Cheshire East Council

Borough-wide Carbon Neutrality Action Plan

2025-2030 Priority Actions

January 2024

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01 Introduction

1. Introduction
Overview and Aims

Overview

In January 2022, Cheshire East Council announced a pledge to become a carbon neutral borough by 2045, five years ahead of the UK government's national 2050 target. This aligns with pledges made around the country by signatories to the UK100 target, which now represents over 50% of the UK population.

The intention of this plan is to create an initial policy document which will allow the council and key partners to build consensus and action across sectors such as Housing, Transport, Agriculture and Industry to encourage and enable carbon reduction across the borough of Cheshire East. Cheshire East Council recognises the importance of collective activity and a multi-agency approach to decarbonisation as no one organisation acting alone will be able to reduce carbon across the varied areas of emissions

This report has been commissioned by Cheshire East Council to provide a detailed action plan which focuses on the next 5 years to ensure Cheshire East is on track and has actions in place to progress the borough toward carbon neutrality.

The report is structured as follows:

- **Chapter 1** introduces the work and recaps key information from evidence-based on the Borough-wide Baseline & Carbon Reduction Options report.
- **Chapter 2** sets out the guiding principles on how action will be taken forward and principles the action plan is based upon.
- **Chapter 3** outlines action areas across 6 sectors: Domestic Buildings, Non-Domestic Buildings, Transport, Agriculture and Land Use, Waste and Energy Supply.
- **Chapter 4** contains a monitoring framework to aid towards assessing progress towards the action plan.
- **Chapter 5** contains next steps for the council including how to take the action plan forward.

Further detail and methodology notes are provided in the appendix.

Aims of the Action Plan

- Highlighting the scale of action and collaboration needed across Cheshire East to achieve carbon neutrality.
- Understand the roles and responsibilities of the council and how to maximise this to support borough-wide action.
- Prioritise actions that will help not only reduce emissions within the borough but also provide co-benefits to its residents.
- Measure the impact of the actions they are taking to ensure they are on track to reaching their target.

Council and borough targets

Cheshire East Council have already developed an evidence base and action plan for the Council's own emissions and operations (i.e. their buildings and fleet). The Council set an ambitious target of 2027 carbon neutrality for their own operations and the Council is already delivering projects towards this. Progress against this is reported annually in the Carbon Neutral Progress Update.

The focus of this action plan and supporting analysis is on Cheshire East as a **borough** and how the council can play its part and support stakeholders in the borough to reduce emissions and collectively achieve a 2045 carbon neutral target.

1. Introduction
Work to date

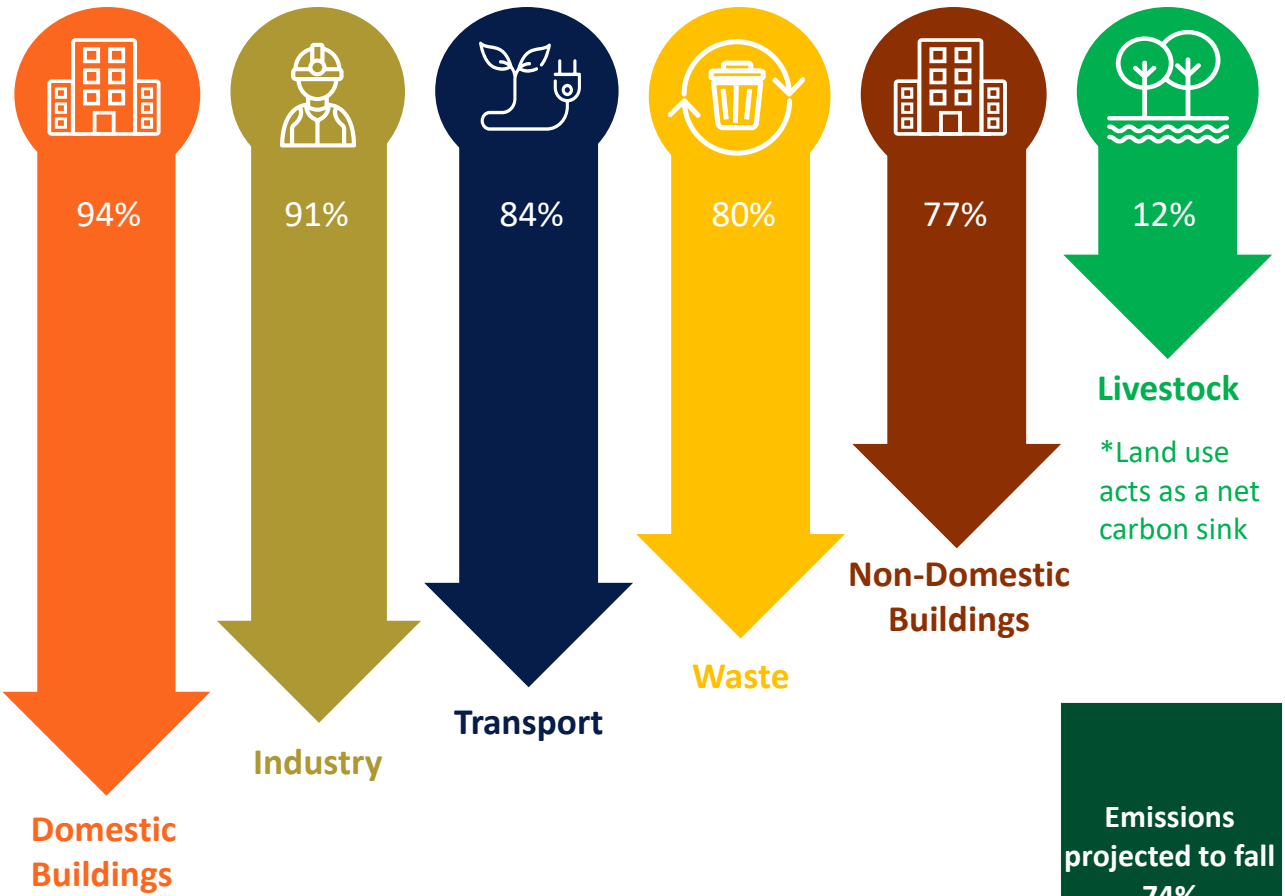
Previous work

Anthesis has previously provided an evidence-based report Borough-wide Baseline & Carbon Reduction Options to Cheshire East Council in order to determine the scale of action required and provide options on to deliver progress towards the Council's goal of becoming a carbon neutral brough by 2045.

The predecessor report provided:

- Borough wide emissions baseline and pathway options with the subsequent activities that would make significant contributions to emissions reduction.
- A range of mitigation options which were established for future emissions considering the borough's 2045 target.
- Examples of projects from across the UK were provided to encourage the next stages of action development.

Below illustrates the emissions reductions needed per sector, which have been drawn from the Borough-wide Baseline & Carbon Reduction Options Report.



Note: The Energy sector is not displayed here as it is integrated within the other sectors where the energy is used. Interventions to increase renewable energy supply are included in the emissions modelling.

Emissions projected to fall 74% by 2045 against 2019 levels

1. Introduction
Work to date

Borough-wide emissions baseline

Cheshire East's borough wide emissions for 2019 totalled 2,845 $ktCO_2e$. This value includes three greenhouse gases: carbon dioxide, nitrous oxide and methane, all of which are combined into one figure measured carbon dioxide equivalent ($ktCO_2e$).

The majority of emissions in Cheshire East come from buildings and facilities (48%) and transport (34%). Livestock (11%) and Industrial emissions (4%) are also significant sources.

The footprint boundary is established from a set list of activities under Scopes 1 & 2 from the Greenhouse Gas Protocol for city-wide emissions. Some of the sub-categories have been merged for Figure 1, the full list can be found in Appendix 1.

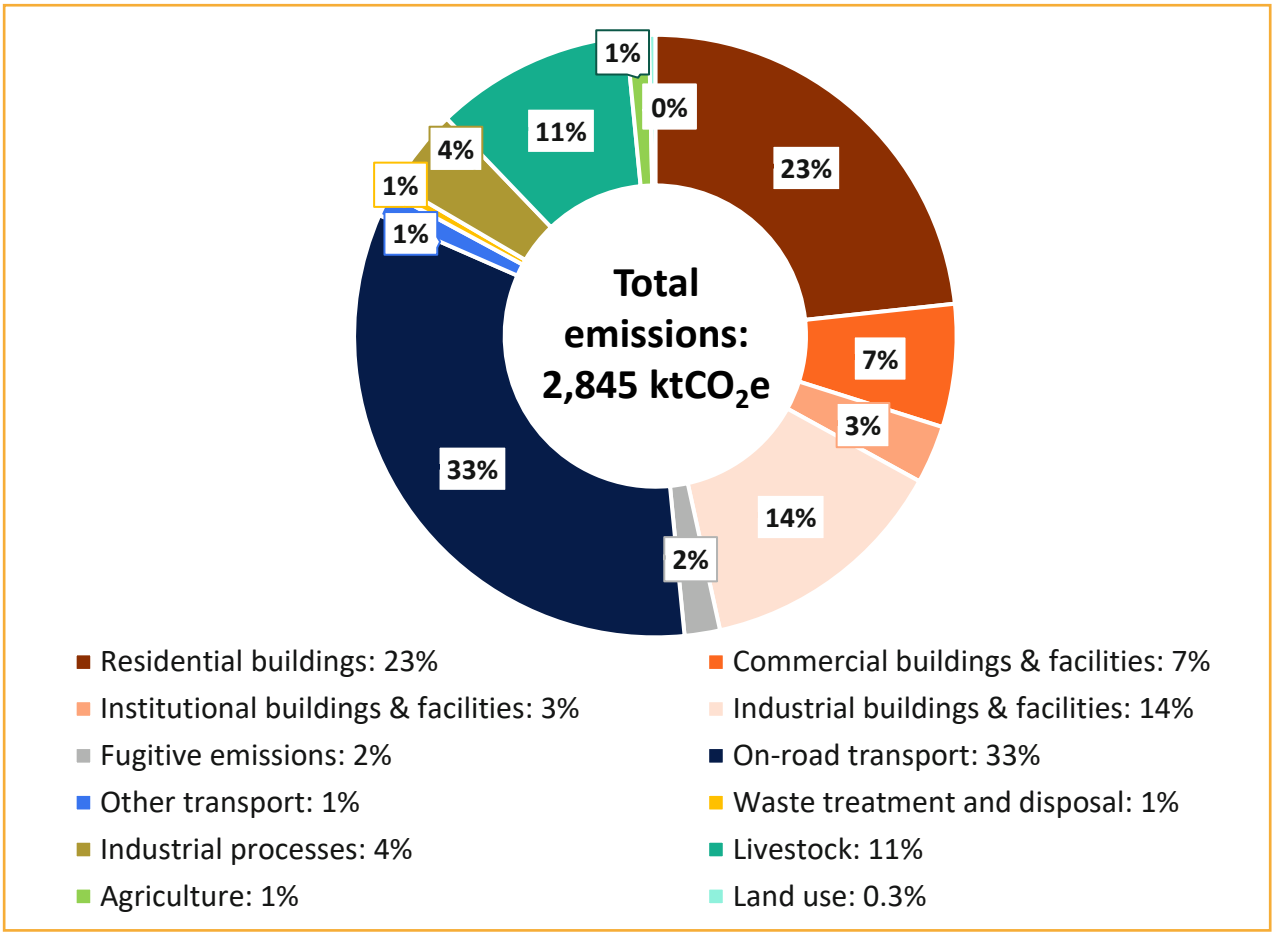


Figure 1: SCATTER 2019 inventory for the borough of Cheshire East shown by emissions sub-category. The total value for buildings and facilities includes residential buildings, commercial buildings & facilities, institutional buildings & facilities, industrial buildings & facilities and fugitive emissions. There may be rounding differences in the statistics presented, refer to Appendix 1 for a detailed breakdown.

Note: This page provides a summary of what was in the Borough-wide Baseline & Carbon Reduction Options Report. Please refer back to that report for more detailed information on Cheshire East's SCATTER Inventory. The percentage total may not add to 100% due to rounding.

1. Introduction
Work to date

Pathways towards a carbon neutral borough

The SCATTER Pathways analysis showed two pathways, business as usual and high ambition, compared against a Paris-aligned carbon budget.

The business-as-usual pathway refers to Cheshire East continuing its current trajectory (following national-led policy and grid decarbonisation); however, emissions only reduce by 17% by 2045.

Alternatively, the high ambition assumes Cheshire East goes beyond the current trajectory and is modelled on the maximum ambition levels of all SCATTER interventions. This leads to a higher emissions reduction (74%) by 2045. Even with the high ambition level, 604 $ktCO_2e$ will remain. Therefore, it is necessary to go beyond the SCATTER interventions.

Nevertheless, these interventions can be used to understand what needs to happen to achieve this scale of carbon savings. The focus now is on how to achieve this and developing actions which can be linked back to this evidence base.

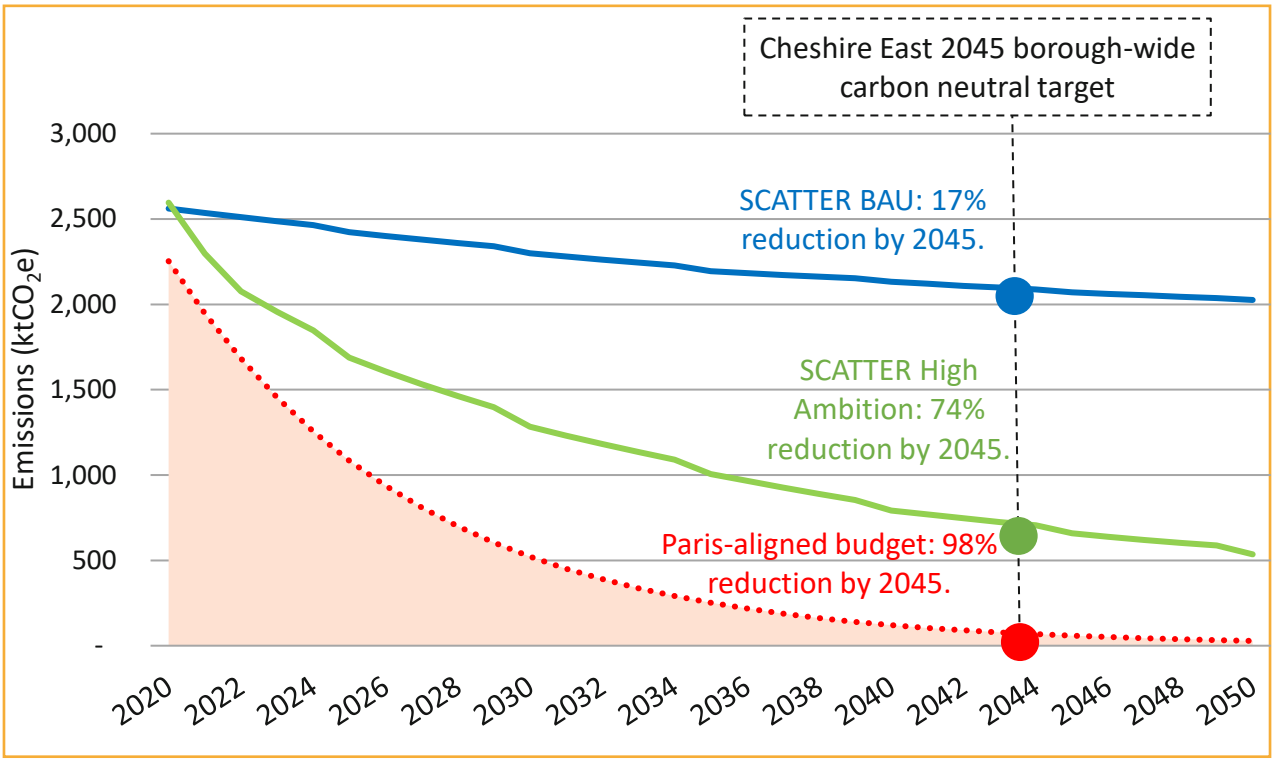
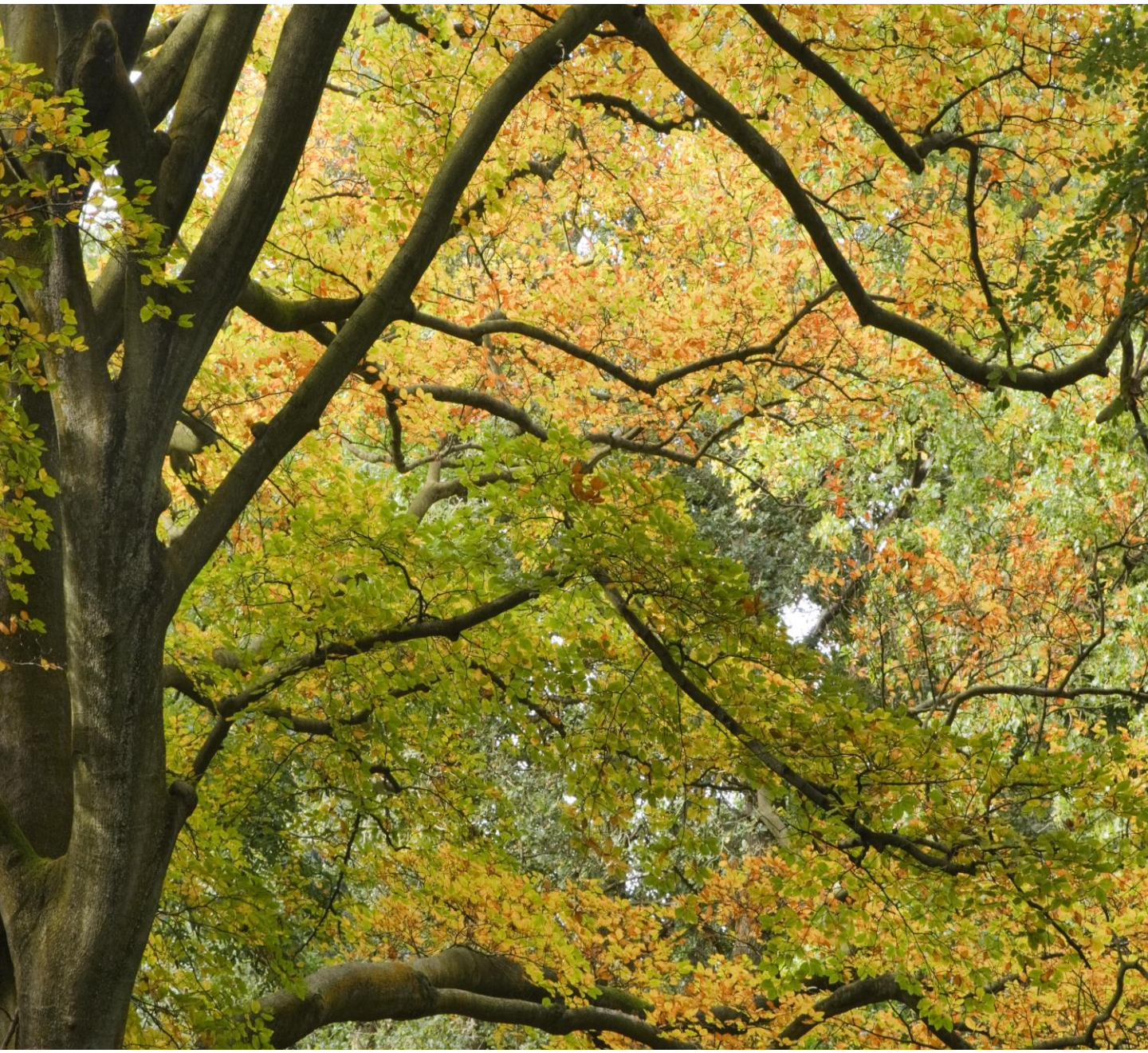


Figure 2: Future emissions pathway for Cheshire East (2020–2050). For more details on the Paris-align carbon budget from the Tyndall Centre, please see Appendix 2.

Note: This page provides a summary of what was in the Borough-wide Baseline & Carbon Reduction Options Report. Please refer back to that report for more detailed information on Cheshire East's SCATTER Pathways and overall analysis.

02 Guiding Principles



2. Guiding Principles
Collaboration and the Council's role

The achievement of borough-wide carbon reduction will require action from multiple stakeholders in Cheshire East and the collaboration of the council, residents, communities, businesses, organisations and national government. The council alone cannot deliver a carbon neutral borough but are well-placed to understand local opportunities and barriers and provide support to stakeholders. They Council has responsibilities in their local area which can be used to enable and encourage action including setting the priorities for the area; working with council suppliers to provide low carbon services; creating a policy landscape that facilitates climate action; providing low carbon infrastructure; convening strategic partnerships; communicating guidance and best practice as a trusted information source and lobbying for further change and the needs of Cheshire East stakeholders. The Council can therefore provide leadership to the borough and work with stakeholders to deliver carbon neutrality in Cheshire East.

