

**EXTRACT**  
**FROM ZERO CARBON ROADMAP PAPER CABINET ON**  
**TUESDAY 25 JULY 2023**

<b>Title of Report</b>	<b>ZERO CARBON ROADMAP UPDATE</b>
<b>Background Papers</b>	Minutes of 31 March 2020 Cabinet meeting where Zero Carbon Roadmap & Action Plan was adopted: <a href="#">Agenda for Leader of the Council Cabinet Member Meeting on Tuesday, 31st March 2020, 5.00 pm - North West Leicestershire District Council (nwleics.gov.uk)</a>  Zero Carbon Roadmap Year 2 report: <a href="#">Agenda for Cabinet on Tuesday, 19th July, 2022, 5.00 pm - North West Leicestershire District Council (nwleics.gov.uk)</a>
<b>Full Cabinet Report</b>	<a href="#">Agenda for Cabinet on Tuesday, 25th July, 2023, 5.00 pm - North West Leicestershire District Council (nwleics.gov.uk)</a>

**1. ZERO CARBON ROADMAP KEY THEMES**

1.1 The Zero Carbon Roadmap is divided into distinct activity groups.

Buildings	Forestry & Land Use
Power	Industry
Waste	Aviation
Transport	F-gases

1.2 North West Leicestershire emissions are dominated by transport, buildings, and industrial installations.

1.3 Council emissions are estimated at 2 ktCO<sub>2e</sub> for Council operated buildings and vehicle fleet; and a further 16 ktCO<sub>2e</sub> for Council homes leased buildings and leisure centres, The total 18 ktCO<sub>2e</sub> equate to 1.5% of the total estimated emissions of 1281 ktCO<sub>2e</sub> for the district.

1.4 The Council can directly influence a further 32% of emissions mainly through:

- Planning for new buildings
- Planning control for new industrial installations and site emissions
- Electric vehicle infrastructure
- Waste reduction and diversion from landfill

1.5 The initial focus is on the Council’s own activities and what direct action it can take. Other categories of activities identified are where the Council can influence and where it can help to facilitate.

**2. WORKING COLLABORATIVELY ON CLIMATE CHANGE**

2.1 The challenges of the Zero Carbon Roadmap are similar across the county of Leicestershire. Working collaboratively enables partners to learn from each other and achieve more together. This approach has enabled the Council to take part in activities and deliver projects that the Council would not be able to undertake on its own.

## 2.2 Green Living Leicestershire Partnership

2.2.1 Leicestershire District Councils together with Leicestershire County Council have an established environmental group which is currently chaired by the Chief Executive of Oadby and Wigston. In 2022, the Green Living Leicestershire (GLL) partnership was created, an officer led and chief executive supported mechanism to undertake joint zero carbon related projects together across the county.

2.2.2 The GLL partnership is currently working together on Sustainable Warmth, a grant funded retrofit programme to improve energy efficiency of private homes as well as a Solar Group buying scheme, electric vehicle charging schemes and a community engagement approach. It is a collaborative approach, sharing best practice, pooling resources and learning together.

## 2.3 Midland Net Zero Hub (MNZH)

2.3.1 MNZH supports public sector organisations across the Midlands to identify and develop local net zero and energy strategies and projects.

2.3.2 In 2022, MNZH led a consortium bid for Sustainable Warmth retrofit funding which then awarded funding to district councils. It is supporting GLL with a solar PV hub electric vehicle charging project.

