, the use of agency and temporary staff resource does give some scope for varying staff levels in order to minimise the risk of this resulting in overspending in staffing cost centres;
- Fees and charges/External works charges to other bodies (trade waste income and income from charging at RHWS) - £1.94m;
- Income from the sale of recyclable materials - £1.14m;
- Income from reserves (including funding for Carbon Reduction initiatives) - £0.98m.

Use of One-off Funding

24. Within the current year's revenue budget, provision was made corporately for significant unplanned expenditure, primarily in relation to the uncertainty on what additional funding would be required to manage the on-going implications of Covid-19. Along with provision for more general MTFS risks, £36m was set aside corporately.
25. At the current position it is looking as though much of this provision will not be required and £28m can be freed up to fund additional one-off expenditure. As a result, an investment fund of £2m has been created for carbon reduction schemes, which will be subject to business cases.

Capital Programme

26. The 2022/23-2025/26 capital programme for Waste Management projects amounts to £5.10m, with a further £0.76m invested in energy and electric vehicle schemes in the Corporate Resources Department. Details are shown in
27. and set out in Appendix C. The capital programme is funded entirely from discretionary funding.

Table 3 – Capital Programme 2022/23 to 2025/26

	2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000	Total £000
Recycling Household Waste Sites (RHWS) – general improvements	210	232	1,160	250	1,852
Kibworth Site Redevelopment	2,000	0	0	0	2,000
Waste Transfer Station Development	1,000	0	0	0	1,000
Mobile Plant	170	0	0	0	170
RHWS Lighting	75	0	0	0	75
Total Waste Management	3,455	232	1,160	250	5,097
SCoRE +	330	320	0	0	650
Electric Vehicle Charge Points	0	90	0	0	90
Energy Certificates	15	0	0	0	15
Total Corporate Resources	345	410	0	0	755
Funded by:					
Corporate Funding (capital receipts and revenue)	3,800	642	1,160	250	5,852

28. The significant elements of the programme in 2022/23 are:

- Waste Transfer Station Development - £1.0m to complete the build of a new waste transfer station in Bardon (total scheme cost £9.0m);
- Kibworth Site Redevelopment - £2.0m to complete the redevelopment of the existing Kibworth RHWS into a modern site that offers a better customer experience, whilst improving the health and safety of the site for visitors and staff and ensuring ongoing compliance with the site's environmental permit (total scheme cost £5.50m);
- School Collaboration on Resource Efficiency + (SCoRE +) programme - further investment in energy efficiency schemes in schools comprising £0.3m in each of the next two years;
- Investment of £90,000 in electric vehicle charging points and £15,000 in Minimum Energy Efficiency Standards and Performance certificates.

29. The main risk to delivery of the capital programme is securing appropriate levels of funding at a time of rising inflationary costs pressures and labour shortages. Without further borrowing funding such unforeseen costs consumes resources set aside for future developments and presents an opportunity cost that needs to be considered.

Capital Programme – Future Developments

30. Where capital projects are not yet fully developed, or plans agreed, these have been included under the heading of 'Future Developments' under the department's programme in Appendix C. It is intended that as these schemes are developed, and where there is a financial justification, or an investment required to maintain delivery of the service, they are added into the capital programme. These include:-

- RHWS – Lighting,
- New Melton RHWS,
- Windrow Composting Facility,
- Mobile Plant Whetstone Facility,
- Country parks further investment and development,
- Invest to save energy and water strategy initiatives,
- Green energy generation,
- Decarbonisation of Council's Property Estate,
- Further investment in SCoRE+.

Background Papers

Report to Cabinet 14 December 2021 – Medium Term Financial Strategy 2022/23 to 2025/26

<http://politics.leics.gov.uk/mgAi.aspx?ID=69945#mgDocuments>

Circulation under Local Issues Alert Procedure

None.

Equality and Human Rights implications

38. Public authorities are required by law to have due regard to the need to:-

- eliminate unlawful discrimination, harassment and victimisation;
- advance equality of opportunity between people who share protected characteristics and those who do not; and,
- foster good relations between people who share protected characteristics and those who do not.

39. Many aspects of the County Council's MTFs may affect service users who have a protected characteristic under equalities legislation. An assessment of the impact of the proposals on the protected groups must be undertaken at a formative stage prior to any final decisions being made. Such assessments will be undertaken in light of the potential impact of proposals and the timing of any proposed changes. Those assessments will be revised as the proposals are developed to ensure decision makers have information to understand the effect of any service change, policy or practice on people who have a protected characteristic.

40. Proposals in relation to savings arising out of a reduction in posts will be subject to the County Council Organisational Change policy which requires an Equality Impact Assessment to be undertaken as part of the action plan.

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List of Appendices

Appendix A – Revenue Budget 2022/23

Appendix B – Growth and Savings 2022/23 – 2025/26

Appendix C – Capital Programme 2022/23 – 2025/26

ENVIRONMENT & WASTE MANAGEMENT SERVICES, CLIMATE CHANGE AND GREEN AGENDA**REVENUE BUDGET 2022/23**

Net Budget 2021/22 £		Employees £	Running Expenses £	Internal Income £	Gross Budget	External Income £	Net Budget 2022/23 £
	ENVIRONMENT & TRANSPORT DEPARTMENT						
	ENVIRONMENT & WASTE MANAGEMENT						
419,431	E&W Branch Management	417,346	2,472	0	419,818	0	419,818
	Commissioning						
1,263,488	Staffing and Admin	1,449,313	7,700	-132,381	1,324,632	-14,000	1,310,632
788,056	Initiatives	122,624	1,015,404	-109,800	1,028,228	-170,873	857,355
60,000	Recycling & Reuse credits	0	60,000	0	60,000	0	60,000
2,111,544		1,571,937	1,083,104	-242,181	2,412,860	-184,873	2,227,987
	Waste Management Delivery						
331,713	Staffing & Admin	366,823	3,241	-20,000	350,064	0	350,064
9,343,941	Landfill	0	9,895,291	0	9,895,291	0	9,895,291
8,802,000	Treatment & Contracts	0	8,265,650	0	8,265,650	0	8,265,650
2,209,000	Dry Recycling	0	2,874,000	0	2,874,000	-665,000	2,209,000
1,591,000	Composting Contracts	0	1,591,000	0	1,591,000	0	1,591,000
3,710,637	Recycling & Household Waste	3,021,935	1,265,939	-12,000	4,275,874	-591,291	3,684,583
2,208,367	Haulage & Waste Transfer	572,170	1,721,578	-20,000	2,273,748	-5,000	2,268,748
-1,458,000	Income	0	0	0	0	-1,503,000	-1,503,000
-30,000	WEEE Funding	0	0	0	0	-32,000	-32,000
26,708,658		3,960,928	25,616,699	-52,000	29,525,627	-2,796,291	26,729,336
29,239,633		5,950,210	26,702,275	-294,181	32,358,304	-2,981,164	29,377,140
	Departmental & Business Management						
2,012,175	Management & Admin	2,100,773	708,230	-775,104	2,033,899	-6,000	2,027,899
425,196	Departmental Costs	55,250	499,293	-5,000	549,543	-168,500	381,043
2,437,371		2,156,023	1,207,523	-780,104	2,583,442	-174,500	2,408,942
31,677,004	TOTAL	8,106,233	27,909,798	-1,074,285	34,941,746	-3,155,664	31,786,082
	CHIEF EXECUTIVES DEPARTMENT						
0	Growth Unit	135,000	0	0	135,000	0	135,000
0		135,000	0	0	135,000	0	135,000
	CORPORATE RESOURCES DEPARTMENT						
-17,723	Forestry	484,255	130,790	-375,896	239,149	-153,000	86,149
234,887	Country Parks	525,374	414,236	0	939,610	-744,750	194,860
217,164	TOTAL	1,009,629	545,026	-375,896	1,178,759	-897,750	281,009
31,894,168	TOTAL	9,250,862	28,454,824	-1,450,181	36,255,505	-4,053,414	32,202,091

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**ENVIRONMENT & WASTE MANAGEMENT SERVICES, CLIMATE CHANGE
& GREEN AGENDA GROWTH & SAVINGS**

			2022/23	2023/24	2024/25	2025/26
References			£000	£000	£000	£000
<u>GROWTH</u>						
ENVIRONMENT & TRANSPORT DEPARTMENT						
Demand & cost increases						
*	G16	Waste tonnage increases (temporary growth removed)	-100	-100	-100	-100
**	G17	Contribution to Regional Waste Project (temporary growth removed)	0	-15	-50	-50
	G18	HGV Driver Market Premia	45	45	45	0
	G19	Hydrotreated Vegetable Oil to replace bunkered diesel (CO2 saving)	55	55	55	55
			0	-15	-50	-95
CHIEF EXECUTIVES DEPARTMENT						
	G24	Carbon Reduction Programme	135	135	135	135
			135	135	135	135
CORPORATE RESOURCES DEPARTMENT						
	G33	Investment in Tree Nurseries	100	100	100	100
			100	100	100	100
TOTAL			235	220	185	140
<u>SAVINGS</u>						
ENVIRONMENT & TRANSPORT DEPARTMENT						
**	ET9	Eff/Inc Recycling & Household Waste Sites service approach	-30	-80	-190	-190
**	ET10	Inc Trade Waste income	-45	-75	-105	-105
**	ET11	Eff Future residual waste strategy- reduced disposal costs	0	-985	-985	-985
*	ET12	Eff Procurement savings from contract renewals	-30	-30	-30	-30
**	ET4	Eff/Inc E&T Continuous Improvement Programme - review of processes and potential income across a range of services	-50	-50	-50	-50
	ET13	Eff Ashby Canal maintenance	-15	-15	-15	-15
			-170	-1,235	-1,375	-1,375
CORPORATE RESOURCES DEPARTMENT						
**	CR2	Eff/Inc Forestry & Country Parks	-30	-140	-195	-245
*	CR3	Eff Environment improvements - energy and water	-50	-50	-50	-50
			-80	-190	-245	-295
TOTAL			-250	-1,425	-1,620	-1,670

References used in the following tables

* items unchanged from previous Medium Term Financial Strategy

** items included in the previous Medium Term Financial Strategy which have been amended

Eff - Efficiency saving

SR - Service reduction

Inc - Income

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ENVIRONMENT & WASTE - CAPITAL PROGRAMME 2022-26

APPENDIX C

Estimated Completion Date	Gross Cost of Project £000		2022/23 £000	2023/24 £000	2024/25 £000	2025/26 £000	Total £000
		<u>ENVIRONMENT & TRANSPORT DEPARTMENT</u>					
Mar-23	5,500	Kibworth Site Redevelopment (Commitments b/f)	2,000	0	0	0	2,000
Mar-23	9,000	Waste Transfer Station Development (Commitments b/f)	1,000	0	0	0	1,000
Mar-26	1,852	Recycling Household Waste Sites - General Improvements	210	232	1,160	250	1,852
Mar-23	75	Recycling Household Waste Sites - Lighting	75	0	0	0	75
Mar-23	340	Mobile Plant	170	0	0	0	170
	16,767		3,455	232	1,160	250	5,097
		<u>CORPORATE RESOURCES DEPARTMENT</u>					
Mar-24	650	Score + (Schools Energy Efficiency Scheme)	330	320	0	0	650
Mar-24	90	Electric Vehicle Car Charge Points	0	90	0	0	90
Mar-23	15	Minimum Energy Efficiency Standards & Performance Certificates	15	0	0	0	15
	755		345	410	0	0	755
	17,522	TOTAL	3,800	642	1,160	250	5,852

<u>Future Developments - subject to further detail and approved business cases</u>					
RHWS Lighting					
New Melton RHWS					
Compaction equipment					
Windrow Composting Facility					
Whetstone mobile plant					
Country Parks investments and developments					
Energy & Water Strategy - Invest to save					
Green energy generation					
Decarbonisation of LCC's Property Estate					
Score + (Schools Energy Efficiency Scheme)					

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**ENVIRONMENT AND CLIMATE CHANGE OVERVIEW AND
SCRUTINY COMMITTEE – 26 JANUARY 2022**

NET ZERO CARBON 2045: A ROADMAP FOR LEICESTERSHIRE

REPORT OF THE DIRECTOR OF ENVIRONMENT & TRANSPORT

Purpose of the Report

1. The purpose of this report is to:-
 - a) ensure that Members are kept up to date with the Council's response to the climate emergency;
 - b) 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 2045 target (Tranche 2) and;
 - c) provide an overview of the approach and process to be employed to develop the Council's response through the development of a Net Zero Strategy and Action Plan.

Policy Framework and Previous Decisions

2. 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. A "Tranche 1" Carbon Reduction Roadmap for the Council to achieve net zero emissions by 2030 was presented to Cabinet in April 2020 and was approved by 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.
3. 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.

4. 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 County Council on 8 July 2020.
5. 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).

Background

International climate change commitments

6. In November 2021, the UK hosted COP26 - 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.
7. 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.
8. The Paris Agreement was agreed at COP21 in 2015. For the first time ever, it saw almost every country around the world enter a legally binding commitment to reduce emissions.
9. 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. The Agreement left room for each individual country to decide how they would get there, via Nationally Determined Contributions (NDCs).
10. 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.

National climate change commitments

11. 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.
12. 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.

County Council action to date

13. The Cabinet was presented with a roadmap to net zero for the Council's own operations in April 2020 – the Tranche 1 Carbon Reduction Roadmap. This is being delivered through a programme of projects to address the Council's own emissions and builds on the Council's ongoing commitment to carbon reduction which had delivered 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 target by 2030.
14. 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.
15. The Net Zero Roadmap research addresses the greenhouse gas emissions from the whole County (Tranche 2) 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. It provides information on the main emissions sources in Leicestershire and models several scenarios to understand options for delivering net zero carbon in Leicestershire by 2045.