> "Local authorities are directly responsible for between 2- 5% of their local area's emissions. However, local authorities have many levers that can be used to deliver wider local action to reduce emissions and prepare local areas fora changing climate."
>
> - Committee on Climate Change (2020)

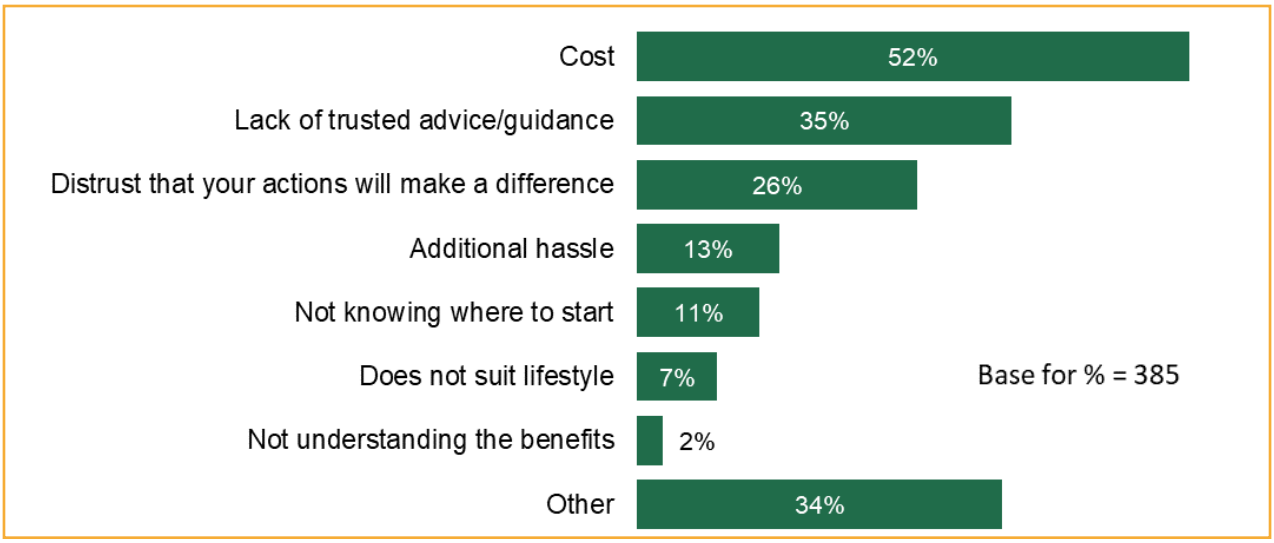


Figure 3: Barriers that limit respondents in reducing their carbon emissions, respondents could select all that applied. The council will work to support others in the borough and where possible reduce the barriers faced to climate action.

Based on the above, the council has developed a set of **Guiding Principles** which will steer future council climate action and ensure that the council is maximising its role and influence to reduce borough-wide emissions.

2. Guiding Principles
Collaboration and the Council's role

Guiding Principles

Cheshire East Council is keen to encourage and enable carbon reduction activities across the borough by communities, public sector, private sector and third sector. The council recognises that it is unable to provide support to every activity and will therefore prioritise those projects where its available resources will make a material difference to the amount of carbon reduction that is possible.

Overarching recommendations:

1. All strategies, plans and policies created or refreshed by the council to incorporate carbon reduction and climate change considerations as a key element of their outcomes.

2. A member of each service area (and teams where relevant), to have carbon reduction as an element of their key roles and responsibilities. These officers to then form together an ongoing Carbon Board chaired by the council's Carbon Manager.

3. Cheshire East Council will continue to use its influence to encourage and enable carbon reduction activity to take place across the borough of Cheshire East and throughout the council's own supply chain.

4. Cheshire East Council will consider the impacts to vulnerable groups for any policy or action that will be taken.

2. Guiding Principles
Collaboration and the Council's role

To understand the type of actions within the council's remit and what they should prioritise, it is useful to consider the level of **influence** that the Council has over different emission sources.

Boundaries of Influence

The council's ability to influence stakeholders varies across the different emissions sources within Cheshire East. This is illustrated in Figure 3 the different bandings showing the different levels of **influence over emissions sources** in the borough. Depending on the emissions source, and the associated level of influence, the council may be better equipped either to take direct action, or to take a role in influencing or convening others through more "crosscutting" actions, such as lobbying national government.

It is worth noting that a degree of influence also extends beyond the borough boundary, where Cheshire East's demand (and supply) of goods and services creates emissions in supply chains in other parts of the UK and internationally. These are *consumption-based* emissions. They are not directly considered in this action plan as they fall outside of the boundary of the borough's carbon neutral ambition.

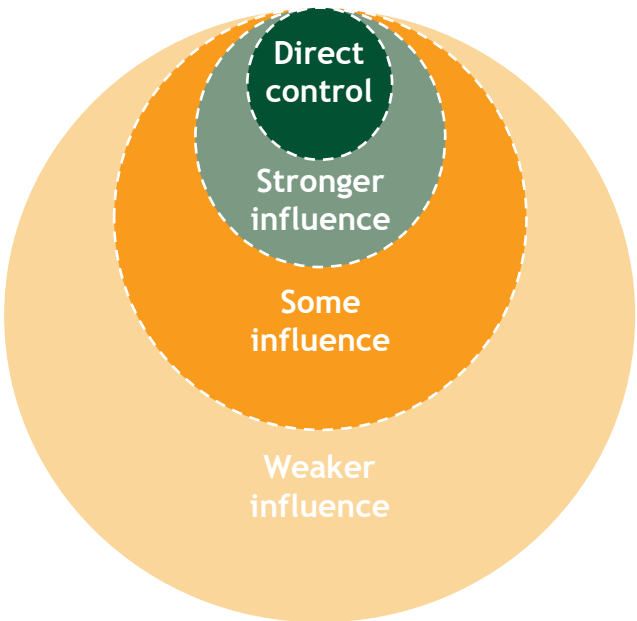


Figure 4: Cheshire East influence boundaries [*illustrative and not to scale*]

Table 1: Council degree of influence and the related emission sources

Influence	Description
Direct control	Emissions sources are directly owned or operationally controlled by the council. The council's Scope 1 and 2 emissions are estimated at 2,845 $ktCO_2e$.
Stronger influence	Owners and operators of emissions sources are clearly defined but are not directly owned or operated by the council. For example, some council procured or council led activities.
Some influence	Emissions sources do not relate to council owned/operated assets, procurement or council led activities; however, some convening power may exist with specific actors in Cheshire East (e.g., high street businesses).
Weaker influence	Owners and operators of emissions sources are not clearly defined, but still within the borough. Influence limited to lobbying central government, non-governmental organisation, trade associations and public behaviour (e.g., private vehicle ownership).

03 2025-2030 Action Plan

3. Action Plan
Principles for action

The following principles have been defined to underpin the 2025-2030 Carbon Neutral Action Plan. They have been used throughout the development of the action plan to ensure the actions agreed are effective and comprehensive.

Evidence-based

Linking actions back to the carbon footprint and emission modelling that has been carried out, to ensure the actions are guided by an understanding of the type and scale of interventions needed. This will also help with monitoring progress and impact.

Inclusive

Ensuring actions consider equity in order to improve the lives of those most marginalised and vulnerable in society and that climate action does not leave communities behind or negatively impact some groups of society.

Localised

Consideration of local priorities to ensure that actions tackle local concerns and use local opportunities. Actions are tailored to the specific context of Cheshire East and the borough's strengths to ensure they are relevant.

Collaborative

As outlined on previous pages, collaboration with stakeholders is key for achieving borough targets. Actions should seek to bring together stakeholders, create partnerships and remove barriers for others.

Reflecting stakeholder views

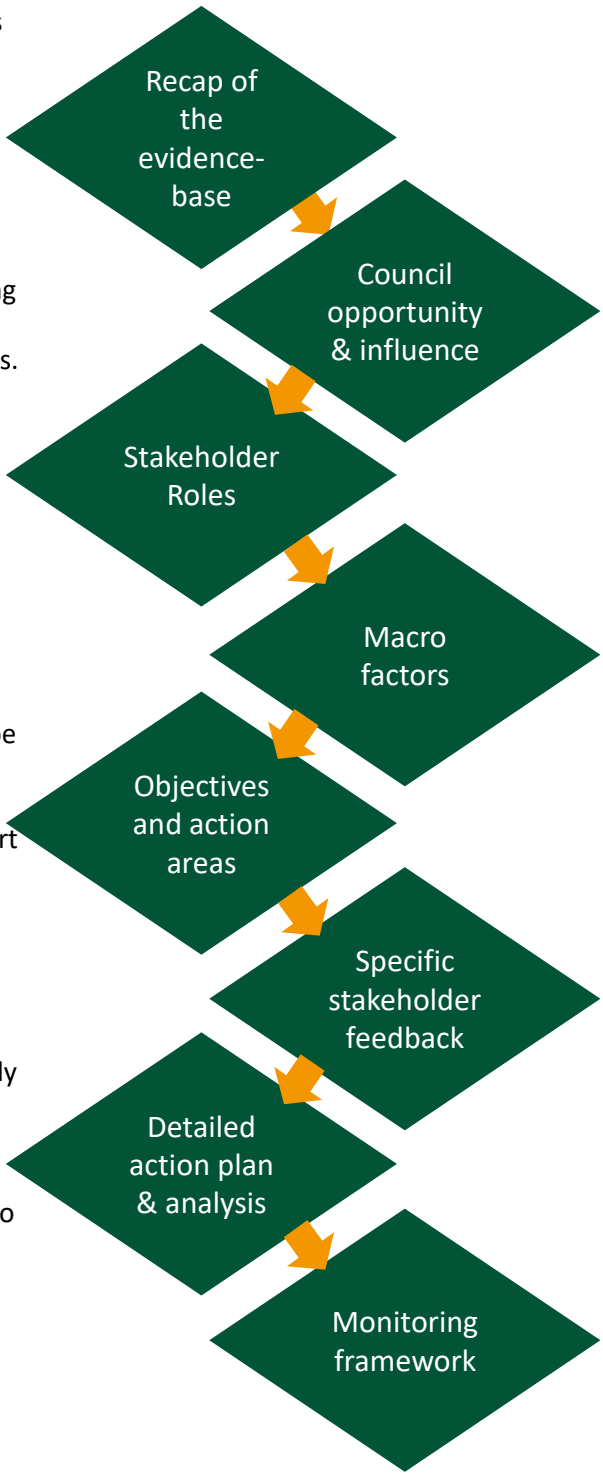
Throughout the process of developing this action plan, engagement with local stakeholders in Cheshire East to understand local context and identify any opportunities and barriers in working towards carbon neutrality has been key. It is essential that the actions reflect local views and that these are used to inform the principles around inclusivity, local action and collaboration.

Both internal and external stakeholders were consulted throughout the development of this plan, through 14 different workshops, interview and feedback sessions.

3. Action Plan
Process for developing actions

In order to develop the list of actions, the following steps have been taken to refine and develop a Cheshire East specific list. This was done by first establishing areas of **impact** by reviewing the evidence base alongside the council's opportunities to influence change, followed by developing **detailed** objectives, actions and implementation considerations.

- **Evidence base recap** - The first step involved reviewing the evidence base on the current context of each sector and the modelled carbon reductions milestones.
- **Opportunities for delivering progress** - The next step was to understand the council's influence within each sector so that the council understands its role in providing support. This was based on insights from engagement with the council, current policies and plans and research into best practice. Similarly, stakeholder groups were also defined for each sector to show the different actors that would need to be involved and what potential roles could be. This exercise was not exhaustive, nor did it aim to prescribe a set of actions but instead aimed to show where different groups could contribute. This ensured that the council's action plan could focus on how to support or enable stakeholder action. Other potential factors that might impact progress but are beyond the influence of the council were also considered.
- **Priority actions** - The above steps were then used to create a set of objectives or action areas where the council should focus its support. This was subsequently broken down into a list of more detailed actions, incorporating specific barriers or enablers raised during local consultation. In addition to the actions, a summary of equality considerations has been added to factor in how the actions may impact the wider society. A more detailed analysis of these actions including metrics for measuring success and potential resource requirements are included in Appendix 4.



Finally, a monitoring framework has been developed to help the council progress the action plan forward. Key performance indicators have been assigned to support tracking and assessing the progress of the actions.

3.1 Overarching Actions

3.1 Overarching Actions
Introduction

Achieving the borough's target of carbon neutrality by 2045, will require a range of activities across the council's own operations. Cheshire East Council can positively impact their own carbon emissions through strategy and policy updates, procurement changes and educating staff.

Action area	Current context
Council footprint	The Council's footprint for 2018-19 was 15,447tCO_2e.
Council staff	The Council employs over 3,500 people working across around 500 services.
Procurement emissions	In the financial year 2021/22 emissions from contracts totalled 4,317tCO_2e. The majority of emissions was sourced from professional services and rentals.
Towns and Parishes	There are 12 town councils and 90 parish councils within Cheshire East.
Climate action groups	There are several local climate action groups operating in Cheshire East who have come together to form the Cheshire East Climate Alliance.

The Cheshire East Plan is the main overarching strategy, while the Carbon Neutral Action Plan includes actions for the council to prioritise in support of its carbon neutral 2027 organisational target. This also includes some enabling actions that will influence climate action across the borough with the council leading by action.

Opportunities for Delivering Progress

Council's influence: High

The main areas in this section consider actions the council can take internally to ensure its processes, people and decisions are aligned to its carbon neutral target. In addition, the council can maximise the partnerships and relationships it has to make the most of its wider influence to key stakeholders connected to the council.

As a result, the council has a high degree of influence over the Overarching actions. Internally, the council can make changes to internal processes and decisions to ensure that they consider the impacts on the carbon neutral ambition. This does occur to some extent already – the carbon impact of projects is reviewed in some cases, but not consistently, and these impacts are not always prioritised in the final decision. There is also an opportunity with the development of a new Cheshire East Plan for the council to prioritise climate action.

On its work with partners, the council has a slightly lower level of influence, as it cannot demand changes or effort from partner organisations. However, many local organisations are also committed to similar targets and there could be more for the council to do on maximising existing networks and partnerships to collaborate on action, share ideas and concerns. The council can also facilitate more collaborative working and provide advice and guidance.

3.1 Overarching Actions
Working Together

Stakeholder Roles

Coordination among various stakeholders across the borough will be important to ensure lessons learned and best practice is shared. Efficiencies and economies of scale can be achieved if effective collaboration occurs with local stakeholders. The following table summarises some of the potential roles for identified stakeholder groups.

Stakeholder	Roles
All suppliers	Reducing emissions in the borough and across the council's wider footprint will rely heavily on suppliers to not only report their emissions and set targets but also to take actions to reduce emissions from their own operations. Reducing their own emissions, particularly those based in the borough will help contribute to borough-wide progress. Scope 3 emissions profile has been developed to support this.
Town and Parish Councils	The local Town and Parish Councils can help with coordination and implementation of actions across the borough. Capacity and resources are limited at Town and Parish Councils, therefore effective management across the Councils will be important.
Local businesses, organisations and residents	There will be specific roles for business, residents and other organisation in each sector but generally there is a need for engagement with guidance and programmes set up by the Council. Communication is needed between all stakeholders.
Public sector	Collaboration and engagement will be required across all public sector organisations in Cheshire East on accessing funding, leading by example and delivering on projects which have multiple benefits e.g. health and climate.
Voluntary, Care, Faith and Social Enterprise (VCFSE) sector	VCFSE organisations will also need to be involved and can embed sustainability practices within their business and day to day roles. The needs of the community or member of the community will need to be considered in changes. The organisations may also be able to help communities through their work.

Other factors to consider

The following factors could impact how quickly progress happens:

- **Competing priorities** – When working across different stakeholders across the borough, there will be competing concerns and agenda on how to reach net zero. The priorities of each stakeholder may be different which can be beneficial if lessons and resources are shared, but it could also potentially slow down action if it takes additional time to align activities.
- **Government policy and funding** – Changes to national policy and ambition and availability of funding for resources will help positively or negative enable local action.

3.1 Overarching Actions
Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green. A more detailed version of these actions including implementation considerations is included in Appendix 4.

Objective	2025-2030 Actions
Encourage and enable council staff to take climate action	Continue to provide education and enhance climate knowledge and explore rolling climate pledges for council staff.
	Every service area within the council to have a named position with a focus on carbon detailed within their role, these carbon champions to form a Wider Borough Carbon Board.
	Prioritise at least one person per team and all committee chairs and vice-chairs to be certified as carbon literate.
	Provide guidance and support on agile working practices to reduce unnecessary travel.
	Design a communication campaign, different to previous approaches, to inform people of the facts/urgency of the situation and motivate staff to proactively act and support activities.
Council policies and processes to prioritise reducing carbon and climate impact	Prioritise and consistently use carbon assessments in the decision process of projects and include carbon pricing into capital investment decisions.
	All policies, strategies and plans that are being developed or renewed to incorporate carbon reduction as a central pillar. Where possible, documents being reviewed to go through the Carbon Neutral team to explore options for carbon reduction. In particular, the upcoming Local Plan, Transport Plan, Corporate Plan and Local Wellbeing Strategy.
	Continue to explore divesting from fossil fuel investments in the council pension fund.
Reduce the council's supply chain related emissions	Assess and monitor the carbon impact of the Council's supply chain and local supply chain.
	Further embed carbon neutral consideration into Procurement Policy (reduce Scope 3 emissions), including through social value and increased weighting.

3.1 Overarching Actions
Action Plan

Objective	2025-2030 Actions
Develop partnerships with local organisations to deliver climate action	Engage with business support organisations and skills training providers to encourage take up of carbon reduction training in local businesses.
	Explore developing an ambassador programme for businesses to facilitate knowledge sharing and support collaboration.
	Identify external groups working on overlapping measures to work together e.g. Air quality steering group.
	Increase co-operation with local environmental and sustainability groups on local engagement and action.
	Work with other local organisations to have joint messaging on the benefits of climate action, in particular the health benefits.
Enable Town and Parish councils to take climate action	Support Town and Parish Councils with information on opportunities for grant funding schemes and potential projects.
	Explore collaborating with partners on roaming resident engagement sessions.
	Promote innovative communications at events with climate action at their core to raise awareness to local residents.
	Work with Town and Parish council to explore setting up dedicated support within the council for Town and Parish climate action and possible opportunities for funding this.
Support a regionally co-ordinated climate action approach	Explore collaboration on climate action with neighbouring authorities and sub-regions.
Explore avenues for generating finance for local low carbon projects	Explore the opportunities for green finance e.g. business rates and explore opportunities in for mechanisms in the way the council raises revenue to raise funding for green projects.
	Continue to promote investment in low carbon projects by the local community and local businesses through community grants schemes.

Equality Considerations

- Ensure that work with Town and Parish councils considers the variety in size and geography of the council areas and constituents, to ensure that resource is used in an equitable way.
- Ensure inclusivity and equality are embedded into the way in which Cheshire East Council operates and manages its sustainability work.
- Ensure projects that the council is supporting consider the avoidance of negative impacts on certain communities and that they support inclusion, particularly of marginalised and excluded communities. Ultimately, the outcomes of the plan should work to reduce health inequalities resulting from climate change.
- All climate action should consider vulnerable groups, including the impact of action on communities and opportunities to prioritise action in area most in need.

3.2 Domestic Buildings

3.2 Domestic Buildings
Introduction

Evidence Base Recap

The domestic buildings sector represents 23% of Cheshire East's total emissions. This sector covers emissions from households from which, fall into one of two categories; heating and hot water emissions and emission from lighting, appliances and cooking. These categories across the borough are approximately an 80:20 split.

Action area	Current context	Modelled milestones
New builds	1,562 new homes were completed in 2022 across Cheshire East. SCATTER modelled a 12,500 increase in the number of households by 2050. This is an estimate based on historical levels of growth and the actual levels of development will be established by the Local Plan.	• 7,200 households receive "medium" retrofit. • 57,500 households receive "deep" retrofit. • 9,600 new houses projected in SCATTER are built to Passivhaus standards. • Reduce energy demand for appliance, lighting and cooking by 31%. • 46% of heating systems are heat pumps or equivalent electrified systems, 54% met by gas/solid fuel systems. • 32% reduction in gas usage for domestic cooking, displaced by electric systems.
Energy Performance Certificate (EPC)	19% of domestic EPCs were rated B and above.	
Vulnerable households	18,475 properties are classed as in fuel poverty.	
Housing tenure	The 2021 census showed 16% of the market is private rental, 12% is social rented and 72% is owner occupied.	
Gas consumption	From 2010 to 2020, gas consumption fell by 2% borough wide, 12% per household.	