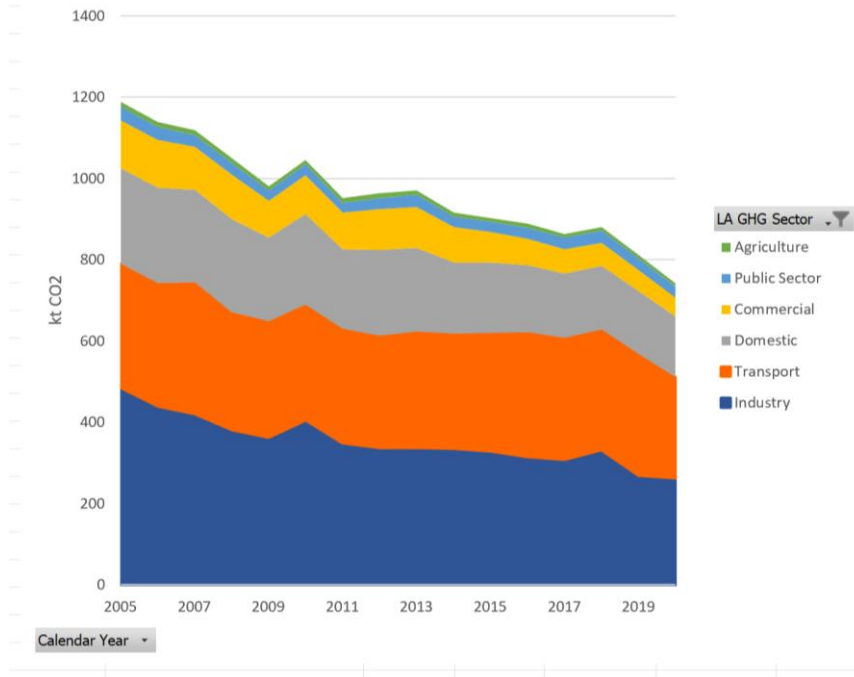
2.3.3 Through initial work with the Council and Everyone Active, MNZH has recently secured grant funding to work with Leicestershire District Councils and Everyone Active on a toolkit to help decarbonise leisure centres.

## 3. EMISSIONS MEASUREMENT

3.1 Members requested officers consider how they could report the impact of activity on carbon emissions. Information on measuring methodologies and detailed breakdown of the reporting developed is outlined in Appendix Two.

3.2 UK Government Department for Energy Security and Net Zero (DESNZ) carbon emission factors provides the best source for district emissions. This data is produced two years in arrears and it is available back to 2005. Data is based on territorial CO<sub>2</sub> emissions, those that occur within NWL borders.

3.2.1 The district level data indicates the following reductions between 2005 and 2020. Additional reporting is available in Appendix Two.



3.3 For the Council’s reporting, the Local Partnerships greenhouse gas accounting tool is used to report on direct emissions. It is based on the DESNZ (formerly BEIS) carbon emission factors.

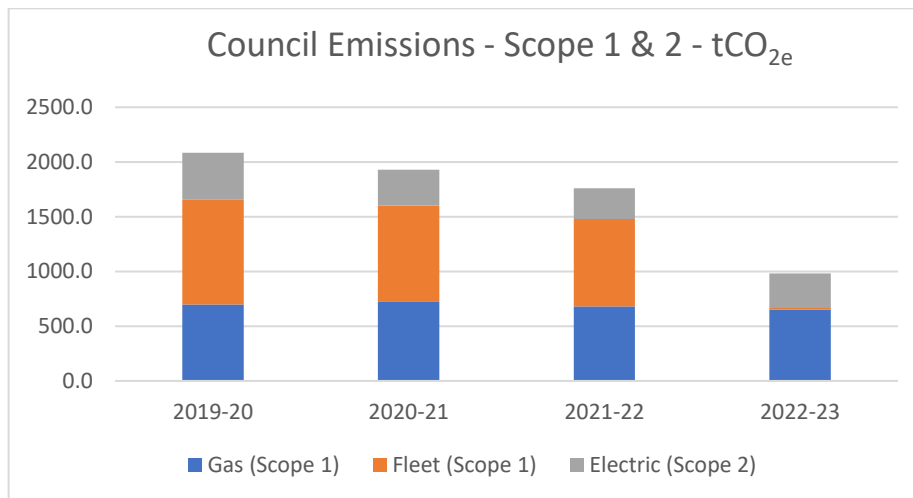
3.3.1 Emissions have reduced by 44.2% versus last year.

3.3.2 The biggest change in 2022-23 is driven by the fuel switch from diesel to Hydrotreated Vegetable Oil (HVO) for the entire fleet.

3.3.3 Next year, the Accommodation project incorporating the move to Whitwick Business Centre and Stenson House refurbishment will be reflected in gas and electricity emissions.