Net Zero Report Purpose and Methodology

16. The Net Zero Roadmap research was commissioned by the Council and has been produced through a contract with Buro Happold, who are specialist consultants with expertise in sustainability and engineering.
17. 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, and
 - c) to support and encourage engagement with other organisations to develop their own climate commitments and action plans.
18. The Net Zero 2045 Roadmap for Leicestershire research report, a summary of which is appended, compiles into a single document:
 - a) an understanding of the baseline carbon emissions for Leicestershire the progress made to date and the 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.
19. The production of the Net Zero Roadmap has been managed by the Carbon Reduction Team in the Environment and Transport Department but has been overseen by an officer Net Zero Roadmap Working Group, the membership of which included senior managers from across the Council with a direct interest in the Roadmap report and the decarbonisation themes under consideration.
20. The Cabinet Lead Member for the Environment and the Green Agenda has been regularly updated on the development of the report and the findings as they have come available.

Key findings and conclusions from the research

21. A more detailed summary of the findings from the Roadmap research is included as Appendix A.
22. However, the key findings to note are:-
- a) The total annual greenhouse gas emission baseline (2019) for Leicestershire is estimated as 8.5 Million 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.
 - 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.

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.

- e) None of the pathways modelled are Paris Agreement Compliant pathways, although the Balanced and Tailwinds Pathways approach the 2045 target. This has also been acknowledged in the UK Climate Change Committee modelling, and 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.
23. In order to meet Leicestershire's net zero target by 2045 in a fair and equitable way the report recommended that future actions should include:-
- a) a massive reduction in demand for energy,
 - b) County-wide 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) net zero is progressed within the context of other environmental objectives to enhance biodiversity and provide resilience,
 - f) carbon capture and storage will be required,
 - g) offsetting carbon should only be considered as a last resort.
24. The conclusions to be 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 show leadership, 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.

Developing a Net Zero 2045 Strategy and Action Plan for Leicestershire

25. The Council has a high level of ambition to demonstrate strong place leadership and to retain oversight of the 2045 target on behalf of the County. The Roadmap report demonstrates that the Council-influenced pathway, although highly ambitious, will only deliver 37% reductions by 2045 so a broader collaborative approach is required.
26. There is no national guidance on defining the scope and parameters for area wide net zero carbon targets. Officers will be recommending a bespoke scope for the County 2045 target based on best practice, data availability to provide annual public progress reports and to reflect the areas where the Council has control or influence. Regardless of the scope recommended, the Strategy and Action Plan will include a commitment to address all emissions where possible. The target will be limited to those that can effectively be monitored and reported on although this may change over time as data availability changes. The Strategy will also include interim targets in line with the national Government carbon budgets to address the need to support the Paris Agreement, demonstrate the steep reduction trajectory needed in the next decade and to limit cumulative greenhouse gas emissions up to 2045 which will determine overall global heating. The Strategy will also include an approach to residual emissions and offsetting as a last resort.
27. A comprehensive draft Strategy and Action Plan will be developed to address the full programme of work needed to deliver net zero which will identify the actions where the Council is the lead, others which will be stakeholder 'asks' and those which remain aspirational within current policy, technology and resources.
28. This leadership role and associated partner engagement will be developed over time to allow the Council to progress its own plans quickly. 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.
29. The scale and pace of change required means it is essential to work with and inspire other stakeholders and residents and engage with the central Government, demonstrating leadership and facilitating others to act and back the net zero target.
30. To support this engagement, the Council will continue to work through existing partnerships in the first instance to build momentum and support. 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 draft Strategy and Action Plan.
31. It is vital that the public are also engaged with the net zero carbon agenda and empowered to act. The Council's public engagement plan will address:-
 - a) Scale and ambition – for example, Citizens' Assembly/Panel one-off or ongoing, focus groups, community spaces/events, bespoke youth

engagement initiatives, community engagement toolkits, use of crowdsourcing;

- b) Timing and longevity – engagement prior to draft, consultation to influence strategy and plans, longer term structures to ‘test’ action plan implementation and/or to facilitate ongoing dialogue.
32. Public communications and engagement will be a priority objective in the Net Zero Strategy and Action Plan and will be further developed over time to inform, engage and activate individuals and communities.
 33. To support the development of the Council's Net Zero Strategy and Action Plan, stakeholder mapping and analysis will be completed to define an engagement plan. Priority stakeholders will be targeted for early engagement to provide input to the first draft.
 34. To shape the draft Strategy and Action Plan, an internal engagement process will be conducted in parallel to the external stakeholder engagement. This will involve widespread engagement across the Council to inform staff and increase capacity for tackling the climate emergency across departments. In addition, it will be necessary to work with key staff to develop the Council's actions for inclusion in the Net Zero Action Plan.
 35. A more 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. This level of engagement is possible within existing resources.
 36. Opportunities for additional funding and resources are being pursued for more ambitious public engagement and innovative consultation, such as the creation of a Citizens’ Assembly and co-designed youth engagement through the UK 100 Local Climate Engagement Programme.
 37. There will also be targeted consultation with key stakeholders via meetings and existing networks wherever possible. This will include health and district and parish councils, business and representative organisations, environmental organisations, voluntary sector and community groups and local universities.
 38. 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 14 June 2022.

Resource Implications

39. The Cabinet approved a budget of £450,000 in September 2019 to facilitate the review of the Environment Strategy and the development of the Net Zero Roadmap and to take immediate action to implement measures to reduce carbon emissions.

40. The development of the Net Zero Strategy and Action Plan will be delivered from the existing resources allocated to the Climate Emergency declaration at Cabinet outlined above. The Net Zero Strategy and Action Plan will be accompanied by a resourcing plan when presented to Cabinet for approval.
41. The actions outlined in the net zero pathways will require action across society and both private and public investment; the Council working alone cannot deliver all the change required. However, the Council has some direct control and significant influence over many areas that can support the transition to net zero.
42. Where appropriate, business cases will be developed for potential projects to deliver the Net Zero Roadmap to assess the carbon, financial and other benefits of proposals to ensure they positively contribute to the Council's objectives.
43. 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 engagement and programme delivery. In addition, there will be a drive to pursue opportunities to secure revenue income from carbon reduction projects.
44. The Director of Law and Governance and Director of Corporate Resources have been consulted on the content of this report.

Timetable for decisions

45. The draft Net Zero Strategy and Action Plan will be presented to Cabinet on 29 March 2022 for approval to consult.
46. The results of the consultation and the final draft Net Zero Strategy and Action Plan will be presented to Environment and Climate Change Overview and Scrutiny Committee on 3 September 2022 for comment and will be presented to Cabinet with the Committee's comments for approval on 16 September 2022.

Background papers

[Environment Strategy 2018 – 2030: delivering a better future](#)

[Leicestershire County Council Climate Emergency Declaration](#)

[Cabinet report on Council's Net Zero Roadmap for 2030](#)

[Leicestershire County Council's Strategic Outcomes Framework and Plans 2018-22](#)

Circulation under Local Issues Alert Procedure

None.

Equalities and Human Rights Implications

47. An Equalities and Human Rights Impact Assessment (EHRIA) is not required as this report relates to a research project, however, an EHRIA will be completed for the Net Zero Strategy and Action Plan to support a just transition to net zero carbon.

Appendix

Summary of findings from the Net Zero Leicestershire Roadmap research report

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Appendix - Summary of findings from the Net Zero Leicestershire Roadmap research report

Baseline

1. There is no national guidance on how different types of emissions might be included in local authority action plans. However, the Global Protocol for Community-Scale Greenhouse Gas Inventories states that “an inventory boundary identifies the gases, emission sources, geographic area, and time span covered by a GHG inventory. The inventory boundary is designed to provide a [county] with a comprehensive understanding of where emissions are coming from as well as an indication of where it can take action or influence change.”
2. The Protocol requires that “the assessment boundary shall include all seven Kyoto Protocol GHG¹s occurring within the geographic boundary of the [county], as well as specified emissions occurring out-of-boundary as a result of [county] activities. The inventory shall cover a continuous 12-month period. [Counties], by virtue of their size and connectivity, inevitably give rise to GHG emissions beyond their boundaries. Measuring these emissions allows [counties] to take a more holistic approach to tackling climate change by assessing the GHG impact of their supply chains and identifying areas of shared responsibility for upstream and downstream GHG emissions.”
3. In line with the Protocol, the baseline inventory of emissions for Leicestershire included in the Roadmap report is based on the latest annual (2019) national datasets produced by the Department for Business, Energy and Industrial Strategy for local authority territorial carbon only emissions, which cover direct emissions mainly from energy and fuel use within the county boundary.
4. To provide a more comprehensive assessment of the emissions related to activities in Leicestershire in line with the Protocol, these annual territorial carbon emissions have been supplemented with additional greenhouse gases (e.g. methane and nitrous oxide) related to these activities (4.5 Million tonnes CO₂e² per year) and Leicestershire consumption emissions (an additional 4 million tonnes of carbon dioxide equivalent (MtCO₂e) per year), these are emissions occurring out-of-boundary as a result of County activities. This gives a total annual greenhouse gas emission baseline for Leicestershire (territorial plus consumption) of 8.5 MtCO₂e.

¹ The United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto protocol covers seven categories of greenhouse gas (GHG) emissions: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

² “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.

5. However, the scenario modelling to assess the pathways to net zero include a smaller scope of consumption emissions that more closely reflect the areas that could be influenced by the County Council and other local partners, and align to other objectives of related strategies and plans, specifically waste, water, food and drink and embodied emissions in new builds.
6. 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).

Scenarios modelled in the Leicestershire Net Zero pathways

7. The Net Zero Roadmap study has modelled four scenarios (the existing policy pathway and three additional) to understand the impact of different interventions on decarbonisation and the pathways to net zero for Leicestershire by 2045.
8. The pathways modelled include a Current Policy pathway, a Council Influenced Pathway, a Balanced Pathway, and a Tailwinds Pathway. The current policy pathway provides an understanding of Leicestershire's future emissions pathway under current policy and existing commitments at both a national and local level, for example, the petrol and diesel car ban and local tree planting ambitions. This is the 'Business as Usual' Scenario. More information on the assumptions included in the pathways are provided below.

	Current policy pathway	Council Influenced	Balanced	Tailwinds
What this pathway illustrates	Existing policy commitments	What the Council can achieve, and the collective action required to reach net zero	What Leicestershire could achieve following UK Government decarbonisation timeframes and interventions	What could be achieved through widespread, fast-paced change
Ambition	Low	High (only in Council Influenced areas)	High	Very High
Key interventions	<ul style="list-style-type: none"> • Very low level of building retrofit for higher energy efficiency • Electrification of vehicles • Increase in vehicle mileage • Increase in waste and water demand • 65% of LCC collected waste recycled 	<ul style="list-style-type: none"> • Retrofit of Council Influenced buildings (2% of total) • 2/3 buses switched to electric/hydrogen • Installation of photovoltaic solar panels (PV) on 25% of social housing and 40% of 	<ul style="list-style-type: none"> • Widespread retrofit of buildings • Full EV roll out and decrease in vehicle mileage • Industry heat source switched to electric/hydrogen • High PV installation 	<ul style="list-style-type: none"> • Near-total retrofit of buildings • Full EV roll out and decrease in vehicle mileage • Industry heat source switched to electric/hydrogen • Very high PV installation • Total reduction in embodied carbon of new builds

		public buildings		
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9. The Council Influence Pathway seeks to understand how the emissions trajectory can be affected solely through Council actions and areas of high influence. The pathway is based on current policy, plus more ambitious action by the County Council through its direct control and influence on the decarbonisation of public buildings (including those outside its ownership).
10. The Balanced and Tailwinds Pathways follow the principles of the national carbon budget assessments undertaken by the UK Climate Change Committee. Following these pathways has the advantage of applying the principles of the national assessment at the local level and there is a wealth of background evidence and information to inform these targets.
11. These pathways are based on much more ambitious action across all areas of the economy and society. The Balanced Pathway is the basis of the Climate Change Committee's advice on the UK Sixth Carbon Budget and includes a combination of high levels of public engagement and behaviour change to reduce demand, alongside the uptake of technological solutions.
12. The Tailwinds Pathway demonstrates a radical stretch scenario which is 'highly optimistic' in terms of behaviour change. The Leicestershire Tailwinds Pathway is a bespoke pathway and explores some locally specific opportunities such as the potential for advanced logistics to decarbonise HGV road transport earlier than national targets.
13. The Current Policy pathway shows a steady decrease in scoped emissions modelled in the study resulting in a 33% reduction between 2020–2045. The Council Influenced Pathway shows a small improvement (37%) in emissions reductions compared with the current policy pathway. The Balanced and Tailwinds Pathways both achieve notable reduction 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.

Emission savings impact assessment

14. The Leicestershire net zero pathways modelling includes several emissions categories and interventions. The Impact Assessment considers the amount by which different emissions categories are reduced in each pathway, including the relative impact of some different interventions.
15. For the Tailwinds Pathway, emissions reductions are achieved in all emissions categories modelled. The greatest absolute emissions savings are modelled in the Tailwinds Pathway, in which fuel switching in the road transport and domestic/non-domestic buildings categories achieve savings of around 2,000 ktCO₂e. Demand reductions through retrofit and reduced mileage save a further 1,000 ktCO₂e in the same categories. Though Solar PV installation is associated with a relatively small amount of emissions savings in this pathway

(78 ktCO₂e), renewables are a critical precursor to decarbonising the grid, have fuel saving benefits and create resilience across the County; they should therefore not be overlooked. High-levels of savings are achieved through industrial demand reductions and heat switching (665 ktCO₂e), while the majority of the rest of emissions savings are the industry-wide reductions in consumption emissions in manufacturing and construction (new build embodied carbon and food & drink; over 1,000 ktCO₂e).