The Council has the Cheshire East Plan, Building Regulations, the Local Plan and the Housing Strategies as the main strategies in this area. The council mostly delivers energy efficiency improvements through central government grant schemes e.g. HUGS and SHCF. These schemes have been successful but that only apply to a small proportion of homes that meet the qualifying criteria, leaving many other homes unsupported. The council also has the Rural Action Plan in place which includes rural property actions.

Opportunities for Delivering Progress

Council's influence: Medium

In order to deliver improvements to homes the council relies on central government funding to be available, which is changeable and outside of the council's control. The council does have good networks with registered housing providers which could be maximised to encourage and drive improvements. The council has the ability to share information on grant opportunities to households that qualify (e.g. vulnerable households or rural communities) and does use this influence to encourage householders to take up schemes where relevant. The council has less ability to influence those who do not qualify for funded schemes and will need to provide guidance and information but cannot fund measures in those homes.

There is also opportunity to influence new developments via planning and the update to the local plan. However, ambition may be constrained by what is included in the National Planning Policy Framework and current building regulations. There are also competing priorities for new developments which may limit the extent to which carbon reduction is implemented so the council will need to explore how to balance this.

The private rental market is seen as difficult for the council to influence but there are networks with landlords that the council could use for engagement. The enforcement of Minimum Energy Efficiency Standard (MEES) and housing efficiency standards was seen as an area that the council was more reactive in but could use its powers to improve.

Stakeholder roles

As the sector with the largest emissions within the borough, it is critical stakeholders are meaningfully engaged to tackling emissions in domestic buildings.

Stakeholder	Roles
Registered housing providers	There will be a need to work with housing providers to improve housing stock and access government funding. There may also be a need for housing providers to engage with their tenants on energy saving.
Private Landlords	Landlords are required to meet certain energy efficiency standards so there is a need for landlords to make improvements to properties and exceed these where possible.
Homeowners	Given that a large proportion of homes are owner occupied, there will be a need for those able to pay to make improvements to their homes. There are barriers to retrofit but other improvements could also be explored such as smart meters. Residents can engage with energy advice and guidance, where applicable.
Developers	With the local plan review, developers have the opportunity to engage with plans to explore ways to further reduce carbon in new developments.
Retrofit providers	Skills we be needed from industry to deliver home improvements.
Regional Bodies e.g. North West Net Zero hub	There is a need to encourage and promote regional collaboration where best practices can be shared, such as the Regional & Authority Level Retrofit Assessment.
National Government	Further funding and grant schemes will be needed to aid the most inefficient and poorest households to have energy saving measures. Ambitious planning policy, building regulations and the phasing out of fossil fuels is needed.

Other factors to consider

The following factors could impact how quickly progress happens:

- **Skilled workers** – There are not enough qualified engineers and retrofit workers to meet the demand that is required. Engaging with education institutions will be important to ensure that there is a growing local workforce.
- **Government policy** – Policy changes to domestic heating systems can impact the roll out of heat pumps and other electrified systems.

3.2 Domestic Buildings Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Support private rental market to improve energy efficiency of domestic properties	Improve enforcement of minimum energy efficiency standards to capture non-compliance, providing support to tenants and landlords where needed. Create mechanism to report landlords not meeting standards.
	Provide guidance and educational resources to landlords on the need to improve properties and the benefits of investing.
	Create green accreditation schemes for private landlords including access to finance, suppliers, installers and discounted EPC surveys as an incentive to the private rental sector to improve energy efficiency.
	Local Skills Improvement Plan to ensure skills to deliver medium and deep retrofit and engineering are within the local workforce.
	Improve enforcement of minimum energy efficiency standards to capture non-compliance, providing support to tenants and landlords where needed. Create mechanism to report landlords not meeting standards.
Planning supports net zero ambitions by increasing energy efficiency in new builds	Explore using the Local Plan refresh as an opportunity to increase ambition on the standard and quantity of net zero new builds and carbon reporting.
	Develop supplementary planning documents or other guidance to provide advice on improving energy efficiency, low carbon heating and renewables. Consider using Passivhaus or equivalent as the standard.
Support the development of net zero infrastructure	Engage with our Distribution Network Operators (DNOs) to plan for greater electrification of systems in households.
	Identify future residential developments that meet criteria for heat networks or heat network zoning.

3.2 Domestic Buildings Action Plan

Objective	2025-2030 Actions
Enable and advise vulnerable households to improve home energy efficiency	Support off-gas or rural communities to switch heating systems to sustainable sources through grant funding and awareness raising.
	Provide guidance and advice to households to publicise the availability of government funding for retrofitting and energy efficiency measures, such as ECO4 and ECO flex.
	Directly allocate available funding for retrofit or prioritise delivery of grant funding of low energy efficiency homes in the borough, for the most vulnerable households.
	Explore the use of green finance on how to retrofit homes (e.g. green mortgages).
	Continue to work with social housing providers to deliver grant funding and use lessons learnt to expand schemes in future.
Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Provide information to residents on retrofit options where feasible.
	Create a strategy which establishes a framework for large scale residential retrofitting and the council's role within it.
	Set up means for residents to collaborate and showcase local examples of decarbonisation via council website.
	Continue to develop neighbouring sub-regional co-operation on housing, which could lead to sharing capacity and resources and supporting green finance opportunities.

Equality Considerations

- Households on low income may struggle to attain the benefits of retrofitting measures due to having a lack of access to upfront capital costs.
- Households which are affected by fuel prices and the rising cost of living, should be considered to make sure their health and wellbeing is not significantly impacted.
- Remote communities are more likely to require substantial intrusive measures due to hard to treat housing from being less likely to be connected to the mains gas and electricity.
- In the rental sector, the cost for some retrofitting measures may be passed on to tenants, who may or may not have the funds.
- Local businesses will feel time and cost pressure from larger businesses meeting their targets.
- Businesses will need to upskill workers to install electric heating.

3.3 Non-Domestic Buildings & Industry

3.3 Non-Domestic Buildings & Industry Working Together

Influence of private businesses is more limited. For SMEs, some grant funding can be accessed and facilitated by local authorities but this is reliant on the provision of it. The council can use its connections with large businesses in the borough, particularly those which operate internationally and follow international best practice for reporting and target setting to facilitate knowledge sharing and best practice. The council can also encourage knowledge and resource sharing through social value offers, where appropriate. There may also be a role in convening and facilitating collaborative projects using business networks and clusters.

Stakeholder roles

Tackling emissions in non-domestic buildings requires coordination between multiple stakeholders given the different types of businesses and building owners across a whole borough.

Stakeholder	Roles
Public sector	Some public sector buildings can access grant funding for delivering energy efficiency improvements. Organisations in the public sector can work together and share best practice. Feasibility studies and match funding may be required for improvements.
SMEs	Although only small businesses, there is still a need for SMEs to reduce emissions from their operations. Monitoring energy usage and exploring grant funding or ways of financing improvements will need to be adopted. However, some SMEs may be tenants so will be limited in building interventions.
Large businesses	Large businesses could have a large impact by reducing energy consumption at sites. However, they are not always headquartered in the borough even if they do have significant operations, which can make it difficult for them to have autonomy to act locally. More efficient industrial processes will also need to be delivered by businesses.
Business Parks	There could be a role for businesses located in business clusters to collaborate and share resources on climate action.
Heritage building owners	Heritage buildings may present challenge as there are restrictions on development however it is still important that energy saving measures are made where possible.
National Government	Further funding and grant programmes will be needed to support businesses, particularly small businesses. Further policy and legislation on emissions reduction from industry can support decarbonisation. Ambitious planning policy, building regulations and the phasing out of fossil fuels is needed.

Other factors to consider

- **Government policy** – Changes to policies that impact energy efficiency, low carbon fuels and the uptake of renewables will be important to help give confidence to companies to implement interventions.
- **Innovation and competition** – Companies are increasingly setting their own science-based targets and seeing the pressure from investors and customers to make more sustainable choices. This may drive further demand and opportunities.

3.3 Non-Domestic Buildings & Industry

Introduction

Evidence Base Recap

Emissions from non-domestic buildings make the sector the second largest contributor to Cheshire East's emissions profile. There are four sub-categories within non-domestic buildings, the largest being industrial building and facilities (14%), then commercial buildings and facilities (7%), institutional buildings and facilities (3%) and the smallest is fugitive emissions (2%). Similarly, to domestic buildings, emissions within non-domestic buildings split into two categories at a ratio of 60:40; heating and hot water emissions and emission from lighting, appliances and cooking.

Action area	Current context	Modelled milestones
Display Energy Certificate (DEC)	In 2020, over 1 in 4 were rated E,F or G.	• Reduce heating demand in buildings by 17%. • 11% reduction in demand for appliances, lighting and cooking. • 46% of heating systems are electric, with the remaining 54% being supplied by non-electric systems. • Process emissions reduced: 26% for chemicals, 18% for metals, 22% for minerals and 73% other industries.
Businesses	As of 2023, there are 19,300 enterprises in Cheshire East.	
Small Medium Enterprises (SMEs)	Over 90% of businesses in Cheshire East are classed as SMEs.	
Gas consumption	1,700 GWh of gas was consumed in 2021 in Cheshire East.	
Listed buildings	There 2,637 listed buildings in Cheshire East.	
Public sector	In 2020, emissions from public sector buildings was 63.12 ktCO_2e. There are 155 schools in Cheshire East and 16 leisure centres.	

Building Regulations are the key policy managing new non-domestic property development. The Council's Asset Management Plan (AMP) also supports the Council's decision making about investment in its land and property assets to deliver its services.

Opportunities for Delivering Progress

Council's influence: Low

As this sector is largely owned and managed by public and private sector organisations outside of the council, most of the activities sit outside the council's direct influence. However, the council has significant influence over the buildings it owns, which form a small proportion of non-domestic buildings across the borough. The council has good relationships with other public sector organisations in Cheshire East (e.g. schools and leisure centres) and the council could support access to funding, feasibility studies and other public sector financing. The council could also use this network to convene public sector organisations to have a joined-up approach.

Through planning, the council can also play a wider role in the decisions around new developments, and the Local Plan can be an enabler to push forward better standards, however the need to align with the national planning framework has historically limited net zero ambition in this area. The council can use upcoming reviews of the Local Plan to influence improvements.

3.3 Non-Domestic Buildings & Industry Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Enable and encourage businesses to support the borough's net zero ambition	Engage with managed business parks to share best practice and identify collaborative projects.
	Lever external support for low carbon research and innovation by businesses, building strengths sub regionally and nationally.
	Conduct feasibility studies for additional low-carbon energy networks in areas of high heat demand e.g. Town centres and industrial estates across the borough.
	Promote the adoption of heat networks, including through heat network zoning and planning.
	Encourage businesses to set net-zero targets and provide open reporting of energy and carbon data.
	Engage with the Cheshire and Warrington sub-regional and the Sustainable and Inclusive Growth Commission to deliver recommendations.
	Explore opportunities to be involved in Net Zero North West Cluster Plan and maximise the local benefits of such a scheme.
	Explore a climate pledge related to decarbonising buildings for all businesses in the borough.
Provide tailored support to SMEs to monitor and reduce their footprint	Provide guidance and support to SMEs to monitor annual energy usage and create mechanism to report this.
	Continue to support businesses in accessing green finance and grants by providing staff resources for guidance and advice (e.g. shared prosperity fund).
	Rural lead to continue and expand work supporting businesses to increase energy efficiency and development of plans.

3.3 Non-Domestic Buildings & Industry Action Plan

Objective	2025-2030 Actions
Planning supports net zero ambitions by increasing energy efficiency in new builds	Investigate using Section 106 developer contributions and Community Infrastructure Levy to deliver net zero infrastructure.
	Explore using the Local Plan refresh as an opportunity to increase ambition on the standard and quantity of net zero new builds and carbon reporting.
	Use existing networks (e.g. Local Government Association (LGA)) to lobby for increased ambition in National Planning Policy Framework (NPPF).
Provide guidance to owners of listed buildings on options for decarbonisation	Provide guidance and best practice and promote knowledge sharing through the sub-region on listed building retrofit. Support owners to understand eligibility for funding and options for retrofit.
Enable and encourage public sector and community groups to support the borough's net zero ambition	Share lessons learnt and lead the way for others in the borough by decarbonising the council's own property.
	Use relationships with schools and leisure centres to support them with access to finance for retrofit and provide guidance on decarbonisation.
	Use the existing sustainability network to share knowledge and build collaboration opportunities. Explore ways the council can support this group.
	Support community groups and charities to decarbonise their buildings and activities.
	Engage with large public sector bodies and wider public sector partners, such as the police, to find synergies. Work collaboratively with, and support, NHS Trusts in working towards their net zero ambition through e.g. Heat Networks and joint procurement.

Equality Considerations

- New developments can be poorly equipped to future climate risks if not taken into account.
- Most small – medium businesses are tenants, which provides a barrier to retrofitting. Furthermore, the upfront capital cost for retrofitting may be too much and therefore lower operational costs will be missed out.
- Larger businesses achieving ambitious standards will likely apply pressure to local trade in cost and time.
- Many larger enterprises take a portfolio approach to retrofitting, which may lead to sites in Cheshire East becoming deprioritised.

3.4 Transport

3.4 Transport

Introduction

Evidence Base Recap

Transport is the largest contributor (34%) to the carbon emissions profile for Cheshire East. The majority of emissions are associated with on road transport (33%), which includes all private and freight travel, while the remaining 1% is attributed to waterborne, rail and off-road vehicles (other transport).

Action area	Current context	Modelled milestones
Active travel	In 2021, 35% of people regularly walk or cycle 5 times per week.	• 25% reduction in the average number of passenger miles travelled per person. • 5% reduction in the share of miles driven on roads. • Share of passenger miles increases 5% through active and public transport. • 89% of private vehicles are EV (electric vehicle) or HEV (hybrid electric vehicle). • All buses and trains are electric. • Road freight milage reduces by 9% and the efficiency per mile travel increases by 71%.
Car ownership	75% of the mileage on Cheshire East's roads in 2019 were from private cars and taxis.	
Public transport	The average number of bus journeys per person in 2021 was 6.	
Ultra-low emission vehicles (ULEV)	4,500 of registered vehicles are ULEV.	
Heavy and light goods vehicles (HGVs/LGVs)	0.2% of HGVs/LGVs were electric in 2021.	

The Local Plan also includes some policies around minimising journey times. The Cheshire East EV Infrastructure Strategy is the key document outlining delivery of infrastructure to enable electric vehicle use. The Cheshire East Highways Asset Management Strategy focus on council assets. The Local Transport Plan and Local Transport Development Plans outline the actions and potential schemes to improve the transport network to support the borough. The extent to which these strategies prioritise environmental implications needs to be considered, given the potential competing priorities arising.

Opportunities for Delivering Progress

Council's influence: Medium

The council has a higher influence over transport and highways assets that the council owns and operates but is not able to change assets outside of its control. Planning requirements need to be considered with relation to the infrastructure needed to facilitate these changes. There are opportunities with updating the Local Transport Plan which can support and influence change in this sector. The council has the ability to provide infrastructure including cycle ways, public footpaths, bike storage and EV charging in owned car parks. By providing infrastructure and guidance to individuals and businesses, the council can use its wider influence to encourage the use of lower carbon travel options including active travel and electric vehicles. The council can influence access to buses, particularly rural buses but is more limited on national rail services. Lack of resource was mentioned as a barrier to the council, encouraging more behaviour change and the extent to which this is within the council's remit has been challenged.

The council's influence over external organisations on transport is limited but the council should still use existing networks to engage, particularly with larger companies who may have their own climate ambitions. There may be existing relationships with taxi companies via licensing for raising awareness.

3.4 Transport
Working Together

Freight transport is an area where the council will have very limited ability to influence and requires transport authorities and industry to change, though there could be opportunities to explore strategic logistics sites as part of the council's Economic Strategy.

Stakeholder roles

Reducing transport emissions will require coordination from multiple stakeholders to ensure there is an efficient way for people to travel from point A to point B.

Stakeholder	Roles
Health sector	Communications advocating for active travel options can have their outreach extended by collaborating with the health sector.
Schools	Schools are a priority area to ensure that measures are implemented to improve air quality. Schools can play a role raising awareness with parents and pupils and ensuring measures are in place for safe active travel and public transport.
Businesses	Businesses have a key part in supporting employees with sustainable travel options. Guidance on travel planning will need to be distributed by to employees and facilities such as bike storage, showers and EV charging can support staff. Incentives could also be provided. In line with the other interventions in this sector, commercial vehicles will also need to shift to alternative fuels and where possible journeys reduced.
Residents	A large part of this sector relies on residents being able to uptake active travel, public transport and EVs. Whilst it is important this is enabled by the council, there will still be a need for behaviour change from people to choose more sustainable options where possible.
Freight	Freight makes up a significant part of transport emissions so there is a role for freight companies to consider local consolidation and decarbonising vehicles. Although many will operate beyond the boundary of Cheshire East.
National Government	Funding for infrastructure will be needed to support councils to deliver sustainable travel options. There also needs to be ambitious policy and phasing out of fossil fuel vehicles.

Other factors to consider

- **Behaviour change** – Cheshire East is a heavily car dependent area which will require a significant shift in behaviours for residents to switch to active travel options. This change may occur quicker or lower than desired but will rely on a trusted infrastructure system to encourage the change.
- **Technology changes** – Council policies will need to stay flexible enough to allow for the consideration of new innovative technologies. Stakeholders will need to stay on top of emerging changes.
- **Level of coordination** – For the transport sector in particular, it requires increased coordination between different stakeholders as people do not move just within the borough but also to neighbouring local authorities. Understand where the demand is for travel will be important and ensuring that there are low carbon options available for those commutes.
- **Supporting infrastructure** – There are concerns about a lack of supporting infrastructure and services e.g. roads not suitable for cycling, EV charging points and lack of public transport.

3.4 Transport
Action Plan
Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Planning supports net zero ambitions by prioritising low carbon transport options	Explore options to encourage developers to create neighbourhoods with good access to services and public transport and active travel infrastructure/facilities (e.g. bike racks, cycle lanes, and wide and well-lit pavements).
Enable and support schools to reduce their emissions	Work with schools and academies in the borough to encourage active travel, set up walking buses and provide cycle workshops.
	Explore the possibility of restrictions on idling through anti idling campaigns, introduce parking zones and road closures near schools during peak hours.
	Engage with schools to identify opportunities for new or extended school bus routes.
Support decarbonisation of freight	Encourage and support council suppliers and other businesses to utilise rail freight or waterborne opportunities as opposed to HGVs.
	Review opportunities for freight consolidation and loading restrictions, (including personal deliveries) in town centres, to reduce last mile emissions.
	Encourage the use of local suppliers through setting up "meet the supplier" events and promote the benefits of consolidating journeys in forums and business groups.
Encourage businesses to reduce business related journeys and support their staff to use sustainable transport options	Facilitate flexible and agile working practice for businesses through supporting development of co-working spaces.
	Encourage businesses to offer incentives to staff to use more sustainable transport e.g. active travel, public transport and EVs.
	Encourage businesses, particularly large employers to develop a sustainable travel plan including providing facilities for active travel (e.g. cycle to work scheme, bike racks) and infrastructure for EV and alternative fuel (e.g. Hydrogen) to support their staff to make sustainable travel choices.
Support commercial vehicles to switch to EV	Engage with businesses on route optimisation techniques and provide guidance on the benefits of switching to EVs.
	Engage with taxi companies on the benefits of switching to EVs and barriers to switching fuels.
Encourage residents to use more EVs	Provide guidance on travel planning, and the benefits of switching to EVs, so residents can make informed choices.
	Explore and identify EV funding opportunities (for purchasing an EV or installing charge points) which are aimed at residents.

3.4 Transport Action Plan

Objective	2025-2030 Actions
Improve infrastructure for lower carbon transport options	Install EV infrastructure in identified strategic sites across the borough to support the switch to EVs, in line with the EV charging strategy.
	Continue to deliver on EV infrastructure strategy including measures on buses, taxis, off street parking and DNO engagement.
	Ensure all new road building and road maintenance projects minimise their carbon impact.
	Explore the opportunities to improve on and expand active travel corridors defined by those set out in the Cheshire East local cycling and walking infrastructure plan.
Use plans and strategies to increase active travel and disincentivise higher carbon transport options	Identify sites of high active travel footfall and consider measures which will encourage a greater uptake (e.g. cycle lanes and pedestrian zones) and provide safe and clean areas for residents.
	Continue to deliver on Air Quality Action Plan including developing active travel strategy, low emission strategy, website updates and school resources.
	Consider schemes that have been implemented elsewhere such as emissions-based charges, low emission zones, workplace charges to encourage the switch to EVs and consider potential impacts of this. Review speed limits where appropriate and consider more 20 mph zones where appropriate.
Enable communities to have more low carbon, accessible and reliable public and shared transport options	Work with industry partners to decarbonise public transport across the borough e.g. switching buses to 100% electric.
	Use the Local transport plan to improve service offerings and to explore how we can develop a public transport offering which reflects the needs of residents in each geographical area.
	Encourage car sharing including car sharing apps.
	Support demand responsive transport and promote car club developments across the borough.