3.3.4 Summary of direct and energy indirect emissions

GHG emissions tCO2e	Sector	2022-23	2021-22	% Change 22/23 v 21/22	2020-21	% Change 21/22 v 20/21	2019-20	% Change 20/21 v 19/20	% Change 22/23 v 19/20	Difference tCO2e 22/23 v 19/20
<b>Scope 1 - Direct Emissions</b>										
Gas	Buildings	651.52	681.4	-4.4%	720.5	-5.4%	698.1	3.2%	-6.7%	-46.6
Diesel, HVO*	Fleet vehicles	13.4	797.7	-98.3%	880.8	-9.4%	955.8	-7.8%	-98.6%	-942.3
<b>Scope 2 - Energy indirect</b>										
Purchased electricity	Buildings	317.6	282.0	12.6%	327.2	-13.8%	429.6	-23.8%	-26.1%	-112.0
<b>Total Emissions</b>		<b>982.6</b>	<b>1761.2</b>	<b>-44.2%</b>	<b>1928.4</b>	<b>-8.7%</b>	<b>2083.5</b>	<b>-7.4%</b>	<b>-52.8%</b>	<b>-1100.9</b>



3.3.5 The data is sourced from the Council's invoices for utilities and from fuel usage for fleet. It excludes the leisure centres and tenanted properties.

3.3.6 Note: In the future, emissions reporting may expand to report on more categories, or property portfolios or fleet numbers might change, which may result in an increase in reported emissions at total level but actually reflect an improvement on prior year on a like-for-like basis.

3.4 Additional reporting is provided in Appendix Two including explanation of scopes, emissions measurement methodology, district level emissions data, Council buildings, Housing's intelligent energy SAVA system dashboard, EV charging usage, the food waste trial and recycling.

#### **4. YEAR THREE UPDATE**

4.1 Year Three has seen good progress on the Council's zero carbon agenda.

4.2 Key achievements include the Fleet Management Strategy with the arrival of the first electric vehicles and the large emissions benefit of the fuel switch from diesel to Hydrotreated Vegetable Oil (HVO); further provision on EV charging across the district; LED lighting in Council car parks, the refurbishment and move to Whitwick Business Centre, roll out of the new intelligent energy SAVA system for Housing which will underpin the Asset Management Strategy; progress on the Local Plan, the launch of Green Living Leicestershire alongside regular activities such as our free tree scheme,

4.3 Speed of progress has been challenging in some areas beyond the Council's control including lead times for electric vehicles and property Energy Performance Certificate (EPC) assessments the continued lack of government funding to support food waste expansion across the district. There has been limited progress on employee travel and scope 3 emissions. All outstanding activities will feature in Year 4 plans.

4.4 Additional activities include being one of the first to sign up to the Leicestershire Climate and Nature Pact and rolling out Carbon Literacy and Net Zero training across the Council, which will also form part of Member inductions.

4.5 A Year Three activity is listed below, a detailed progress summary is available in Appendix One.

No.	Sector	Action Plan Overview
<b>Buildings</b>		
1	Social Housing	Implement the asset management plan, including the zero carbon commitments to drive energy efficiency improvements and emission reduction in tenants' homes. Explore grant funding including Social Housing Decarbonisation Fund (SHDF) and Energy Company Obligation (ECO)
		Fit LED lighting and explore EV charging opportunities across the HRA estate.
		Develop reporting to demonstrate emission benefits from property improvements
2	Property	Develop a property portfolio energy efficiency action plan and address commercial F&G EPC ratings
		Explore options for retrofitting of technology that will generate power at a lower carbon cost, including the Accommodation project
		Build better understanding capacity of the infrastructure networks around our buildings to support a switch to lower carbon power sources and EV charging.
		Regeneration activity will consider zero carbon implications within all projects.
		Develop reporting to demonstrate emission benefits from property improvements
3	Leisure Centres	Together with Everyone Active, develop action plan to drive a reduction in emissions at the Leisure Centres.
4	Private Sector	Together with Leicestershire Authorities partnership, deliver the Sustainable Warmth programme to increase the energy performance of homes across the district improve the efficiency of some of the worst energy efficient homes in the district.
<b>Power</b>		
5	Utilities	Develop a utilities strategy.
		Review usage data/property EPCs to identify opportunities to reduce consumption at council owned and operated buildings.
6	LED lighting	Convert all the lighting in NWLDC car parks to LED and review HRA lighting.
7	Planning	Build the Council's zero carbon ambition into the substantive review of the Local Plan including renewable energy and energy efficiency standards for new homes.
		Reflect the Council's zero carbon ambitions in the Good Design Supplementary Planning Guidance
		Explore carbon offset options including opportunities for the Council to be a biodiversity and carbon offset provider
8	Solar Together	Support the delivery of the Solar Together group buying scheme to assist householders and small businesses to install solar PV and battery storage
9	Mine Water	Continue to explore mine water feasibility - this technology could provide low carbon, low cost heat from water from dis-used mines underneath Coalville with the potential to feed the new Leisure Centre, Stephenson College and the council offices.
<b>Waste</b>		
10	Recycle more	Refresh the Recycle more strategy.
		Develop reporting to reflect landfill kgs per person and estimate emission savings through diverting waste from landfill.
11	Food Waste	Continue to develop the business case and explore government funding to expand to provide a cross-district service.
<b>Transport</b>		
12	Fleet	Continue to roll out the Fleet Management Strategy, including fleet replacement, infrastructure and housing trials.
13	Cycling & Walking	Complete action plan Q3 and develop local infrastructure plans and priorities to build connectivity improvements.
14	EV charging	Install EV charging at Peggs Close in Measham and Whitwick Business Centre.
		Plan EV charging at Money Hill car park.
		Support the Flex-D solar hub project with Leicestershire Authorities to develop a business case and seek funding
		Explore further EV opportunities across the Council's portfolio, including HRA.
15	Employee Travel	Conclude the review of employee travel and travel expense policy to encourage staff to consider their carbon footprint.
<b>Other</b>		
16	Finance	Investment strategy - review treasury guidelines for use next financial year.
16	Finance	Explore how to reflect and embed zero carbon impact in financial decision making
17	Reporting	Establish approach to explore Scope 3 emissions (indirect, supply chain) reporting, to shape the Council's procurement policies and influence spend