16. Table representing the emissions impact assessment (Tailwinds Pathway)

Action	Emissions saving (ktCO ₂ e)
Transport fuel switching	1,327
Water, waste and new build reductions	993
Heat switching (including grid decarbonisation)	829
Food and drink measures	682
Industrial measures	665
Demand reduction	539
Transport mileage	409
New PV installations	78
TOTAL	5,522

Paris Agreement Compliant Pathway

17. Leicestershire County Council declared a climate emergency in May 2019. The declaration noted that “the UK has, at an international level, signed into the Paris Accord 2015 and to the commitments agreed in 2018 at the Conference of Parties to the UN Framework Convention on Climate Change (COP24) which amongst other things recognise the need to limit by 2030 temperature rises to between 1.5°C and 2°C above the internationally recognised pre-industrial baseline”.
18. The Tyndall Carbon Budget Tool presents climate change targets for UK local authority areas that are based on the commitments in the United Nations Paris Agreement, informed by the latest science on climate change and defined by science-based carbon budget setting. The Tyndall Centre Carbon Budget Tool (which focusses on direct energy related emissions) concludes that for Leicestershire to make its fair contribution to delivering the Paris Agreement's commitment to staying “well below 2°C and pursuing 1.5°C” global temperature rise, then an immediate and rapid programme of decarbonisation is needed. The County will need to stay within a maximum cumulative carbon dioxide emissions budget of 26.7 million tonnes (MtCO₂) for the period of 2020 to 2100 to deliver a Paris Agreement compliant pathway.
19. None of the pathways modelled in the Net Zero Roadmap study for Leicestershire are Paris Agreement Compliant pathways, although the Balanced and Tailwinds Pathways approach the 2045 targets set out in the Tyndall Carbon Budget Tool. However, all the pathways modelled in the study emit substantially more than the total carbon budget defined by the Tool over the period between 2020 to 2045.

20. The inability of even the most ambitious policy pathways to align with a Paris Agreement compliant pathway highlights the major policy gap between current targets and the required pace of action, this has also been acknowledged in the UK Climate Change Committee modelling, and 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).

Residual emissions

21. Under all emissions pathways, Leicestershire is left with some annual residual emissions. As such, if net zero is to be achieved in any pathway carbon removals either through carbon capture and storage or offsetting would be required in 2045. These are in line with the proportion of residual emissions in the Climate Change Committee's Sixth Carbon Budget which assumes a certain amount of carbon removal technology and net emissions reductions activity will be required to meet net zero by 2050 in the UK.
22. The largest residual emissions categories in both the Balanced and Tailwinds Pathways are:
- a) Road transport – a small amount of residual emissions resulting from HGV vehicles that have not switched to electric or hydrogen fuel by 2045;
 - b) Industry and building emissions – because of latent carbon in the electric grid and hydrogen sources. Industry emissions categories also include agricultural emissions, which may prove hard to reduce; and
 - c) Other GHGs – non-CO₂ emissions linked to the territorial emissions categories are modelled to reduce in line with CO₂ territorial emissions reductions (source). As a result, a fraction of residual Other GHGs emissions remain, as per the proportion of remaining CO₂ territorial emissions.

Sequestration

23. Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide in plants, soils, geological formations and the oceans. This can be through both natural and human activities. Recent studies for Leicestershire³ indicate that only 6% of the County is 'built'. The majority (65%) is farmland, while 8% is 'potentially valuable grassland', 5% is garden and 5% is woodland. This study indicates that ecosystems in Leicestershire and Leicester City sequester 40 ktCO₂ every year. Given the urban density of the Leicester City area, it can be assumed that a large proportion of this sequestration occurs outside of the City. This carbon sink of 40 ktCO₂ is equivalent to 1% of Leicestershire territorial emissions in 2019, or 14% of 2045 territorial emissions projected in Leicestershire under the Tailwinds Pathway. The study further

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

explores opportunities for increasing carbon sequestration and the scale of action that would be required to address the residual emissions in 2045.

Costs and benefits of the net zero transition

24. Financing net zero will require investment from both the private and public sector for infrastructure, and by both organisations and individuals in their own assets such as buildings and vehicles. Although this capital investment is significant, it has the potential to deliver operational cost savings over time from reduced maintenance costs and avoided fuel costs and can provide an economic boost to jobs in the low-carbon sector and greening other sectors. The cost of further delays and the impacts from global heating threaten to be much higher, as illustrated in the recent report of the Intergovernmental Panel on Climate Change – The Physical Science and previous economic assessments such as those from the Office of Budget Responsibility, Swiss Re Institute and Stern Review.
25. The UK Net Zero Strategy states “Both public and private investment will be crucial for any path to net zero. While we expect most investment to come from the private sector, market failures mean the private sector alone will not deliver emissions reductions and innovation at the pace required”. It goes on to highlight “The scale of the net zero challenge and persistent market failures mean that public sector intervention is needed to shape and accelerate the flow of private capital.”
26. Benefits that occur because of greenhouse gas emission reduction are known as ‘co-benefits’. Co-benefits are important to consider when assessing the overall costs and benefits of abatement. Co-benefits will arise for the economy, health, and society, where interventions are implemented with equitable policies that maximise the opportunities for improved air quality, active travel, biodiversity recovery, good jobs and affordable, quality homes and buildings.
27. The Climate Change Committee provides the most detailed set of cost projection models for UK-wide decarbonisation currently available. They find that the capital cost of implementing a Balanced Net Zero nationally would cost £1,415bn (2020 - 2050), and that of a Tailwinds Pathway would cost £1,440bn (2020 - 2050) (excluding removals). Capital cost dominates in the first 10 to 15 years but by 2050 aggregate operating savings are similar to the annual UK capital investment requirement
28. Leicestershire territorial emissions in 2019 amounted to 4.5MtCO₂e, 1.3% of national emissions (345MtCO₂e). Pro rata, this indicates that decarbonisation efforts in Leicestershire could cost in the region of £18bn under either a Balanced or Tailwinds Pathways. This investment would include contributions from both the public and private sector.
29. However, there are several reasons why this figure is indicative only as the scope of emissions and geographic variations mean the cost model is not directly applicable at a local level. Further detailed consideration of the costs for

building decarbonisation are considered in the report and demonstrate a strong case for investment as a no-regret measure with a good return on investment.

High-level action plan

30. The Roadmap research concluded with recommendations for a high-level action plan. The actions to reach net zero will require urgent change across all sectors and at all levels. All scenarios modelled confirm that there are significant policy and resource gaps between the existing policy pathway and a net zero by 2045 pathway for Leicestershire.
31. The Council Influenced Pathway confirms that the Council acting alone will not be able to deliver the change required. However, the study concludes that there is a role for the Council in convening partners and key stakeholders to make the best use of resources locally and to secure the investment and the national policy required to deliver the infrastructure and interventions that will support the net zero transition.
32. The Roadmap study has concluded that it will not be a choice between interventions but will rather require the deployment of all possible decarbonisation approaches at pace and scale to meet the net zero by 2045 ambition. For some areas, this assumes new technologies will become technically and financially feasible in the intervening decades.
33. In summary, in order to meet Leicestershire's 2045 net zero target there must be:-
 - a) **a massive reduction in demand for energy** through building retrofits, solar PV, reduced vehicle mileage and industrial and manufacturing process efficiencies;
 - b) **County-wide switch to low carbon fuel** including building heat sources, vehicle electrification and switching industrial and manufacturing fuels to low carbon equivalents – such as green hydrogen;
 - c) **significant reduction in material demand** including waste arisings, water demand, water supply leakage, reduced material consumption and material substitution in construction and manufacturing to lower embodied carbon of goods and services;
 - d) **a just transition** to ensure that all interventions are implemented with equitable policies and co-benefits fully harnessed;
 - e) **a coherent programme to enhance biodiversity** across Leicestershire, restoring existing spaces, maximising carbon sinks and protecting endangered species;
 - f) **carbon capture and storage** will be required to bridge the gap where full decarbonisation is not possible;
 - g) **offsetting** carbon should only be considered as a last resort.

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**ENVIRONMENT AND CLIMATE CHANGE OVERVIEW AND
SCRUTINY COMMITTEE – 26 JANUARY 2022**

GREENHOUSE GAS EMISSIONS REPORT 2020-2021

REPORT OF THE DIRECTOR OF ENVIRONMENT & TRANSPORT

Purpose of the Report

1. This report provides an update on progress against the net zero emissions target for Leicestershire County Council in 2020-21 and commentary of the reasons for change and positive action the Council has been taking to reduce its operational emissions. This report forms part of the Council's Carbon Reduction Programme.

Policy Framework and Previous Decisions

2. The updates in this report reflect progress against the Council's 2030 net zero carbon commitment for its own operations as part of the Environment Strategy 2018-2030.

Background

3. The County Council declared a climate emergency in May 2019 with unanimous cross-party support. The declaration committed the Council to achieving net zero emissions for its operations by 2030 and to working with others and lobbying the Government to support delivery of this commitment and to the limiting of global warming to less than 1.5°C, in line with the Paris Agreement.
4. A review of the Environment Strategy 2018-2030 was carried out to embed the climate emergency commitments and to take account of new Government policies, changes in legislation and new information/data that had become available. The revised Environment Strategy 2018-2030 was approved by County Council on 8 July 2020. The revised Strategy was later followed by the commitment to work with others across Leicestershire to become a net zero County by 2045 or before.
5. Following recommendations by the UK Government, the Council publishes an annual report on its greenhouse gas (GHG) emissions. This report focusses on the Council's own operational emissions for the 2020-21 reporting period and the delivery against the Council's target to achieve net zero by 2030. The scope of the report includes emissions from the Council's buildings, fleet vehicles,

streetlighting and traffic signals, business travel, water and waste. A copy of this report for 2020-21 is included in the Appendix.

6. The Authority has followed the Government's Environmental Reporting Guidelines, published by BEIS and DEFRA (2019), alongside international best practice guidance from the Greenhouse Gas Protocol.

Greenhouse Gas Emissions Update – Annual Report 2020/21

7. The headline figures show that the Council's total net greenhouse gas emissions in 2020-21 of 9,434 tCO₂e were 73.6% lower than the 2008-09 baseline year, and 19.4% less than in 2019-20. This level of reduction places the Council 5,843 tCO₂e ahead of the target emissions for 2020-21 to reach the 2030 net zero target. It should be noted that a considerable amount of reduction in 2020-21 can be attributed to the impact of Covid-19 on Council operations and resultant changes to ways of working.
8. Emissions have fallen from most sources except for buildings gas and fugitive emissions¹. The most significant reductions in emissions have come from business travel, streetlighting and traffic signals, building electricity and fleet vehicles. Most of the reduction seen during 2020-21 can be attributed to the impact of Covid-19 on Council operations from the two lockdowns, the reduction in face to face meetings and service delivery, the shift to home working, alongside the continued decarbonisation of the national grid, and actions to reduce carbon emissions across the Council.
9. The GHG report notes the potential risk of bounce back in the Council's emissions in 2021-22 due to the return of some Council operations to near pre-pandemic levels – this is being assessed, alongside the carbon impact of Council employees working from home, as part of the Ways of Working programme and projects will be developed to maximise the benefits and minimise the impact of 'bounce back'.

Emissions Trends by Source

10. Emissions from gas and other fuel use in buildings increased by 2.5% compared to 2019-20 levels. The main cause of this was due to Covid-19 regulations within buildings to keep building users safe, such as increased ventilation requiring more heating to maintain internal temperatures and social distancing. Whilst total building heating emissions increased, LPG, oil, kerosine and wood chip emissions all reduced compared to 2019-20 by a combined 36%.
11. Fugitive emissions increased by 265% (33 tCO₂e) compared to 2019-20. These emissions are calculated from information the Council maintains on refrigeration and air conditioning equipment to ensure compliance with

¹ Fugitive emissions are from gasses used in refrigeration and air conditioning, as a result of leakage and service of equipment over their operational life.

fluorinated-gas regulations. The data experiences large annual variations due to maintenance regimes and subsequent top ups of F-gases between years. Despite the increase from the previous year, 2020-21 fugitive emissions remain below the average for the last 11-year period.

12. The Council's fleet emissions reduced by 15.4% compared to 2019-20, halting the increase in fleet emissions seen over the previous two financial years. This reduction can mainly be attributed to the impacts of Covid-19 on Council operations. During 2020-21 the Council hired more vehicles to ensure social distancing, resulting in additional diesel fuel usage in Highways Operations but this was more than offset by a 12% reduction in gas oil emissions and the delay of resurfacing works during the year, alongside reductions in Passenger Fleet and Operational Property and Waste Management Delivery fleet vehicles. Diesel fuel use remains the greatest source of the Council's fleet emissions (86%), followed by gas oil use (13%).
13. Electricity consumption emissions in Council operated buildings fell by 22.5% compared to 2019-20. Most of this reduction (67%) can be attributed to the impact of Covid-19 lockdowns and a significant shift to home working for Council employees, meaning less electricity was used during the year. The Council's continued programme of energy efficiency and renewable energy investments across the property estate also contributed to this reduction. The remaining 33% of the reduction seen within building electricity can be identified as the national impact of greening the electricity grid.
14. Greenhouse gas emissions from Council streetlighting and traffic signals continue to improve in performance, as emissions fell by a further 14.8% compared to 2019-20. This is mainly due the decarbonisation of the national grid (54%) but also because of energy saving measures the Council has introduced, such as further 'trimming and dimming' of the streetlighting system to reduce electricity consumption.
15. Preliminary analysis of available data² shows the Council's business travel emissions reduced by 57% as a result of 3.1 million less business miles claimed by staff in 2020-21 compared to 2019-20. Most of this reduction can be attributed to the impact of Covid-19 restrictions and a significant shift to working from home and remote meetings, reducing the ability but also the need to travel for business. Alongside the carbon emissions saving, this had a significant financial saving to the Council.
16. Emissions for water and waste have been included within the Council's GHG report for the first time in 2020-21. This follows best practice guidance from the Greenhouse Gas Protocol Standard and enables monitoring of additional emissions sources where the Council has a high level of control and influence. Though not previously included, water and waste emissions have been calculated in previous years, allowing for change since 2019-20 to be identified:

² Business mileage claims for Q4 2020-21 are incomplete due to the Council's shift to the new Oracle Fusion system, where claims have been made but data reports are not yet available.

- a) Water emissions reduced by 33.5% compared to 2019-20 and can be attributed to the impact of Covid-19 on Council operations and the shift to home working;
- b) Authority emissions from Council operational waste reduced by 61.7% compared to 2019-20 and can be attributed to the impact of Covid-19 on Council operations and the shift to home working.