Equality Considerations

- The lack of accessible active and public travel infrastructure may limit vulnerable and differently-abled groups, therefore private vehicles may be their only option. There could be a need for more specialist services and/or equipment which might not be not available locally.
- Improvements in active and public travel options need to consider vulnerable populations and equity to ensure improvements benefits are not just seen in more affluent or already well-connected areas.
- Low-income residents are less likely to be well served by decentralised services and the high cost of public transport compared to private vehicle use will act as a barrier. It is unlikely that these communities will switch their ICE vehicles to EVs due to the current costs and lack of proper infrastructure.
- Businesses may have to switch to EVs if they are within a congestion or emission zone. This will cause a high upfront cost which some businesses may struggle with.
- Communities in rural areas of Cheshire East will most likely rely on their private vehicles as public transport is not feasible.

3.5 Agriculture & Land Use

3.5 Agriculture & Land Use
Introduction

Evidence Base Recap

The agriculture and land use sector accounts for 12.03% of Cheshire East's carbon baseline. There are three sub-categories that contribute to this value are livestock (11%), agriculture (1%) and land use (0.3%). Livestock and agriculture are sources of emissions stemming from farm animals and crop farming practices, respectively. Land use acts both as a source and sink for emissions due to changes in the land's use and the natural environment taking up carbon.

Action area	Current context	Modelled milestones
Land use type	70% of land in Cheshire East is classified as agricultural, as of 2022.	• 12% reduction in the number of livestock. • Increase lone tree planting to the equivalent of 50 trees per hectare. • 24% in forest coverage and a 7% decrease in grassland.
Livestock	1.8 million poultry, 140,000 sheep, 125,000 cattle and 8,000 pigs as of 2020.	
Non developed land	91% of land is classed as non-developed in Cheshire East in 2022.	
Council-owned land	Over 2,600 land and building assets under Cheshire East ownership.	
Tree coverage	Lone tree coverage for 2020 was approximately 45 trees per hectare.	
Woodland	In 2022, 9,250 hectares across Cheshire East was classed as woodland or forestry.	

The Green Infrastructure Plan is the council's main plan covering the natural environment and outlines the aspirations for a comprehensive and connected green infrastructure that will meet the needs of people and nature in the 21st century; to pass on a better environment to the next generation. This outlines the four reasons to invest in Cheshire East's natural green infrastructure, one of which is climate change.

The Local Plan also includes some policies around the use of land, while the Environment Strategy covers how the council will address the issues in agriculture and land use. Cheshire East Greenspace Strategy covers the management and connection of green space to maintain health and wellbeing and biodiversity while the Landscape Scale Partnership Strategy sets out how the council will work with National Trust to effectively manage land in the north of the borough. The protection of peatland is also a priority of the council following a study into the Peatlands of Cheshire East and their environmental importance.

Opportunities for Delivering Progress

Council's influence: Medium

The council has significant influence over land that it manages and owns, to best understand the most beneficial use of that land in relation to biodiversity, carbon sequestration and sustainable land management practices. The council has less influence over the activities and practices of local landowners on their land but has an opportunity to showcase leadership and provide guidance on sustainable practices. Planning is also a key enabler in ensuring sustainable land use while considering biodiversity implications and can impact new developments.

3.5 Agriculture & Land Use
Working Together

A particular focus will be on agricultural land, the council has limited influence over farming and farming practices, but it is a key sector for the borough and there are existing networks to engage with. Peatland is also a priority but some of this is on privately owned land so the council must use its influence to raise awareness and work with other landowners.

Stakeholder Roles

Protecting and enhancing the agricultural sector will be greatly help the borough in increasing its carbon sequestration potential. There are a number of land-owners and land uses to consider:

Stakeholder	Role
Farmers	As a significant land use in Cheshire East is agriculture, farmers are a key stakeholder. They have a role in engaging with this agenda and exploring more sustainable farming practice where possible.
Landowners	There are a number of private landowners in Cheshire East that can also play their part by protecting and enhancing green space and biodiversity. There will be a need to engage with the council and other landowners.
Education	Colleges, in particular, Reaseheath College, offer Agricultural courses to help support and shape the future of farming. The colleges can help increase agricultural skills in the local workforce.
Local communities	The use and continued protection of green spaces from local communities will be important to ensure that they are maintained. Volunteer and community groups are often the champions of these efforts and support tree planting efforts.
National Farmers Union	The NFU can help communicate the importance of climate change and sustainability. They have the ability to coordinate nationally and align on guidance and information provided to farmers.
National Government	There is a need for ambitious policies on new developments and support for the agricultural sector to reduce emissions.

Other factors to consider

- **Ownership of assets** – A continued assessment of the ownership of assets that could plant trees, create new wetlands and wildlife zones, and create public green spaces will be important. As ownership changes, engaging with these landlords will be critical to ensuring green infrastructure remains a priority.
- **Biodiversity and ecology** – Plans must ensure carbon reduction and sequestration opportunities do not overtake wider environmental impacts and cause adverse effects on biodiversity and local ecosystems.
- **Changing diets** - There may be a shift in diets that could impact livestock in Cheshire East as people shift to local, seasonal and plant-based foods. The extent at which this behaviour change happens will impact the livestock industry.

3.5 Agriculture & Land Use Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Support the farming community to encourage regenerative and sustainable farming practices	Review the Farms strategy and Agricultural Land Holdings to maximise opportunities to reduce carbon emissions.
	Continue to engage with the National Farmers' Union (NFU) and other key agricultural stakeholders to provide guidance on sustainable farming practices.
Maximise carbon sequestration, support biodiversity and use sustainable land practices on council owned land	Where possible, restore, retain and protect existing land uses which store carbon dioxide on council-owned land. E.g. allow community groups to grow and upkeep wildflower verges, small grass areas and have access to allotments.
	Update the Green Infrastructure Action Plan to include Landscape-scale projects, town and service improvements.
	Work with town councils and other local community groups to deliver tree planting and other carbon sequestration activities as well as management of trees, especially in flood prone areas.
Planning supports net zero and biodiversity ambitions	Ensure tree cover, green infrastructure and Biodiversity Net Gain (BNG) is considered for all new developments through the new Local Plan by mandating for a minimum level of tree coverage in new developments, in line with the Carbon Neutral ambition.
	Where possible, ensure new developments support the environment by avoiding constructing on sequestering land e.g. greenbelts and peatlands.
Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Raise awareness through business networks and provide guidance to businesses on tree planting and local offsetting.
	Where possible, avoid any degradation in healthy peatlands and restore as much degrading peat (which acts as a carbon source) as possible by working with landowners.
	Engage with local land owners and key stakeholders on land use issues and ways in which the council can provide support.

Equality Considerations

- Lower income areas are less likely to experience green infrastructure projects as there is a lack of spaces and services to develop them.
- Shifting agricultural practices should put farming communities at the heart of a just transition, ensuring communities are not left behind and are able to benefit from climate action.
- The agricultural sector may require knowledge sharing/ upskilling if agricultural practices are required to change.
- Businesses with lack of information on climate risk may lead to projects or developments occurring on sensitive or risk-prone areas.

3.6 Waste

3.6 Waste
Introduction

Evidence Base Recap

The waste sector represents 1% of Cheshire East's emissions but consumption in Cheshire East results in emissions in other areas nationally and internationally outside of the borough's boundary.

Action area	Current context	Modelled milestones
Household waste	In 2021, the total collected household waste was 199,826 tonnes of waste, of which 56.3% was sent for recycling.	• 24% reduction in the volume of waste. • Increase recycling rate to 66%.
Commercial waste	The commercial and industrial sectors generate more waste than households. In 2021, the council collected 3,663 tonnes of waste from non-households. There are other waste providers which collect commercial, industrial and construction waste.	

Cheshire East already has a Municipal Waste Management Strategy 2030 which includes high level objectives to reduce household waste, increase recycling and work in partnership with other organisations. A Minerals and Waste Plan has also been developed for the borough. All of the waste collected is diverted from landfill by sending for composting, reuse, recycling and energy recovery. Commercial and Industrial waste in the borough may be collected by other waste management providers, but the council can still offer recycling services or use its connections with businesses to raise awareness of better recycling and reuse.

Opportunities for Delivering Progress

Council's influence: Low

The council can reduce waste produced on their own premises and from their own operations, but the majority of waste in the borough will be produced by other stakeholders including residents, businesses and other organisations. However, the council does have an opportunity to influence this through the provision of information and guidance in household waste collection and disposal services; including kerbside collection, recycling centres and litter bins) and by providing education and guidance to stakeholders. The council is also the waste planning authority which means they can develop planning policies to sustainably manage waste for new developments.

An important part of reducing waste is in the design of products to be more sustainable (e.g. ability to repair, recyclability), the council has a limited ability to influence this but could work with local manufacturers or encourage buying of more sustainable products including within their own procurement. For recycling, there needs to be demand or a market for recycled materials. It is challenging for the council to influence this as markets will extend beyond Cheshire East and require intervention at a larger scale.

Stakeholder Roles

Given the number of waste producers and macro factors at play in the waste sector, a number of stakeholders will need to be involved to deliver the waste interventions.

Stakeholder	Roles
Residents	Residents have a role to play in reducing household waste and increasing recycling and reuse where possible. Individuals can engage with campaigns and resources on how to recycle and reduce waste, engage in community initiatives (e.g. food redistribution, repair shops), consider the sustainability of products they buy and be encouraged to reduce consumption.
Businesses and industry	Commercial and industrial waste makes up a significant proportion of waste generated in borough and so there is a need for organisations to reduce waste, reuse and recycle where possible. Organisations should embed principles of circular economy into their business models and consider opportunities to reduce waste in supply chains.
Other local organisations e.g. NHS, police, schools	Schools and educational institutions can promote good waste practices in young people as well as reducing waste from their operations. There are already schemes in place with schools in Cheshire East to support this. There is also a role for other public sector bodies such as healthcare (e.g. Cheshire East Partnership) to reduce waste where possible and create a waste management plan.
National Government	There is a need for national government to lead the way through upcoming policies such as Extended Producer Responsibility. Food waste collection, Deposit Return Schemes and standardisation of waste collection. There may also be a role in encouraging markets for secondary recycled materials.
Manufacturers	Sustainability should be factored into product design and so manufactures or organising developing products should consider and review the opportunities to improve this.
Other waste collection and disposal providers	Other waste collection and disposal providers should ensure clear information is provided on what can and can't be recycled and work with the organisation collecting from to minimise waste and contamination.

Other factors to consider

The following factors could impact how quickly progress happens:

- **Government policy** – Changes proposed as part of the national Resource and Waste Management Strategy, the timing and level of ambition will impact on the delivery of waste interventions.
- **Secondary market for materials** – As referenced early, it is important to have a well-functioning secondary market for the use of recycled material to reduce the need for new materials.

3.6 Waste Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Improving waste services to enable waste reduction and circular economy	Develop a circular economy roadmap for the borough, mapping material flows within the area to identify opportunities for circularity and co-location.
	Encourage other waste collectors to review their waste processing and impact of RCVs.
	Respond to consultations and engage with national government on changing legislation to push ambition and plan for implementation.
Raising awareness amongst residents of the waste hierarchy and supporting initiatives that enable reuse	Support community groups to develop sharing/circular economy e.g., repair café, library of things, community fridge, food redistribution centres.
	Continue to work with organisations and develop own campaigns to deliver education and awareness raising on waste reduction, recycling and food waste.
	Continue to engage with schools and other educational institutions to raise awareness and support young people to understand waste reduction and recycling.
Improving waste services to enable waste reduction and circular economy	Encourage businesses to segregate their waste including their commercial organic waste to reduce food waste through incentives and sharing best practice.
	Signpost businesses adopting good waste or recycling practices or offering services that support circular/sharing economy to recognise activity and to share knowledge.

Equality Considerations

- There are often higher costs for more sustainable products which may exclude lower income groups from accessing these.
- Impacts on vulnerable and disabled residents who require more products in daily life such as the use of disposable items.
- Ensure areas with higher populations of vulnerable groups have access to sufficient waste collection provisions.
- Consider the protection of waste collection jobs through changes to collection.
- The impact beyond Cheshire East should also be considered, including the impact on informal waste collection.

3.7 Energy Supply

3.7 Energy
Introduction

Evidence Base Recap

The energy sector focuses on decarbonising the energy system within the borough; more specifically, increasing low carbon energy generation and the decarbonisation of the national grid.

The SCATTER model assesses the amount of installed technology that is required to meet local demand using local generation. Therefore, the data refers to the scale of technology required to meet demand rather than the type of technology.

Action area	Current context	Modelled milestones
Electricity demand	For 2021, the total electricity consumed for Cheshire East was 1,612.1 GWh.	• Increase small scale wind capacity to 153 MW. • Increase large onshore wind capacity to 93 MW and offshore wind capacity to 203 MW. • Increase small scale solar PV capacity to 461 MW. • Increase large scale PV (major power producers) capacity to 447 MW. • Increase small- and large-scale hydro capacity to 14 MW.
Fuel type	The national split of fuel type in 2021 was at a ratio of 0.63:0.35:0.02 for gas, electric and solid fuels.	
Off gas houses	10% of homes in Cheshire East are not connected to the gas grid.	
Renewable types & capacity	Energy capacity in 2019 was across five technologies; onshore wind (0.33 MW), solar PV (54.16 MW), Hydro (0.33 MW) and biomass (7.84 MW).	

The Local Plan includes guidance on considerations for planning new renewable energy installations and improvements to buildings to include renewables.

Opportunities for Delivering Progress

Council's influence: Medium

The council has some areas of higher influence in increasing renewable energy installations: on the council's own estate or land and in enabling installations through planning applications. The council can identify suitable assets and land that are viable for renewable energy installations and is already conducting feasibility studies to assess this viability. Cheshire East's Plan is a key enabling policy in this. The council can also play a role in supporting and enabling other organisations to encourage installations by showcasing leadership and providing guidance as well as working with other public sector bodies on accessing finance for renewables.

The council has less influence over installations businesses and individuals make on their properties, however planning plays a key role in enabling these installations. There could be opportunities to feedback through consultations on updates to the local plan and National Planning Framework to improve guidance and enable more renewable energy installations to be approved. There is also an important role for the council in working with the District Network Operator to plan for future energy demand.

3.7 Energy
Working Together

Stakeholder Roles

Addressing energy supply will require a range of different stakeholders and roles for groups due the nature of energy generation and infrastructure. There are, however, a number of stakeholders that can contribute.

Stakeholder	Role
Public sector	Public sector can install renewables on their buildings or access public sector funding where available to do this. This may be part of a whole building approach to improvements.
Businesses	Businesses will be responsible for their own procurement and installation of renewables.
Residents	For energy supply, the role of residents is mainly installations on their own properties e.g. solar panels. However, not all properties will be suitable, and it would require upfront investment.
District Network Operators (DNOs)	The DNO will be important for the roll out of infrastructure and support to not only the council but also businesses and residents.
Community Energy Groups	Community energy groups provide opportunities to access grants and other funding sources while also providing a direct benefit to residents.
National Government	As with other sectors, there is a need for funding or incentives for renewable energy installations. There may also be barriers in planning policy that national government can work to address. The government will need to provide leadership on national grid decarbonisation and large-scale renewable projects e.g. offshore wind.

Other factors to consider:

- **Cost of renewables** – a key barrier is the high upfront cost of installing renewables which requires either grants or funding schemes to cover. Return on investment needs clarity to ensure this can be considered against upfront cost.
- **Battery storage** – storage is a key enabler for efficient renewable use within the boundary and can help provide long term energy security, however high upfront costs can be a challenge.
- **Energy prices** – changing energy prices may create difficulty in understanding the true return on investment of renewables.
- **Planning** – National and local planning policy may discourage or be a barrier to renewable installations in some locations.

3.7 Energy Action Plan

Priority Actions

The following actions outline how the council will support stakeholders and deliver on the identified opportunities outlined on the previous pages. The colour of the objectives refers to the level of carbon impact. Starting from lower carbon impact to higher carbon impact the order is blue, yellow, light green, dark green.

Objective	2025-2030 Actions
Provide advice to residents on increasing renewable energy generation	Provide support and guidance on setting up community led energy schemes and groups. Explore partner organisation/initiatives to help deliver and promote this.
	Provide information on the benefits of installing renewables on property and on how residents can go about this e.g. use existing Solar Together guidance on how to find an installer.
	Assess options for decarbonisation in off-gas and rural areas.
Increase local renewable generation through work with key local partners	Explore ways to expand on or develop opportunities around large-scale energy generation and storage solutions in collaboration with key businesses. Where appropriate, engage with larger landowners to review opportunities for renewables.
	Provide guidance to businesses on the benefits and options available for renewable energy: Green energy procurement, Power Purchase Agreement (PPAs), Local generation, solar buy back.
	Review council's own land for renewable potential and consider other priorities for land.
	Coordinate action with our DNOs (Distribution Network Operators) to have better forward plans to decarbonise rural areas and towns.
Ensure new developments incorporate renewable energy technologies	Develop a Local Area Energy Plan that will provide priorities for energy demand reduction and opportunities for renewables.
	Review opportunities to promote renewables and increase the requirements for renewables in the Local Plan.
	Provide technical guides and general guidance on applying for planning permission for renewable technologies, including for key businesses.

Equality Considerations

- Residents in rented homes do not have the ability to instal renewable infrastructure, but landlords are unlikely to invest in high-cost installations when they do not recoup the investment from a reduction in bills.
- Consider how renewable energy can support areas with high populations of vulnerable groups to ensure energy security, reduced bills and improved health.
- More remote communities can benefit from increased energy security and reliability from renewables. For large scale renewable infrastructure, the council and businesses will need to engage with local communities to ensure their voices are heard and reach agreement with landowners that considers and supports current usage (e.g. as agricultural land).
- Businesses will face a high upfront cost to switching to renewable energy due to the installation and the electrical infrastructure to manage decentralised power.

4 Monitoring Framework

4. Monitoring Framework
Introduction

With so many stakeholders contributing to the success of meeting the carbon neutrality target, a framework to monitor progress is critical. Monitoring, refers to the ability to understand and track climate actions being taken in the area and their impact. Reporting, is the ability to present and share these outcomes. This could be internally or externally, in line with existing reporting principles or commitments, or aligning with an external reporting mechanism such as CDP Cities.

Why monitor and report on climate action?

Monitoring and reporting is widely agreed to be key to credible, long term climate action. This is illustrated in the climate action cycle in Figure 4 across, which, is based on C40 Cities guidance on City Monitoring, Evaluation and Reporting. This guidance also underpins the thrust of the recommendations in this section. The cycle in Figure 4 illustrates how Monitoring and Reporting ensures continued improvement over an extended period and can also feed into decision making around timeframes for when strategies and plans need updating and refreshing.

It is also important for transparency and accountability. Monitoring climate action gives councils and other stakeholders the ability to demonstrate progress and quantify the benefits of climate action. This can aid future decision making by indicating where climate action has been most successful, and most challenging. This can also support collaboration by supporting communicating on progress and highlighting areas for partnership working.

Figure 5: The Climate Action Cycle illustrates the typical journey a borough will take when undertaking climate action. This helps to create a cycle of continuous improvement and growing ambition. Adapted from C40 Cities.

Monitoring Framework Principles

The steps below outline the recommended stages needed to develop a monitoring framework.

1) Develop governance structure: The first step is to set up a governance structure to establish both who is responsible for actions across the borough and who is responsible for monitoring this system. This will also need to consider avenues for sharing information and data.

2) Identify indicators: This involves selecting indicators that will be used to assess progress and whether the desired outcomes are likely to be delivered. It should be possible to identify how each metric links to the borough's targets.

3) Monitor, evaluate and report: Progress needs to be reported in a transparent way. The changes reflected in the data should be evaluated in a progress report and communicated with stakeholders.

4. Monitoring Framework Principles

1. Develop governance structure

This can be broken down into the following two steps:

Developing partnerships and engaging key stakeholders - This refers to the coalition-building process to determine which stakeholders take "ownership" of different actions. An exercise needs to be done to assign responsibility for delivery of actions across the borough, which requires a strong partnership between public and private sector organisations, both across the borough itself as well as wider networks. Cheshire East can use existing networks and forums to support this.