18	Air Quality	Continue delivering air quality action plan
19	Business	Continue to promote zero carbon related activity to local businesses
20	Biodiversity	Continue free tree scheme, planting trees and support communities with grants
21	Engagement	Consider LCC net zero consultation and use feedback to shape district engagement plan.

## 5. YEAR FOUR PLANS

5.1 A key focus will be on the Council's buildings and asset management plans.

No.	Sector	Action Plan Overview
	<b>Buildings</b>	
1	Social Housing	<p><i>The actions below are all drawn directly from the Housing Asset Management Plan approved by Cabinet in July 2022 and included given the scale of the contribution of social housing to the Council's carbon footprint.</i></p> <p>Start retrofitting green measures to existing housing owned by the Council or through the Asset Management Plan process consider demolition /or rebuild opportunities to improve the building energy efficiency (including insulation, improving air tightness, mechanical ventilation with heat recovery, air source heat pumps, solar PV) targeting high emission homes first and including pilot projects to establish costs and risks of a potential wider roll out throughout the district.</p> <p>Set best practice energy standards of future housing built or acquired by the council, or on council land. This should be consistent with the recommendations of the Committee on Climate Change (CCC). Report on the future of housing (i.e. space heating demand &lt; 15-20 kWh/m2.yr). PassivHaus or equivalent should be considered and an assessment against Net Zero Carbon should be required.</p> <p>Continue to reduce the Council's carbon emissions and to achieve a minimum EPC rating of C by 2030 for all homes, seeking funding to support this with alternative options explored where this is not feasible.</p> <p>Set best practice energy standards of new buildings built or acquired by the council. This will be consistent with BEIS energy mission to halve energy use in new buildings. PassivHaus or equivalent will be considered and an assessment against Net Zero Carbon will also be undertaken.</p> <p>Review all data available to confirm low efficiency homes through EPC data, future capital works due to the fabric of the building and construction types. A risk rating will be produced against each property which will assist the council in bidding for future grants to install green measures.</p> <p>Develop a programme to replace all inefficient car park lighting schemes in the council's HRA-owned land. This will include a programme to replace existing lighting with efficient LEDs, and improve controls to save energy in the longer term.</p> <p>Review current EPC ratings and determine if these are accurate based on information we hold on similar properties where an EPC has been completed within the last two years. This will help in reclassifying EPC ratings where they are incorrect. New EPCs will be completed to ensure there is an accurate information to inform future bids.</p>
2	Property	<p>Develop a full commercial property asset management plan to drive energy efficiency improvements across the portfolio and inform and shape the capital plan</p> <p>Explore options for retrofitting of technology that will generate power at a lower carbon cost, including the Accommodation project</p> <p>Build better understanding capacity of the infrastructure networks around our buildings to support a switch to lower carbon power sources and EV charging at commercial properties.</p> <p>Regeneration activity will consider zero carbon implications and biodiversity net gain within all projects.</p> <p>Develop improved reporting to demonstrate emission benefits from property improvements</p>
3	Leisure Centres	Together with Everyone Active, continue to drive a reduction in emissions at the Leisure Centres, build the business case to install solar panels and explore funding opportunities to support delivery of energy and carbon reductions.

