

## Blaby District Council **Strategy**

### 2030 Council Net Zero Action Plan

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## 2030 Net Zero Council Action Plan

December 2023

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## Foreword

Today we face a global climate emergency<sup>1</sup> which requires us to think beyond 'business as usual'. Local Authorities have an important role to play and as a District we need to act now to reduce our carbon emissions. We need to prepare and adapt to deal with the inevitable impacts of climate change. We recognise that achieving our vision will not be easy as there are entrenched market and wider forces that support existing fossil-fuel dependent, high consumption-based economic systems.

Climate change increases the likelihood of extreme weather events, including floods, droughts and heatwaves and the health impacts are likely to be significant. In recent years there have been increasing public calls for action on climate change and the environment, be that in terms of reducing the use of single use plastics, improving air quality, encouraging the switch to electric vehicles and improving energy efficiency.

Blaby District Council's emissions account for less than 0.1% of district's emissions yet offer an opportunity for the council to show leadership and demonstrate that it can lead by example. Through setting an ambitious goal, the council hopes to end its contribution to climate change as soon as possible and inspire others to do the same.

The collective response to Covid 19 has demonstrated our ability to take significant and far reaching steps to tackle a global threat. It has shown us how we can innovate and deliver our services differently. The lockdown brought about significant benefits to air quality and the environment and it demonstrated how behaviours can be dramatically changed through effective communication and leadership in response to a global health emergency. We will use what we have learnt from the pandemic to inform our Net Zero action plan and shape our response to the global climate emergency.

We have an exciting opportunity to address the challenge of climate change whilst also bringing about numerous co-benefits; improving the health and well-being of the community, reducing inequality, delivering sustainable new homes, cleaner air and creating jobs. This is a complex problem and we know that no single organisation alone can deliver the scale and pace of change we need. So we will engage widely to understand how we can work together to achieve the ambitions set out in our Climate Change Strategy. This action plan provides a pathway for Blaby District Council to become net zero as an organisation by 2030. A separate '2050 Net Zero District Action Plan' will set out how as a council is helping the wider community achieve Net Zero by 2050.

Cllr Terry Richardson Leader Blaby District Council

Cllr Les Phillimore Portfolio Holder for Housing, Community and Environmental Services.

## Executive summary

Blaby District Council is committed to becoming a Net Zero<sup>2</sup> council for its own operational emissions by 2030 and includes emissions from vehicle fleet, buildings, business travel, waste and water use. This builds on the commitments of our Climate Change Strategy.

### Timeline to Net Zero

#### 2023/24

- Install Solar PV and battery storage at Whetstone Depot and Enderby Leisure Centre.
- Begin phase 1 HV/LV electrical infrastructure.
- Install smart energy management system and heating controls at main office.
- Continue with like for like replacement of Gas Boilers at main office.
- Introduce an EV Salary Sacrifice scheme for staff.
- Install Workplace Chargers.
- Purchase an electric roadsweeper (AQ grant funded)
- Purchase refuse lorry Electric Retrofit (AQ grant funded)

#### 2024/25

- Phase 2 LV EVCP Distribution to coincide with first wave of eRCV's.
- Phase 2 Charging Points to coincide with first wave of eRCV's.
- Have reduced greenhouse gas emissions by 80% by 2025, compared to a 2018/19 baseline.

#### 2025 - 2030

- Continued roll out of charge points and EV's as part of vehicle replacement schedule and phase out HVO.
- Introduce EV pool cars initially for high business mileage users with full decarbonisation of business mileage by 2030.
- Reduce annual energy consumption from council buildings by at least 30% by 2030 compared to 2019-20.
- Switch to low carbon heating system at Whetstone Depot.
- Source 50% of annual energy consumption in corporate council buildings from on-site renewable or zero-carbon energy generation by 2030.
- Continue to minimise the council's scope 3 emissions arising from its value chain.
- Prioritise local carbon sequestration and insetting to offset those residual greenhouse gas emissions that are unable to be eliminated, substituted or reduced further by 2030.

The 2030 Net Zero Council Action Plan outlines the council's vision and strategic approach to delivering net zero, alongside an overview of greenhouse gas emissions and a range of scenarios, highlighting that the council has to continue to act to reduce its own emissions. This is a revision of our first plan drawn up in 2020 and focuses specifically on the actions we are undertaking now and the intended future actions to deliver our commitment to achieving net-zero across the Council's operations by 2030.

Projects and actions have been identified across four emissions sources (Estates, fleet, business travel, Out of Scope emissions) and four enabling themes (Finance, Embedding net zero into the council, net zero ways of working and influencing indirect emissions).

This plan identifies a number of high priority projects including the need to switch to low carbon heating, transition to an electric vehicle fleet and decarbonisation of the council's business travel.

Blaby District Council acknowledges the importance in acting to reduce its wider emissions, including those that arise from the supply chain, leased assets, employee commuting and investments (Out of Scope Emissions). Whilst these emissions are not included in the 2030 commitment, actions to influence and reduce emissions associated with these categories have been included within the action plan, in line with the district's 2050 net zero commitment.

Between now and 2030, the actions and projects within this plan will be monitored and reviewed on an ongoing basis and each year the council will publish its Greenhouse Gas Emissions Report, along with an update of the action plan tables.

## **Background and Drivers for Net Zero**

The science is unequivocal and that there is now an urgency to address climate change. The impacts of climate breakdown are already causing serious damage around the world. The 2021 Intergovernmental Panel on Climate Change Report identified the last five-year period has been the hottest on record since 1850 and that human influence is 'very likely' to be the main driver of climate change. In July 2022 an all-time high temperature of 40.3°C was recorded in the UK. Future climate projections (UKCP18)<sup>3</sup> suggest this trend will continue, and will result in hotter and drier summers, warmer and wetter winters with more extreme weather events across the world. However the catastrophic impacts of climate change can still be avoided if we act quickly.