Setting up the governance structure for monitoring - Once responsibility has been established, the governance of the reporting framework must be set up to allow effective monitoring and reporting. The key themes are:

- **Co-ordination** – Assigning roles and responsibilities for monitoring different elements of the framework. This will require co-ordinating with stakeholders, partners and internal staff to identify metrics, collect data and report findings.
- **Data collection process** – Setting up systems to collect and analyse data as well as identifying new potential data sources. Factors such as the type of data collected, expectations for data quality and data management need to be defined.
- **Communication** – Determining how the findings and data collected will be communicated and who it will be shared with. There are different formats available for reporting progress which can be evaluated.

2. Identifying indicators

The next stage is measurement and incorporating some degree of "impact" analysis. This involves selecting data sources which can be used to indicate the level of progress made across 3 levels.

- **Greenhouse Gas Inventory -** Broadly, progress towards the borough's emissions targets will be recorded by changes in the borough's carbon footprint. This will provide an indication of the overall direction of progress across the region and by sector or sub-sector.
- **Key Performance Indicators -** Using only emissions data to measure progress can pose a challenge because it is only available two years in arrears, and it may not provide the necessary detail to understand how different programs or changes have impacted emissions. Therefore, there is a need for key performance indicators (KPIs) that can act as more useful proxy for measuring progress within a reporting year. The indicators identified track progress against Cheshire East's objectives to illustrate how emissions are being reduced. These indicators do not need to be carbon focused.
- **Project Tracker -** By examining projects that are occurring across Cheshire East, a better indication of the action taking place across the objectives can be gained. This helps the borough better understand where time, resource and investment is occurring. It is still challenging for emissions data to be provided on an action-by-action level and monitoring the specific impacts of a project in this way is difficult. However, it is recommended that Cheshire East track progress at a project level as well.

4. Monitoring Framework
Principles

3. Monitor & Report

Monitoring - This requires developing data collection and management systems to ensure the data can provide the evidence needed for each indicator. It is important to develop a management strategy which covers the following factors: data needs, data systems, transparency, responsibility and quality assurance.

Evaluation - Cheshire East must evaluate actions periodically following the monitoring stage. Robust evaluation provides a critical assessment of changes in monitored parameters and data as a means of informing future activity. A good evaluation process provides an explanation for the causality between an action and its measured impact; in other words, identifying why measured changes have been recorded and what has created them, whilst holding the relevant stakeholders to account. This is ultimately used as the basis to revise the scale or resource for each action and share learnings between stakeholders and partners. Evaluation should be carried out alongside reporting cycles after a defined period, whilst monitoring is a continuous process.

The process itself is essentially an assessment of observed changes in the performance indicators of each action according to pre-defined criteria, designed to identify the extent of progress. This assessment should be carried out collaboratively with the affected owners and stakeholders for each action. The evaluation process serves to bridge the gap between observed progress of each action and reporting; translating progress into a narrative which can then be used to communicate successes. In the case of actions with little or no observed progress, these evaluation criteria also help to identify the required changes necessary to get back on track.

Reporting - The final piece of this framework is the reporting of progress in an accessible and transparent way. For this, there needs to be a clearly defined internal and external reporting process. It will be important to supplement quantitative metrics with qualitative narrative to help understand the reasons, challenges and opportunities associated with the metrics. This narrative is key in communicating the progress towards net zero and maximising opportunities.

5 Summary

5. Summary
Taking this forward

Summary

This report sets out an action plan and a monitoring framework to be implemented in order to be a carbon neutral borough by 2045. To meet this target, Cheshire East will need to take into account the following recommendations:

- **The Council should use its influence and powers to help accelerate action across the borough.** The council will be unable to provide support to every actor and action and will require support from stakeholders across the borough to play their part. The council will need to prioritise projects where its resource and influence will make the most impact.
- **Collaboration across the borough is required by communities, public sector, private sector and third sector.** These stakeholders will need to use existing and new networks and forums in order to build capacity and share expertise.
- **Significant resource is required to implement the action plan.** Additional resource and officer time will be required within the council (especially the Housing team) to ensure that strategies, plans and policies can be refreshed and created to consider climate change. It would be beneficial to have an officer in service area who has carbon reduction as an element of their role. In addition, knowledge and expertise will be required to ensure that the council can effectively engage and deliver projects.
- **When implementing climate actions, equity must also be considered.** It is crucial that actions go beyond just achieving carbon reductions but also provide other co-benefits such health outcome improvement, equality and equity considerations. This should consider (but not limited to) low-income households, vulnerable populations, and remote communities.
- **Measuring progress against the action plan is critical.** Even though the council is not responsible for delivering all of the actions outlined in this action plan, coordination will be required to ensure the borough is on track to meeting its target. Transparently reporting progress, measuring the impact being made against the metrics identified and communicating to stakeholders will be important to ensure actions are being implemented effectively.

Next Steps

To take forward this action plan the next steps are recommended:

- **Communicate and engage stakeholders**: Begin identifying key stakeholders to communicate the action plan and start identified roles and responsibilities.
- **Prioritise equitable climate action:** The action plan recommends actions that need to occur in the next 5 years. However, actions will need to be prioritised to ensure they enable further action. The council will need to consider resource, funding, impacted communities and carbon potential when evaluating which actions they should deliver first.
- **Delivery plans:** The action plan recommends actions that need to occur in the next 5 years. Delivery plans will need to be produced to ensure teams across the Council are able to manage available resources.

Appendices

Appendix 1 – SCATTER Inventory

Sub Sector	DIRECT Scope 1 tCO_2e	INDIRECT Scope 2 tCO_2e	OTHER Scope 3 tCO_2e	TOTAL tCO_2e
Residential buildings	489,754	172,839	NO	762,406
Commercial buildings & facilities	81,945	105,763	26,969	214,676
Institutional buildings & facilities	65,779	22,964	12,074	100,817
Industrial buildings & facilities	256,705	128,838	65,752	451,296
Agricultural fuel use	34,678	4	8,254	42,937
Fugitive emissions	54,057	-	NE	54,057
On-road	942,413	IE	405,099	1,347,512
Rail	14,473	IE	3,444	17,917
Waterborne navigation	13,009	IE	IE	13,009
Aviation	NO	IE	211,286	211,286
Off-road	9,408	IE	NE	9,408
Solid waste disposal	7,323	-	IE	7,323
Biological treatment	NO	-	IE	-
Incineration and open burning	1,729	-	IE	1,729
Wastewater	6,945	-	NO	6,945
Industrial process	125,404	-	NE	125,404
Industrial product use	0	-	NE	0
Livestock	301,822	-	NE	301,822
Land use	9,482	-	NE	9,482
Other AFOLU	NE	-	NE	-
Electricity-only generation	NO	-	NO	-
CHP generation	NO	-	NO	-
Heat/cold generation	NO	-	NO	-
Local renewable generation	30	NO	NO	30
TOTAL:	**2,414,923**	**430,408**	**832,693**	**3,678,055**

Notes:

- SCATTER calculates a territorial emissions profile and therefore excludes emissions from goods and services generated outside the borough (also referred to as consumption emissions).
- Within the SCATTER model, national figures for emissions within certain sectors are scaled down to a local authority level based upon a series of assumptions and factors.
- The inventory data presented here relates to the 2019 reporting year as emissions are reported two years in arrears.

IE	Included Elsewhere
NE	Not Estimated
NO	Not Occurring
	Included as part of profile
	Excluded as part of profile

Appendix 2 – Carbon budget analysis

What is a carbon budget?

A carbon budget is a fixed limit of cumulative emissions that are allowed over a given time in order to keep global temperatures within a certain threshold.

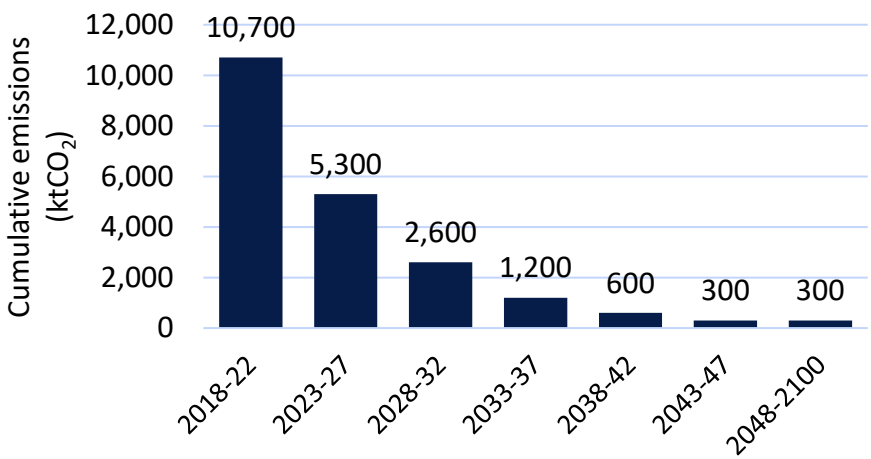
The Tyndall Centre Carbon Budget

The Tyndall Centre for Climate Change Research, based at the University of Manchester, have translated the Paris Agreement targets of limiting temperature change below 2°C into a fixed emissions 'carbon budget' for each local authority. There are two key ideas underpinning their research:

1. **The carbon budget is a fixed amount:** A global emissions limit represents the total emissions allowed before the 1.5°C threshold for greenhouse gas concentration is crossed. This global "budget" can then be scaled down to a national level, and finally, a regional level.
2. **Emissions now mean impacts later**: The most crucial element of this approach is understanding the importance of cumulative carbon emissions. Once emitted, carbon dioxide remains in the atmosphere for many years, contributing to increasing the average global temperature. The carbon budget does not reset; it represents a fixed upper limit to emissions. These two principles mean that the annual reduction rate of emissions becomes very important. Cumulative emissions and the scale & speed of action in the short-term are crucial in meeting the targets of the Paris Agreement.

Results for Cheshire East

- To keep Cheshire East aligned with the Paris Agreement, emissions should be reduced by 13.6% each year.
- Between 2005 and 2017, the average annual emissions reduction rate in Cheshire East was around 3%, highlighting the ambitious action required to meet the Paris Agreement targets.
- If Cheshire East continues along a business-as-usual pathway, the carbon budget (2020 – 2100) will be exceeded before 2030 and this could happen as soon as 2026.
- By 2041, 5% of the budget remains, provided that Cheshire East achieves the recommended annual reduction rate.



The chart above describes the carbon budget targets based on the recommended annual reduction rate. Slight differences in scope mean that direct comparisons of this budget with the cumulative emissions from SCATTER Pathways trajectories should be taken as an estimate only.

Appendix 3 – Current Context References

The table below contains source data for all current context statistics given within the Action Plan section of the report.

Sector	Current context	Source
Overarching Actions	Council footprint	https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s76206/Carbon%20Neutral%20Action%20Plan%20-%20appendix.pdf
Overarching Actions	Council staff	https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s83067/MTFS%202021-25%20-%20app%20B%20-%20annex%201.pdf
Overarching Actions	Procurement emissions	https://moderngov.cheshireeast.gov.uk/ecminutes/documents/s76206/Carbon%20Neutral%20Action%20Plan%20-%20appendix.pdf
Overarching Actions	Number of Towns and Parishes	https://www.cheshireeast.gov.uk/council_and_democracy/voting_and_elections/town_and_parish_councils/town_and_parish_councils.aspx#:~:text=There%20are%2012%20town%20councils,size%20and%20profile%20for%20each.
Overarching Actions	Climate action groups	https://groups.friendsoftheearth.uk/join``
Domestic Buildings	New builds	https://app.powerbi.com/view?r=eyJrIjoiZjg4NWI1MjMtZTRkNC00MGM4LWFkZTItMjdlODc4YWEwOTdhIiwidCI6ImJmMzQ2ODEwLTljN2QtNDNkZS1hODcyLTI0YTJlZjM5OTVhOCJ9
Domestic Buildings	Energy Performance Certificate (EPC)	https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates
Domestic Buildings	Vulnerable Households	https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2023-2022-data
Domestic Buildings	Housing tenure	https://www.ons.gov.uk/visualisations/censusareachanges/E06000049/
Domestic Buildings	Gas consumption	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics
Non- Domestic Buildings and Industry	Display Energy Certificate (DEC)	https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates
Non- Domestic Buildings and Industry	Businesses	https://www.nomisweb.co.uk/reports/lmp/la/1946157071/report.aspx#tabidbr

Appendix 3 – Current Context References

Sector	Current context	Source
Non- Domestic Buildings and Industry	SMEs	https://www.nomisweb.co.uk/reports/lmp/la/1946157071/report.aspx#tabidbr
Non- Domestic Buildings and Industry	Gas consumption	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics
Non- Domestic Buildings and Industry	Listed buildings	https://www.cheshireeast.gov.uk/environment/heritage_natural_environment/conservation_listed_buildings/conservation_listed_buildings.aspx#:~:text=The%20majority%20of%20the%202%2C637,interest%20and%20worthy%20of%20preservation.
Non- Domestic Buildings and Industry	Public sector	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2020 https://www.cheshireeast.gov.uk/schools/school_organisation/school_organisation.aspx
Transport	Active travel	https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-statistics-cw
Transport	Car ownership	https://scattercities.com/pages/pathways-methodology/
Transport	Public transport	https://www.gov.uk/government/statistical-data-sets/bus-statistics-data-tables
Transport	Ultra-low emission vehicles (ULEV)	https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#all-vehicles
Transport	Heavy and light goods vehicles (HGVs/LGVs)	https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#all-vehicles
Agriculture and Land Use	Land use type	https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use
Agriculture and Land Use	Livestock	https://scattercities.com/
Agriculture and Land Use	Non developed land	https://www.cheshireeast.gov.uk/council_and_democracy/your_council/council-land-and-property/property_for_sale_and_to_let/council-asset-ownership-and-management.aspx

Appendix 3 – Current Context References

Sector	Current context	Source
Agriculture and Land Use	Council-owned land	https://opendata-cheshireeast.opendata.arcgis.com/datasets/736df6086fd34dd7ac6820aabe6096f3_0/explore?location=53.178076%2C-2.459787%2C9.99
Agriculture and Land Use	Tree coverage	https://scattercities.com/
Agriculture and Land Use	Woodland	https://scattercities.com/
Waste	Household waste	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122 https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122
Waste	Commercial waste	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122
Energy Supply	Electricity demand	https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics
Energy Supply	Fuel type	https://scattercities.com/
Energy Supply	Off gas houses	https://www.gov.uk/government/statistics/sub-national-estimates-of-households-not-connected-to-the-gas-network
Energy Supply	Renewable types & capacity	https://scattercities.com/

Appendix 4 – Detailed Actions Method Notes

Current context - Whilst the carbon footprint can be broken down into subsectors, the data is not available to break this down into the owner or stakeholders involved. However, there are other types of non-carbon data that can be used to provide context as to where emissions likely come from and who has most influence over them. This data has been pulled out to support the council in prioritising where to focus action and build an understanding of who needs to be involved. The sources of data have been provided in the annex of this report.

Carbon impact - A ranking of the potential carbon impact has been included to support the council to prioritise actions and understand the scale of impact across stakeholders. The ranking is scored 1 - 4, where 1 represents a moderate reduction in emissions and 4 represents the highest impact objectives. This a relative assessment based on the other interventions suggested. The assessment is not based on a quantifiable emissions savings as data is not available for this but has been based on the judgement of Anthesis. This has been informed by the emissions analysis and modelling previously carried out alongside the current context available on possible impact. For instance, an understanding of the potential number of new builds relative to existing stock.
As the majority of actions for the council are focused on ways to support and encourage action, the assessment has not focused on direct impact e.g. the carbon impact of developing a website for climate communications, rather it focuses on the possible outcome of objectives e.g. improved climate understanding and awareness of residents. This assessment is subjective and there will be a number of factors which affect the success and extent of impact (general factors noted in the factors impacting success). However, this serves as a way for the council to understand which areas are those which could have the greatest potential impact. It is recommended when creating delivery plans that the carbon impact is further quantified and reviewed.

Implementation considerations - For each action, key implementation considerations or factors that should be considered when it comes to implementation of an action have been highlighted. This includes the first next step, particular stakeholder considerations and any specific risks or equality considerations that are needed. This is not exhaustive but pulls out key considerations raised through engagement or existing policies and plans.

Internal action owner – An initial allocation of actions to the team who will own and take forward the action has been included. However, it will still be important to work across teams.

Resource required - A qualitative assessment of the potential resource required per action has been included in order to capture the level or potential sources of investment required for actions. The Council will need significant resource within the council as well as funding and support externally. This assessment has been informed by conversations with stakeholders, existing resources, the likely skills needed and desktop research into costs of climate actions. This has not been based on a quantification but a judgement on potential resource requirements and there will be other factors and considerations needed when developing a business case for actions or allocating funding. Further detailed assessment of costs when taking actions forward is recommended. The cost also only reflects the cost to the council to provide support, not the cost that would be incurred by stakeholders and others involved to deliver change e.g. the cost to install charge points, not the cost to residents to switch to electric vehicles. This cost could be significant and should also be considered in decisions. The aim of this analysis is to indicate the scale of resource and investment needed to help prioritisation.

Sector	Relevant Intervention (by 2030)	Objective	Local Carbon Impact potential	Actions	Implementation considerations	Internal Action Owner	Resource required
Overarching	N/A	Encourage and enable council staff to take climate action		Continue to provide education and enhance climate knowledge and explore rolling climate pledges for council staff.	To build on existing staff education programs, Climate pledges can increase awareness and provide a way of tracking progress in staff behaviour and encourage ownership. When onboarding new staff, carbon literacy/training should be included in their induction process. Regarding existing staff, this can be managed in PDRs and put into performance management for heads of departments.	Carbon Neutral Team	Officer time required to coordinate training. Resource required to develop training material from either an internal officer or external resource.

Overarching			1	Every service area within the council to have a named position with a focus on carbon detailed within their role, these carbon champions to form a Wider Borough Carbon Board.	As a first step, resource considerations would need to be made and considerations on the which individuals and levels of role would make most sense to lead this, as well as setting expectations on the role. Additionally, explore quantifying emissions per department to provide more clarity on the scale of action required.	Head of Environmental Services	Officer time required to coordinate carbon champions. Carbon champions to have time committed in order to participate on the Wider Borough Carbon Board.
Overarching				Prioritise at least one person per team and all committee chairs and vice-chairs to be certified as carbon literate.	Use existing groups to explore cost and resource requirements for Carbon Literacy training and list of staff to train as a priority. Consider the level of staff involved. This could be a starting point for having trained staff as carbon champions (as above).	Carbon Neutral Team	Officer time required to coordinate carbon literacy training. Time for officers and committee chairs and vice-chairs to participate in training.
Overarching				Provide guidance and support on agile working practices to reduce unnecessary travel.	Review the council's existing agile working policies and explore how these can be updated and better communicated to reduce unnecessary travel.	Carbon Neutral Team	Officer time required to produce guidance.

Overarching			Design a communication cam paign, different to previous approaches , to inform people of the facts/urgency of the situation and motivate staff to proactively act and support activities.	Build on existing communications campaigns, explore how these have been successful before developing further regular communications. Ensure these are connected with relevant policies and projects to enable staff to act on the information.	Communications team	Officer time required to produce communications campaign.
Overarching	Council policies and processes to prioritise reducing carbon and climate impact		Prioritise and consistently use carbon assessments in the decision process of projects and include carbon pricing into capital investment decisions.	Carbon considerations in projects and committee decision reports are currently not prioritised or matched up against other council priorities. This could begin by reviewing current guidance on carbon considerations for projects and decisions, and engage with departments via leads to understand competing priorities. Additionally, educate managers how to use the web-based calculator to give quantifications for committee report.	Carbon Neutral Team	Resource required to produce templates and guidance. May require specialist advice

Overarching			3	All policies, strategies and plans that are being developed or renewed to incorporate carbon reduction as a central pillar. Where possible, documents being reviewed to go through the Carbon Neutral team to explore options for carbon reduction. In particular, upcoming Local Plan, Transport Plan, Corporate Plan and Local Wellbeing Strategy.	List key council policies, strategies and plans along with key consultation and review dates. Develop a process for ensuring they are reviewed by the Carbon Neutral team to align with the council's net zero ambitions.	Carbon Neutral Team	Resource required in teams to incorporate carbon reduction into policies, strategies and plan. Officer time in Carbon Neutral team to be able to review policies, strategies and plans in order to provide guidance.