4	Private Sector	Together with Green Living Leicestershire partnership, deliver the Sustainable Warmth programme (LAD3 on-gas and HUG2 off-gas) to improve the efficiency of some of the worst energy efficient homes in the district.
	<b>Power</b>	
5	Utilities	Develop a utilities strategy. Continue to review usage data/property EPCs to identify opportunities to reduce consumption at council owned and operated buildings.
6	Planning	Build the Council's zero carbon ambition into the substantive review of the Local Plan including renewable energy and energy efficiency standards for new homes. Reflect the Council's zero carbon ambitions in the Good Design Supplementary Planning Guidance refresh. Explore carbon offset options including opportunities for the Council to be a biodiversity and carbon offset provider Implement Biodiversity Net Gain legislation requirements (from November 2023) and support the development of Local Nature Recovery Strategy (lead by Leicestershire County Council)
7	Solar Together	Support the delivery of the second Solar Together group buying scheme to assist householders and small businesses to install solar PV and battery storage
8	Energy Switch	Support the delivery of the Energy Switch group buying scheme to assist householders to switch to renewable energy
9	Mine Water	Continue to explore mine water feasibility - this technology could provide low carbon, low cost heat from water from dis-used mines underneath Coalville with the potential to feed the new Leisure Centre, Stephenson College and the council offices.
	<b>Waste</b>	
10	Recycle more	Refresh the Recycle more plan incorporating all relevant actions from the Zero Carbon Roadmap and Action Plan. Develop key performance indicators for waste, recycling and emissions to monitor progress and impact of the Recycle more refresh Continue with the food waste collection trials and prepare for legislative changes and funding to facilitate district-wide collections.
	<b>Transport</b>	
11	Fleet	Continue to roll out the Fleet Management Strategy, including fleet replacement, infrastructure and housing trials.
12	Cycling & Walking	Delivery of cycling & walking in Kegworth. Work with County to support the development of the NWL element of Leicestershire Cycling and Walking Infrastructure Plan with a view to being able to access Active Travel England funding to be able to deliver elements of NWL LCWIP. Complete cycling & walking action plan in Q3 and develop local infrastructure plans and priorities to build connectivity improvements.
13	EV charging	Complete installation of EV charging at Whitwick Business Centre and install EV charging at Ibstock car park Support the inclusion of EV charging at Money Hill car park. Support the delivery of Flex-D solar hub project at London Road with Green Living Leicestershire partnership and Midland Net Zero Hub. Explore further EV charging opportunities across the Council's property portfolio, including HRA.
14	Employee Travel	Conclude the review of employee travel and travel expense policy to encourage staff to consider their carbon footprint.
	<b>Other</b>	
15	Finance	Explore how to reflect and embed zero carbon impact in financial decision making, including business cases, budget setting and the capital process, and make preparations to explore Scope 3 emissions (indirect, supply chain related) in 2024/25. We will strive to deliver a range of initiatives, but the anticipated cost will need to be supported by accessing significant external funding opportunities as well as government funding and investments to reduce overall running costs
16	Procurement	Contribute to the Procurement Strategy delivery and zero carbon related elements
17	Reporting	Establish approach to explore Scope 3 emissions (indirect, supply chain related) reporting, to shape the council's procurement policies and influence spend
18	Air Quality	Continue delivering air quality action plan
19	Business	Continue to promote zero carbon related activity to local businesses
20	Biodiversity	Continue free tree scheme, planting trees and support communities with grants

		In partnership with LCC, plant trees on highway verges in Coalville area in Winter 2023/24
		Deliver elements of Hermitage Recreation Ground Eco Park and improve biodiversity working with the National Forest and Woodland Trust funded Tiny Forest
		Develop Tree Strategy for the planting and management of the Council's Tree stock.
21	Engagement	Work in conjunction with Green Living Leicestershire to develop district engagement plan.
22	Governance	Consider the actions necessary for the Council to become ISO14001 accredited, and the timescales involved