Renewable Energy: Exports, Avoidance and Green Tariff

- 17. The Council is estimated to have exported 122,364 kWh of electricity to the national grid from solar panels on Council properties, accounting for 28.5 tCO₂e saving in emissions. Compared to 2019-20, exported solar generated electricity netted off 13% less GHG emissions, this can be attributed to a number of factors including the reduction in carbon intensity of the national grid, the number of annual sunshine hours, solar panel degradation/maintenance and incomplete solar generation readings between financial years.
- 18. Across the Council's corporate buildings, 14.3% of energy used by the Council is from on-site renewables and avoided 476 tCO₂e of emissions in 2020-21 (equivalent to 5% of Council's net emissions), compared to if gas and grid electricity were consumed.
- 19. In recognition of the Council's positive step of having a green energy tariff and supporting national decarbonisation of the electricity grid by increasing demand for low-carbon energy, the GHG report now also considers the Council's emissions following a market-based approach to reporting emissions. This directly reflects the emissions associated with the electricity the Authority purchases for its operations. This approach means emissions from the Council's electricity consumption are considered to be zero emission due to the electricity being produced by renewable sources. Total net market-based emissions for the Council in 2020-21 were 5,418 tCO₂e (demonstrating an 84.9% reduction compared to 2008-09 baseline).

Resource Implications

- 20. The Director of Law and Governance and Director of Corporate Resources have been consulted on the content of this report.
- 21. There are no other resource implications to note as part of this greenhouse gas report.

Background papers

[Environment Strategy 2018 – 2030: delivering a better future](#)
[Leicestershire County Council Climate Emergency Declaration](#)
[Leicestershire County Council's Strategic Outcomes Framework and Plans 2018-22](#)

Circulation under Local Issues Alert Procedure

None.

Equalities and Human Rights Implications

22. There are no specific equalities and human rights implications to note as part of this greenhouse gas report.

Appendix

Greenhouse Gas Emissions Report 2020-21, Part of the Leicestershire County Council Carbon Reduction Programme

Officers to Contact

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Greenhouse Gas Emissions Report 2020-21

Part of the Leicestershire County Council
Carbon Reduction Programme

Author: Michael Suddens
(Senior Carbon Reduction Officer)

Reviewers: Donna Worship
(Carbon Reduction Team Manager)

Date: November 2021



1. Introduction

Leicestershire County Council (LCC) is committed to measuring and reporting its environmental performance in order to better understand its impacts and to monitor progress towards the targets in its [2018-2030 Environment Strategy](#).

The 2020-21 Greenhouse Gas Report forms part of LCC's Carbon Reduction Programme and its commitment to become a Net Zero¹ Council for its own operational emissions by 2030. This commitment was made in May 2019, alongside the Council's declaration of a climate emergency² and later followed with a further commitment of working with Leicestershire people and organisations to become a net zero county by 2045 or before.

This report focusses on LCC's own operational greenhouse gas (GHG) emissions for the 2020-21 reporting period and the Council's 2030 net zero ambition, which includes emissions from the Council's buildings, fleet vehicles, streetlighting and traffic signals, business travel, water and waste. The full scope of emissions included in this report are provided in Appendix1.

The Council has followed the [Government's Environmental Reporting Guidelines](#), published by BEIS and DEFRA (2019), alongside international best practice guidance from the [Greenhouse Gas Protocol](#).

In accordance with Government recommendations, this report is published on the Council's website.

“ Leicestershire County Council ‘declares a climate emergency’ and ‘recognises that there is an increasing urgency for action to avoid the worst impacts of climate change’. The Council ‘will aim to achieve carbon neutrality from its own operations by 2030’ and ‘commits to work with business and other public bodies across the county and region to deliver this ambitious goal through all relevant technologies, strategies and plans.

👤 Leicestershire County Council, 15 May 2019

”

¹ **Net zero** refers to the point when greenhouse gas emissions being emitted into the atmosphere are balanced with their removal, meaning there is no overall addition to atmospheric levels.

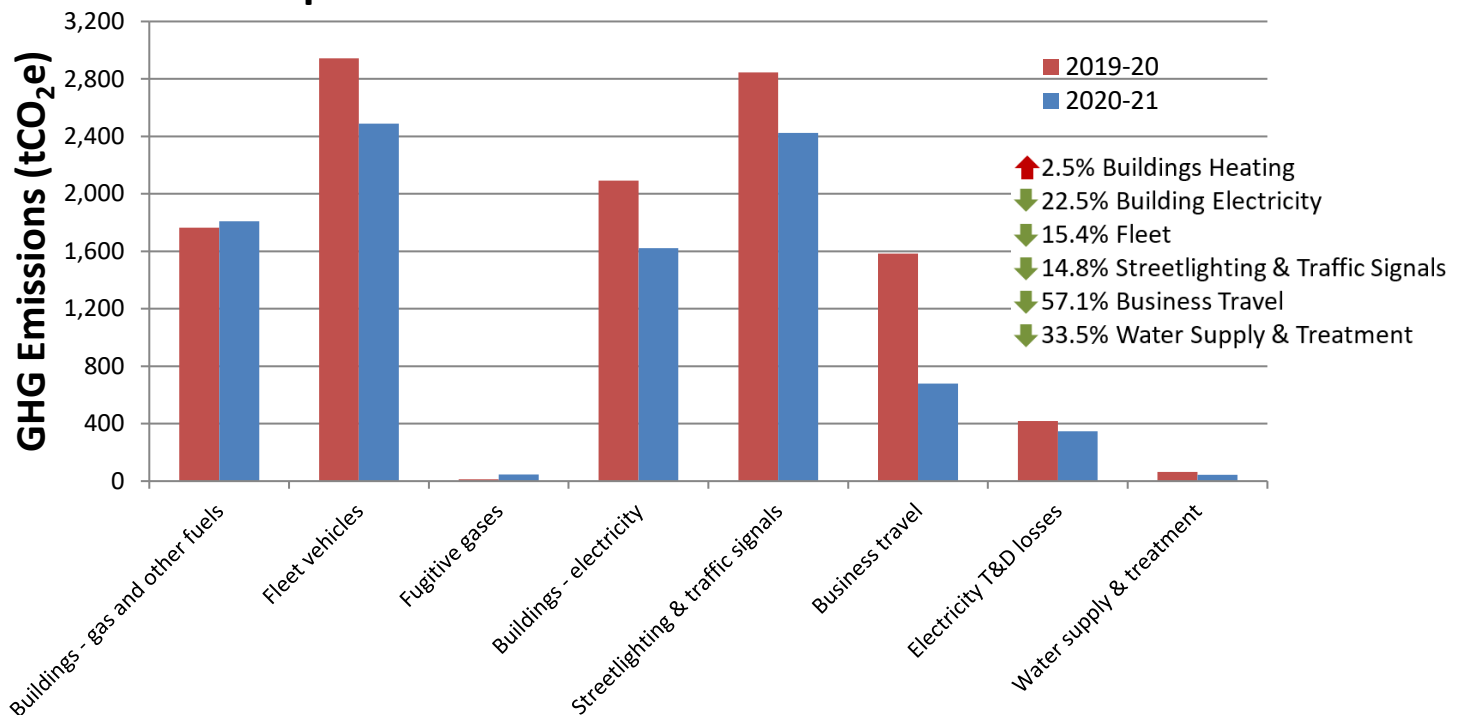
² A **climate emergency** is a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it.

2. Headline Figures

Total net 2020-21
GHG Emissions
9,434 tCO₂e

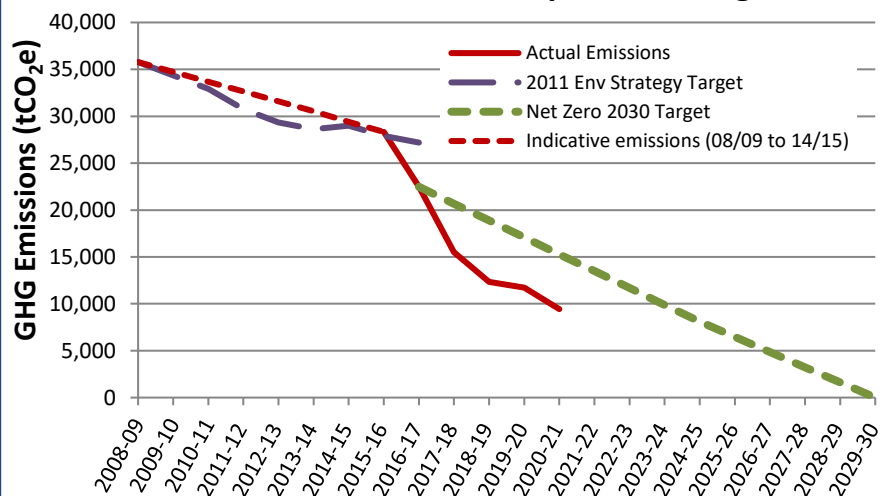
73.6% reduction since
2008-09 baseline
19.4% reduction
compared to 2019-20

Comparison of 2020-21 Emissions with 2019-20



- ✓ 2,268 tCO₂e reduction since 2019-20
- ✓ Significant reductions across business travel, streetlighting & traffic signals, building electricity and fleet.
- ✓ 417 tCO₂e reduction associated with the greening of the national grid
- ✓ 476 tCO₂e emissions avoidance through the use of on-site renewable energy, equivalent of 5% of 2020-21 emissions
- ✓ 5,853 tCO₂e below net zero targets

GHG Emissions Compared to Targets



3. Organisation Information

Leicestershire County Council is the local government authority that provides council services within the Leicestershire area.

Registered address is:
County Hall
Glenfield
Leicestershire
LE3 8RA.

Leicestershire County Council does not operate outside the UK, all emissions are UK based.

4. Reporting Period

1st April 2020 to 31st March 2021

5. Organisational Boundary and Operational Scope

The Council has followed the Government's Environmental Reporting Guidelines, published by BEIS and DEFRA (2019), alongside international best practice guidance from the Greenhouse Gas Protocol. The organisational boundary for reporting the Council's GHG emissions, for its own operations and activities, is Operational Control.

The operational scope includes the direct emissions from building heating and fleet (scope 1) and purchased electricity for buildings, streetlighting and traffic signals (scope 2) resulting from the owned and leased assets and operations where the Council is in operational control and is responsible for the purchase of energy or fuel. Some scope 3 emissions are also included: business mileage (grey fleet), transmission and distribution losses for electricity consumption, water supply and treatment, and waste. Following a review of LCC's GHG report, water and waste emissions have been included for the first time within scope, due to the Council having a considerable level of influence over these emissions sources and tackling them aligns to other Environment Strategy objectives.

The Council has excluded GHG emissions from schools (all scopes) and contracted services such as waste disposal and business travel by public transport (scope 3) due to the cost of data collection and/or its availability. The Council has also excluded the emissions resulting from activities undertaken by contractors due to limited requirements for contractors to annually monitor energy and fuel usage within existing contracts.

All greenhouse gas emissions are expressed as tonnes of carbon dioxide equivalent (tCO₂e).

See Appendix 1 for more information about scopes and sources of emissions, alongside commentary describing the basis for inclusion or exclusion within LCC's GHG footprint.

6. Baseline Emissions Year and Targets

The adopted baseline year is 2008-09 which the Council set in its Environment Strategy 2011 using a fixed base year approach.

Where there are relevant significant changes in the factors that informed the calculation of the base year emissions, such as the sale of council buildings, that result in a greater than 5% cumulative change in the total base year emissions, then the emissions for the base year and the year prior to the reporting year will be recalculated.

The Environment Strategy 2018-2030 includes a commitment to reduce carbon emissions from the Council's own estate and operations to net zero by 2030 and to achieve a 64% reduction in emissions compared to the 2016-17 financial year by 2025.

Joanna Gyll, Assistant Director Environment & Waste, Environment and Transport Department, is responsible for the achievement of the target.

7. Calculation Method

The Council has followed the Government's Environmental Reporting Guidelines, published by BEIS and DEFRA (2019), alongside international best practice guidance from the Greenhouse Gas Protocol.

Following this guidance, activity data has been collected for energy, resource and fuel consumption in buildings and vehicles under LCC operational control. Wherever possible this has been actual consumption based on bills, invoices and receipts. Activity data by volume or mass, e.g. kWh of energy or litres of fuel, have been prioritised for accuracy. However, where this is not available other methods have been employed for example miles travelled have been used for some transport sources. Estimated activity data covers less than 5% of emissions from building energy consumption and is based on extrapolation from known previous activity data.

The appropriate emissions factors for each year are drawn from the BEIS Greenhouse Gas Conversion Factor Repository.

Emissions factors published in 2020 have been used for the purpose of this report, as the majority of the period covered by this report fell within 2020.

The Council has adopted 'Full Time Equivalent employee' as the intensity factor across the organisation. From 2014-15 onwards, the intensity measure has only been applied to the Council's emissions, excluding schools, as employee and energy data for schools are no longer held by LCC.

Leicestershire County Council has not sought independent external assurance of the Greenhouse Gas Emissions Report.

