

West Oxfordshire District Council

Carbon Action Plan 2024-2030

*Reaching West Oxfordshire District Council's
carbon neutral target by 2030*



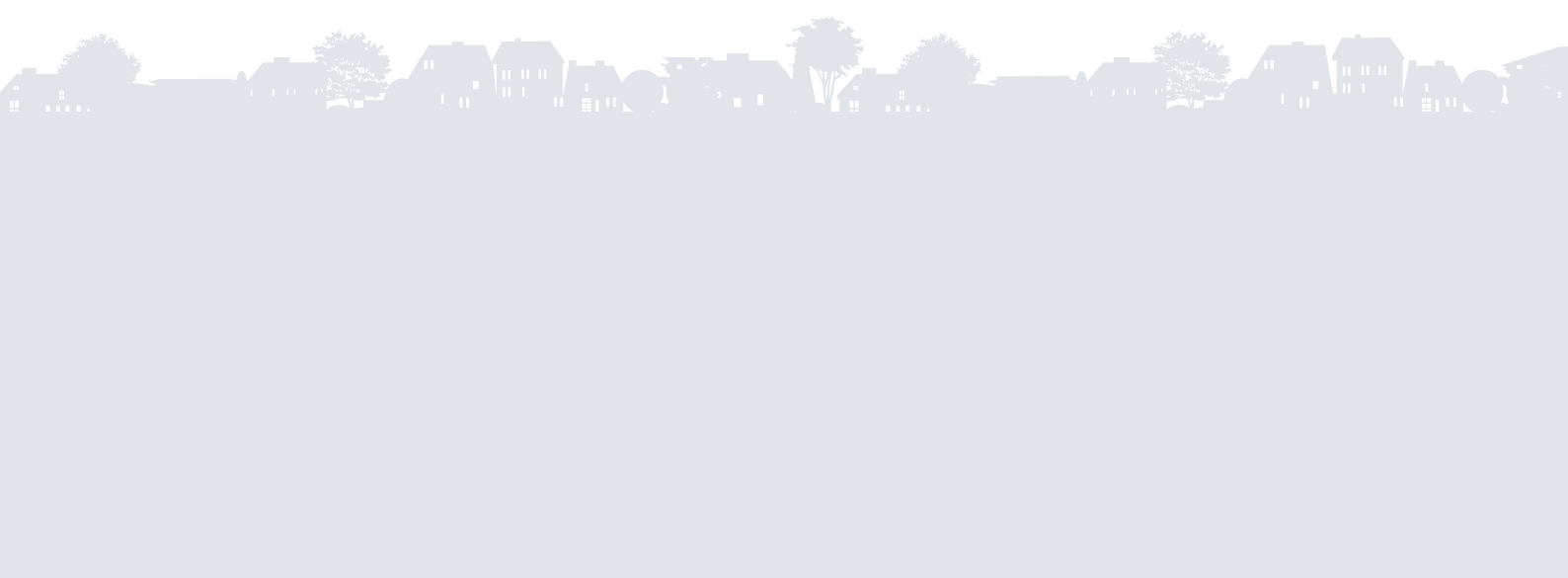
WEST OXFORDSHIRE
DISTRICT COUNCIL

Contents table

Introduction	3
Current council emissions	6
2030 target	10
Action Plan	15

Common abbreviations

- BAU – Business as Usual
- CO2e – Carbon dioxide equivalents
- EVCP – Electric Vehicle Charging Point
- EV – Electric Vehicle
- GHG – Greenhouse Gas
- Solar PV – Solar Photovoltaics



Introduction

West Oxfordshire District Council (the Council) declared a climate and ecological emergency in 2019, pledging to become a carbon neutral council by 2030. The decision was taken at a meeting of Full Council on 26 June 2019.

A pledge to be carbon neutral means that the Council needs to balance the carbon dioxide emissions produced as a result of its everyday activities with the amount of carbon dioxide emissions that are removed from the atmosphere. Therefore, the first objective is to minimise the amount of carbon dioxide emissions being released because of council activities, bringing these as close to zero as possible. Any remaining 'residual' emissions will then need to be inset and/or offset through verified means.

The Council's emissions represent 0.49% of the district's total emissions. While the Carbon Action Plan focuses on reducing emissions from council activities,

buildings and services, the Council is also committed to facilitating the reduction of wider district emissions through the delivery of its Climate Change Strategy 2021-25. Action on both fronts is important and supports national decarbonisation targets through learning, demonstrating best practice, and building capacity and skills.

The Council published a Carbon Action Plan in 2020. Since then, it has become good practice to consider additional sources of emissions beyond those previously accounted for, including emissions where the lack of data means that these cannot be reported formally through the Council's carbon reporting process. This document provides an updated version of the Climate Action Plan, covering actions to be undertaken between 2024 and 2030 to reach the carbon neutral target. Additional actions for procurement and waste have been included in line with best practice, while actions from the previous plan which are complete have been removed.

What will the Carbon Action Plan set out?

The Carbon Action Plan sets out the Council's pathway for achieving its target to be carbon neutral by 2030 and will:

- Define a set of guiding principles for planning future projects implemented by the Council.
- Outlines the process for monitoring, reviewing progress and updating actions so this plan remains live and responsive to external influences, technological changes and innovation within the low-carbon and renewable energy sector.
- Presents the Council's 2019 greenhouse gas (GHG) emissions baseline.
- Includes modelling work done to illustrate the rate of change in emissions and the roadmap/pathway required to align with the 2030 target.
- Details the actions to be undertaken by 2030.

The Carbon Action Plan is not intended to be an overly technical document. It is written for reference by multiple stakeholders within the Council and across functions. Detailed technical and specialist projects will fall from the Carbon Action Plan as standalone pieces of work which will be developed and implemented, where necessary, in support of the Council's plans for being carbon neutral.