In May 2019 the UK became the first parliament to declare a climate emergency. In 2021, the United Kingdom (UK) hosted the 26th Conference of the Parties, known as 'COP26', which brought together nearly 200 countries across the world to discuss and agree on taking action to tackle climate change. COP26 concluded with countries agreeing to the Glasgow Climate Pact, highlighting that urgent and accelerated climate action is needed to keep the ambition of limiting global temperature rise to 1.5°C in sight, originally agreed in the Paris Agreement in 2015. Countries also agreed to revise and strengthen their contributions and targets more frequently, 'phase down coal' and to meet previous finance commitments to help tackle climate change and adapt to its impacts<sup>4</sup>. The UK has the world's most ambitious climate change commitment to achieve net zero emissions by 2050 and to reduce emissions by 78% by 2035, compared to 1990 levels. Following on from these commitments, there have been several national policy documents released including the Environment Act 2021, UK Net Zero Strategy, Heat and Buildings Strategy, and the Transport Decarbonisation Plan.

## Net Zero Definition

We have adopted the term 'net zero' as this is now the predominant terminology in use across central government and industry. The concept of 'net zero' refers to humanity collectively achieving a balance of greenhouse gas reductions (and removal) with greenhouse gas emissions, where the overall net emissions are zero. That overarching concept of net zero aligns with the goal of keeping global warming below 1.5C.

It specifically involves offsetting using carbon removal projects which actually take CO2 out of the atmosphere. It must encompass the whole organisation, including value chain emissions and cover direct and indirect emissions (scopes 1, 2 and 3).

Net-zero is a long term goal, which involves setting specific targets to work towards. The SBTi Net-Zero Standard<sup>5</sup> outlines guidance on both near-term target setting by 2030 and long-term target setting by 2050.

## 2030 Net Zero Vision

*'By 2030, Blaby District Council is a net zero emissions authority for its own operations, no longer contributing to global climate change.*

*There is a culture of climate and environmental awareness within the organisation that supports informed decision making and service delivery that minimises carbon impact and maximises the co-benefits of taking climate action<sup>6</sup>.*

*The Council has further reduced its wider greenhouse gas emissions through its supply chain, alongside working with others across the Blaby to make significant progress towards becoming a net zero District by 2050 if not before* **Targets and Objectives**

Blaby District Council will:

### **Greenhouse Gas Emissions**

1. Reduce In-Scope greenhouse gas emissions by 80% by 2025, compared to a 2018/19 baseline.
2. Become a net zero council by 2030, including fleet, buildings, business travel, waste and water use.
3. Offset those residual greenhouse gas emissions that are unable to be eliminated, substituted or reduced further by local carbon sequestration and insetting by 2030 and preferably sooner.

### **Energy**

1. Reduce annual energy consumption from council buildings by at least 30% by 2030 compared to 2019-20.
2. Source at least 50% of annual energy consumption from on-site renewable or zero-carbon energy generation by 2030.



## Snapshot of the Action Plan

<p><b>Estates</b> A clear decarbonisation plan for all council buildings (includes building fabric &amp; low carbon heating).</p> <p>Council owned buildings are energy efficient.</p> <p>Maximise renewable energy generation (e.g. Rooftop Solar PV)</p> <p>Renewable energy generation – ‘netting off’<sup>7</sup></p> <p>Local carbon sequestration and insetting<sup>8</sup> through to 2030.</p>	<p><b>Business Travel</b> Travel Hierarchy for all council business travel (to include smarter working, active travel, public transport and electric vehicles)</p> <p>Smarter working to reduce unnecessary business mileage.</p> <p>Greater use of public transport and active travel.</p> <p>EV pool &amp; lease car schemes.</p> <p>Staff Salary sacrifice scheme for EV’s.</p>
<p><b>Fleet</b></p> <p>Efficient fuel management and green driver training to influence driver behaviour.</p> <p>HVO gradually phased out and transition to an electric vehicle fleet</p> <p>Transition of heavier vehicles and RCV’s to electric by 2030 through combination of conversion and newly purchased depending on market.</p>	<p><b>Out of Scope Emissions</b></p> <p>Work with suppliers to reduce emissions from high emitting contracts.</p> <p>Invest in clean green and sustainable portfolios.</p> <p>Improve data collection, understanding and reporting of scope 3 emissions (to include waste &amp; finance)</p>

Figure 1. Snapshot of the 2030 Council action plan

## Strategic Themes

### Primary Emission sources

- **Estates** – Carbon emissions from council buildings including, energy consumption (e.g. electricity and gas use), refrigerant gases, water use and waste generation.
- **Fleet** – Carbon emissions from fuel used (e.g. diesel, petrol) in vehicles operated by the council.
- **Business travel** – Carbon emissions associated with staff journeys undertaken for work purposes in staff vehicles, also known as ‘grey fleet’ (not including council operated fleet vehicles and employee commuting).
- **Out of Scope Emissions** – Carbon emissions from supply chain, leased assets, employee commuting and investments.

## Enabling actions

- **Financing Net Zero** – Gain better understanding of the costs and benefits associated with achieving net zero and how it will be funded. Seeking funding, investment, income generation
- **Embedding Net Zero into the Council** – Incorporate carbon within the Council decision making process. The way in which net zero is built into the normal functioning of council operations and decision making for procurement, project management, learning and development opportunities, recruitment and communication and engagement with stakeholders.
- **Net Zero Ways of Working** – The way in which the council and its staff operate and work, this includes emissions associated with business travel, employee commuting, hybrid and smarter working.
- **Influencing Out of Scope Emissions** – The way in which the council will tackle indirect emissions from its purchased goods and services, leased assets, employee commuting, investments and value chain.