8. 2020-21 Greenhouse Gas Emissions

GHG emissions data for period 1 st April 2020 to 31 st March 2021 (tCO ₂ e)						
	Sector	2020-21	2019-20	% Change	Base Year 2008-09	% Change
Scope 1 – Direct Emissions e.g. boilers, owned transport, air conditioning gases	Buildings	1,810	1,765	2.5%	4,317	-58.1%
	Fleet vehicles	2,489	2,944	-15.4%	4,358	-42.9%
	Fugitive gases	46	13	265.4%	-	-
	Sub-total	4,345	4,722	-8.0%	8,675	-49.9%
Scope 2 – Energy Indirect e.g. purchased electricity	Buildings	1,621	2,092	-22.5%	6,562	-75.3%
	Streetlighting & traffic signals	2,424	2,845	-14.8%	15,581	-84.4%
	Sub-total	4,045	4,937	-18.1%	22,143	-81.7%
Scope 3 – Other Indirect e.g. business travel and water supply/treatment	Business travel	679	1,585	-57.1%	3,237	-79.0%
	Electricity transmission & distribution losses	348	419	-17.0%	1,722	-79.8%
	Water supply & treatment	43	64	-33.5%	-	-
	Waste	3	7	-61.7%	-	-
	Sub-total	1,073	2,076	-48.3%	4,959	-78.4%
Total Gross Emissions		9,462	11,735	-19.4%	35,778	-73.6%
Carbon offsets		0	0	-	0	-
Renewable energy exports		-29	-33	-12.9%	0	-
Total Location-based Net Emissions		9,434	11,702	-19.4%	35,778	-73.6%
Full time equivalent (FTE) employees		4,789	5,129	-6.6%	6,880	-
Intensity measure: tCO ₂ e/FTE		1.97	2.28	-13.7%	5.2	-62.1%
Renewable electricity tariff		4,045	4,937	-	-	-
Total Market-based Net Emissions		5,418	6,798	-20.3%	35,778	-84.9%
Petrol and diesel (outside of scope)		0.09	0.09	6.0%	-	-
Woodchip (outside of scope)		754	935	-19.4%	-	-

Table 1: LCC 2020-21 GHG emissions, with a comparison to 2019-20 and the baseline year

2020-21 GHG Emissions by Source

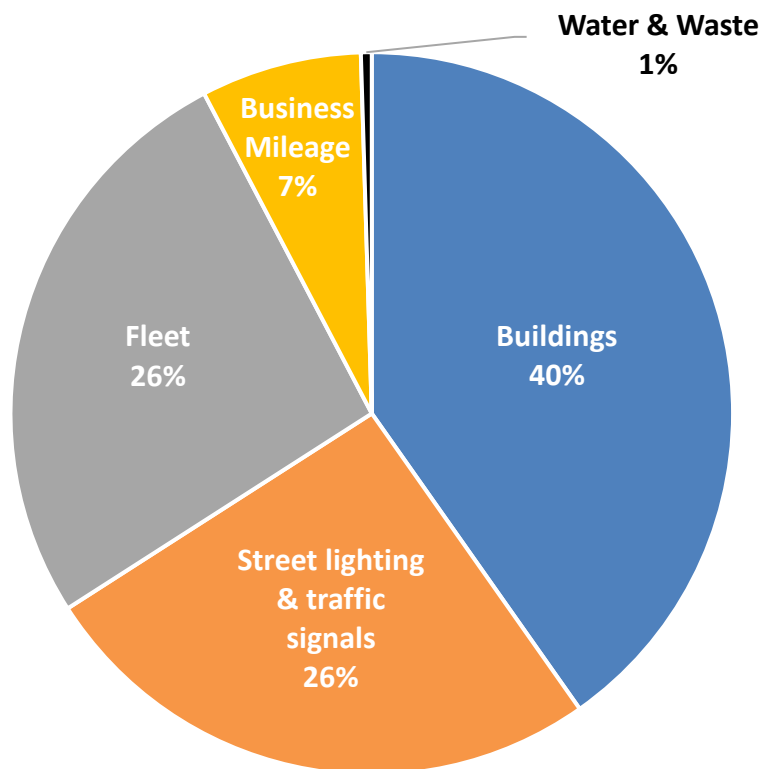


Figure 1: LCC 2020-21 GHG emissions by source.

2020-21 GHG Emissions by Scope

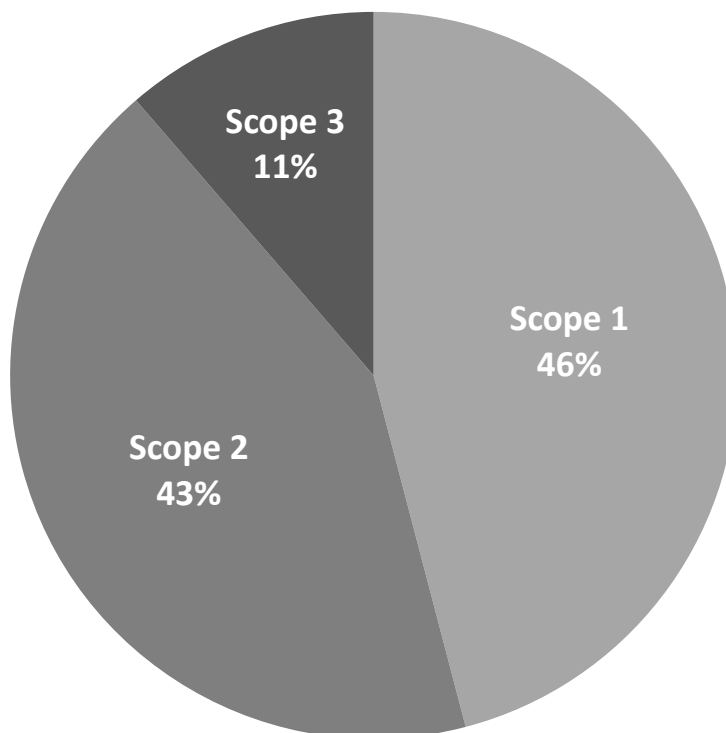


Figure 2: LCC 2020-21 GHG emissions by scope.

Comparison of 2020-21 GHG Emissions with 2019-20

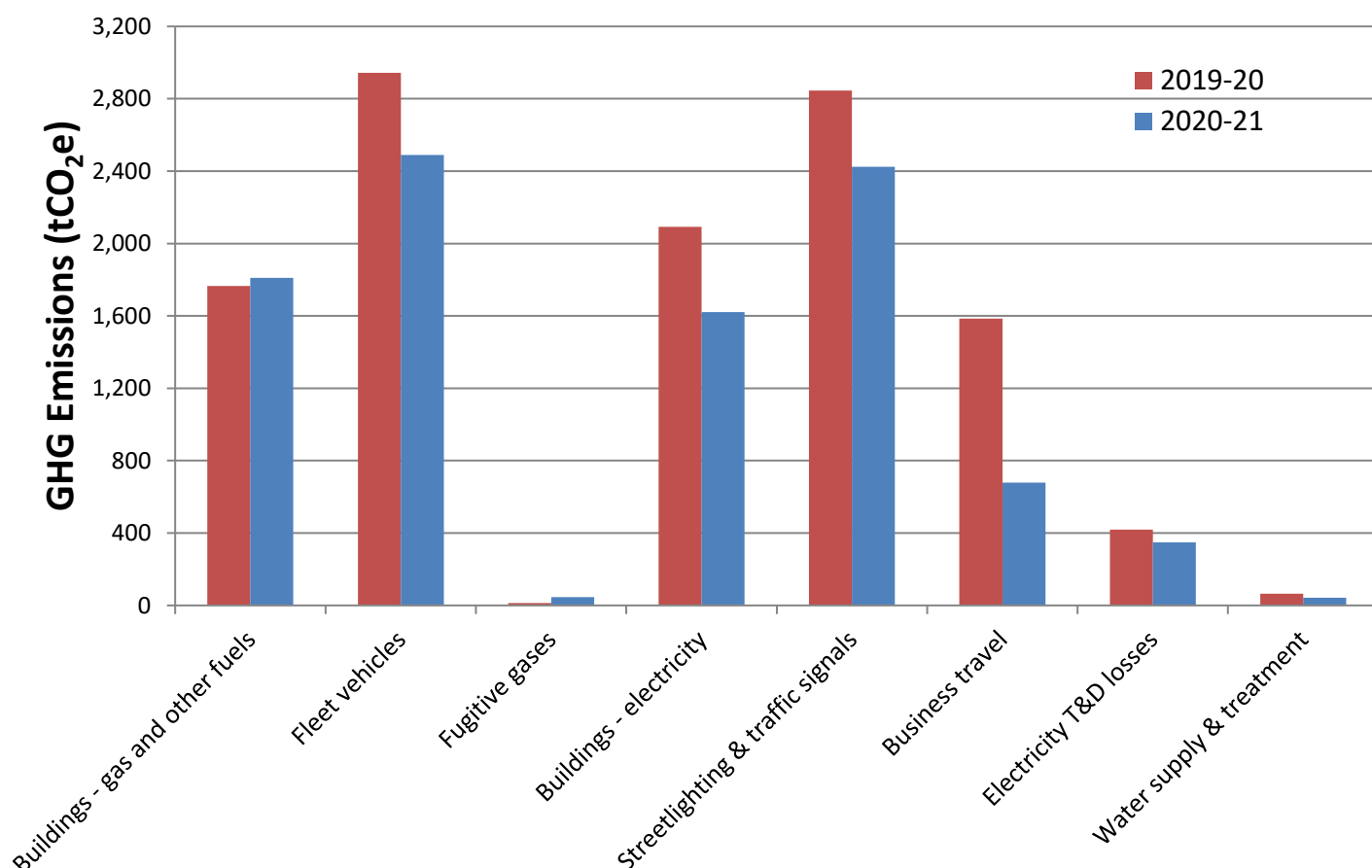


Figure 3: LCC 2020-21 GHG emissions by source, compared to 2019-20.

9. Performance Against Baseline and 2019-20

Leicestershire County Council net greenhouse gas emissions reduced by 19.4% (2,268 tCO₂e) compared to the 2019-20 financial year to 9,434 tCO₂e – equivalent of 1.97 tCO₂e per fulltime equivalent employees. This level of reduction has been achieved through significant levels of emissions reduction from business travel, streetlighting and traffic signals, building electricity and fleet. The Council recognises that Covid-19 lockdowns and the significant shift to LCC employees working from home would have impacted on the Council's operations and emissions during the entire 2020-21 financial year. This level of emissions reduction means LCC GHG emissions have now reduced by 73.6% since the 2008-09 baseline year. The below sections discuss the reasons behind these changes in more detail.

Scope 1 Emissions

Buildings (Heating and Fugitive Emissions)

Emissions from gas and other fuel use in buildings increased by 2.5% (45 tCO₂e) compared to 2019-20 levels. The main cause of this was due to Covid-19 regulations within buildings to keep building users safe, for example measures to increase ventilation within buildings were in force for much of 2020-21, which required more heating to maintain internal temperatures. There was also the requirement to continue to heat large areas of Council buildings despite having a much lower office capacity, due to having to socially distance office users. A small part of this increase can also be associated with slightly colder weather. When the figures are adjusted for temperature, consumption increases, reinforcing the impact of Covid-19 lockdown and restrictions on building heating emissions.

Looking at individual fuel types that make up the 2.5% rise in emissions demonstrates that an increase in gas use contributes all of the increased emissions (rising 4.3% compared with the year before). Meanwhile, LPG, oil, kerosine and wood chip emissions all reduced compared to 2019-20 by a combined 36% (31 tCO₂e).

Fugitive emissions increased by 265% (33 tCO₂e) compared to 2019-20. These emissions are calculated from information LCC maintains on refrigeration and air conditioning equipment to ensure compliance with F-gas regulations. The data experiences large annual variations due to the varying nature of leaks in systems and subsequent maintenance to top up F-gases. Despite the increase from the previous year, 2020-21 fugitive emissions remain below the average for the last 11-year period.

Fleet Vehicles

LCC fleet emissions reduced by 15.4% (455 tCO₂e) compared to 2019-20, halting the increase in fleet emissions seen over the previous two financial years. This reduction can mainly be attributed to the impacts of Covid-19 on Council operations. Emissions reductions have been noticed across almost all areas of the Council, such as Sustainable Travel (-39%), Operational Property (-22%), Waste Sites (-6%). Highways Operations is the only area where fleet emissions increased (0.5%), due to a 4% rise in diesel emissions offset by a 12% reduction in gas oil emissions. The rise in diesel emissions can be explained by the Council hiring more vehicles to ensure social distancing, resulting in additional diesel fuel usage in Highways Operations but overall, this was more than offset by reductions elsewhere in the Council's fleet.

Diesel fuel use remains the greatest source of LCC fleet emissions (86%), followed by gas oil use (13%) and petrol/distance claims making up the remaining 1%.

Scope 2 Emissions

Building Electricity

Emissions from electricity consumption in council operated buildings fell by 22.5% (471 tCO₂e) compared to 2019-20. The majority of this reduction (67%, 315 tCO₂e) can be attributed to the impact of Covid-19 lockdown and a significant shift to home working for Council employees, meaning less electricity was used during the year, e.g. desk equipment, printers and lighting within buildings. The Council's continued programme of energy efficiency and renewable energy investments across the property estate would also have contributed to some of this reduction.

The remaining 33% (156 tCO₂e) of the reduction seen within building electricity can be identified as the national impact of greening the electricity grid – the carbon conversion factor for UK electricity fell by 8.8% compared to 2019-20.

Streetlighting and Traffic Signals

Greenhouse gas emissions from LCC street lighting and traffic signals continue to improve in performance, as emissions fell by a further 14.8% (421 tCO₂e) compared to 2019-20. This is mainly due the decarbonisation of the national grid (54%, 227 tCO₂e) but also as a result of energy saving measures the Council has introduced, such as further ‘trimming and dimming’ of the streetlighting system to reduce electricity consumption, alongside the impact of different weather/lighting between years.

Scope 3 Emissions

Business Travel

Preliminary analysis using available data* shows LCC business travel emissions reduced by 57% (906 tCO₂e) because of 3.1 million less business miles claimed by staff in 2020-21 compared to 2019-20. Most of this reduction can be attributed to the impact of Covid-19 restrictions and a significant shift to working from home, reducing the ability but also the need to travel for business. Alongside the carbon emissions saving, this had a significant financial saving to the Council.

Prior to Covid-19, several projects were also in place which aimed to reduce the need to travel and manage staff journeys. These included the increased use of technology to enable more online meetings, provision of an electric pool vehicle and a flexible working policy. These may have also contributed to some of the reduction in business mileage.

*Business mileage claims for Q4 2020-21 are incomplete due to the Council’s shift to the new Oracle Fusion system, where claims have been made but data reports are not yet available.

Electricity Transmission and Distribution Losses

Electricity transmission and distribution loss emissions have reduced by 17% (71 tCO₂e) and can be explained by the reduced consumption detailed above (accountable for 60% of the change) and an 8% lower carbon conversion factor (accountable for 40% of the reduction).

Water Supply and Treatment

Emissions for water have been included within the Council’s GHG report for the first time in 2020-21. Though not previously included, water emissions have been calculated in previous years, allowing for changes since 2019-20 to be identified. Water emissions reduced by 33.5% (21 tCO₂e) compared to 2019-20 and can be attributed to the impact of Covid-19 on Council operations and the shift to home working. A third of this reduction in emissions is from water supply and the other two thirds from the treatment of wastewater used by the Council.