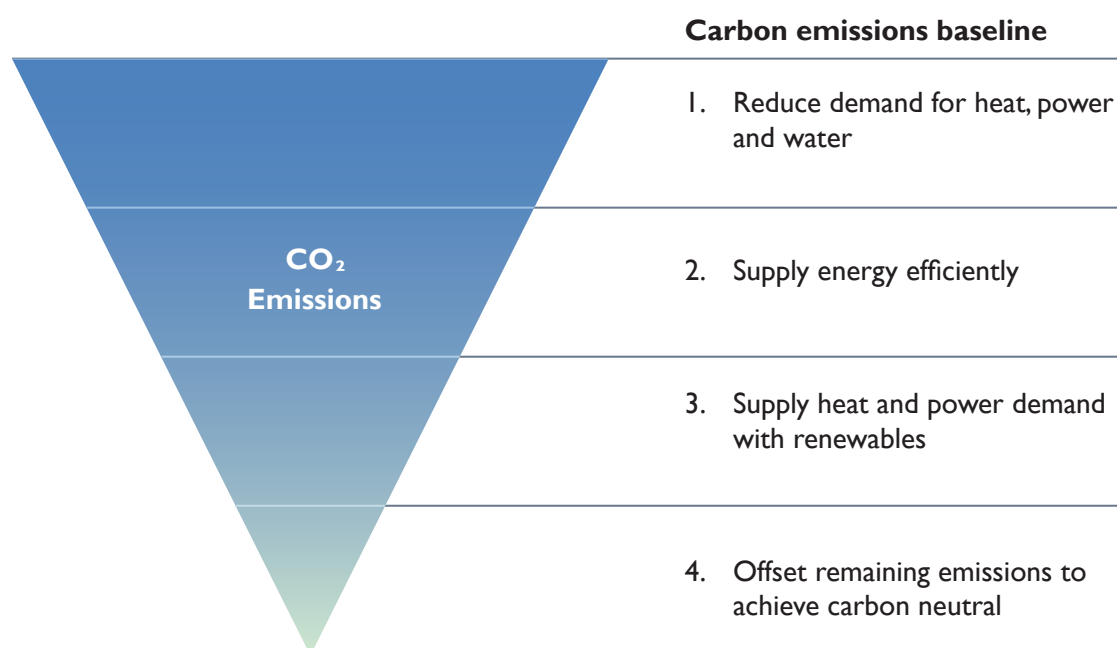
How will the Council prioritise action?

The council sets out ten priority actions under these headings:

- Prevention
- Buildings
- Water
- Waste
- Transport
- Procurement
- Offsetting/insetting

Guiding principles have been developed in line with the energy hierarchy, illustrated in Figure 1 below. The hierarchy provides a point of reference to guide the planning of projects and activities being taken forward to deliver the Carbon Action Plan.

Figure 1: The energy hierarchy



The timing of projects will be prioritised to align with a route map that has been developed as a trajectory for the Council achieving its carbon neutral target, shown on page 16. The Route Map highlights where there is greatest opportunity to influence change and reduce climate impact.

It is recognised that projects will, to a greater or lesser degree depending on the scope, require an element of research and development, which may also be referred to as a viability assessment stage. This is to facilitate well-informed decision making.

Delivering carbon neutrality is an iterative process so projects will need to evolve as the landscape for clean energy and technology evolves. This allows for the lessons learned and experiences taken from one project to feed into and benefit the next. With additional Government stimulus and investment, we can expect to see technology evolving and green energy technology becoming more accessible. As demand increases for innovative solutions, new technologies are expected to come forward. Where there are opportunities for the Council to pilot innovative approaches, these will be pursued. Developing projects at various stages of a pathway to carbon neutral allows the Council to maximise the benefits of these technological advancements as they occur, and activities to be prioritised in line with expected changes in legislation, funding opportunities and/or technological developments.

How will the Council monitor the Carbon Action Plan?

The Carbon Action Plan will be monitored and reported on as part of the Council's current commitment to reporting its annual GHG emissions, in line with government guidance and the GHG Protocol. Monitoring and reporting is also carried out with the objective of meeting the Council's commitment to deliver action in response to its declaration of a climate and ecological emergency.

The impact of actions taken as part of the Carbon Action Plan will be monitored through a time-series analysis to enable year on year comparisons to be made and monitoring of changes in council's climate change impact over time. A live action tracker which monitors performance against Key Performance Indicators (KPIs) will be developed as a way of ensuring the Carbon Action Plan remains responsive to external influences, funding opportunities and technological innovations.

The Annual Monitoring Report will also be used to report on progress being made towards the Carbon Action Plan's objectives and council's target of carbon neutral.

What resources will be required?

The resource and finance required, both revenue and capital, will be considered for each project. A decision will need to be taken on each as to whether research and viability, followed by delivery, can be implemented through either existing internal resource or through external specialist support, or a combination of the two. Individual council decisions on the allocation of funding will need to be taken for the implementation of targets contained within the Carbon Action Plan, which will be understood in more detail at the scoping stage of each project.

Delivery of all the actions in the Carbon Action Plan requires a high level of investment. Some projects may provide a financial return on investment and others will not. Carbon reduction measures such as decarbonising the waste fleet, or the leisure centres, may be much more expensive for the Council than pursuing traditional, carbon-intensive alternatives.

The Council has finite resources available to achieve its net zero target and, therefore, cannot resource and deliver all the actions in the Carbon Action Plan without significant long-term investment and securing substantial external funding.

The Council will seek to identify and bid for appropriate funding as it becomes available. External grants can fund staff resources, consultancy fees, and capital works required to deliver projects, but this will be determined by the grant funding criteria. External grants often require the submission of an application within a short timeframe and expect delivery of the project and allocated funds within a set period. This may influence the delivery timeline for actions within the Carbon Action Plan.

Individual council decisions on the allocation of funding will also need to be taken, though that will be understood in more detail at the scoping stage of each project.