## Greenhouse Gas Emissions Overview

The council is committed to measuring and reporting on its annual net zero performance. Each year, the council calculates its greenhouse gas emissions. This is sometimes referred to as a 'carbon footprint' and is measured as 'carbon dioxide equivalent' (CO<sub>2</sub>e)<sup>9</sup>. The sections below provide a summary of the 2030 net zero commitment scope, baseline and current emissions.

### Scope of reporting

The greenhouse gas (GHG) emissions included within the 2022-23 Greenhouse Gas Report are summarised below. 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 (scope 2), resulting from the owned/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 (T&D) losses for electricity consumption, water supply and treatment.

Blaby District Council acknowledges the importance of acting to reduce its wider scope 3 emissions, including those that arise from the council's supply chain, leased assets, employee commuting and investments. Whilst these emissions are not included in the scope of the 2030 commitment, actions to influence and reduce emissions associated with these categories have been included within the action plan, in line with the District's 2050 net zero commitment. The Scope of reporting is summarised in Figure 2 below.

	Council's Own Operations
2030 Net Zero Council	Scope 1: Fleet Vehicles, Gas Use (heating of buildings) Scope 2: Purchased electricity. Scope 3: Business mileage, Transport & Distribution (T&D) losses & water.
2050 Net Zero District	Wider Council Emissions Scope 3: Purchased goods and services, investments, downstream/upstream leased assets, employee commuting, leisure centres.

Figure 2. Scope of reporting summary

## Baseline and Current Emissions Overview

Figure 3 below shows the latest carbon footprint of Blaby District Council (as an organisation) and includes emissions that occur as a result of the Council's own operations. We have calculated the carbon footprint of the Council's own operations in line with the UK Government's Environmental Reporting Guidelines<sup>10</sup>. Figure 4 shows a breakdown of the emissions by source.

Scope	Sector	2018/19 baseline(tCO <sub>2</sub> e)	2022/23 (tCO <sub>2</sub> e)	% Change
1	Buildings	80.9	89.4	+9.5
1	Authority Fleet	603.06	354.67	-41.2
<b>1</b>	<b>Sub-total</b>	<b>683.9</b>	<b>440.25</b>	<b>35.6</b>
2	Electricity	96.22	53.21	-44.7
<b>2</b>	<b>Sub-total</b>	<b>96.22</b>	<b>53.21</b>	<b>-44.7</b>
3	Staff Travel	46.01	38.88	-15.5
3	T & D Losses	8.2	4.87	-40.7
3	Water	0.9	0.56	-37.8
<b>3</b>	<b>Sub-total</b>	<b>55.19</b>	<b>44.31</b>	<b>-28.5</b>
Total Gross Emissions		<b>835.34</b>	<b>541.56</b>	<b>-35.2</b>
	Renewable electricity tariff		<b>-53.21</b>	
Total Market Based Emissions		<b>835.34</b>	<b>488.35</b>	<b>- 42%</b>

Figure 3. Summary of greenhouse gas emissions 2022/23 compared to baseline year.

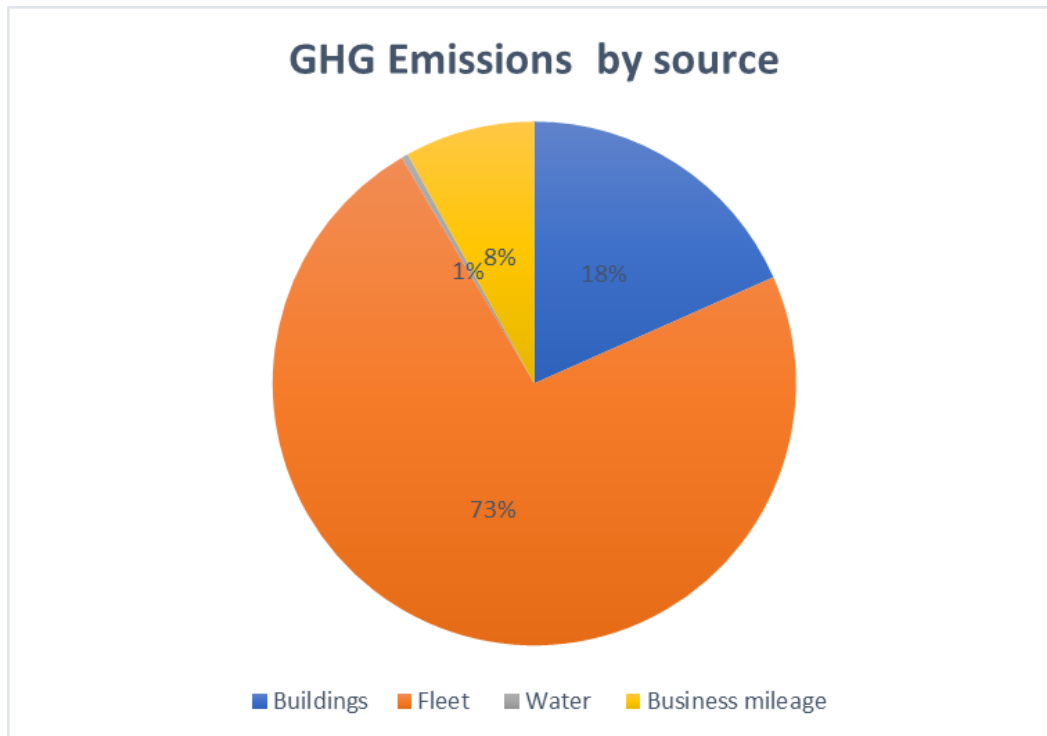


Figure 4. Greenhouse gas emissions by source 2022/23

## Out of Scope Emissions

Blaby District Council acknowledges the importance of acting to reduce its wider scope 3 emissions. This includes carbon associated with the council's supply chain, leased assets, employee commuting and investments. It also includes those emission that arise from assets and services not operated by the council and have limited influence over. During 2020/21 the council commissioned a study into it's wider scope 3 emissions (purchased goods and services). The results are shown alongside In-Scope emissions in figure 5. This is the first step into quantifying what is a highly complex and subjective area and will need further development. The council provided detailed extracts from its finance system covering, suppliers, purchase orders, invoices and journalled transactions. Artificial intelligence was the used to extract the product data from the descriptions. This was then used to calculate the carbon footprint of the matched products using MRIO data from CenSA (now University of Leeds as used by DEFRA).