Overarching			Continue to explore divesting from fossil fuel investments in the council pension fund.	Explore options for net zero and fossil fuel free investments for the council's pension scheme, ensuring staff's pensions are not negatively impacted by the change. Explore net zero pension schemes used by other public sector organisations. Resource implications on investing officer time to research and implement new pension scheme.	Finance	Officer time required to conduct further research. May require changes in investments
Overarching	Reduce the council's supply chain related emissions	3	Further embed carbon neutral consideration into Procurement Policy (reduce Scope 3 emissions), including through social value and increased weighting.	Process for assessing the responses on climate action would need to be determined and the role of the carbon team in supporting and enabling this. For instance, score tenders which use decarbonisation techniques and/or materials better than those which do not. Lessons can be learnt from the Communities and the Transport & Highways team on their work on tenders.	Procurement	Officer time in Procurement team to update procurement policy and social value requirements.

Overarching			Assess and monitor the carbon impact of the Council's supply chain and local supply chain.	The council's Social Value strategy could be reviewed as a first step as this is the enabling strategy to support supply chain sustainability. Explore options to maximise local purchasing through the strategy.	Procurement	Officer time required to measure impact of supply chain. May require specialist advice or external support.
Overarching	Develop partnerships with local organisations to deliver climate action		Engage with business support organisations and skills training providers to encourage take up of carbon reduction training in local businesses.	Build on the relationships with organisations such as the Chamber of Commerce to understand what training options exist for businesses on carbon reduction, and how to embed going forward.	Economic Development	Alignment of future external skills funding, e.g. Shared Prosperity Fund, plus officer time to engage with providers.
Overarching			Explore developing an ambassador programme for businesses to facilitate knowledge sharing and support collaboration.	Support businesses to unlock barriers in their corporate approach to net zero focussing mainly on large and medium sized companies.	Economic Development	Not resourced at present. Officer time to develop and manage an ambassador programme. Time will be required to develop a process for managing the programme.

Overarching			3	Identify external groups working on overlapping measures to work together e.g. Air quality steering group.	Identify which other groups across Cheshire East will have influence on key carbon impact areas. Explore how groups can work together to work towards net zero within existing governance structures and explore where these can be updated. Challenges may exist in competing priorities of groups and varied levels of climate knowledge.	Carbon Neutral Team	Officer time required to identify external groups and collaborate on climate action opportunities.
Overarching				Increase co-operation with local environmental and sustainability groups on local engagement and action.	This can begin by identifying key local environmental and sustainability groups and the work they are already doing. Explore options to learn and collaborate across groups to enable further action as many groups exist and are keen to collaborate.	Carbon Neutral Team	Officer time to engage with local groups.
Overarching				Work with other local organisations to have joint messaging on the benefits of climate action, in particular the health benefits.	Resourcing work with external organisations was mentioned as a challenge, so exploring existing using networks may enable this.	Carbon Neutral Team	Officer time to engage with local organisations and develop guidance on joint messaging.

Overarching	Enable Town and Parish councils to take climate action	1	Support Town and Parish Councils with information on opportunities for grant funding schemes and potential projects.	CEC has already supported town & parish councils with grant funding in some cases. Explore future opportunities to support town and parish councils and establish a structure and process for working collaboratively on projects and identify where sharing resource may help efficiency.	Carbon Neutral Team	Officer time to pass on information about grant funding schemes and potential projects.
Overarching			Explore collaborating with partners on roaming resident engagement sessions.	Discuss with Town and Parish councils to understand opportunities for community engagement. Explore resource constraints and how best to plan for these events efficiently.	Carbon Neutral Team	Time to collaborate and coordinate with Town and Parish councils. Time for engagement and resources will also be required.
Overarching			Promote innovative communications at events with climate action at their core to raise awareness to local residents.	Identify upcoming events with climate action and start developing communications to reach residents. Ensure communication is accessible for all.	Carbon Neutral Team	Time required to develop communications about climate events in resident forums and groups.

Overarching			Work with Town and Parish council to explore setting up dedicated support within the council for Town and Parish climate action and possible opportunities for funding this.	Define the responsibilities for a role that would co-ordinate and support town & parish councils and explore the business case for this position. Ensure that responsibilities on larger towns vs. smaller parishes correlate to the resource and ability to impact they have.	Carbon Neutral Team	Officer time to set up a role within the council. Funding for this position could be sourced from Town and Parish councils.
Overarching	Support a regionally co-ordinated climate action approach	2	Explore collaboration on climate action with neighbouring authorities and sub-regions.	Work with the Sustainable Inclusive Growth Commission via the LEP to collaborate with neighbouring authorities. Identify existing relationships and forums (e.g. LGA, UK100) where CEC can connect with other local authorities. Ensure this is owned by the CN team and develop an outline of topics/challenges that would benefit from being discussed in these forums.	Carbon Neutral Team	Officer time required to communicate and work with other authorities.

Overarching		Explore avenues for generating finance for local low carbon projects		Explore the opportunities for green finance e.g. business rates, and explore opportunities in for mechanisms in the way the council raises revenue to raise funding for green projects.	Explore increasing existing business rates on renewable energy on sites to fund carbon management. Consider providing first year reduced rates and other incentives to businesses.	Finance	Officer time to identify options regarding business rates. Engagement with businesses may be required to consult on the incentive options.
Overarching			2	Continue to promote investment in low carbon projects by the local community and local businesses through community grants schemes.	Explore sharing opportunities and provide guidance for funding local low carbon projects, and how communities and businesses can get involved in funding these. Utilise the Communities team's online notice board or crowdfunding for local businesses who need support with carbon initiatives/training etc and proactively sign post strategic suppliers to regularly check and offer support where possible, financially or otherwise	Carbon Neutral Team	Continue with existing resource to develop community grants regimes. National Government funding may be required.

Domestic	7,200 households receive “medium” retrofit 57,500 households receive “deep” retrofit Reduce energy demand for appliance, lighting and cooking by 31% 46% of heating systems are heat pumps or equivalent electrified systems, 54% met by gas/solid fuel systems	Support private rental market to improve energy efficiency of domestic properties		Improve enforcement of minimum energy efficiency standards to capture non-compliance, providing support to tenants and landlords where needed. Create mechanism to report landlords not meeting standards.	The council can look to use its powers under MEES, however limited resources has been listed as a challenge. Consider opportunities for enforcement for property extensions and alterations which are currently not being maximised. The council will also need to consider potential unintended consequences like increases in rental values, leading to pricing out lower income or vulnerable households. These groups will need protecting. Furthermore, consider households affected by fuel prices and the rising cost of living, to make sure their health and wellbeing is not significantly impacted.	Planning / Building Regs	Requires staff resource to enforce MEES. Creation of a mechanism would also require time to set up and monitor.

Domestic			3	Provide guidance and educational resources to landlords on the need to improve properties and the benefits of investing.	A first step could be to compile local case studies showing the benefits from installations and improvements. Private landlords investment and education is the barrier, they don't see it as a priority. Private sector liaison officer has responsibility for engaging with private landlords, but landlords are using it as an excuse to increase rents. Equality implications if investment cost is passed on to residents. Capacity is an issue - 1 officer for 21,000 private rented properties.	Housing	Officer time required to develop resources. May require engagement with businesses.
Domestic				Create green accreditation schemes for private landlords including access to finance, suppliers, installers and discounted EPC surveys as an incentive to the private rental sector to improve energy efficiency.	Research best practice and examples of other schemes and incentives offered to inform the development of a Cheshire East scheme.	Housing	Significant resource required to develop a scheme and process for accrediting businesses as well as manage scheme.

Domestic				Local Skills Improvement Plan to ensure skills to deliver medium and deep retrofit and engineering are within the local workforce.	There is a particular need for skills in retrofit services but this should still link to overall plans for green skills in the borough. There is a need to identify possible trainers (e.g. local training colleges), understand the barriers and how to start the process of upskilling.	Economic Development	At this stage, officer time required to engage via existing networks, especially Local Skills Improvement Plan.
Domestic	9,600 new houses projected in SCATTER are built to Passivhaus standards	Planning supports net zero ambitions by increasing energy efficiency in new builds		Explore using the Local Plan refresh as an opportunity to increase ambition on the standard and quantity of net zero new builds and carbon reporting.	As the local plan considers biodiversity and habitats as well as carbon and other impacts, it will be important to consider any updates holistically. The Local Plan is limited in scope as it must adhere to National Planning policy, however this is an opportunity to maximise opportunities for the long term.	Planning	Resource already allocated for local plan update. Specialist advice may be needed for carbon inclusion.

Domestic			3	Develop supplementary planning documents or other guidance to provide advice on improving energy efficiency, low carbon heating and renewables. Consider using Passivhaus or equivalent as the standard.	National planning guidelines will still need to be considered as part of the SPD development, which could reduce the potential for higher standards. Explore what other councils have done successfully in this area. Any PassivHaus designs will need to be certified by Passivhaus Certifiers.	Planning	Additional officer time required to develop. Specialist advice may be needed.
Domestic	46% of heating systems are heat pumps or equivalent electrified systems, 54% met by gas/solid fuel systems 32% reduction in gas usage for domestic cooking, displaced by electric systems.	Support the development of net zero infrastructure	2	Engage with our Distribution Network Operators (DNOs) to plan for greater electrification of systems in households.	Explore opportunities to decarbonise towns and increase electrification with DNOs. Identify areas of high need and consider equality implications and support of vulnerable households.	Carbon Neutral Team	Officer time required. May require energy planning and study to support.
Domestic				Identify future residential developments that meet criteria for heat networks or heat network zoning.	Heat network zoning requirements are emerging and could align with the local plan development. Consider vulnerable communities and the equality impacts to support heat network planning.	Planning	Officer time to integrate into local plan process. Additional resources may be needed for zoning.

Domestic		Enable and advise vulnerable households to improve home energy efficiency		Support off-gas or rural communities to switch heating systems to sustainable sources through grant funding and awareness raising.	The council can explore how to fund and deliver the Home Repairs and Adaptation policies. There may be grant funding available to support off-gas and rural communities, if so, vulnerable and low income households should be prioritised. Consideration of the barriers to this are needed, such as the awareness of how to shift heating systems.	Housing	Dedicated officer time needed to support grant delivery. Officer time required to develop guidance. National Government funding required.
Domestic	7,200 households receive “medium” retrofit 57,500 households receive “deep” retrofit Reduce energy demand for appliance, lighting and cooking by		3	Provide guidance and advice to households to publicise the availability of government funding for retrofitting and energy efficiency measures, such as ECO4 and ECOflex.	First step is to research into the various government funding options residents have access to based on income and health. Where groups do not have access, other guidance and resources should be developed to support them.	Housing	Dedicated officer time needed to support grant delivery. Officer time required to develop guidance. National Government funding required.

Domestic	31% 46% of heating systems are heat pumps or equivalent electrified systems, 54% met by gas/solid fuel systems 32% reduction in gas usage for domestic cooking, displaced by electric systems.			Directly allocate available funding for retrofit or prioritise delivery of grant funding of low energy efficiency homes in the borough, for the most vulnerable households.	Risk of changing funding schemes, therefore this would need updating depending on availability of schemes and criteria for eligibility. Explore alterative options where funding is not available.	Housing	Significant resource required to directly allocate funding.
Domestic				Explore the use of green finance on how to retrofit homes (e.g. green mortgages).	These could be compiled into recommendations for homeowners and buyers. Consider the applicability of green finance options to vulnerable communities.	Housing	Research task on options available. Part of wider need for officer time to create guidance and raise awareness.
Domestic				Continue to work with social housing providers to deliver grant funding and use lessons learnt to expand schemes in future.	Build on existing work with social housing providers. Consider the impact of restrictions on eligibility for grants and properties that are older and in disrepair.	Housing	Continue existing resource, may require further time/investment if schemes expanded. National Government funding required.
Domestic		Support homeowners and the able to pay market to improve energy efficiency of		Provide information to residents on retrofit options where feasible.	Current processes require residents to actively contact the council for support, consider how communications can be expanded.	Housing	Officer time required to develop resources. May require consultation with residents and community groups.

Domestic		domestic properties	4	Create a strategy which establishes a framework for large scale residential retrofitting and the council's role within it.	Risk of the scope of this being too wide, so needs ownership and resourcing. A first step could be to look at existing strategies and identify areas which are not already covered, as well as highlighting how to connect existing strategies. This work should co-ordinate and build on regional work coming out of the LEP and existing heat density mapping.	Housing	Requires resource to develop framework, may require commission of study to develop.
Domestic				Set up means for residents to collaborate and showcase local examples of decarbonisation via council website.	Ensure communication channels are accessible by all and consider vulnerable groups.	Housing	Officer time required, may require resource for platform to be set up and managed.
Domestic				Continue to develop neighbouring sub-regional co-operation on housing, which could lead to sharing capacity and resources and supporting green finance opportunities.	Continue to use networks via the LEP to connect with regional councils and align with regional research and programmes. Consider the needs of vulnerable households when offering finance opportunities.	Housing	At this stage, officer time required to engage via existing networks.

Domestic				Support the installation of smart meters and share guidance on installing environmental controls in homes.	Provide clear guidance which is accessible for all groups. Vulnerable households may require financial support.	Housing	Officer time to provide guidance. Direct funding could be explored.
Non-domestic Buildings & Industry	Reduce heating demand in buildings by 17%. 11% reduction in demand for appliances, lighting and cooking. 46% of heating systems are electric, with the remaining 54% being supplied by non-electric systems. Process emissions reduced: 26% for chemicals, 18% for metals, 22% for minerals and 73% other industries.	Enable and encourage businesses to support the borough's net zero ambition		Engage with managed business parks to share best practice and identify collaborative projects.	Explore opportunities to showcase leadership in climate action based on best practice.	Economic Development	Use existing networks and connections. Officer time required for engagement
Non-domestic Buildings & Industry				Lever external support for low carbon research and innovation by businesses, building strengths subregionally and nationally.	Support for R&D and eco-innovation is being delivered sub-nationally and regionally, primarily linked to university assets.	Economic Development	Officer time for engagement. Direct funding could be explored.
Non-domestic Buildings & Industry				Conduct feasibility studies for additional low-carbon energy networks in areas of high heat demand e.g. Town centres and industrial estates across the borough.	Review existing studies and locate any additional low carbon energy networks which can be added. Consider vulnerable populations and equality implications as part of determining the location for sites.	Economic Development	Feasibility studies already conducted. Investment required for any further feasibility assessments.

Non-domestic Buildings & Industry			3	Promote the adoption of heat networks, including through heat network zoning and planning.	Engage with landowners to understand challenges raised around heat network development. Skills and resources for development have been raised as a challenge to deliver heat networks locally. Consider the equality implications of communities served by future developments.	Economic Development	Officer time. May require specialist advice
Non-domestic Buildings & Industry				Encourage businesses to set net-zero targets and provide open reporting of energy and carbon data.	Identify businesses across the borough who are reporting their data to showcase. Resource constraints may limit capacity to engage with businesses but the council could explore ambassador program for business. Use existing networks through the Chamber of Commerce and small business federation.	Economic Development	Officer time required for engagement. Investment will be needed to make a significant impact to support businesses.

Non-domestic Buildings & Industry				Engage with the Cheshire and Warrington sub-regional and the Sustainable and Inclusive Growth Commission to deliver recommendations.	Build on relationship with Cheshire and Warrington and the Sustainable and Inclusive Growth Commission to align recommendations which will target all groups.	Economic Development	Officer time for engagement.
Non-domestic Buildings & Industry				Explore opportunities to be involved in Net Zero North West Cluster Plan and maximise the local benefits of such a scheme.	Explore how to maximise benefit of national significant infrastructure development, including opportunities for carbon capture and hydrogen deployment.	Economic Development	Officer time needed for engagement. May need further resource if strategic partnerships formed.
Non-domestic Buildings & Industry				Explore a climate pledge related to decarbonising buildings for all businesses in the borough.	Risk of businesses not being engaged and signing up. This would need to be wide in scope to ensure businesses of different sizes and sectors would be able to participate in a meaningful way. Consider the large amount of small and agricultural businesses across Cheshire East.	Carbon Neutral Team	Officer time require to develop process and manage. May require development of a platform or website.

Non-domestic Buildings & Industry	Provide tailored support to SMEs to monitor and reduce their footprint	2	Provide guidance and support to SMEs to monitor annual energy usage and create mechanism to report this.	Consider reduced business rates or other financial incentives to provide an evidence base to support new construction standards	Economic Development	SPF funding to 2025. Officer time to develop guidance. Mechanism development could be linked to above actions.
Non-domestic Buildings & Industry			Continue to support businesses in accessing green finance and grants by providing staff resources for guidance and advice (e.g. shared prosperity fund).	The council is already supporting businesses to access grants and green finance. This should tie in with national initiatives on green finance, and existing private sector initiatives. Identify smaller businesses across the borough and in different sectors who need help but are unlikely to reach out.	Economic Development	SPF funding to 2025. Continue existing resource. Officer time required for applying for funding, administration and business support. National funding is required.
Non-domestic Buildings & Industry			Rural lead to continue and expand work supporting businesses to increase energy efficiency and development of plans.	Identify smaller and older businesses who may require more support. Engage with the NFU and other unions to provide advice and services to what is out there.	Rural economy	Existing resource focussed on general business growth. Officer time and resources required to develop further.

Non-domestic Buildings & Industry		Planning supports net zero ambitions by increasing energy efficiency in new builds		Investigate using Section 106 developer contributions and Community Infrastructure Levy to deliver net zero infrastructure.	Finance and planning team to work together to formulate various options: external specialist advice may be required. Explore how other councils have used S106 and CIL opportunities to raise funds for carbon projects.	Planning & Finance	Officer time required. Specialist advice may be needed.
Non-domestic Buildings & Industry			2	Explore using the Local Plan refresh as an opportunity to increase ambition on the standardand quantity of net zero new builds and carbon reporting.	The Local Plan should reflect current and future policies and building standards (link to previous action on Passivhaus or equivalent standard for new builds). Once the Local Plan is in review it should be passed through the Carbon Neutral team to be assessed. The new local plan should reflect CE's climate ambitions.	Planning	Resource already allocated for local plan update. Specialist advice may be needed for carbon inclusion.
Non-domestic Buildings & Industry				Use existing networks (e.g. Local Government Association (LGA)) to lobby for increased ambition in National Planning Policy Framework (NPPF).	Collaborate with other councils to discuss and align messaging to promote increased ambition in the National Planning Policy Framework, especially on energy efficiency.	Planning	Officer time required. Use existing networks to support.

Non-domestic Buildings & Industry	Provide guidance to owners of listed buildings on options for decarbonisation	1	Provide guidance and best practice and promote knowledge sharing through the sub-region on listed building retrofit. Support owners to understand eligibility for funding and options for retrofit.	This action also applies to heritage buildings in the domestic sector. Creating specific guidance and sharing knowledge on listed buildings will encourage carbon reduction actions due to the guidance being specific to the group. An group network between all heritage buildings will promote the share of information more easily and freely.	Planning	Officer time required to develop guidance and co-ordinate engagement. Specialist advice may be needed.
Non-domestic Buildings & Industry	Enable and encourage public sector and community groups to support the borough's net zero ambition		Share lessons learnt and lead the way for others in the borough by decarbonising the council's own property.	Link in with existing work on decarbonising the council's estate and funding programmes already in place. Regular review and reporting of progress will support knowledge sharing.	Carbon Neutral Team	Office time for co-ordinating decarbonisation programmes and reviews. Continue to use existing resource.

Non-domestic Buildings & Industry				Use relationships with schools and leisure centres to support them with access to finance for retrofit and provide guidance on decarbonisation.	Research and list out all the different options schools and leisure centres have in regards to funding for retrofitting and EV charging installations. Where funding gaps exist, the council should consider offering funding options to fill these gaps. Ensure vulnerable populations and equity is considered when prioritising schools of high need.	Carbon Neutral Team	Officer time for engagement. Council could fund feasibility studies and provide match funding.
Non-domestic Buildings & Industry			3	Use the existing sustainability network to share knowledge and build collaboration opportunities. Explore ways the council can support this group.	Engaging the network will need to be achieved in a way that includes different communities including vulnerable populations.	Carbon Neutral Team	Officer time required for engagement but network already set up. Could explore feasibility studies.
Non-domestic Buildings & Industry				Support community groups and charities to decarbonise their buildings and activities.	Identify community groups and charities across the borough. Prioritise inefficient buildings (could use EPC or DEC data).	Communities Team	Officer time require to engage and manage. Direct funding or community grants could be offered.

Non-domestic Buildings & Industry	46% of heating systems are electric, with the remaining 54% being supplied by non-electric systems.			Engage with large public sector bodies and wider public sector partners, such as the police, to find synergies. Work collaboratively with, and support, NHS Trusts in working towards their net zero ambition through e.g. Heat Networks and joint procurement	Use existing relationships with NHS Trusts in Cheshire East. External specialists may be required to map out heat networks across the borough.	Carbon Neutral Team	Initially, officer time needed for engagement.
Transport	25% reduction in the average number of passenger miles travelled per person. 5% reduction in the share of miles driven on roads. Share of passenger miles increases 5% through active and public	Planning supports net zero ambitions by prioritising low carbon transport options	2	Explore options to encourage developers to create neighbourhoods with good access to services and public transport and active travel infrastructure/facilities (e.g. bike racks, cycle lanes, and wide and well-lit pavements).	This action needs to take account of the various groups in Cheshire East, to make sure neighbourhoods are accessible for all.	Planning	Resource already allocated for local plan update. Specialist advice may be needed for energy planning and requirements for renewables.