Current council emissions

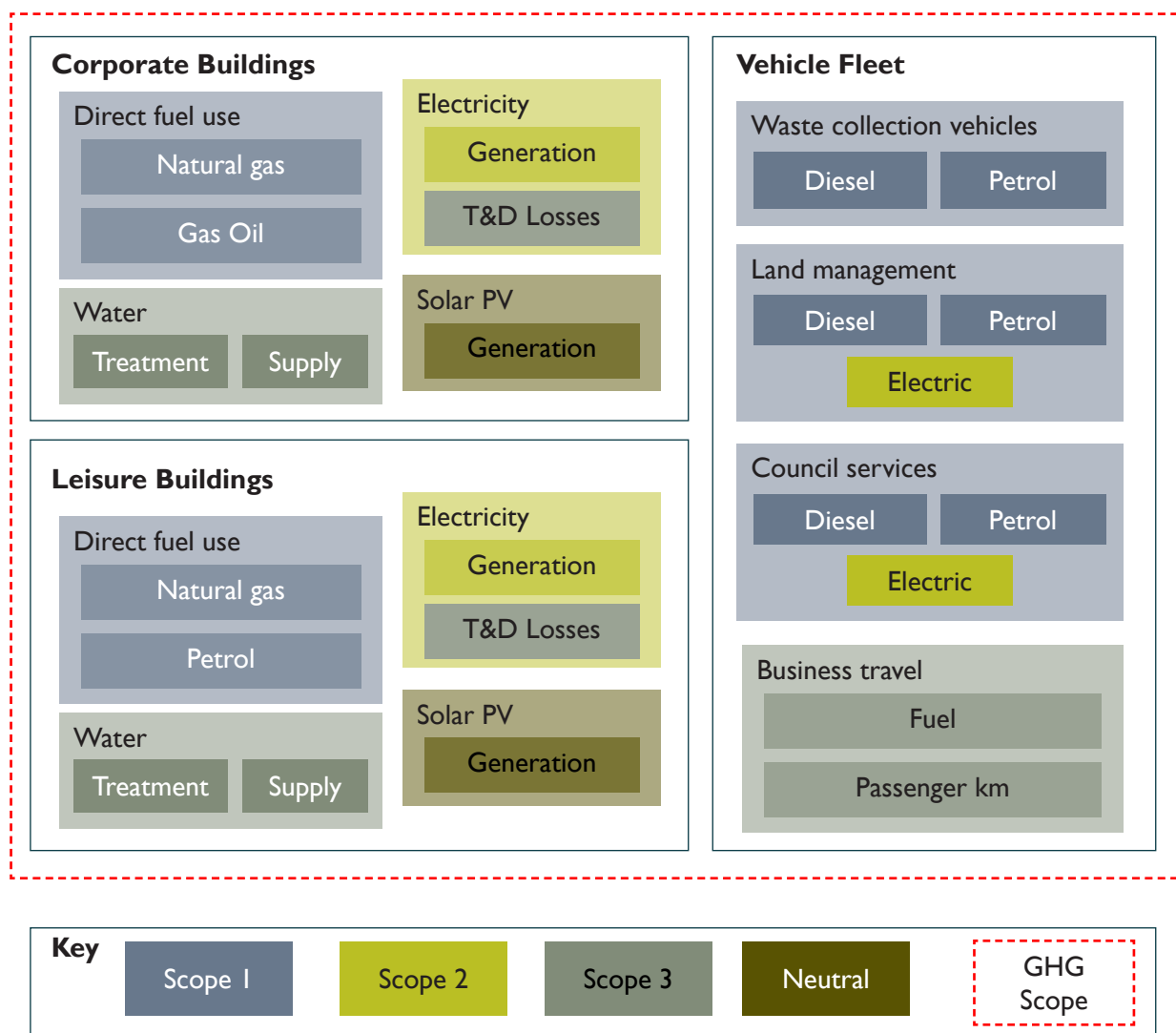
What does the Council measure?

In line with the GHG Protocol, the Council is taking a financial control approach to reporting which means that the Council will account for all emissions over which it has financial control. This excludes emissions from operations in which it has an interest but no control. Therefore, the following emissions are being accounted for:

Scope	Type	Source
1	Fuel for heating (gas, gas oil)	Council offices, properties, and sites
		Leisure buildings
	Liquid fuel for vehicles (petrol, diesel)	Council-owned or operated vehicles
2	Electricity	Council offices, properties, and sites
		Leisure facilities
		Council-owned or operated electric vehicles (EVs)
3	Business travel (petrol, diesel, public transport)	Staff and Member travel for business purposes
	Water	Council offices, properties, and sites
		Leisure buildings
	WTT and Transmission and distribution	Council offices, properties, and sites
		Leisure buildings
N/A	Electricity generation	Council offices, properties, and sites
		Leisure buildings
Out of scope for reporting but included in the Carbon Action Plan	Supply chain emissions	Procurement
	Waste	Council offices, properties, and sites
	Fuel for heating, electricity, and water	Leased assets

Figure 2 illustrates the emissions currently reported on by the Council and the boundaries they fall under.

Figure 2: The Council's emissions



Guidance from the Greenhouse Gas Protocol for a Corporate Accounting and Reporting Standard has been used to ensure the Council has developed a fair and accurate account of its GHG emissions by including datasets that are:

1. Relevant
2. Complete
3. Consistent
4. Transparent
5. Accurate

How does the Council measure emissions?

The Council accounts for its GHG emissions as CO₂e. This term stands for 'carbon dioxide equivalents' and is a measure of how much global warming is given by a particular GHG as a function of the amount or concentration of carbon dioxide gas. CO₂e is the common unit used within the Carbon Action Plan to express the contribution of the Council's GHG emissions to global warming and subsequent impact on climate change.

Data from various sources across the Council are used. The source data are quantified using different units of measure. For example, some data obtained are expressed as litres of liquid fuel, either petrol or diesel; some as kWh of gas or electricity; some as distance travelled by car; some as fares incurred on journeys taken by train, bus, or plane. In each case,

these data are converted into a single measure of CO₂e. To express the Council's total GHG emissions in terms of CO₂e, conversion factors defined and published by the Government have been used. These conversion factors are reviewed by Government each year to maintain up-to-date and accurate reporting.