	2019/20	2020/21	% Change
In-Scope emissions (scope 1,2 and direct scope 3)	774.69	648.77	-16.3
Out Of Scope emissions (purchased goods and services)	7095	4880	-31.3

Figure 5. Summary of GHG emissions (tonnes CO<sub>2e</sub>)

**Purchased Goods and Services** – By far the biggest 'exclusion' relates to the purchasing and use of goods, and the consequential 'embodied energy' of such goods. Embodied energy is a complex area, but in simple terms means the energy used to make and distribute goods, before such goods are actually used. The primary way to tackle these emissions nationally is through adopting a Circular Economy approach.

**Waste production** – The Council produces waste as part of the day to day operation of its services i.e. general office waste and through the delivery of some of its services such as highway maintenance. At the time of writing this plan it was not possible to include emissions arising from these sources but this will be calculated and included in future emissions calculations.

**Employee commuting** – Whilst the emissions relating to employees travelling for the purposes of work, to and from meetings for example, is included within this report, the emissions arising from employees travelling from home to work are not included. This approach is accepted as part of the GHG guidance and we will look to find methods to record and report this information going forward. This includes our Leisure Centres. Blaby District Council leases the Huncote and Enderby Leisure Centres to SLM. Both the financial and day to day management of these is controlled wholly by SLM and as such we do not intend to report these at present. However there may be opportunities to influence emissions by investing in our property portfolio. as part of the 2050 Net Zero District target.

## Delivery of Carbon Reduction Projects

Blaby District Council is committed to becoming a net zero local authority by 2030, through following best practice and guidance. The council's strategy can be explained in four approaches to achieve net zero emissions (see diagram below)

Step 1 - **Eliminate** greenhouse gas emissions at their source by preventing excess energy use, fuel consumption and waste production through actions such as behaviour change initiatives, carbon literacy training and hybrid/smarter working.

Step 2 - **Reduce** the emissions the council emits through energy efficiency improvements to buildings and reducing fuel consumption.

Step 3 - **Substitute** the energy the council does have to use by switching to clean and low carbon sources, produce our own renewable energy (solar panels), switch to a renewable energy tariff and use low/zero carbon fuels or technology for transport and heating.

Step 4 - **Neutralise** by removing carbon from the atmosphere through carbon sinks, for example tree planting, woodland creation, wetland management for delivering biodiversity net gain or wider nature recovery, where carbon reduction is a co-benefit. This also includes area based insetting, where carbon offsets can be gained within the council's value chain/boundary. Local sequestration and insetting within the council's value chain/boundary will be prioritised over wider carbon offsets.

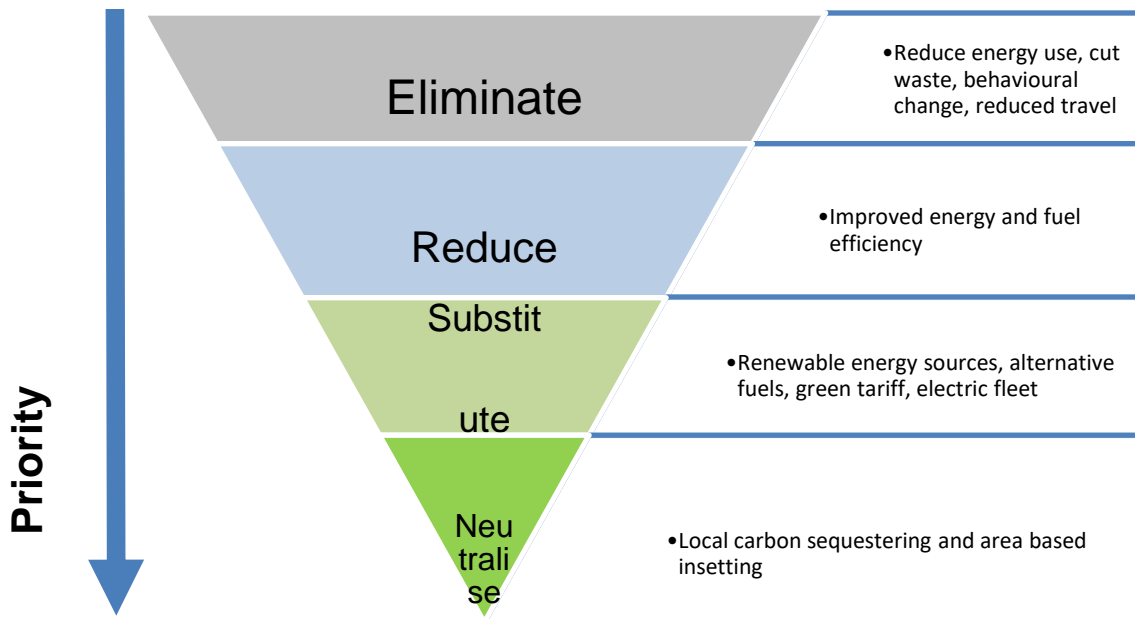


Figure 6. Strategic approach to delivering carbon reduction

Blaby District Council has made good progress in reducing the emissions from the council's own operations as shown in GHG Emissions pathway below.