Waste

Emissions from waste generated in the Council’s offices have been included in the GHG report for the first time in 2020-21. Though not previously included, office waste emissions have been calculated in previous years, allowing for changes since 2019-20 to be identified. LCC emissions from office waste reduced by 61.7% (4 tCO₂e) since 2019-20 and can be attributed to the impact of Covid-19 on Council operations and the shift to home working.

10. Performance Against 2030 Net Zero Target

Leicestershire County Council's net GHG emissions in 2020-21 are 73.6% lower than the 2008-09 baseline. Figure 4 below demonstrates how LCC's emissions continue to fall well below the 2030 net zero target, where the previous 5-year period has seen an average emissions reduction of 19% per year. Currently the Council is performing 5,853 tCO₂e below net zero targets and requires an average of 1,048 tCO₂e per year reduction in future years to achieve net zero in 2030. It should be noted that prior to the impact of Covid-19, emissions reductions were beginning to slow down, which is expected as the Council's emissions become nearer to net zero and opportunities for emissions reductions become less frequent and smaller in magnitude.

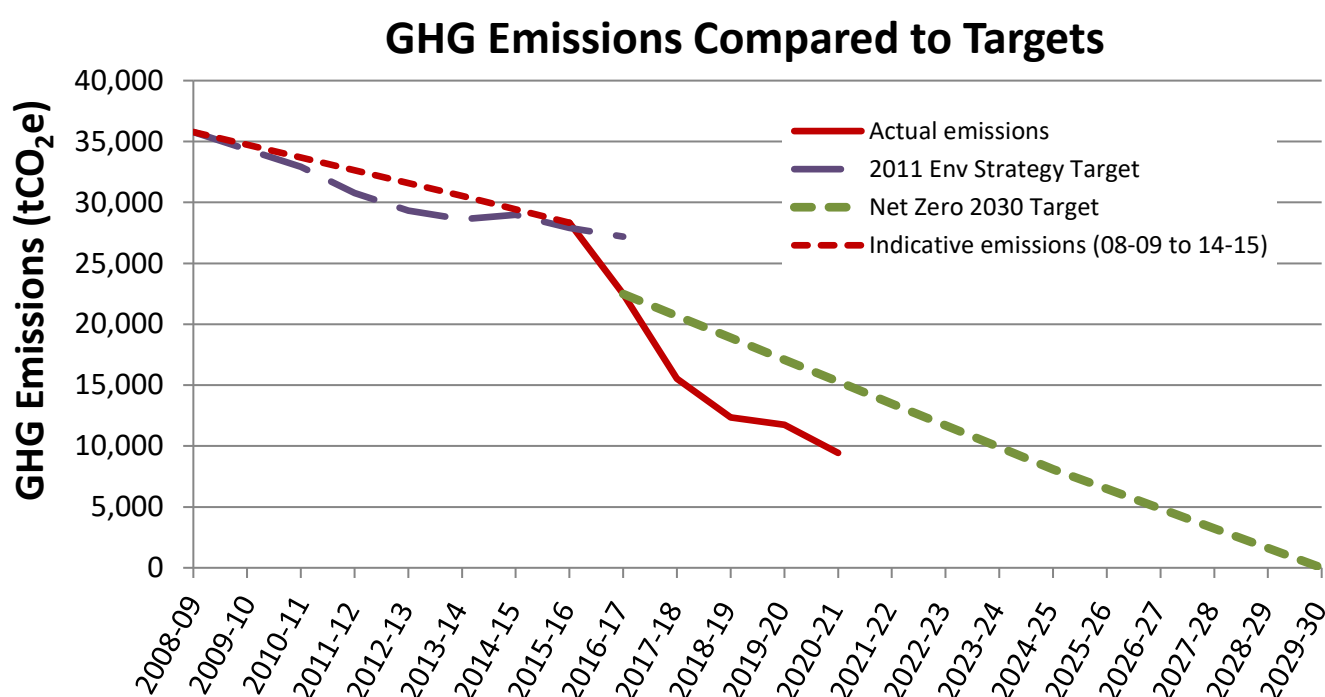


Figure 4: LCC actual net GHG emissions compared to 2011 Environment Strategy targets and the current 2030 net zero target.

11. Positive Actions

Renewable Energy and Emissions Avoidance

The Council has invested in solar photo-voltaic (PV) panels on many of its buildings. It is estimated that 25% of the electricity generated is not used directly in these buildings and is instead exported to the national grid for use by others outside of the Council. This effectively replaces the need for electricity to be generated from a fossil fuelled power station and can be used to 'net' off the Council's 'gross' emissions in the GHG report. County Hall generation has been excluded from the calculation as the high energy consumption in this building is likely to mean that all generated electricity is used on site.

In 2020-21, the Council is estimated to have exported 122,364 kWh of electricity to the grid, accounting for 28.5 tCO₂e (0.3% of LCC's gross emissions). Compared to 2019-20, exported solar PV netted off 13% (4.3 tCO₂e) less GHG emissions. This can be attributed to a number of factors including: the reduction in carbon intensity of the grid (discussed above), the number of annual sunshine hours, solar panel degradation/maintenance and incomplete solar generation readings between financial years.

Leicestershire County Council also uses biomass to provide heat to most buildings on the County Hall campus. In 2020-21, LCC biomass use was at its highest level. When combined with local solar PV generation on the Council's corporate buildings, 14.3% of energy used by the Council is from on-site renewables and avoided 476 tCO₂e of greenhouse gas emissions in 2020-21 (equivalent to 5% of LCC's net emissions and higher than any previous year), compared to if gas and grid electricity were consumed.

The Council sources biomass from a local supplier, Milner's Forestry, based in Markfield, which provides benefits of cost savings, carbon reduction, and biodiversity improvement, as well as local economy and woodland management benefits. 90% of the material used is sourced within The National Forest under management plans and felling licences. The remaining 10% of material is sourced from local arboriculture waste. The distance travelled to transport biomass to County Hall is reduced through this contract, whilst supporting local sustainable forestry management and reinforcing green jobs across the county.

Market-Based Emissions and Green Tariff

The Council changed its electricity contract to a green tariff in October 2019, meaning all grid electricity used by LCC now comes from renewable energy sources. In line with DEFRA/BEIS guidance and the Greenhouse Gas Protocol, the Council's headline emissions figures focus attention on LCC's location-based emissions, where this renewable generation is taken into account when calculating the national average grid electricity carbon emissions factor for the year.

In recognition of the Council's positive step in having a green energy tariff and supporting national decarbonisation of the electricity grid by increasing demand for low-carbon energy, the GHG report now also considers LCC's emissions following a market-based approach to reporting emissions. A market-based approach enables the Council to directly reflect the emissions associated with the electricity it purchases for its operations. Following this approach, the Council's 2020-21 electricity emissions (4,045 tCO₂e) are considered zero emission due to the electricity being produced by renewable sources. Total market-based emissions for LCC in 2020-21 were 5,418 tCO₂e (84.9% reduction compared to 2008-09 baseline).

Greener Bypass Resurfacing (wider scope 3)

Leicestershire County Council trialled new recycled and low carbon products and techniques in necessary highway improvements which recycled 5,000 tyres and saved 30 tCO₂e, compared to conventional resurfacing techniques. The Council's pilot project will go on to inform other local authorities as a case study on how to reduce emissions within highways projects across the UK.

Croft Quarry Restoration (wider scope 3)

Leicestershire County Council commissioned consultants to undertake a study of the GHG emissions associated with the transport of 14 million cubic metres of inert construction, demolition and engineering waste by rail, over a 20-year period, for the restoration of Croft Quarry, located in Leicestershire. The study assessed on site emissions, those arising from the transport of the waste and calculated the carbon sequestration arising from the habitat restoration scheme. This is a positive example of where the carbon impact of a project has formed a material consideration in the planning decision making process

Appendix 1 - Operational Scopes

The Council has measured scope 1, 2 and some of scope 3 emissions within the GHG Report, where accurate and annual data is available. The different scope of emissions are described below:

- **Scope 1** (direct emissions) Activities owned or controlled by the Council that release emissions straight into the atmosphere. Examples include emissions from owned or controlled boilers and vehicles.
- **Scope 2** (energy indirect) Emissions being released into the atmosphere associated with the consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of the Council's activities, but which occur at sources not owned or controlled.
- **Scope 3** (other indirect) Emissions are a consequence of the Council's actions, which occur at sources which are not owned or controlled. Examples of scope 3 emissions include business travel (e.g. use of staff vehicles or public transport), employee commuting, and purchased goods and services.

	Notes on inclusions and exclusions
Scope 1	
Council combustion e.g. gas, solid and liquid fuels in boiler plant	All fuel used in LCC owned and leased buildings where we are responsible for the bills (excludes schools). Less than 5% of total fuel use excluded where information was unavailable.
Owned and leased transport	Fuel consumption has been excluded if LCC does not pay for fuel
Fugitive emissions	Data is gathered from information LCC maintains on refrigeration and air conditioning equipment to ensure compliance with F-gas regulations. The data experiences large annual variations due to the varying nature of leaks and maintenance between years.

Scope 2	
Purchased electricity	All electricity used in all LCC owned and leased buildings where we have operational control and are responsible for the bills (excludes schools).
Scope 3	
Fuel well to tank emissions	Well to Tank emissions from energy, gas, liquid and solid fuels consumption have been excluded e.g. diesel, LPG, coal, electricity and natural gas.
Business travel	Business travel by public transport has been excluded, based on previous years this represents approximately 1% of scope 3.
Employee commuting	Excluded due to lack of good quality information and availability of data. LCC does not routinely monitor commuting so information was not available.
Water supply and treatment	Included for the first time in 2020-21 GHG Report
Waste generated in operations	Waste generated in Council offices has been included for the first time in 2020-21 GHG Report. Other sources of waste generated in council operations (e.g. highways construction) have been excluded due to data availability.
Purchased goods and services / Capital goods	Excluded due to lack of good quality information and availability of data.
Downstream leased assets	Some included within the Council's scope 1 and 2 data. Separation of third-party emissions where another organisation leases areas within some Council assets is not possible due to lack of good quality information and availability of data.
Investments	Excluded due to lack of good quality information and availability of data.
Out of scope	
Biomass fuel - woodchip	As a renewable fuel source, the carbon emitted from burning biomass is not included in the calculation as this will be reabsorbed by growing fuel trees as part of the natural carbon cycle.
Vehicle fuels – petrol and diesel	Standard vehicle fuels include a small percentage of biofuels. The carbon emissions from this element is 'out of scope' as it will be reabsorbed by new biomass crops.



**ENVIRONMENT AND CLIMATE CHANGE OVERVIEW AND
SCRUTINY COMMITTEE – 26 JANUARY 2022**

ENVIRONMENTAL PERFORMANCE REPORT 2020-21

REPORT OF THE DIRECTOR OF ENVIRONMENT AND TRANSPORT

Purpose of Report

1. This report provides details of the Council's environmental performance for 2020-21. The report provides an update on progress in delivering the targets in the Council's Environment Strategy 2018–2030 and on the performance of the Council's Environmental Management System.

Policy Framework and Previous Decisions

2. The Cabinet approved a new Environment Strategy 2018-2030 on 6 July 2018. The vision of the Strategy is that "Leicestershire County Council will minimise the environmental impacts of its own activities and will contribute to the improvement of the wider environment through local action. We will continue to play a significant role in protecting and enhancing the environment of Leicestershire, meeting the challenges and opportunities of climate change, and seeking to embed environmental sustainability into both social and economic development in the county."
3. A revised Strategy was subsequently adopted by the County Council on 8 July 2020, to account for the Council's declaration of a Climate Emergency in May 2019.
4. The declaration committed the Authority to achieving net zero greenhouse gas (GHG) emissions by 2030 for its own operations. Furthermore, the declaration committed the Council to working with partners and lobbying government to make the wider 2050 net zero target possible for Leicestershire and to limiting global warming to less than 1.5°C in line with Paris Agreement.
5. Subsequently, the County Council signed up to the UK100 Race to Zero Pledge and committed to achieving net zero emissions for Leicestershire by 2045.

Background

6. Environment and Climate Change Risk Registers identify actions to reduce GHG emissions from service activities, especially high-risk areas such as Property and Highways.

7. Where circumstances have changed since the end of 2020-21 in relation to environmental risks, the current position is provided where appropriate.
8. An external ISO14001 Environmental Management System (EMS) recertification audit was carried out in January 2021. No non-conformities were found and the single outstanding non-conformity was closed.
9. The environmental performance summary dashboard for 2020-21 is available at Appendix A.
10. The layout of the report follows the structure of the ISO14001 standard.
11. The 2020-21 reporting period took place during the global Covid-19 pandemic and the resulting UK lockdowns, and therefore should be seen as an exceptional year. It is not possible to determine any ongoing trends or to make any assumptions about future performance. The Covid-19 pandemic has resulted in a mixture of positive and negative impacts on the Council's environmental performance which is explained in the relevant sections of the report.

Measures currently behind target

C2b – Gas/biomass consumption (weather corrected) per m² in LCC buildings

12. This key performance indicator (KPI) looks at energy efficiency in Council buildings. Only buildings that have been in the Council's portfolio for six years are included so that any annual reductions seen in both electricity and gas consumption represent genuine efficiency improvements.
13. Gas/biomass consumption per square metre has increased slightly this year, remaining just above target. The actual figure for 2020-21 was 125.4 kWh/m² compared to a target of 112.5 kWh/m².
14. This has been due to the need to continue to heat many of the Council buildings while at the same time needing to increase ventilation to meet Covid-19 safety requirements. This has meant that more energy than usual has been used to heat the buildings.

C14 - Total CO₂ emissions from Leicestershire (under local authority influence)

15. Data is provided by the Department of Business Energy and Industrial Strategy (BEIS) for all UK regions and is two years in arrears. The data provided relates to 2019. Emissions fell again in 2019 and there has been a 32% reduction against the 2005 baseline. The figure for 2019 still showed that some 3.4 million tonnes of carbon dioxide were released in Leicestershire. The KPI is just behind the target of 3.3 million tonnes but is continuing an improving trend (see Figure 1).
16. The main driver of reduced emissions nationally is a change in the fuel mix for electricity generation, with a decrease in the use of coal and gas and an

increase in the use of renewables. The same pattern is reflected in the data for emissions in Leicestershire considered to be under the local authority's influence. Since 2005, four of the five emissions sectors have reduced considerably. The biggest falls were in the commercial and public sector sources with these falling by 53% and 51% respectively. Emissions from industrial and domestic sources fell by 44% and 36% respectively. While emissions from transport (excluding motorways) only fell by 1.7% in the same period.