As new data, methodologies, and reporting processes become available, the Council may include additional sources of emissions for which the Council is responsible. In widening the scope of emissions being accounted for, performance over time may appear worse than in reality, but this will be clearly communicated in any report updates and, where possible, new data sources will be backdated to minimise this negative impact.

Baseline data

The Council has completed its GHG emissions account for the financial year 2019/2020 which is referred to within the Carbon Action Plan as the Council's baseline.

During 2019/2020, emissions totalled **3,130,991 kg CO₂e**.

By scope

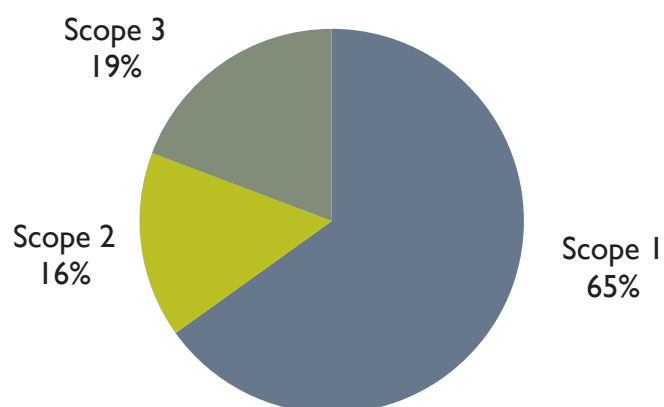
Table 1: Total emissions by scope

1 April 2019 to 31 March 2020	Kg CO₂e
Scope 1	2,038,201
Scope 2	490,201
Scope 3	602,589
Total	3,130,991

Scope 1 emissions, associated with gas and liquid fuel, account for 65% of council emissions.

Scope 2 emissions associated with the purchase of electricity from the National Grid account for 16% of council emissions.

Scope 3 emissions associated with the transport of gas, electricity, and liquid fuel (referred to as T&D, transport, and distribution, and WTT, well-to-tank), water consumption, and transport miles for staff and Member business travel account for the remaining 19% of council emissions.

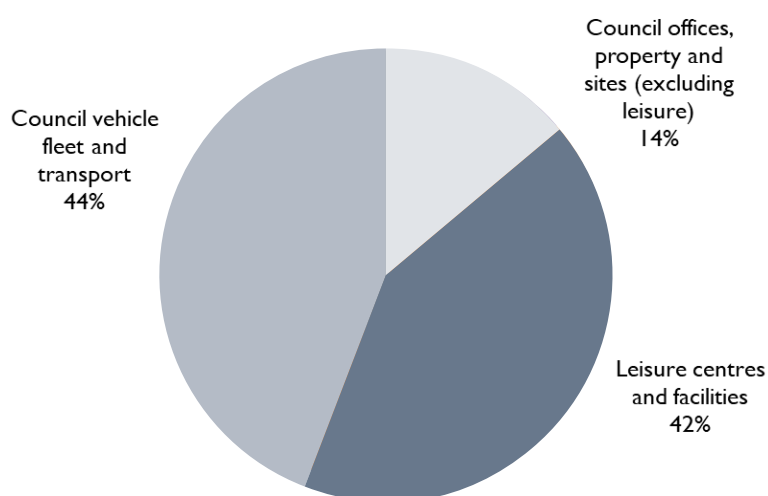
Figure 3: Total emissions for 2019/20 by scopeBy type/location**Table 2: Total emissions by location**

1 April 2019 to 31 March 2020	Kg CO ₂ e
Council offices, property, and sites (excluding leisure)	427,968
Leisure centres and facilities	1,334,962
Council vehicle fleet and transport	1,368,061
Total	3,130,991

Council offices, property and sites represent 14% of total emissions across scopes 1, 2 and 3.

Leisure centres and facilities account for 42% of council emissions, across all scopes.

Council vehicle fleet, machinery, and transport, including council-owned waste trucks currently operated by Ubico, account for 44% of council emissions.

Figure 4: Total emissions for 2019/20 by location

Emissions reduction

Since 2019/20, emissions have reduced by 4% to 2022/23. This has primarily been because of reductions in gas and electricity as a result of energy efficiency measures in council buildings and leisure sites.