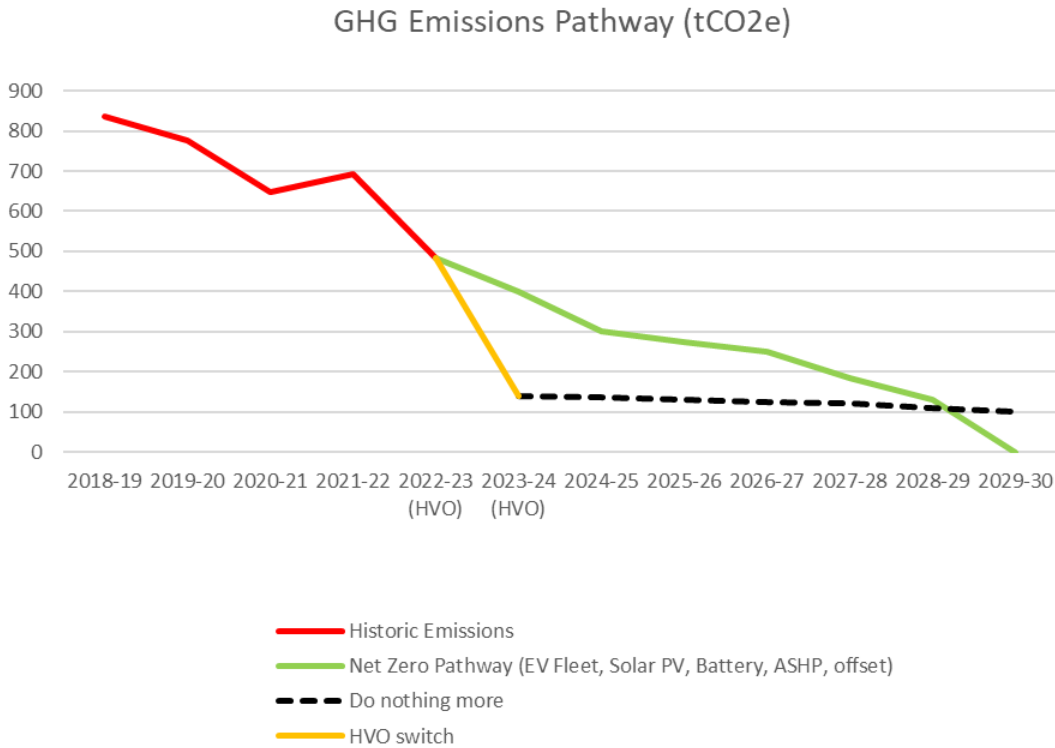


Figure 7. BDC's historic emissions and potential pathways to 2030

An estimated 100-140tCO<sub>2</sub>e will still remain and needs to be further reduced or offset to achieve net zero by 2030. The 'do nothing more' scenario represents the projected emissions reductions associated with greening of the national electricity grid and the UK's transition to electric vehicles by 2030. This allows for approximately 25% reduction in emissions (estimated) from 2022/23.

The Yellow trajectory marks the estimated reductions associated with switching to HVO (Hydrotreated Vegetable Oil) and at first glance appears to resolve the majority of emissions. While this is true our aim is ultimately to replace HVO with full electrification of our vehicle fleet (this is discussed in more detail below). Only this accompanied by installation of renewables, low carbon heating etc will allow us to eliminate the remaining emissions (see Figure 8 below). If we 'do nothing more' between 2023/24 and 2029/30, around double the amount of greenhouse gas could be emitted to the atmosphere, compared to the 2030 net zero trajectory. This demonstrates the importance of the council continuing to take action to reduce its greenhouse gas emissions.

As well as the impact on emissions to 'do nothing more' could lead to a significant increase in the council's financial spend on energy, water fuel and business/fleet mileage further making the case for action.

Project	Estimated Cost	Estimated carbon savings (tCO2/yr)	Estimated cost Savings
Improve heating controls (TRV's) at main office	£20k	≈ 5	£1500/yr
Install smart energy management system	<£5k	5-30%.	£3350 - £24000
Switch to ASHP at Depot	£240k (Block A) £103k (Block B)	28	TBC
EV Salary Sacrifice Scheme	Zero	Potentially significant if high mileage users switch to EV. Will also have positive impact on emissions from staff commuting.	N/A
Provide electric pool cars for business journeys.	£200k	10	TBC - Upfront costs offset by reduction in mileage claims & essential car user payments
Review mileage claims process	low	6	£10,000/annum
Install Workplace Chargers	<£10K	N/A	N/A

Figure 8. Proposed actions to reduce the residual GHG emissions

### HVO – An interim measure

One of our key actions to reduce emissions has been the switch to Hydrotreated Vegetable Oil (HVO) which will reduce emissions from fleet diesel use significantly. HVO is a biofuel manufactured from waste oils from all over the world. It offers around 90% carbon reduction against fossil fuels.

However there are significant doubts as to the true sustainability of HVO and there are concerns over the hidden environmental impacts from its manufacture. It's not yet fully understood what effect the increased demand for HVO may have on global supplies of waste vegetable oil, the subsequent demand for palm oil and ultimate impact on deforestation.

The demand and cost of HVO is also likely to rise significantly which could affect its long term viability. Blaby District Council therefore does not see the use of HVO as a permanent solution, but rather as an interim measure towards its transition to a fully electric fleet by 2030.

## Sequestration, Insetting and Offsetting Residual emissions.

Those emissions that are unable to be addressed by projects in the first three approaches to carbon reduction, will be tackled by approach four, 'neutralise', which looks to provide local sequestration to remove carbon from the atmosphere through carbon sinks and carbon insetting within the council's value chain.

- Local carbon offsetting (aka Insetting)
- Carbon Sequestration
- Large scale carbon offsetting

A carbon offset is a reduction in emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere. This may include investing in large scale renewable energy or district heating projects, tree planting, woodland and parks management which will increase the capture of CO2 via sequestration. Figure 9 sets out in more detail some local insetting projects that are in development and their likely carbon savings.