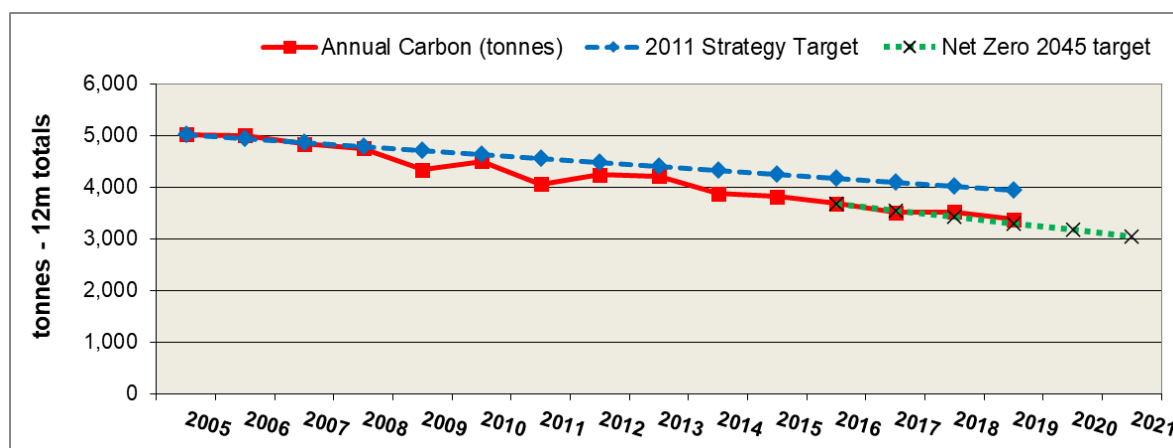


Figure 1: Total CO₂ emissions for Leicestershire (under local authority influence) 2005 – 2019

C15 - Total CO₂ emissions from Leicestershire road transport

17. This indicator is based on data provided by the Department of Business Energy and Industrial Strategy for all UK regions and is two years in arrears. The data provided relates to 2019. The data reflects all traffic emissions from roads and includes emissions from A roads, motorways and minor roads and excludes emissions from diesel railways and other forms of transport.
18. Based on this 2019 data, there has been a slight decrease in CO₂ emissions in the Leicestershire local authority area originating from road transport, falling by 0.3% to 1.838 million tonnes. However, the indicator remains 8.7% above the net zero target of 1.691 million tonnes and presents a significant challenge to meeting the national and County Council net zero carbon commitments (see Figure 2).
19. The Council's influence in this area is through Local Transport Plan (LTP) sustainable travel initiatives, which include working with businesses to encourage cycling, walking, and car sharing; personalised travel planning; providing walking and cycling infrastructure; contributing to the move to electric vehicles; improved Choose How You Move branding / website; and advocating for sustainable development in the planning arena. The production of LTP4 will present an opportunity to better identify what action should be taken to reduce emissions taking onboard the direction set by DfT's Transport Decarbonisation Plan.

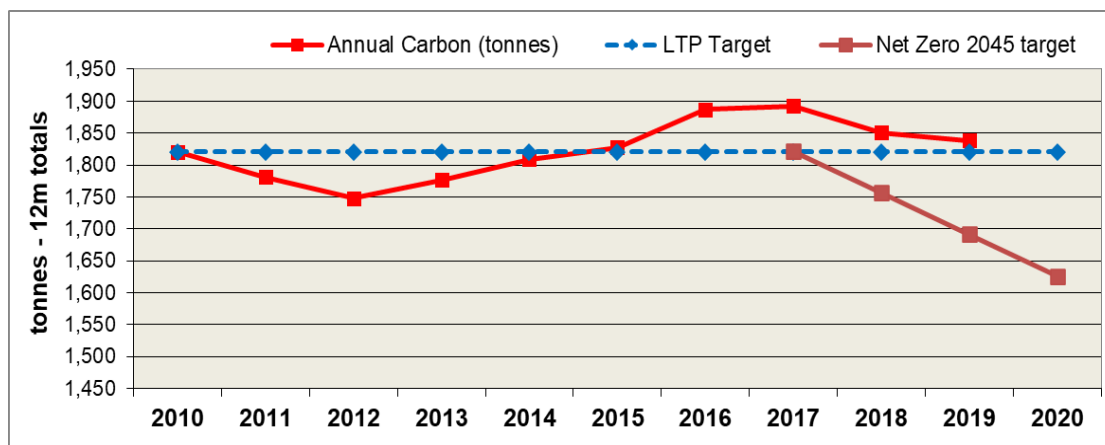


Figure 2: Total CO₂ emissions from roads (A roads, motorways and minor roads) in Leicestershire 2005-2019

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

20. The amount of renewable energy generated as a percentage of total energy consumed was 14.3% at the end of 2020-21, under the 21.6% target. The targets for this indicator have been updated to reflect the revised Energy Strategy 2020-30, which has a target of 50% renewable or zero carbon energy generation on corporate Council buildings as a percentage of annual consumption by corporate Council buildings.
21. The largest contributor to renewable energy generation is the biomass boiler at County Hall. This provides approximately three-quarters of the total renewable energy generated.
22. This indicator has been re-defined to ensure that only sites where both generation and consumption data is available are included. This figure is more accurate but slightly reduces the amount of renewable energy included.

LW2 - % Recycled from LCC sites

23. The 12-month rolling recycling figure fell throughout 2020-21 from 60.5% to 48.4% by the end of the year. This is well below the target of 62.3% for 2020-21. The target is to achieve a 70% recycling rate by 2030.
24. Separate targets have been set for County Hall (80%) and non-County Hall sites (60%). County Hall achieved an average recycling rate of 64.3% over 2020-21. Non-County Hall sites averaged 37.4% recycling over 2020-21.
25. While it is disappointing to see recycling performance decline, there has been a significant drop in the total amount of waste produced, reducing from 358 tonnes in 2019-20 to 133 tonnes in 2020-21. This has predominately been due to the Covid-19 pandemic and the need to close or reduce the use of Council buildings. Unfortunately, this has resulted in a change in the mix of waste, with

an increase in residual waste and a decrease in the amount of recyclable or compostable waste created resulting in a drop in recycling performance.

HW2 - % Household waste reused, recycled and composted

26. The annual household waste recycling figure has remained just above 43% for most of 2020-21. This is below the 50% recycling target for 2020 which is in line with the Waste Framework Directive. Recycling performance has dropped by 2% compared to the previous year.
27. Work has started on reviewing the Leicestershire Municipal Waste Management Strategy which will incorporate new targets such as those as set out in the Circular Economy Package (i.e. 65% recycling of municipal waste by 2035).
28. There are several reasons for the continued low performance, including national issues such as seasonal fluctuations in garden waste, light-weighting of packaging and economic factors, as well as issues specific to Leicestershire such as the closure of the Mechanical Biological Treatment plant (MBT). It is believed that the Covid-19 pandemic has also contributed to this year's reduction in performance.

M3 - Environmental risks scoring >15

29. At the end of 2020-21, there were a total of five environmental risks scoring 15 or more. These environmental risks relate to areas where the Council is not meeting legal requirements or Council policy or is significantly failing to address Environment Strategy objectives.
30. All the remaining risks sit with the Environment and Transport Department and are summarised as follows:

Environment and Transport Department – previously 5 risks, now 5:

- i) Ensure Cleaner Road Vehicle Regulations 2011 are being considered in the procurement of vehicles (**1 risk**). A new process for vehicle procurement has been developed which takes environmental factors into account. This risk will be reviewed once the new process has been fully trialled.
- ii) Biodiversity considerations not sufficiently taken into account in Highways mowing regimes (**1 risk**). Urban verge trials are continuing and expanding. These are being used to inform possible changes to mowing regimes. There is increasing public interest in having wildflower verges, but further systematic change is needed. This risk will be reviewed in the coming year to determine if sufficient progress has been made.
- iii) Various operational risks at RHWS sites (**3 risks**). Two of the risks relate to the need to install appropriate drainage infrastructure at two RHWS. Work has, or will start, on improving the drainage at the two sites during 2021-22 and these risks will be removed once the works have been completed. The third risk relates to inadequate access to waste disposal

outlets due to infrastructure closures. This risk will remain until the completion of future waste disposal procurement exercises.

Measures which are ahead of target

C2a – Electricity consumption per m² in LCC buildings

31. This KPI looks at energy efficiency in Council buildings. The actual figure for 2020-21 was 67.2 kWh/m² compared to the target of 79.8 kWh/m², so slightly ahead of target (low is good).

R1 - Outstanding actions on climate change risk register

32. There are currently no 'live' risks on the register, but this will change when a review of the climate change risk register is completed during 2021-22 and new risks are identified. A separate report on this will be presented to the Environment and Climate Change Overview and Scrutiny Committee at the March 2022 meeting.

LW1 - Total waste from LCC sites

33. The rolling annual waste figure reduced by almost 63% in 2020-21 compared to 2019-20, largely due to the Covid-19 pandemic. The figure of 132.8 tonnes is significantly ahead of the target of 410.1 tonnes. The figure is expected to rise as offices and other buildings continue to open, but efforts will be made to minimise the rise where possible.

P1a - Total office paper purchased

34. The data shows that the amount of paper purchased in 2020-21 reduced by 85% compared to the annual total for 2019-20, largely due to the Covid-19 pandemic and the move to digital delivery of services and working from home. The figure of 1.2m A4 sheets is significantly less than the target of 16.6m A4 sheets.
35. Work is and will take place to maintain the reduction in paper usage where possible. The reduction in paper use in part contributed to the fall in recycling performance, as there was less paper to recycle.

P2 - Commissioned print

36. The rolling 12-month total commissioned printing volume (tonnes) has decreased significantly compared to last year. It has dropped by 50% to 8.97 tonnes of paper used. The Authority remains well below target (where lower is better). This decline has largely been due to the Covid-19 pandemic as events were cancelled and clients closed their businesses or reduced operations.
37. Steps are being taken to streamline the data acquisition process for commissioned print going forward, in conjunction with the new Rio environmental performance reporting software project.

WA1 - Water consumption per full time equivalent member of staff

38. Estimated usage in corporate buildings fell significantly in 2020-21 to 40,743 m³, down from 61,271 m³ in the previous year. This is broadly in line with the lower average occupancy in many buildings across the year due to the Covid-19 pandemic. This has meant that the level of water consumption per full time equivalent member of staff has fallen from 11.95 m³ in 2019-20 to 8.51 m³ in 2020-21.
39. A new water supplier was procured in October 2020. This led initially to some excessively high usage estimates, which have now been corrected. Water data is still subject to some volatility, but it is believed that the current data provides a reasonable picture of consumption.

E1/E2 - Staff engagement

40. A survey is included in the mandatory Environmental Awareness E-Learning module to gather data for this KPI. Of the staff that completed the survey in 2020-21, 93% agreed that the Council was doing enough to reduce its impact on the environment and 96% agreed they understood how they can contribute to green issues at work.
41. This positive result represents effective and consistent engagement with staff through the Go Green scheme and the Council's internal communication channels.

M5 - Environmental enforcements/prosecutions

42. There were no enforcement notices or prosecutions logged in 2020-21.

Measures which are not performance ratedHW 1 - Total household waste per household

43. The quantity of household waste per household fell by 7% at the end of 2020-21 to 1,020kg, compared to the previous year. This was despite an increase in the number of people working and/or staying at home due to the Covid-19 pandemic. However, while there was an overall drop in waste, some waste streams increased putting additional cost on the service.

LW10 - % of recycled aggregates used in highways

44. The proportion of recycled aggregates used in 2020-21 was 51%, a slight increase on the previous year. The amount of recycled aggregate used varied throughout the year with almost 24% used in quarter 1 and 93% used in quarter 3.
45. The use of recycled aggregates may not always be the best environmental option when processing, logistics and energy use is factored in. However, recycled aggregates are used wherever possible and in certain schemes reduce transportation and waste costs as well as carbon emissions.

M1 - Environmental complaints

- 46. There have been two environmental complaints upheld during 2020-21 compared to five in 2019-20. Consequently the 12-month rolling figure has improved.
- 47. The two complaints in question were in relation to a poor-quality job by a contractor doing rights of way works and the RHWS Covid-19 rules causing an unnecessary trip for a resident.
- 48. Whilst there is no static target for this KPI, continuous improvement is expected. Levels of environmental complaints remain satisfactorily low.

M2 - Environmental incidents

- 49. There was one environmental incident reported in 2020-21 pertaining to a breach on the Ashby Canal resulting in the loss of water from the canal into an adjoining drainage ditch and local brook. There was concern that the breach may have allowed non-native species to enter the local river catchment, but two fish surveys did not find any non-native species in the local catchment.
- 50. Whilst numbers of incidents should ideally be zero, reporting and investigation of incidents should be encouraged.

Measures for which complete data is not availableC18 - Total business mileage

- 51. Annual business mileage claims continued to fall during 2020-21, largely due to the Covid-19 pandemic. However, due to the switch to the new Oracle Fusion system there has been a delay in getting accurate business mileage data for quarter 4. This data will be added into the system once it is received.
- 52. It is expected that the amount of business mileage will have reduced significantly compared to the previous year, with total business mileage being estimated at about 3 million miles for 2020-21. This would mean a reduction of 46% compared to 2019-20 and be almost half of the current target of 5.7 million business miles.
- 53. However, both the target and future plans to reduce business mileage will need to be reviewed in light of the Covid-19 pandemic and the proposed new ways of working at the Council.
- 54. Work is also taking place on developing an additional / replacement KPI that sets a target for reducing emissions from business mileage in line with the net zero carbon commitment. This should encourage both a reduction in mileage, as well as an increase in the use of lower emission vehicles.