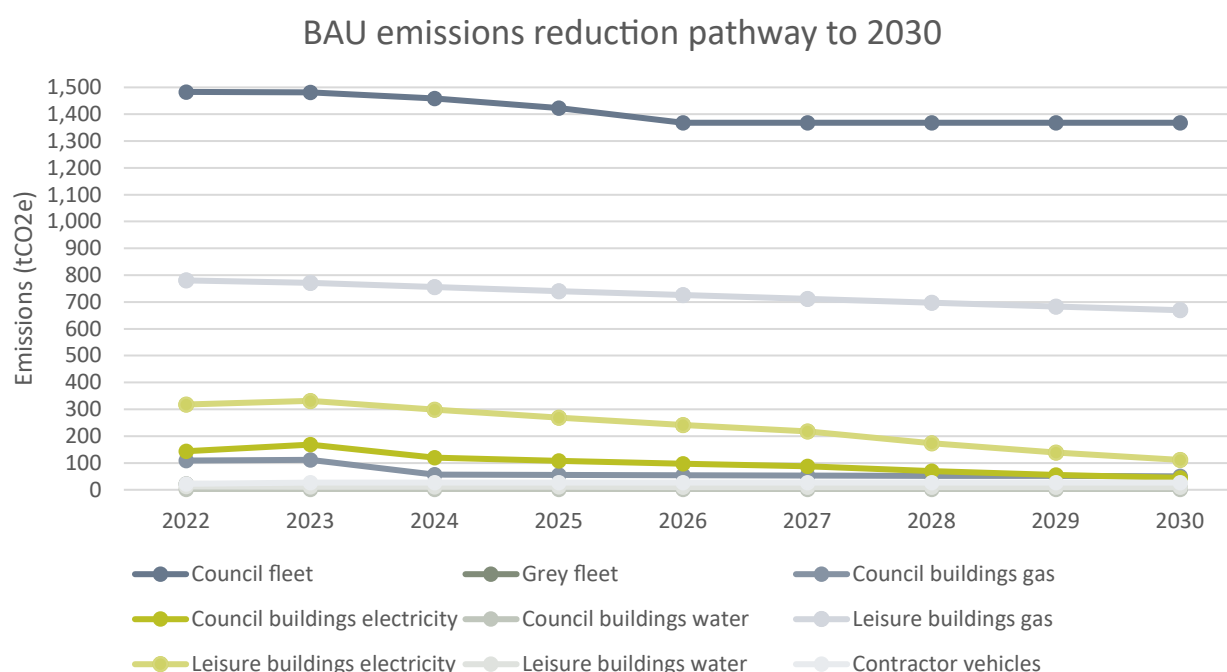
2030 target

Scenario modelling

On the current trajectory of emissions reduction, the Council will not meet its carbon neutral target by 2030, as shown in Figure 5. The reductions under Business as Usual (BAU) are primarily a result of the projected decarbonisation of the national electricity grid, with some energy efficiency gains and electrification of smaller vehicles in the Council fleet.

To hit the carbon neutral target by 2030, the Council must follow the emission reduction pathway illustrated in Figure 6. The success of this pathway is influenced to some extent by external factors like the availability of funding, national policy, and progress in technological innovations in key areas. The assumptions for the BAU scenario are listed beneath Figure 5 and the actions required to align with the carbon neutral target are listed under Figure 6.

Figure 5: BAU



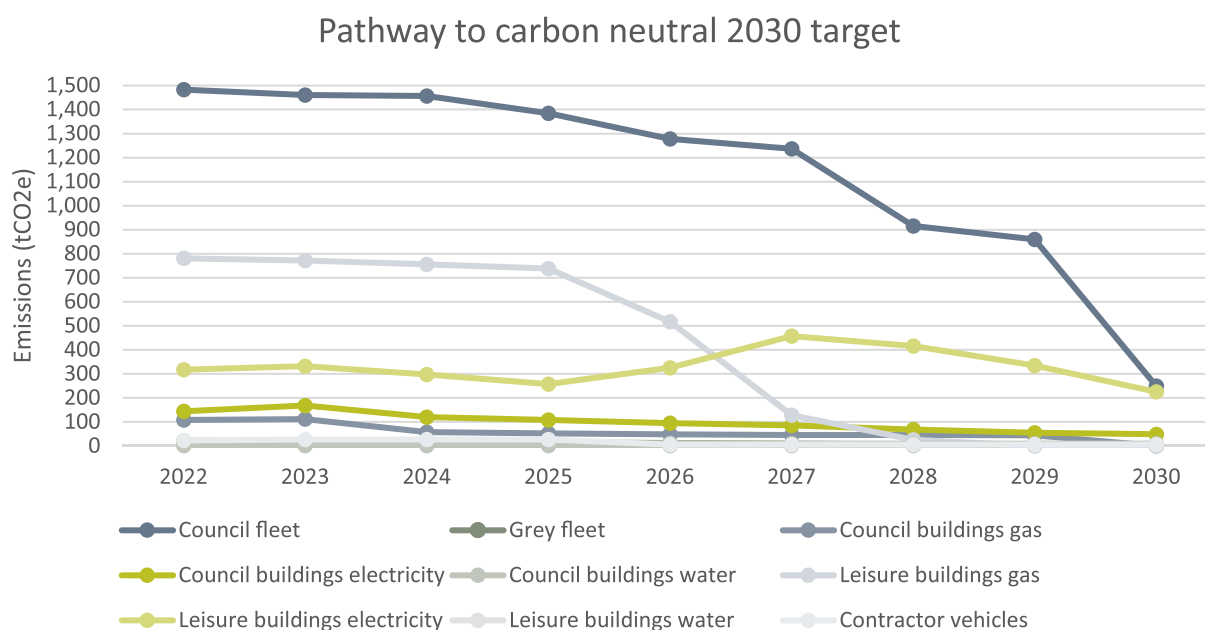
Assumptions:

- Small and medium vehicles will transition to electric, with two Refuse Collection Vehicles (RCVs) shifting to electric before 2030.
- Minor annual reductions of 2% in gas emissions due to energy efficiency across all sites.
- Solar PV installed on council offices, providing a proportion of the electricity demand.
- The projected decarbonisation of the national electricity grid is applied to this scenario (Department for Energy Security and Net Zero (DESNZ) figures).
- No changes to water use.
- No changes to staff travel patterns but proportion of EVs assumed to increase in line with national estimates to 2030.
- Population growth and increased use of services is not accounted for.

Under BAU, approximately 2,109 tonnes of CO₂e would need to be offset and/or inset in 2030, excluding electricity emissions as it is assumed that all electricity would be from certified renewable sources.

Figure 6: Emission reduction pathway for carbon neutral by 2030 target

The carbon neutral pathway would leave approximately 544 tonnes of CO₂e to be offset and/or inset by 2030. This is from unavoidable emissions associated with electricity and water use. The Council should continue to source its electricity from certified renewable sources, meaning that the emissions from electricity would be considered zero from a market-based perspective. This would only leave approximately 10.8 tonnes of CO₂e from water use to be offset and/or inset by 2030 to reach the carbon neutral target.



This pathway assumes a number of key activities occur which are listed in Table 3. However, the Carbon Action Plan recognises that the Council will be constrained by a number of external and internal factors which may limit the potential for action in some areas. Where this is the case, italics are used.