### Carbon insetting projects

Project	Estimated Cost	Estimated carbon savings	Estimated Cost savings
135kWp Rooftop solar – Whetstone Depot	£132,000 (+ design project management tbc)	24tCO2/year	5.4 year payback Annual savings £25,000 20y savings £250,000?
193kWp Rooftop solar – Enderby Leisure Centre	£295,000	32tCO2/year	7 years payback Annual savings £29,000 20y savings £587,000?
Battery Storage – Whetstone Depot	£200,000	TBC	TBC

Figure 9. Carbon insetting projects (carbon/cost/savings)

Whilst we will identify potential offsetting practices to help Blaby's Net Zero ambition, we will not be actively promoting these above actions to reduce or inset carbon emissions directly. Blaby's carbon budget currently assumes that we will not be using technologies to remove CO2 from the atmosphere as these are currently unproven at scale and relying on them would create uncertainties in our contribution to future climate change action.



## Carbon Reduction Projects

The council has identified several opportunities to decarbonise its own operational emissions across all strategic themes. These projects are detailed below. See the 'Project Development' section for an explanation of the Discover, Design and Deliver project development process.

This plan places a high priority on carbon reduction measures in order to meet our Net Zero ambitions. There are 4 priority areas for actions on carbon reduction within the organisation:

- Transport (T)
- Buildings (B)
- Energy (E)
- Waste and water (W)

Other areas for action which indirectly support carbon reduction include:

- Resources and Consumption (R)
- Governance, Funding & Engagement (G)
- Adaptation and resilience (A)

Within each target area of the plan, key objectives, actions and timescales for implementation are identified:

**Short term (2023-24)** Actions already completed or underway.

**Medium term (2024-2026)** – Actions that are underway or require further development before implementing.

**Long term (2026-2030)** – Potential actions that require significantly more development or resource before implementation. Aim to complete by 2030.

Where possible we have estimated the cost of implementation, the financial saving/income and the carbon savings for each project as either low, medium or high. See Figure 10 below:

	Low	Medium	High
Carbon Saving (% of BDC's total emissions)	<1%	1-3%	>3%
Cost Per annum	<£10k	£10k - £100k	£100k+
Financial Saving/Income per annum	<£10k	£10k - £100k	£100k+

Figure 10. Estimated project impact (emissions/cost/savings)

## Project Development

Identification of opportunities and development of carbon reduction projects will be facilitated by the Green/Net Zero and Climate Change officer in collaboration with individual departments, The Net Zero Working Group and programme board. Each Project will be developed using the 'Discover, Design and Deliver' stages. Definitions of these and the specific carbon reduction projects within each stage are listed below:

**Discover** – Projects which have been identified as ideas and require further investigation into their feasibility (CO<sub>2</sub>e saving/cost/resource/deliverability) and an opportunity assessment to be carried out.

**Design** – Projects which have had an opportunity assessment conducted and approved by the Net Zero Working Group to be designed into a full business case.

**Delivery** – Projects where business cases have been approved by the relevant teams and boards, which have now progressed into implementation.

The following tables set out the status of current and potential net zero projects from that are completed, currently in delivery, at the design or discovery stage.

### Completed

Project	Category	Department	Estimated Cost	Financial saving/income	Potential carbon saving	Timeframe
T1 - Green Fleet Review	Transport	Neighbourhood Services	Low	N/A	Low	Short Term (2020-23)
T4 - Install Workplace EV Chargers	Transport	Neighbourhood Services	Low	N/A	Medium	Short Term (2020-23)
T5 - Improve access to and experience of remote working	Transport	Corporate Services	Medium	low	Low	Short Term (2020-23)
T6 - Review of the Council's employee travel policy	Transport	HR	Medium	N/A	Medium	Short Term (2020-23)
T8 - Carry out Staff Travel Survey	Transport	HR	Low	N/A	Medium	Short Term (2020-23)
T9 – Provide e-Bikes for staff	Transport	Environmental Services	Low	N/A	Low	Short Term (2020-23)
T10 - Switch fleet fuel from diesel to HVO	Transport	Neighbourhood Services	Medium	N/A	High	Short Term (2020-23)
B1 – Main office Energy Audit	Buildings	Property Services	Low	Low	Low	Short Term (2020-23)
B4 - Replace Lighting at main office with LEDs	Buildings	Property Services	Medium	Medium	Medium	Short Term (2020-23)
B5 - Conduct decarbonisation feasibility studies for all major assets	Buildings	Environmental Services	Low	Low	Low	Short Term (2020-23)
B7 - Replace inefficient end of life heating system at main offices.	Buildings	Property Services	High	Medium	Low	Short Term (2020-23)
E1 - Establish the Council's annual greenhouse gas emissions.	Energy	Environmental Services	Low	Low	Low	Short Term (2020-23)
E4 - Switch to a 100% renewable 'green' electricity tariff	Energy	Property Services	Low	N/A	Medium	Short Term (2020-23)
R2 - Conduct an analysis of our Scope 3 emissions	Resources and Consumption	Env Services	Low	N/A	High	Short Term (2020-23)

G1 - Ensure the Corporate Plan includes the Council's Net Zero Targets and tackling the climate emergency is one of it's main priorities.	Governance funding & Engagement	Corporate Services	Low	NA	Low	Short Term (2020-23)
G2 - Introduce a 'Carbon Impact Assessment' procedure for all key decisions & cabinet reports	Governance Funding and Engagement	Environmental Services	Medium	N/A	Low	Short Term (2020-23)
G4 - Deliver carbon literacy training for Green Champions, council staff and elected members	Governance Funding and Engagement	Environmental Services	Low	N/A	Low	Short Term (2020-23)
G7 - Maintain a Net Zero Project tracker	Governance Funding and Engagement	Environmental Services	Low	N/A	Medium	Short Term (2020-23)
G10 - Deliver Net Zero Masterclass for elected members	Governance Funding and Engagement	Environmental Services	Low	N/A	Low	Short Term (2020-23)
G16 - Develop a Net Zero webpage	Governance Funding and Engagement	Environmental Services	Low	N/A	Low	Short Term (2020-23)
G17 - Publish the council's Greenhouse Gas Emissions report each year	Governance Funding and Engagement	Environmental Services	Low	N/A	Low	Short Term (2020-23)