Transport	transport. 89% of private vehicles are EV (electric vehicle) or HEV (hybrid electric vehicle).	Enable and support schools to reduce their emissions		Work with schools and academies in the borough to encourage active travel, set up walking buses and provide cycle workshops.	Developing guidance to encourage active travel will need to take into consideration all the needs from different groups to make sure they are supported (e.g. provide reduced/subsidised services).	Carbon Neutral Team	Officer time to engage with schools and develop guidance which schools can follow.
Transport			2	Explore the possibility of restrictions on idling through anti idling campaigns, introduce parking zones and road closures near schools during peak hours.	The first step is to prioritise schools where traffic is a concern or where most children are driven to school. Consultation will be required with schools and other local stakeholders on the impact of such restrictions.	Transport & Highways	Officer time required for review possible interventions. Resource required for consultation on proposed changes and enforcement.

Transport				Engage with schools to identify opportunities for new or extended school bus routes.	Map out the current school bus routes for schools to provide the most recent context. This document can then identify areas for new or extended routes, alongside consulting with schools to understand if there are any hotspots that need to be addressed (e.g. a cluster of areas which would benefit from a bus route). An additional action on bus services is considered below and should be considered in line with this action.	Transport & Highways	Officer time to engage with schools across the borough and develop plans for new or extended bus routes.

Transport	Support decarbonisation of freight		Encourage and support council suppliers and other businesses to utilise rail freight or waterborne opportunities as opposed to HGVs.	Engage with suppliers and businesses through networks and contacts to utilise rail freight and waterborne opportunities. Identify opportunities where rail freight and waterborne transport can be used for council suppliers. This action will reduce the number of vehicles on the road, in turn reducing traffic and air pollution. Fewer vehicles can also be linked to reduced pedestrian incidents. The council has limited influence in this area, but can encourage businesses to support the action.	Procurement	Officer time to engage with council suppliers and businesses to identify opportunities.

Transport			3	Review opportunities for freight consolidation and loading restrictions, (including personal deliveries) in town centres, to reduce last mile emissions.	Next step would be to look into areas for a freight consolidation centre. Freight consolidation centres may change businesses delivery processes if they is a delivery delay but will increase efficiency and reduce costs and time. Therefore, it will be necessary to support businesses and showcase the benefits of freight consolidation if it is implemented. The council has limited influence in this area, but can encourage businesses to support the action.	Transport & Highways	Officer time to conduct review and consult stakeholders. Further resource would be required to implement.
Transport				Encourage the use of local suppliers through setting up "meet the supplier" events and promote the benefits of consolidating journeys in forums and business groups.	The first step is to review the potential of such a scheme by looking at business clusters and local suppliers, then potential attendees would need to be identified for running a supplier event. The council has limited influence in this area, but can encourage businesses to support the action.	Procurement	Officer time to research and coordinate local suppliers.

Transport		Encourage businesses to reduce business related journeys and support their staff to use sustainable transport options		Facilitate flexible and agile working practice for businesses through supporting development of co-working spaces.	First step is to identify business networks and forums to facilitate communications. Best practices shared will need to come from a range of different sized businesses and across different sectors to apply to as many other businesses who are not adopting the practice.	Economic Development	Funded to 2025 through SPF.
Transport			3	Encourage businesses to offer incentives to staff to use more sustainable transport e.g. active travel, public transport and EVs.	Some businesses may not be able to offer financial incentives, so other types of incentives will have to be considered.	Transport & Highways	Officer time for engagement with businesses and development of resources.

Transport			Encourage businesses, particularly large employers to develop a sustainable travel plan including providing facilities for active travel (e.g. cycle to work scheme, bike racks) and infrastructure for EV and alternative fuel (e.g. Hydrogen) to support their staff to make sustainable travel choices.	Businesses may require support to develop travel plans, especially SMEs who may have low resources.	Transport & Highways	Officer time for engagement and support developing plans.
Transport	Support commercial vehicles to switch to EV	2	Engage with businesses on route optimisation techniques and provide guidance on the benefits of switching to EVs.	Identify businesses across the borough and prioritise larger businesses who are more likely to have higher road milage.	Economic Development	Officer time for engagement and develop communications on the benefits of EVs.
Transport			Engage with taxi companies on the benefits of switching to EVs and barriers to switching fuels.	Identify the taxi companies which operate in the borough, from there engagement can start. Consideration of the impact on taxi companies is required.	Transport & Highways	Officer time for engagement with taxi companies and time for developing resources.

Transport	Improve infrastructure for lower carbon transport options	4	Install EV infrastructure in identified strategic sites across the borough to support the switch to EVs, in line with the EV charging strategy.	Identify sites and prioritise the order in which they should be installed in.	Transport & Highways	Investment required to install EV charging infrastructure as well as ongoing resource requirement to manage and maintain
Transport			Continue to deliver on EV infrastructure strategy including measures on buses, taxis, off street parking and DNO engagement.	Build an understanding of what have been achieved and what is still outstanding in the EV infrastructure strategy.	Transport & Highways	Officer time to progress the EV infrastructure strategy.
Transport			Ensure all new road building and road maintenance projects minimise their carbon impact.	Assess companies who offer low carbon services.	Transport & Highways	Officer time required to research and understand opportunities. Investment required in low carbon materials.

Transport				Explore the opportunities to improve on and expand active travel corridors defined by those set out in the Cheshire East local cycling and walking infrastructure plan.	Signpost existing resource which identifies the current public pathways around Cheshire East to encourage active travel. If expanding cycle lanes, the width and surface course will need to be considered to make sure the lanes are accessible for all. Collaboration and consultation with other authorities may be required.	Transport & Highways	Officer time to construct a plan for expanding new cycles lanes. Significant investment would be required to implement. National funding is required.
Transport		Use plans and strategies to increase active travel and disincentivise higher carbon transport options		Identify sites of high active travel footfall and consider measures which will encourage a greater uptake (e.g. cycle lanes and pedestrian zones) and provide safe and clean areas for residents.	When looking at the relationship between vehicle numbers and speed and active travel uptake, consult and collaborate with businesses and residents to reduce disruption and increase awareness of the benefits.	Transport & Highways	Officer time to research into the areas of high footfall and review the benefits and impacts of implementation.

Transport			4	Continue to deliver on Air Quality Action Plan including developing active travel strategy, low emission strategy, website updates and schools resources.	The council is already delivering on the Air Quality Action Plan. The council should makes sure that the developments or updates include being accessible and addressing the needs of all residential groups (vulnerable, low income, differently abled etc) in the borough.	Transport & Highways	Officer time will be required to deliver the action plan. May require council or National Government funding.
Transport				Consider schemes that have been implemented elsewhere such as emissions-based charges, low emission zones, workplace charges to encourage the switch to EVs and consider potential impacts of this. Review speed limits where appropriate and consider more 20 mph zones where appropriate.	Consideration into different groups is important as some groups require their car to get around.	Highways & Finance	Officer resource to review the various disincentive options and plan out where it would take place. Resource required for consultation and enforcement.

Transport	Encourage residents to use more EVs	3	Provide guidance on travel planning, and the benefits of switching to EVs, so residents can make informed choices.	Show casing a range of residents who have made the switch will encourage other residents to switch.	Carbon Neutral Team	Officer time to develop campaigns and guidance.
Transport			Explore and identify EV funding opportunities (for purchasing an EV or installing charge points) which are aimed at residents.	Identify any EV schemes already available and supplement them with council schemes which focus on the untargeted groups.	Carbon Neutral Team / Highways Team	Officer time to signpost and develop EV funding schemes for residents
Transport	Enable communities to have more low carbon, accessible and reliable public and shared transport options		Work with industry partners to decarbonise public transport across the borough e.g. switching buses to 100% electric.	Identify Government funding streams like the Zero Emission Bus Regional Areas 2 and apply for funding to help increase the decarbonisation of the bus fleet. Use influence with train & bus providers. The appropriateness of electric buses for rural bus networks needs to be reviewed.	Transport & Highways	Investment required in new fleet. May require council or National Government funding.

Transport			2	Use the Local transport plan to improve service offerings and explore how we can develop a public transport offering which reflects the needs of residents in each geographical area.	A more holistic approach will take into consideration different modes such as "micro mobility" e.g. e-scooters/ebikes, as well as bus and train offerings. Also leaves the door open to future technologies. Where appropriate, engage with other authorities and Towns and Parishes to support this.	Rural economy & Transport & Highways	Office time for review and engagement. Investment in bus services would be required if the network were to be expanded.
				Encourage car sharing including car sharing apps.	Promote car sharing groups and apps through different channels to increase outreach e.g. on the council website and in community groups.	Transport & Highways	Officer time to research into exisiting car sharing groups and time for spreading awareness.
Transport				Support demand responsive transport and promote car club developments across the borough.	First step is to identify data sources which track transport demand (e.g. usage of buses) and research established car clubs across the borough. Particular focus should be given to areas which do not have transport services for differently abled residents, and assessing increasing services for them.	Transport & Highways & Finance	Signposting car clubs across the borough would require officer time to manage. Supporting demand responsive transport would require development of a system to facilitate this and investment in technology.

Agriculture & Land Use	12% reduction in the number of livestock. Increase lone tree planting to the equivalent of 50 trees per hectare. 24% in forest coverage and a 7% decrease in grassland.	Support the farming community to encourage regenerative and sustainable farming practices	3	Review the Farms strategy and Agricultural Land Holdings to maximise opportunities to reduce carbon emissions.	There may be an opportunity with new tenancies to require sustainable farming practices. This needs consideration of how this would be assessed and managed.	Asset Management	Officer time to review and update the Farms strategy and Agricultural Land Holdings.
Agriculture & Land Use			3	Continue to engage with the National Farmers' Union (NFU) and other key agricultural stakeholders to provide guidance on sustainable farming practices.	The council is already engaging with NFU and key agricultural stakeholders. It is important that guidance provided by different stakeholder is aligned. Resources shared should be made accessible for all.	Carbon Neutral Team	Continue existing resource for engagement and to develop guidance.
Agriculture & Land Use	Increase lone tree planting to the equivalent of 50 trees per hectare. 24% in forest coverage and a 7% decrease in grassland.	Maximise carbon sequestration, support biodiversity and use sustainable land practices on council owned land		Where possible, restore, retain and protect existing land uses which store carbon dioxide on council-owned land. E.g. allow community groups to grow and upkeep wildflower verges, small grass areas and have access to allotments.	Identify all council owned land across the whole borough and pinpoint land areas where carbon can be stored. This will need to consider both the protection of current carbon stores as well as creating or enhancing new stores.	Asset Management	Investment will be required from the council to manage and improve spaces. Office time and potential external specialist needed identify restoration areas.

Agriculture & Land Use			2	Update the Green Infrastructure Action Plan to include Landscape-scale projects, town and service improvements.	Map out where there are potential opportunities for landscape-scale projects, town and service improvements across the borough to be included in the Green Infrastructure Action Plan update.	Carbon Neutral Team	Use existing officer time required to update action plan.
Agriculture & Land Use				Work with town councils and other local community groups to deliver tree planting and other carbon sequestration activities as well as management of trees, especially in flood prone areas.	First step will be to list out any tree planting or sequestration activities that are in progress or have been proposed and identify where town councils or any local groups can help deliver.	Carbon Neutral Team	Officer time to communicate and collaborate on opportunities with town and local community groups. Small grants could be offered to community groups. National grants could be explored.

Agriculture & Land Use	Planning supports net zero and biodiversity ambitions	1	Ensure tree cover, green infrastructure and Biodiversity Net Gain (BNG) is considered for all new developments through the new Local Plan by mandating for a minimum level of tree coverage in new developments, in line with the Carbon Neutral ambition.	As part of the local plan review, the planning requirements for biodiversity net gain and enhancement of green space in new developments should be updated to maximise carbon storage.	Planning	Existing officer time to ensure new local plan requirements are understood and implemented. Specialist advice may be required on biodiversity requirements.
			Where possible, ensure new developments support the environment by avoiding constructing on sequestering land e.g. greenbelts and peatlands.	First step will be to identify all carbon sequestering areas (e.g. green belt, peat lands and woodlands). This resource can then be used to identify areas developers should try to avoid.	Planning	Officer time required to develop guidance for new developments.

Agriculture & Land Use	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	1	Raise awareness through business networks and provide guidance to businesses on tree planting and local offsetting.	First step will be to identify local tree planting schemes which business can get involved with (e.g. Leighton Grange project) and local offsetting options. This resource can then be used to engage businesses. Guidance will need to be tailored to areas where conditions are different for e.g. planting trees, as some locations will not be suitable for certain species.	Carbon Neutral Team	Time required to develop communications in business networks and to construct guidance.
Agriculture & Land Use			Where possible, avoid any degradation in healthy peatlands and restore as much degrading peat (which acts as a carbon source) as possible by working with landowners.	Identify peatland on CEC owned land and consider actions to support and improve peat health. Speak to local landowners to understand what has been done locally to support peat health.	Carbon Neutral Team	Officer time for engagement and development of resources on peat health issues. National grants could be explored.
Agriculture & Land Use			Engage with local land owners and key stakeholders on land use issues and ways in which the council can provide support.	Identify local land owners and key stakeholders across the borough to engage with.	Carbon Neutral Team	Officer time for engagement and development of resources on land use issues.

Waste	24% reduction in volume of waste 66% recycling rate	Improving waste services to enable waste reduction and circular economy	1	Develop a circular economy roadmap for the borough, mapping material flows within the area to identify opportunities for circularity and co-location	The first step is to build up an understanding of the current context by mapping material flows The report could then serve as an evidence base for engaging stakeholders in the borough.	Environmental services	This would require dedicated council resource to develop a plan and conduct research. May require external support and budget allocated.
Waste				Encourage other waste collectors to review their waste processing and impact of RCVs.	First step is to identify other waste collectors in the borough.	Environmental services	Officer time require to engage with other waste collectors.
Waste				Respond to consultations and engage with national government on changing legislation to push ambition and plan for implementation	This type of engagement already takes place. Impact of potential policy and legislation has already been reviewed in Municipal waste management strategy. Risk that this is delayed or the extent to which policy goes is limited.	Environmental services	Officer time required to respond to consultations. Potential to engage in Local Authority networks to support this.

Waste	Raising awareness amongst residents of the waste hierarchy and supporting initiatives that enable reuse	1	Support community groups to develop sharing/circular economy e.g., repair café, library of things, community fridge, food redistribution centres.	First step involves understanding community groups already set up and signposting these. The council will then need to review how to support existing groups and if there any gaps. Engagement with Climate Alliance to build up idea of local groups.	Communities Team	Officer time required to review, may require small grants to be offered to community groups.
Waste			Continue to work with organisations and develop own campaigns to deliver education and awareness raising on waste reduction, recycling and food waste.	The council has already developed campaigns and has partnerships with organisation on awareness raising. The next step is to review the effectiveness of these and to continue to raise awareness.	Environmental services	Resource required to develop campaigns and engagement but already part of plans/resource previously allocated.
Waste			Continue to engage with schools and other educational institutions to raise awareness and support young people to understand waste reduction and recycling.	Consider equality impacts of delivering support to schools with less resources. There are already recycling champions set up in schools which could be built upon.	Environmental services	Officer time required to co-ordinate engagement but already part of plans/resource previously allocated.

Waste		Improving waste services to enable waste reduction and circular economy	1	Encourage businesses to segregate their waste including their commercial organic waste to reduce food waste through incentives and sharing best practice.	Identify businesses across different sectors which are segregating their waste and collaborate with them on best practices which can be shared with other businesses. Resource constraints may result in deprioritising this area of action, due to lack of council officer time.	Environmental services	Officer time to implement new incentives and encourage through business networks and forums to post about their best practice.
Waste				Signpost businesses adopting good waste or recycling practices or offering services that support circular/sharing economy to recognise activity and to share knowledge.	First step is to research into SMEs and larger organisations in a variety of sectors who are supporting the circular economy.	Environmental services	Officer time to encourage businesses who are supporting circular economy/ sharing economy to showcase their best practice in business forums and or networks.

Energy supply	Increase small scale wind capacity to 153 MW. Increase large onshore wind capacity to 93 MW and offshore wind capacity to 203 MW. Increase small scale solar PV capacity to 461 MW. Increase large scale PV (major power producers) capacity to 447 MW. Increase small- and large-scale hydro capacity to 14 MW.	Provide advice to residents on increasing renewable energy generation		Provide support and guidance on setting up community led energy schemes and groups. Explore partner organisation/initiatives to help deliver and promote this.	Identify partner organisations/ initiatives across the borough and collaborate with them on consulting with established community led energy groups and schemes (e.g. Congleton Hydro) to understand first hand where support and guidance is needed for them and new groups.	Communities Team	Resource to identify and engage with potential partner organisations/initiatives. Officer time to oversee engagement with partner organisations and communities.
Energy supply			2	Provide information on the benefits of installing renewables on property and on how residents can go about this e.g. use existing Solar Together guidance on how to find an installer.	Review the success of existing schemes such as solar together to inform future programmes and guidance. A vetting framework within the Council would help identify qualified installers.	Carbon Neutral Team	Officer time to provide information to residents about installing renewable technology and associated benefits.
Energy supply				Assess options for decarbonisation in off-gas and rural areas.	Map out locations of homes which are off-gas and rural and prioritise areas where there are vulnerable groups. Assess which technologies are best suited for the location of homes and the age of the building.	Carbon Neutral and Rural economy	Officer time required to assess options. May need upskilling or external technical support.

Energy supply	Increase local renewable generation through work with key local partners		Explore ways to expand on or develop opportunities around large-scale energy generation and storage solutions in collaboration with key businesses. Where appropriate, engage with larger landowners to review opportunities for renewables.	Identify the larger landowners and businesses to engage with and build up an understanding of current land uses and areas suitable for renewables. There will be competing priorities for land use which will need to be reviewed.	Carbon Neutral & Business Support	Officer resource to coordinate with key businesses and discuss opportunities on large scale energy generation and storage.
Energy supply		3	Provide guidance to businesses on the benefits and options available for renewable energy: Green energy procurement, Power Purchase Agreement (PPAs), Local generation, solar buy back.	Provide documents which can be accessible for businesses of different size and sector.	Carbon Neutral & Business Support	Officer time required to research into all the options available for businesses on renewable energy and for the development of guidance documents.

Energy supply			Review council's own land for renewable potential and consider other priorities for land.	Consider all the possible options for the land as it may be more beneficial in other ways e.g. tree planting or peat restoration.	Carbon Neutral Team	Officer time to conduct review, may require external support. Investment may be required for actions identified.
Energy supply			Coordinate action with our DNOs (Distribution Network Operators) to have better forward plans to decarbonise rural areas and towns.	Understanding the potential future electricity demand and whether the capacity of infrastructure is in place.	Carbon Neutral Team	Officer time required to communicate and discuss future plans with DNO.
Energy supply	Ensure new developments incorporate renewable energy technologies		Develop a Local Area Energy Plan that will provide priorities for energy demand reduction and opportunities for renewables.	Local Area Energy Planning will help to identify priorities for retrofit and energy supply with the local area. The plan should make sure there are opportunities across the borough, with particular attention to vulnerable areas where they would benefit most.	Carbon Neutral Team	May require external support or consultant to be commissioned.

Energy supply			2	Review opportunities to promote renewables and increase the requirements for renewables in the Local Plan.	As part of the local plan review, the planning requirements for renewables should be reviewed and opportunities to include renewable energy in new developments.	Planning	Resource already allocated for local plan update. Specialist advice may be needed for energy planning and requirements for renewables.
Energy supply				Provide technical guides and general guidance on applying for planning permission for renewable technologies, including for key businesses.	Understanding planning requirements was cited as a barrier by local stakeholders so guidance should be produced to build an understanding of the requirements and process for planning permission on renewable installations. This action overlaps with the action under the domestic sector as it needs to be considered in multiple action areas.	Planning	Resource required to develop technical guidance, may require upskilling or specialist skills.