Table 3: Activities required to align with the carbon neutral by 2030 pathway

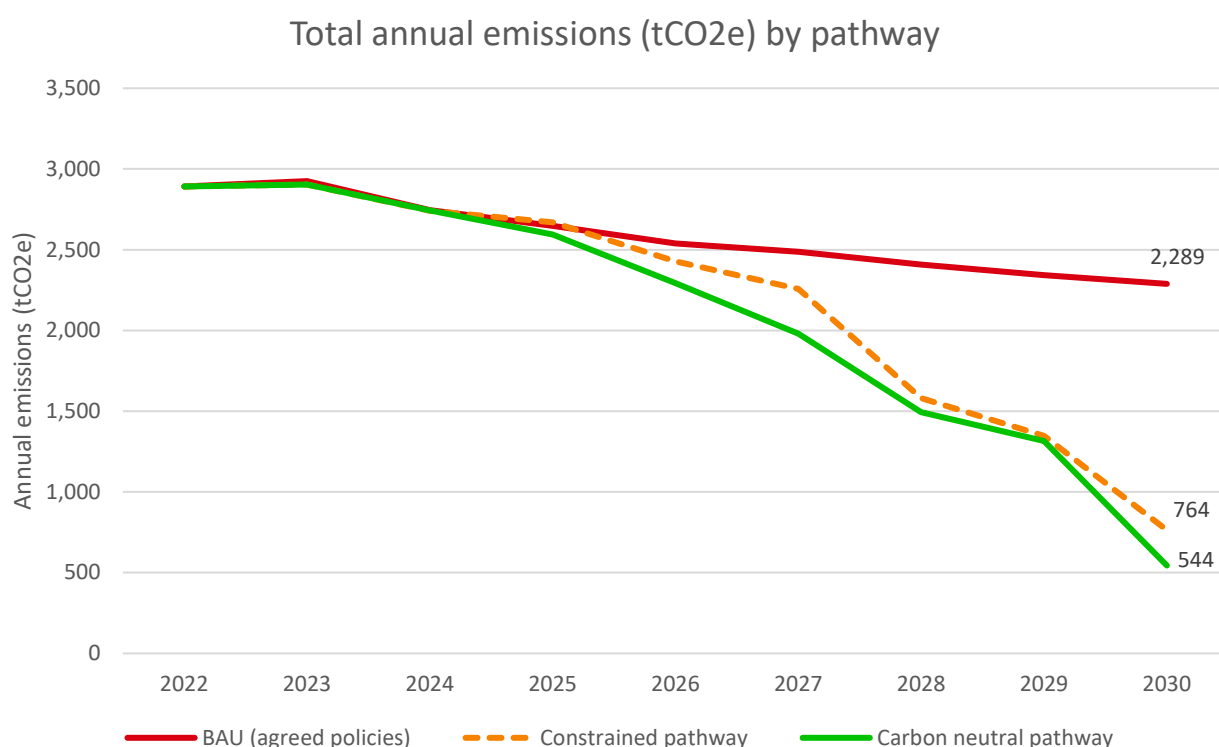
Emission source	Activity
Waste fleet	<ul style="list-style-type: none"> • Trial of two electric RCVs undertaken in 2026. • Medium HGVs transition to electric in 2026. • All waste vehicles transition to low-carbon alternatives by 2030, <i>as or before they reach end-of-life</i>.
Other council fleet	<ul style="list-style-type: none"> • Sweepers, trucks, vans, and tractors and mowers are all low carbon by 2027. • All petrol and diesel cars or vans are electric by 2030.
Council buildings – gas	<ul style="list-style-type: none"> • The boilers at the Council offices at Welch Way and the Old Court House are replaced with electric heating systems in 2025 and 2027, respectively. • <i>Woodgreen Offices are decarbonised in 2030 with significant external support.</i>
Council buildings – electricity	<ul style="list-style-type: none"> • All sites improve the fabric and energy efficiency of the building. • Solar panels are installed at Woodgreen in 2024, providing 36% of the building's electricity requirements. • Solar PV are installed at the Council offices on Welch Way, providing 55% of the building's electricity requirements. • Solar PV are installed at the remaining council sites by 2027, providing an estimated 30% of the building's requirements. • LEDs and motion sensors are installed in all public conveniences to minimise electricity use. • All remaining electricity use continues to be supplied from certified renewable energy in 2030.

Council buildings – water	<ul style="list-style-type: none"> A water fixture replacement programme is implemented to review the flow rate of existing fixtures to minimise water use.
Leisure buildings – gas	<ul style="list-style-type: none"> Windrush Leisure Centre is decarbonised by 2026. Carterton Leisure Centre and Chipping Norton Leisure Centre are decarbonised by 2027, <i>with the support of public sector funding</i>. Smaller leisure sites are decarbonised by 2028.
Leisure buildings – electricity	<ul style="list-style-type: none"> Solar panels are installed at Witney ATP and Carterton Pavilion in 2025 to meet approximately 50% of the building's electricity demand. Solar panels are installed at the leisure centres as part of the wider decarbonisation schemes, providing between 20% and 55% of the site's electricity demand.
Leisure buildings – water	<ul style="list-style-type: none"> A water fixture replacement programme is implemented to review the flow rate of existing fixtures to minimise water use.
Business travel	<ul style="list-style-type: none"> Investment in electric pool cars to minimise petrol or diesel use on council business, following a review of pool car demand among staff. Electric vehicle charging points (EVCPs) are installed at or near council offices by 2025. <i>Consider introducing staff benefits or incentives to increase the use of public transport.</i> <i>Flying on council business is prohibited.</i>
Contractor travel	<ul style="list-style-type: none"> New contracts require the use of EVs by 2026.

Figure 7 illustrates the gap between BAU and the carbon neutral aligned pathway. Acknowledging that the Council is subject to a number of external factors, a 'constrained' pathway is also shown here which recognises areas where minimising emissions may not be feasible depending on:

1. Whether the Council has reasonable authority and capacity to request and enforce an action.
2. Practical or technological constraints.
3. The availability of funding and budget constraints to ensure the long-term security of the Council's operations.