## In Delivery

Project	Category	Department	Estimated Cost	Financial saving/income	Potential carbon saving	Timeframe
T7 - Introduce Fleet Replacement Plan that specifies transition to Fully Electric Fleet by 2030-35	Transport	Neighbourhood Services	Low	N/A	Low	Long Term (2026-30)
T12 Deliver Flex D at Enderby Leisure centre in collaboration with HDC	Transport	Neighbourhood Services	Low	N/A	Medium	Medium Term (2024-26)
T13 Deliver Defra funded 'Lets go electric' to purchase Electric Sweeper and eRCV conversion kit.	Transport	Neighbourhood Services	Low	High	Medium	Medium Term (2024-26)
B2 - Minimise energy usage across our assets through building management systems & improved controls	Buildings	Property Services	Medium	N/A	Medium	Medium Term (2024-26)
E2 - Install Solar (PV) at Whetstone Depot	Energy	Property Services	Low	Low	Low	Medium Term (2024-26)
E3 - Install Solar (PV) installations on Enderby Leisure centre.	Energy	Property Services	Medium	Low	High	Medium Term (2024-26)
W1 - Introduce a process to accurately measure the amount of waste produced by the council.	Waste & water	Property Services	Low	Low	Low	Medium Term (2024-26)
W3 - Remove/replace office vending machines that use non-recyclable cups and single use plastics.	Waste & water	Property Services	Medium	Low	High	Medium Term (2024-26)
W4 – Remove mixed waste paper bins from offices and promote the use of centralised recycling stations.	Waste & Water	Property Services	Low	Low	Low	Short Term (2023-24)

R3 - Develop Procurement Appraisal and Framework to engage with suppliers to reduce their carbon footprint.	Resources & Consumption	Finance	Medium	Medium	Medium	Medium Term (2024-26)
R4 - Conduct a Circular Economy baselining activity to help inform and embed these principles into council processes.	Resources & Consumption	Environmental Services	Low	Low	Medium	Medium Term (2024-26)
G8 - Review & Update Climate Strategy - Move to Net Zero terminology	Governance Funding and Engagement	Environmental Services	Low	Low	low	Short term (2023-24)
G9 - Introduce Climate Impact Assessment tool to Project Management procedures	Governance Funding and Engagement	Transformation	Low	Low	Low	Medium Term (2024-26)

## In Design

Project	Category	Department	Estimated Cost	Financial saving/income	Potential carbon saving	Timeframe
T2 - Introduce an Electric Vehicle Salary Sacrifice Scheme to Blaby Benefits.	Transport	Neighbourhood Services	Low	N/A	Low	Medium Term (2024-26)
T3 - Develop a Business Mileage Decarbonisation Plan to reduce emissions from staff travel.	Transport	Neighbourhood Services	Low	N/A	Medium	Medium Term (2024-26)
T14 - Replace non RCV diesel fleet vehicles with battery electric equivalents.	Transport	Neighbourhood Services	Low	High	Medium	Medium Term (2024-26)
T15 Purchase a pool of electric vehicles to reduce business mileage	Transport	Neighbourhood services	Medium	N/A	Medium	Medium Term (2024-26)
B3 – Main Office net zero feasibility study	Buildings	Property Services	Low	High	Medium	Medium Term (2024-26)
B6 - Develop a strategy for decarbonisation of Huncote Leisure centre	Buildings	Property Services	Low	High	Medium	Medium Term (2024-26)
W2 – Ensure we can identify the total volume of waste we produce and set annual reduction targets	Waste & Water	Property Services	Low	Low	Low	Short Term (2023-24)
R1 - Reduce/eliminate plastic use across the organisation.	Resources & Consumption	Whole Council	Low	Low	Low	Medium Term (2024-2026)

## To Discover

Project	Category	Department	Estimated Cost	Financial saving/income	Potential carbon saving	Timeframe
R5 - Explore potential for funding carbon offsetting projects within the district to offset those council emissions that cannot yet be fully mitigated.	Resources & Consumption	Environmental Services	Low	Low	Medium	Medium term (2024-26)
G5 - Deliver carbon literacy training to all staff and new starters.	Governance Funding and Engagement	HR	Low	Low	Low	Medium Term (2024-26)
G11 - Create a Cross Party Net Zero Working Group	Governance Funding and Engagement		Low	Low	Low	Medium Term (2024-26)
G12 - Embed circular economy principles into council procurement policies	Governance Funding and Engagement	Finance	Low	Low	Medium	Medium Term (2024-26)
G13 - Ensure all senior management and councillors carbon literacy/climate awareness training	Governance Funding and Engagement	Finance	Low	Low	Low	Medium Term (2024-26)
G14 - Pass a motion in support of divestment from all fossil fuels from the councils' pension funds.	Governance Funding and Engagement	Finance	Low	Medium	High	Medium Term (2024-26)
G15 - Review all council's investments, bank accounts to ensure these are environmentally responsible and aligned with our net zero ambitions	Governance Funding and Engagement	Finance	Low	Low	High	Medium Term (2024-26)
A1 - Develop Climate Adaptation Risk register to ensure core council services are resilient and adaptable to effects of changing climate.	Resilience & Adaptation	Corporate Services	Low	N/A	Low	Medium (2024-26)

## Financing Net Zero

A key enabling theme for the council's ambition to become net zero by 2030 is finance. The Net Zero Programme acknowledges this by including the cost, financial saving and carbon saving potential early on in project development. Where possible projects will also be prioritised based on their financial cost per lifetime tonne of carbon saved (£/tCO<sub>2</sub>e). To date council has delivered the LED lighting project, the savings from which should provide payback on investment in under 4 years and from that point reduce our expenditure on lighting while reducing energy use and carbon emissions from day one.