Appendix 6 - Measurement Framework

KPIs for tracking progress against you Action Plan

This worksheet contains KPIs the council could use to monitor progress against the Action Plan. KPIs are provided across all sectors. Within each sector, the given KPIs could be used to track progress across a range of the objectives, although In Column D we flag the most relevant objective. Where we were unable to identify enough publicly available data from established sources, we have suggested new KPIs the council could implement, based on its own data collection (column 'Description'). Additional Metadata is provided where it is available for the established, publicly available, KPIs, in columns 'Unit' to ' Comments and Exclusions'

	KPI Summary			KPI Metadata (for Established KPIs only)							
Sector	KPI Name	Most relevant Objective	Established / Suggested KPI	Description	Unit	Period Type	Source Name	Source URL	Source data location on website	Source Type	Source data updated
		Which objective is the KPI most relevant to? Note: in some instances, a KPI could also be used to track progress against other objectives in the sector.	KPIs marked "Established" are based on public data, detailed in the rows across. In some instances where suitable public data wasn't found, we have suggested KPIs that the council could collect themselves.	Details of the dataset							

Agriculture & Land Use	Total Land Area Classified As Forestry Or Woodland	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	This KPI shows the total land area in hectares by usage type as shown in the Land Use Statistics dataset.	Ha	Calendar Year	DLHUC	https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use	Land Use Statistics, England 2022	Nationally Collected	24/10/2023
Agriculture & Land Use	Proportion Of Land Area That Is Classified As Non-Developed	Support the farming community to encourage regenerative and sustainable farming practices	Established	This KPI shows the total land area in hectares by usage type as shown in the Land Use Statistics dataset. This includes land in the categories of; Agriculture, Forests, Open Land, Water, Outdoor Recreation, Residential Gardens and Undeveloped Land.	%	Calendar Year	DLUHC	https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use	Land Use in England, (All years)	Nationally Collected	24/10/2023

Agriculture & Land Use	Proportion Of Land Area That Is Classified As Agricultural	Support the farming community to encourage regenerative and sustainable farming practices	Established	This KPI shows the total land area in hectares by usage type as shown in the Land Use Statistics dataset.	%	Calendar Year	DLHUC	https://www.gov.uk/government/statistical-data-sets/live-tables-on-land-use	Land Use Statistics, England 2022	Nationally Collected	24/10/2023

Agriculture & Land Use	Net Natural Environment GHG Emissions, Including LULUCF	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	Forest Research and the UK Centre for Ecology & Hydrology annually prepare estimates of the uptake of CO2 by afforestation and net loss or gain of CO2 from soils for inclusion in the UK GHGI. In addition to this, estimates of emissions of CH4 and N2O to the atmosphere from LULUCF (Land Use, Land Use Change and Forestry) have been made. These	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Agriculture & Land Use	Agricultural GHG Emissions	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	The LA GHG emissions data includes emissions from; fuel combustion, liming, fertilisers, agricultural soils (NEW), and livestock (NEW).	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023
Agriculture & Land Use	Livestock GHG Emissions	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	Dataset shows the net emissions from Livestock. Aggregated cattle population data were supplied to and processed by Cranfield University from cattle tracing system (CTS) data.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Agriculture & Land Use	Net GHG Emissions From Forest Land	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	Dataset shows the net emissions from Forest Land. A negative value of emissions means that there is an overall sink.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023
Agriculture & Land Use	Net GHG Emissions From Cropland	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	Dataset shows the net emissions from Cropland. A negative value of emissions means that there is an overall sink.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Agriculture & Land Use	Net GHG Emissions From Wetlands	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Established	Dataset shows the net emissions from Wetlands. A negative value of emissions means that there is an overall sink.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023
Agriculture & Land Use	Proportion of land area protected as priority habitat	Support local land owners to maximise carbon sequestration, support biodiversity and use sustainable land use practices	Suggested		%						

Domestic	Number Of Energy Company Obligation (ECO) Measures Installed	Support the development of net zero infrastructure	Established	The estimates use administrative data generated as part of the Green Deal (GD) and Energy Company Obligation (ECO) processes. For the annual detailed statistical release, scheme administrative data from the Green Homes Grant Vouchers (GHGV) and the Green Homes Grant Local Authority Delivery (LAD) scheme are	Measures	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/household-energy-efficiency-national-statistics	Yearly Headline Releases	Nationally Collected	30/11/2023

Domestic	Number Of Retrofit Measures Under The Renewable Heat Incentive	Support the development of net zero infrastructure	Established	Showing the cumulative number of accredited installations under the Renewable Heat Incentive, from the start of the scheme.	Retrofits	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/renewable-heat-incentive-statistics	Annual Edition(s)	Nationally Collected	20/04/2023
Domestic	Number Of Heat Pumps Installed Under The Renewable Heat Incentive (RHI)	Support the development of net zero infrastructure	Established	This insight shows the cumulative number of accredited heat pump (Air Source and Ground Source) installations under the Renewable Heat Incentive, from the start of the scheme.	Heat Pumps	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/renewable-heat-incentive-statistics	Annual Edition(s)	Nationally Collected	20/04/2023

Domestic	Total Renewable Heat Energy Generated As A Result Of Retrofits Under The Renewable Heat Incentive	Support the development of net zero infrastructure	Established	This dataset refers to 'Heat Paid for by the Local Authority, in GWh' as a result of the Renewable Heat Incentive.	MWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/renewable-heat-incentive-statistics	Annual Edition(s)	Nationally Collected	20/04/2023

Domestic	Proportion Of Domestic New Builds with EPCs That Are Rated B And Above	Planning supports net zero ambitions by increasing energy efficiency in new builds	Established	This KPI refers to all new builds EPCs submitted within each year, rather than a cumulative approach looking at all EPCs. This KPI can show an insight into the whole housing stock, through new build performance, retrofitting etc… *Note, not all buildings have an EPC and buildings that receive retrofit measures are not required to update their EPC.	%	Calendar Year	DLUHC, EPC Open Data	https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates	Table NB1	Nationally Collected	04/12/2023

Domestic	Proportion Of Domestic EPCs That Are Rated B And Above	Planning supports net zero ambitions by increasing energy efficiency in new builds	Established	This KPI refers to all (new and existing builds) EPCs submitted within each year, rather than a cumulative approach looking at all EPCs. This KPI can show an insight into the whole housing stock, through new build performance, retrofitting etc… *Note, not all buildings have an EPC and buildings that receive retrofit measures are not required to update their EPC	%	Calendar Year	DLUHC, EPC Open Data	https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates	Table A1	Nationally Collected	04/12/2023

Domestic	Total Domestic Electricity Consumption	Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Established	These figures are based on meter level electricity consumption data provided by data aggregators (who compile this data on behalf of electricity suppliers). Domestic consumption is based on Non-Half Hourly (NHH) meters with profiles 1 and 2 (these are the standard domestic and economy 7 tariffs respectively). Non-domestic consumption is based on NHH	GWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics	Sub-national electricity consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Domestic	Mean Domestic Electricity Consumption Per Domestic Meter	Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Established	These figures are based on meter level electricity consumption data provided by data aggregators (who compile this data on behalf of electricity suppliers). Domestic consumption is based on Non-Half Hourly (NHH) meters with profiles 1 and 2 (these are the standard domestic and economy 7 tariffs respectively). Non-domestic consumption is based on NHH	kWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics	Sub-national electricity consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Domestic	Total Domestic Gas Consumption	Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Established	These figures are based on meter level gas consumption data provided by Xoserve (who compile meter level data from gas shippers, who in turn receive the data from gas suppliers). Xoserve provide annualised estimates of consumption (AQs) for all gas meters. Xoserve provide the AQs on a weather corrected basis by a process which accounts for	GWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics	Sub-national gas consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Domestic	Mean Average Domestic Gas Consumption Per Domestic Meter	Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Established	These figures are based on meter level gas consumption data provided by Xoserve (who compile meter level data from gas shippers, who in turn receive the data from gas suppliers). Xoserve provide annualised estimates of consumption (AQs) for all gas meters. Xoserve provide the AQs on a weather corrected basis by a process which accounts for regional	kWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics	Sub-national gas consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Domestic	Domestic Buildings GHG Emissions	Support homeowners and the able to pay market to improve energy efficiency of domestic properties	Established	The LA GHG data uses sub-national consumption data, uses both a bottom up approach of meter point level consumption, as well as supporting information from DUKES. For the UK, BEIS use an 'Employment Based Energy Consumption' approach to mapping energy consumption. The DUKES data and sub-national datasets do not match due	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Energy supply	Total Renewable Capacity	Increase local renewable generation through work with key local partners	Established	This insight shows the total capacity of renewable energy sites within the local authority boundary. This includes (Solar PV, Onshore and Offshore Wind, Hydro, Anaerobic Digestion, Wave/Tidal, Sewage Gas, Landfill Gas, Municipal Solid Waste, Animal Biomass, Plant Biomass and Cofiring.) *Please note that this dataset omits some larger sites for data privacy	MW	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-renewable-statistics	Renewable electricity by local authority 2014 - 2021	Nationally Collected	28/09/2023

Energy supply	Total Electricity Generation from Renewables	Increase local renewable generation through work with key local partners	Established	This insight shows the total number of renewable energy generation from sites within the local authority boundary. This includes (Solar PV, Onshore and Offshore Wind, Hydro, Anaerobic Digestion, Wave/Tidal, Sewage Gas, Landfill Gas, Municipal Solid Waste, Animal Biomass, Plant Biomass and Cofiring.) *Please note that this dataset omits some larger	MWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-renewable-statistics	Renewable electricity by local authority 2014 - 2021	Nationally Collected	28/09/2023

Energy supply	Number of Sites Generating Renewable Energy	Ensure new developments incorporate renewable energy technologies	Established	This insight shows the total number of renewable energy sites within the local authority boundary. This includes (Solar PV, Onshore and Offshore Wind, Hydro, Anaerobic Digestion, Wave/Tidal, Sewage Gas, Landfill Gas, Municipal Solid Waste, Animal Biomass, Plant Biomass and Cofiring.) *Please note that this dataset omits some larger sites for data privacy	Sites	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-renewable-statistics	Renewable electricity by local authority 2014 - 2021	Nationally Collected	28/09/2023

Energy supply	Number of Solar PV Sites	Ensure new developments incorporate renewable energy technologies	Established	This insight shows the total number of solar pv sites within the local authority boundary. *Please note that this dataset omits some larger sites for data privacy reasons and therefore, some values may appear smaller than they are. For more information, follow the Source link to the methodology documents.	Sites	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Non-domestic Buildings & Industry	Proportion Of Submitted Non-Domestic EPCs That Are Rated B Or Higher	Planning supports net zero ambitions by increasing energy efficiency in new builds	Established	This KPI refers to all (new and existing builds) EPCs submitted within each year, rather than a cumulative approach looking at all EPCs. This KPI can show an insight into the whole housing stock, through new build performance, retrofitting etc… *Note, not all buildings have an EPC and buildings that receive retrofit measures are not required to update their EPC	%	Calendar Year	DLUHC, EPC Open Data	https://www.gov.uk/government/statistical-data-sets/live-tables-on-energy-performance-of-buildings-certificates	Table A	Nationally Collected	04/12/2023

Non-domestic Buildings & Industry	Total Non-Domestic Electricity Consumption	Enable and encourage businesses to support the borough's net zero ambition	Established	These figures are based on meter level electricity consumption data provided by data aggregators (who compile this data on behalf of electricity suppliers). Non-domestic consumption is based on NHH meters with profiles 3 to 8 and all Half Hourly meters. In addition, profile 1 and 2 meters are re-allocated to the non-domestic sector if their annual	GWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics	Sub-national electricity consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Non-domestic Buildings & Industry	Mean Non-Domestic Electricity Consumption Per Non-Domestic Meter	Enable and encourage businesses to support the borough's net zero ambition	Established	These figures are based on meter level electricity consumption data provided by data aggregators (who compile this data on behalf of electricity suppliers). Non-domestic consumption is based on NHH meters with profiles 3 to 8 and all Half Hourly meters. In addition, profile 1 and 2 meters are re-allocated to the non-domestic sector if their annual	kWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-electricity-consumption-statistics	Sub-national electricity consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Non-domestic Buildings & Industry	Total Non-Domestic Gas Consumption	Enable and encourage businesses to support the borough's net zero ambition	Established	These figures are based on meter level gas consumption data provided by Xoserve (who compile meter level data from gas shippers, who in turn receive the data from gas suppliers). Xoserve provide annualised estimates of consumption (AQs) for all gas meters. Xoserve provide the AQs on a weather corrected basis by a process which accounts for	GWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics	Sub-national gas consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Non-domestic Buildings & Industry	Mean Non-Domestic Gas Consumption Per Non-Domestic Meter	Enable and encourage businesses to support the borough's net zero ambition	Established	These figures are based on meter level gas consumption data provided by Xoserve (who compile meter level data from gas shippers, who in turn receive the data from gas suppliers). Xoserve provide annualised estimates of consumption (AQs) for all gas meters. Xoserve provide the AQs on a weather corrected basis by a process which accounts for	kWh	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/regional-and-local-authority-gas-consumption-statistics	Sub-national gas consumption statistics 2005 to 2021	Nationally Collected	26/01/2023

Non-domestic Buildings & Industry	Commercial Buildings GHG Emissions	Enable and encourage businesses to support the borough's net zero ambition	Established	The LA GHG data uses sub-national consumption data, uses both a bottom up approach of meter point level consumption, as well as supporting information from DUKES. For the UK, BEIS use an 'Employment Based Energy Consumption' approach to mapping energy consumption. The DUKES data and sub-national datasets do not match due to differences	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Non-domestic Buildings & Industry	Industrial Buildings and Processes GHG Emissions	Enable and encourage businesses to support the borough's net zero ambition	Established	The LA GHG data uses sub-national consumption data, uses both a bottom up approach of meter point level consumption, as well as supporting information from DUKES. For the UK, BEIS use an 'Employment Based Energy Consumption' approach to mapping energy consumption. The DUKES data and sub-national datasets do not match due to differences	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Overarching	Territorial GHG Emissions	Council policies and processes to prioritise reducing carbon and climate impact	Established	The BEIS dataset shows a nationally consistent set of greenhouse gas estimates at the local authority level. This includes 'territorial' emissions estimates for local authorities, showing all emissions that occur within that local authorities border. All emissions are estimated on an 'end-user' basis.	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Overarching	Territorial GHG Emissions, per Capita	Council policies and processes to prioritise reducing carbon and climate impact	Established	Data, provided by BEIS, shows the Territorial emissions of the Local Authority per capita. This can help to compare emissions against Local Authorities with similar characteristics.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023
Overarching	Territorial GHG Emissions, per Km2	Council policies and processes to prioritise reducing carbon and climate impact	Established	Data, provided by BEIS, shows the Territorial emissions of the Local Authority per km2 of area. This can help to compare emissions against Local Authorities with similar characteristics.	tCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Overarching	Council Scope 1 & 2 Emissions	Council policies and processes to prioritise reducing carbon and climate impact	Established	Data from CEC	tCO2e	Calendar Year					

Overarching	Public Sector Buildings GHG Emissions	Council policies and processes to prioritise reducing carbon and climate impact	Established	The LA GHG data uses sub-national consumption data, uses both a bottom up approach of meter point level consumption, as well as supporting information from DUKES. For the UK, BEIS use an 'Employment Based Energy Consumption' approach to mapping energy consumption. The DUKES data and sub-national datasets do not match due to differences	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/collections/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Overarching	Number of council staff engagement activities	Encourage and enable council staff to take climate action	Suggested		tCO2e						
Overarching	Council Scope 3 Emissions	Reduce the council's supply chain related emissions	Suggested		tCO2e						
Overarching	Number of partnerships developed	Develop partnerships with local organisations to deliver climate action	Suggested								
Overarching	Finance generated for local low carbon projects	Explore avenues for generating finance for local low carbon projects	Suggested		£						

Transport	Average Number Of Bus Journeys Per Person	Improve infrastructure for lower carbon transport options	Established	The data shows the total recorded passenger journeys on local bus services within the local authority, per person, creating an average number of journeys per person within the local authority	Journeys	Calendar Year	DfT	https://www.gov.uk/government/statistical-data-sets/bus-statistics-data-tables	Bus01	Nationally Collected	31/01/2023
Transport	Proportion Of All HGVs/LGVs That Are Electric	Support decarbonisation of freight	Established	This insight shows the percentage of all registered HGVs/LGVs within the local authority boundary that are classified as plug-in vehicles.	%	Calendar Year	DfT	https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#all-vehicles	VEH0101 and VEH0141	Nationally Collected	12/12/2023

Transport	Proportion Of All Vehicles That Are Plug-In Electric	Support commercial vehicles to switch to EV	Established	This insight shows the percentage of all registered vehicles within the local authority boundary that are classified as plug-in vehicles.	%	Calendar Year	DfT	https://www.gov.uk/government/statistical-data-sets/vehicle-licensing-statistics-data-tables#all-vehicles	VEH0101 and VEH0141	Nationally Collected	12/12/2023

Transport	Percentage Of People Regularly Walking Or Cycling (Based On Active Lives Survey) 5 Times Per Week	Improve infrastructure for lower carbon transport options	Established	The Active Lives Travel Survey collects data on the general populations travel habits. This helps to show trends in active travel. *This statistic shows active travel for any purpose, meaning this some survey responses could include recreational walking and cycling.	%	Calendar Year	DfT	https://www.gov.uk/government/statistical-data-sets/walking-and-cycling-statistics-cw	cw0301	Nationally Collected	30/08/2023
Transport	Number Of Public EV Charging Points Installed	Encourage residents to use more EVs	Established	This insight shows the total number of public EV charging points installed.	Charge Points	Calendar Year	DfT	https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-january-2023	Electric vehicle charging device statistics: January 2023 tables	Nationally Collected	25/01/2023

Transport	Number Of EV Charge Points Installed Under The Electric Vehicle Homecharge Scheme	Encourage residents to use more EVs	Established	This insight shows the total number of private EV charging points installed as part of the Electric Vehicle Homecharging Scheme.	Charge Points	Calendar Year	DfT	https://www.gov.uk/government/statistics/electric-vehicle-charging-device-statistics-january-2023	Electric vehicle charging device statistics: January 2023 tables	Nationally Collected	25/01/2023
Transport	Km of cycle/walking paths in the borough	Improve infrastructure for lower carbon transport options	Suggested		Km						

Transport	Transport GHG Emissions	Use plans and strategies to increase active travel and disincentivise higher carbon transport options	Established	Fuel consumption factors and emission factors combined with traffic data for 6 major classes of vehicles are used to estimate national fuel consumption and emissions estimates from passenger cars, light goods vehicles (LGVs), rigid and articulated heavy goods vehicles (HGVs), buses/coaches and mopeds/motor cycles. *It should be noted that	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

Waste	Total Waste Collected	Improving waste services to enable waste reduction and circular economy	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. This is based on a sum of all collection services, for households and other locations.	Tonnes	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023

Waste	Household Recycling Rate, As A Proportion Of All Household Waste	Improving waste services to enable waste reduction and circular economy	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. Household recycling contains materials sent for recycling, composting or reuse by local authorities as well as those collected from household sources by 'private-voluntary' organisations.	%	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023

Waste	Total Waste Sent To Landfill Sites	Improving waste services to enable waste reduction and circular economy	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. Landfill estimates include recycling, composting or reuse rejects.	Tonnes	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023
Waste	Total Collected Household Waste	Raising awareness amongst residents of the waste hierarchy and supporting initiatives that enable reuse	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. Household collection is based on wastes within Schedule 1 of the Controlled Waste Regulations 1992.	Tonnes	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023

Waste	Average Household Waste Collected	Raising awareness amongst residents of the waste hierarchy and supporting initiatives that enable reuse	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. Household collection is based on wastes within Schedule 1 of the Controlled Waste Regulations 1992.	Kg	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023

Waste	Total Collected Waste From Non-Households	Encouraging businesses to follow the waste hierarchy and promoting business with good waste practices	Established	All data is based on data entered by local authorities onto WasteDataFlow for each quarter. This refers to waste collected which is not part of the ordinary waste collection round service.	Tonnes	Tax Year	Defra, WasteDataFlow	https://www.gov.uk/government/statistical-data-sets/env18-local-authority-collected-waste-annual-results-tables-202122	Local authority collected waste generation from annual results 2021/22 (England and regions) and local authority data annual results 2021/22	Nationally Collected	24/03/2023

Waste	Waste & Waste Management GHG Emissions	Improving waste services to enable waste reduction and circular economy	Established	Emissions from non-electricity related processes in the waste management sector have been included in the LA GHG data for the first time this year, allocated to Local Authorities based on estimated distributions of where the waste arises rather than where the emissions occurred. Emissions associated with electricity used in the waste industry	KtCO2e	Calendar Year	BEIS/DESNZ	https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2021	2005 to 2021 UK local and regional greenhouse gas emissions – data tables (Excel)	Nationally Collected	06/07/2023

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