Figure 7: Comparison of emission reduction pathways to 2030



Offsetting and insetting

To achieve the carbon neutral target, the emissions that cannot be removed entirely within the carbon neutral pathway would need to be offset and/or inset through a mechanism endorsed within the Carbon Action Plan, but only once all other steps to minimise carbon emissions have been taken. Carbon offsetting and/or insetting could be achieved by paying for a carbon credit, i.e. paying for an equivalent amount of emissions to be reduced or removed elsewhere. The Council will focus on carbon offsetting and/or insetting that derives local benefit as a priority over investing in carbon offset schemes further afield. This could include pursuing insetting approaches – implementing projects that reduce emissions and provide local benefit within the district boundary – alongside recognised offset schemes like the Woodland Carbon Code.



Table 4: Carbon offsetting and insetting schemes

Name	Offset location	Notes
Relevant recognised schemes		
Woodland Carbon Code	West Oxfordshire and UK	Developed through support of the UK Government, the Environmental Reporting Guidance allows these domestic units to be used like international offsets. Supporting local projects for tree and woodland management will be a priority for the Council. Accredited by the UK Environmental Agency.
Retrofit credit	UK	HACT and PNZ Carbon have produced a retrofit credit that is certified by the Verified Carbon Standard. Credits are issued when projects successfully deliver retrofit and decarbonisation of social housing stock.
Potential future schemes		
Council energy-efficiency retrofit fund	West Oxfordshire	Equivalent CO ₂ e savings derived from investment into a deep retrofit programme for existing housing stock in the district.
Area Based Insetting schemes	West Oxfordshire	As above, equivalent CO ₂ e savings derived from investment in other schemes, such as low-emission transport, can be used to offset emissions.
Soil, saltmarsh, and land-use carbon credits	West Oxfordshire and UK	Soils hold differing levels of carbon depending on their management. Credits could be derived from schemes that quantify carbon stored in soils, rewarding those whose practices increase sequestration. This is a developing area in the UK.

Action Plan

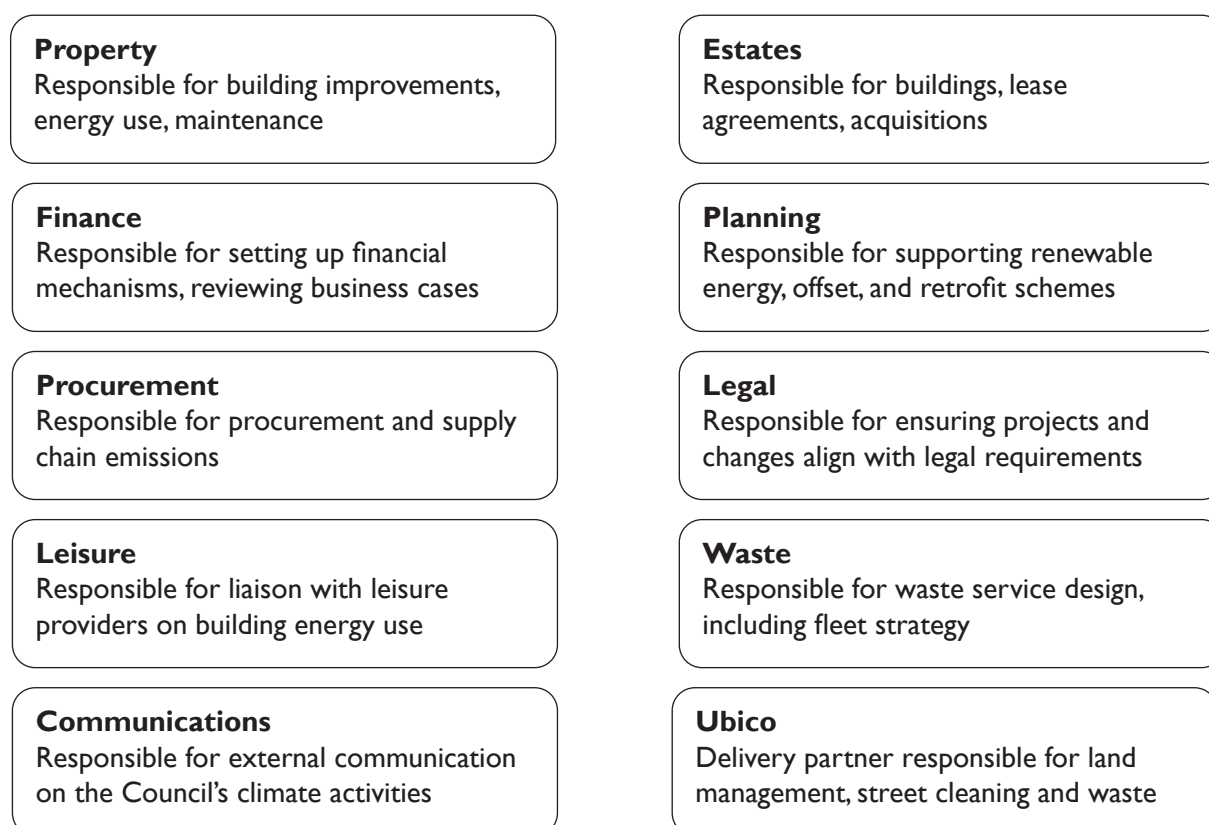
The Carbon Action Plan consists of 10 priority actions which cover emissions produced from a range of sources - council buildings, properties, and sites; leisure buildings; and council vehicles and travel.