There are further opportunities to reduce revenue expenditure in delivering carbon reduction projects, through decarbonising the council's business travel, adopting electric fleet vehicles and using council generated local renewable energy (solar rooftop arrays). In doing so, the council could reduce its annual spend.

Not all carbon reduction projects will deliver financial savings and some may have a higher cost per tonne of carbon saved than others (e.g. decarbonising heating). Where this is the case, the Net Zero Working Group will consider a whole portfolio approach to project delivery, alongside looking in to innovative and alternative funding sources, to enable the delivery of net zero.

The cost of reaching net zero is difficult to determine due to several factors, including: the long-term and complex nature of the programme, differing project development stages and rapidly changing and emerging technology. The financial costs and savings will be tracked and monitored during the implementation of the 2030 Net Zero Action Plan and further research will be carried out to better understand the total financial cost of delivering net zero.

## **Embedding Net Zero in the Council**

Becoming a net zero local authority requires strong and effective management and governance, alongside a collaborative effort across the council, embedding net zero at the heart of council decision making and service delivery. This involves ensuring that net zero is built into learning and development opportunities for staff and teams, procurement mechanisms and the council's communications and engagement with staff, suppliers and service users. This will also support the District wide 2050 net zero target, as staff become better able to support carbon reduction through their work.

## **Influencing Out of Scope Emissions**

In recognition of the importance in acting to reduce the council's wider influence on emissions, including those that arise from the council's supply chain, leased assets, employee commuting and investments, actions to influence and reduce emissions associated with these categories have been included within the action plan. Following the scope 3 emissions study, the council has identified several actions to reduce its wider influence on emissions. See actions, T2, T3, T4 and R5.

## **Management and Governance of Net Zero**

The Net Zero programme spans across the entire council and effective governance and oversight of the plan is key to its success. The establishment of the programme and development of the action plan has been led and managed by the Environmental Services Team. It receives oversight from the council's internal Net Zero Working Group. As the Net Zero Programme moves towards continued implementation and monitoring of this action plan, it is important that the governance structure is embedded into the council, giving carbon reduction the spotlight in pre-existing structures and sharing the responsibility for delivery of carbon reduction initiatives to teams and departments directly responsible for the strategic theme areas.

## Communications and Engagement

Working with our stakeholders is key to the success of the council becoming a net zero local authority by 2030. Key internal stakeholders to inform and engage with to help shape and deliver our net zero programme are:

Stakeholder	Method of Engagement
Chief Executive	Programme Board, SLT
Senior leadership team	SLT meetings, programme board
Senior managers	Net Zero Working Group, monthly Green Agenda meetings
All Staff	Blaby Matters, Comms Team, Carbon literacy training, iLearn.
Lead member for Climate Change and Net Zero	Portfolio holder updates, Green Agenda meetings
Green Champion	Green Agenda meetings with Green Officer
Council Leader	Monthly Leader's statement
Cabinet	Cabinet Briefings and reports
Scrutiny Committee	Scrutiny briefings, Green Officer attending scrutiny panel when required
All Members	Monthly Leader's statement, Members Masterclass
Net Zero Working Group	Quarterly meetings with Green Officer
Public	Promote achievements, and information through the Council's Climate Change webpage, E-newsletter, events, social media, parishes.

## Performance and Monitoring

Blaby District Council's emissions will be monitored on an annual basis to provide end of year emissions reductions. The council will then assess, measure and report actual emissions through the annual Greenhouse Gas Report published on the council's website, detailing the council's current emissions and progress towards net zero by 2030. See actions G6, G8, G11.

The programme of carbon reduction projects will be monitored on a regular basis, through the Discover, Design and Delivery process and where new projects are identified these will be added. Project progress will be updated in the council's Net Zero Projects Tracker and reported to the Net Zero Working Group and Programme Board on a regular basis.

Additional updates will be provided where necessary to the council's Senior Leadership Team, and Net Zero & Climate Change Lead Member. The council will conduct a review and update of Net Zero Action Plan at the beginning of each financial year. The main aims of the annual review will be to:

1. Provide an opportunity to add new and update existing actions to the action plan
2. Inform the Greenhouse Gas Report by providing an overview of projects delivered in the last financial year and an understanding of where council action has contributed towards emissions reduction.

## References

1. 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. 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.
3. <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/about>
4. <https://ukcop26.org/cop26-keeps-1-5c-alive-and-finalises-paris-agreement/>
5. <https://sciencebasedtargets.org/>
6. For example, Benefits to public Health and the NHS, immigration, security, economy and employment <https://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/briefing-papers/Co-benefits-of-climate-change-mitigation-in-the-UK.pdf>
7. Renewable energy generated by council assets that is exported to the grid or where the carbon benefit isn't claimed by a third party can be used to net off the council's electricity emissions.
8. Insetting refers to projects which avoid, reduce or sequester carbon upstream or downstream to the council value chain
9. Using CO<sub>2</sub>e as a measuring tool means that the different global warming potential (GWP) of different gases are taken into account. Quantities of greenhouse gases are multiplied by their GWP to give results in units of carbon dioxide equivalent (CO<sub>2</sub>e)
10. <https://www.gov.uk/government/publications/environmental-reporting-guidelines-including-mandatory-greenhouse-gas-emissions-reporting-guidance>
11. <https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>