Changes affecting the Environmental Management SystemExternal and internal issues that are relevant to the EMS

55. Uncertainties remain about the regulatory regime post Brexit and the creation of the Office of Environmental Protection.
56. The Environment Strategy Action Plan has been updated to indicate main areas of activity and opportunities for reducing carbon emissions and delivering the wider aims of the Environment Strategy. This is a live document and it is updated as new activity is identified.
57. Actions which are primarily focussed on reducing carbon emissions are included in a Net Zero Carbon Roadmap which is being developed in two tranches based on areas of control and influence. The Tranche 1 Roadmap which covers the Council's measured emissions has been developed and approved. The Tranche 2 Roadmap that covers the Council's unmeasured emissions and the wider Leicestershire emissions, is currently being developed.
58. Work is taking place on quantifying the new biodiversity KPIs. This work is due to be completed by March 2022, at which time the new KPIs will be included in the Environmental Performance Report.

The needs and expectations of interested parties, including compliance obligations and changes in political priorities/direction

59. There has been a growing political commitment to environmental issues across all political parties, both locally and nationally. This has increased with the COP 26 conference which took place in the UK in 2021. There are increasingly more new rules, duties, targets and funding opportunities being announced that support action on the environment.

Changes to statutory duties

60. There was one change in the Council's statutory environmental duties during 2020-21 with the Trading Standards section of Regulatory Services within Chief Executive's Department being required to enforce breaches of the sale of certain solid fuels under the Air Quality (Domestic Solid Fuels Standards) (England) Regulations.

Relevant changes to environmental legislation

61. There were significant relevant changes to general environmental legislation during 2020-21 mostly due the UK's withdrawal from the EU. There were too many to list here and are instead covered under the general reference to the European Withdrawal Act and Agreement below. Other relevant changes in environment legislation are also listed.

Act / Regulation/ Guidance/ Other	Summary of change / new requirements	Area affected
Waste (Circular Economy) (Amendment) Regulations SI 2020/904	Amended legislation in the UK to fully implement the 2020 Circular Economy Package in England and Wales and partially implement that Package in Scotland and Northern Ireland. The UK is committed to moving towards a circular	Waste Environment Economic Growth

Act / Regulation/ Guidance/ Other	Summary of change / new requirements	Area affected
	economy. This will ensure that resources are used and reused for as long as possible, and their maximum value is realised. The aim is that resources will be produced and used in a way that avoids them being disposed of quickly, ensuring they can be brought easily back into the value chain and used several times again.	
Environmental Protection (Plastic Straws, Cotton Buds and Stirrers) (England) Regulations SI 2020/971	Restricts the supply of: <ul style="list-style-type: none"> • single-use plastic straws, • single-use plastic-stemmed cotton buds, • plastic drinks stirrers. There are some exceptions to the ban on these products. These measures were introduced to help improve the environment and to prevent needless plastic waste.	Waste Property Leicestershire Traded Services
Producer Responsibility Obligations (Packaging Waste) (Amendment) (England) Regulations SI 2020/1336	Amend the Producer Responsibility Obligations (Packaging Waste) Regulations SI 2007/871 by varying the packaging waste targets for all materials as well as varying the targets set for specific materials.	Waste
Air Quality (Domestic Solid Fuels Standards) (England) Regulations SI 2020/1095	Include provisions relating to the appointment of an approved wood certification and manufactured solid fuel certification body. Restrict the sale of certain solid fuels and provide for the enforcement of breaches of these Regulations by a local authority.	Public Health Trading Standards
Energy white paper: Powering our net zero future	Sets out how the UK will clean up its energy system and reach net zero emissions by 2050.	Environment Economic Growth
Consultation on the Future Buildings Standard	Seeking views on the proposed changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations SI 2010/2214 for non-domestic buildings and dwellings, as well as address overheating in new residential buildings.	Property Environment
Waste Management Plan for England	The WMPE does not introduce any new policies or plans for England, its aim is to bring all current waste management policies together under one national plan. It sets out a vision and several policies to move to a more circular economy, many of which fall under the WMPE umbrella.	Waste
European Union (Withdrawal) Act 2018 and European Union (Withdrawal Agreement) Act 2020 (Commencement, Transitional and Savings Provisions) Regulations SI 2020/1622	Brought into force provisions of the European Union (Withdrawal) Act 2018 as well as the European Union (Withdrawal Agreement) Act 2020 on 31 December 2020. In addition, various EU Decisions/Regulations were retained, amended, or revoked in / from UK law.	Various

Act / Regulation/ Guidance/ Other	Summary of change / new requirements	Area affected
International Waste Shipments (Amendment of Regulation (EC) No 1013/2006) Regulations SI 2020/1455	The amendments made to the Convention aim to improve controls on transboundary shipments of plastic waste.	Waste
Consultation on the introduction of a deposit return scheme in England, Wales and Northern Ireland	Seeking views on the plans to introduce a deposit return scheme for drinks containers.	Waste
Consultation on packaging and packaging waste: introducing Extended Producer Responsibility	Seeking views on plans to introduce an Extended Producer Responsibility scheme for packaging waste.	Waste
Countryside Stewardship (England) (Amendment) Regulations SI 2021/42	Implementing changes to the Countryside Stewardship grant scheme, including introducing new activities that are eligible for funding.	Property Country Parks

62. The Environment Policy and Strategy Team now have access to an Environmental Legislation Information and Register Service (contract commenced 1 May 2020). This will strengthen the team's ability to advise on compliance obligations. The Legislation Register will be updated by the end of 2022, in particular to take account of the new Environment Act.

Environmental risks and opportunities

Any significant new / changed environmental risks or opportunities (such as new technologies or innovative solutions) relevant to this level of reporting.

63. Risk of climate change affecting the delivery of Council services e.g. flooding and heatwaves. The Environment Policy & Strategy Team is working to update Climate Change Risk Registers to help departments plan their responses. Services have been classed as "high risk" if they (a) are a key community support service that is vulnerable to severe weather events, (b) are part of the County's system of resilience to such events or (c) manage infrastructure assets (Highways and Property). These services have been assessed during 2019-2021, ahead of producing a Climate Change Resilience Update report in early 2022.
64. The report will cover climate change projections, the direct risks to services, and knock-on and compound risks. Based on results so far, and the recent third national Climate Change Risk Assessment for the UK, the risks of climate change for the Council are expected to have increased since the last assessment.
65. There is a risk that some of the KPIs may continue to be negatively affected by the Covid-19 restrictions. These include a reduction in recycling performance due in part to increased use of single-use plastics such as disposable plastic

items in the canteen and PPE, an increase in some types of household waste and carbon emissions due to more people working from home.

66. Central Print requested that an exception be allowed to the Timber Products policy regarding purchases of paper for commissioned print jobs, in view of the difficulty and cost implications of obtaining silk papers that are at least 75% recycled paper. This exception was approved during 2020-21.
67. There is an opportunity to co-align environmental and health objectives through the Air Quality & Health Action Plan developed as part of the Joint Strategic Needs Assessment. Discussions are taking place between the Environment team and Public Health on how to do this.
68. Opportunities arising from Covid-19 restrictions to support a green recovery and maintain the positive benefits for the environment e.g. reduced business mileage, paper use, energy and water consumption.

Adequacy of resources

Any shortcomings in staff / revenue / capital resources that are affecting the efficacy of the EMS or environmental performance.

69. One new member of staff joined the Environment Policy & Strategy Team in 2020-21. The Environmental Partnerships Officer post was filled in January 2021 after being vacant for eight months. This post supports the work on delivering the Council's Action for Nature priorities.
70. A new team was established to lead on the Council's carbon commitments – the Carbon Reduction Team. A Team Manager was appointed in March 2020 and a Senior Carbon Reduction Officer was appointed in June 2021. In November 2021 a new post in the Growth Unit of Environment and Net Zero Carbon Programme Lead was appointed to.

Relevant communications from interested parties

71. Levels of formal environmental complaints remain relatively low (two upheld during 2020-21).
72. There were no prosecutions or other relevant communications with regulators or stakeholders.
73. As public concern for environmental issues is increasing, it is anticipated that the Authority will receive more enquiries from the public regarding environmental performance and the impacts of the Council's own operations. The Authority is already seeing an increase in the number of Freedom of Information requests for environmental related information.

Internal and External Audit results

External Audits

74. External Audits are carried out by BM Trada annually to ISO14001 Environmental Management System Standard, with a full re-certification audit every three years.
75. An external ISO14001 Environmental Management System (EMS) recertification audit was carried out in January 2021. No non-conformities were found, and the single outstanding non-conformity was closed.
76. Only those services externally certified to ISO14001 are subject to internal and external audits, namely Property, Central Print and the Environment Policy & Strategy team.

Internal Audits

77. An internal audit programme was carried out during August – September 2020 as part of a three-year schedule. No major or minor non-conformities were recorded.
78. Two major non-conformities were raised in the previous internal audit carried out in February-March 2019. The issues related to a failure to provide the information required to confirm (i) compliance with the air conditioning energy assessment requirements of the Energy Performance of Buildings Regulations 2012, and (ii) follow-up action from previous air conditioning assessment report recommendations.
79. Since March 2021, an inventory of air conditioning systems has been provided and 10 additional buildings identified, which require air conditioning energy assessments. Assessment reports have now been provided for 7 of these 10 buildings. The Environment Team will continue to work with Property on obtaining the outstanding reports and ensuring that their recommendations are fully considered, through the regular Property environmental management meetings.
80. These non-conformities have been closed and the position will be re-evaluated as part of the next internal audit of the Hard Facilities Management function.

Opportunities for continual improvement (Environmental Management System, including opportunities for improved integration with other business processes or environmental performance)

81. The development of the Net Zero Carbon Roadmaps following the climate emergency declaration will present further opportunities for improving the environmental performance of the Council and producing possible financial savings in some cases.
82. Access to the legislation update service that was procured during the year will improve the robustness and effectiveness of the Environmental Management System.
83. A procurement exercise was carried out during 2020-21 for a new environmental sustainability performance reporting software, to replace the

current complex and vulnerable system based on interlinked spreadsheets and manual calculations. The new Rio system will be up and running from April 2022 and should provide a more effective and stable system for monitoring the Council's environmental performance.

84. Work is on-going with colleagues to better understand the impact of severe weather events on the Council and County by improving the use of existing Council data from sources such as Flooding, Property and Highways. This work is feeding into updates to the Climate Change Risk Registers.

Resource implications

85. While there are no immediate resource implications from this report, the Environment Act and subsequent legislation is expected to place new or additional duties on local government. Once these are known it will be necessary to assess whether there are any resource implications for the Council.
86. The Director of Law and Governance and Director of Corporate Resources have been consulted on the content of this report.

Conclusions

87. The following conclusions can be drawn from the environmental performance for 2020-21 based on the targets in the Environment Strategy 2018-2030:
 - i) The number of comparable indicators rated green has decreased from 11 to 9 compared to 2019-20. Though an indicator for which there is currently insufficient data is expected to be rated as green once the full data is received, so it is expected there will be a total of 10 green indicators for the year.
 - ii) The number of comparable indicators rated red has increased from 3 to 6 compared to 2019-20. The number of indicators rated amber has decreased from 3 to 1.
 - iii) The main reasons for these changes are that targets have been changed (made tougher) in line with recent net zero carbon commitments, and some of the improving and worsening performance has been as a result of the Covid-19 pandemic and how the Council and society has needed to respond to it.
 - iv) Environmental risks exceeding a score of 15 have remained at 5, though this is expected to reduce to at least 3 within 12-months.
 - v) Most amber and red indicators relate to areas where there is limited control or resources to address, or which have been adversely affected by the Covid-19 pandemic.
 - vi) The review of the Climate Change Risk Registers which is currently being completed will help the Council better prepare for the impacts of climate change that are likely to take place in the coming years and

decades, helping to highlight areas for action and increase the resilience of the Council's services going forward.

- vii) A new sustainability software solution called Rio, which is currently being implemented and expected to be fully up and running for the start of the 2022-23 financial year, will also improve the Council's environmental performance by replacing the current system with a more robust and modern one which will ensure error reduction, easier and more effective reporting, labour savings and improved reliability and confidence in the figures that are reported.

Circulation under Local Issues Alert Procedure

None.

Equal Opportunities and Human Rights Implications

- 88. This paper provides a report on the County Council's environmental performance and therefore in itself has no equal opportunities or human rights implications.

Recommendations

- 89. The Committee is asked to note the contents of the report.

Background Papers

[Link to Environment Strategy 2018-30](#)
[Link to Action for Nature document](#)

Appendices

2020-21 Environmental Performance Summary Dashboard

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Appendix

2020-21 Environmental Performance Summary Dashboard

Performance Summary		
KPI	Your Rating	Trend
Carbon / Energy		
C2a - elec consumption per m2 in LCC buildings	GREEN	improving
C2b - gas consumption per m2 in LCC buildings	RED	worsening
C14 - CO2 emissions from Leics (under LCC influence)	AMBER	improving
C15 - CO2 emissions from Leics road transport	RED	improving
C17 - renewable energy generated on LCC land	RED	improving
C18 - total business miles claimed	Insufficient data	improving
R1 - outstanding actions on climate change risk register	GREEN	no change
Waste		
LW1 - total waste from LCC sites (tonnes)	GREEN	improving
LW2 - % recycled from LCC sites	RED	worsening
HW1 - total household waste per household	no target	worsening
HW2 - % household waste reused, recycled & composted	RED	improving
LW10 - % recycled aggregates used in highways	no target	N/A
Resources		
P1a - total office paper purchased (A4 sheets)	GREEN	improving
P2 - paper used for LCC commissioned print (tonnes)	GREEN	improving
WA1 - potable water consumed per fte	GREEN	improving
Staff engagement		
E1 - staff agreeing - council doing enough for env.	GREEN	improving
E2 - staff understanding how to contribute to green issues	GREEN	worsening
Quality and compliance		
M1 - environmental complaints upheld	no rating	improving
M2 - environmental incidents	no rating	no change
M3 - environmental risks scoring >15	RED	no change
M5 - environmental enforcement/prosecutions	GREEN	no change

Note: Green = on or ahead of target, Amber = behind target but within 5% variance of the target, Red = behind target by more than 5% variance.

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