These actions are to:

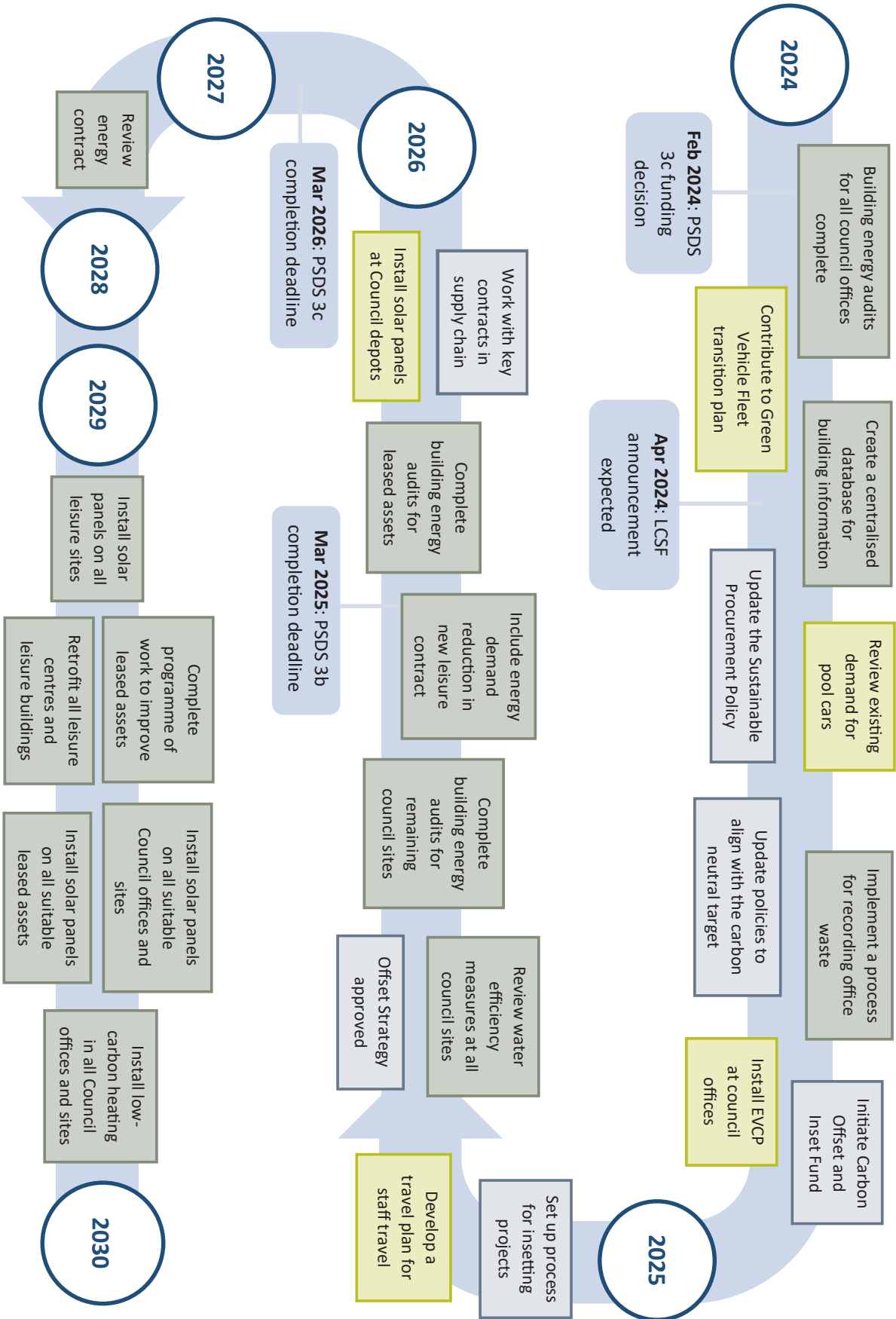
- Avoid future emissions
- Whole building retrofit of council sites
- Whole building retrofit of leisure sites
- Whole building retrofit of leased assets
- Minimise water demand at council sites
- Minimise consumption and waste in council buildings
- Minimise emissions from grey fleet (business travel)
- Minimise emissions from council fleet
- Minimise emissions from procurement
- Offset and/or inset residual emissions.

These are divided by type of emissions under the following headings: buildings, water, waste, transport, procurement, and residual. Each of these activities has been identified to deliver a reduction in emissions in line with the scenario modelling and carbon budgets for the emissions the Council is responsible for. There are some activities which may also benefit district-wide emissions. Successful delivery of the Carbon Action Plan relies on emissions reduction being embedded across council operations and working with others, including other local authorities, to share ideas and best practice. Key delivery partners for the Carbon Action Plan are summarised in Figure 7.

Figure 7: Key delivery partners



Decarbonisation Road Map



Avoid future emissions

I. Avoid future emissions

While the Carbon Action Plan aims to reduce existing carbon emissions to zero by 2030, it is also important to avoid producing additional future emissions that will only increase the scale of this challenge. Policies and processes inform council activities so ensuring that these are aligned with net zero and support the Council's carbon neutral target is a critical activity. These might relate to standard processes for replacing building heating systems in council-owned and tenanted buildings, or ensuring any refurbishments include energy efficiency improvements, or reviewing vehicle policies. This action also embeds climate considerations within all service delivery.

Key delivery teams

Climate, Estates, Executive Management, Property, Waste




Activities

- Align policies and processes with net zero.
- Ensure all new assets are low carbon.
- Embed use of the climate impact assessment tool.
- Carbon Literacy Training.
- Collaborating on Local Area Energy Planning.
- Review the green electricity contract when it is up for renewal.

Key Performance Indicators

- Number of projects using the impact assessment tool.
- Building standard of new properties built or acquired.

Co-benefits

-  Avoids sunken costs from future retrofit requirements by ensuring all new acquisitions and sites are net zero, low-carbon and/or energy efficient.
-  Avoids future offset costs by reducing the quantity of future emissions.
-  Upskills staff to become climate experts in their service area.

Risks and dependencies

- Collaboration: Requires successful collaboration between teams to review and update policies and processes.
- Availability and affordability of low carbon assets: Low carbon assets are likely to be new build and come with a premium price tag which would limit the assets the Council could consider acquiring. As a major income stream for the Council, protecting the investment portfolio is important as it supports other actions in the Carbon Action Plan.

Buildings

2. Whole-building retrofit of council sites (except leisure and leased assets)

Emissions from council buildings make up 14% of the Council's baseline carbon emissions. These primarily come from the use of gas for heating and electricity. To decarbonise our buildings, it is critical to follow the energy hierarchy which first minimises energy demand and improves the energy efficiency of the building fabric, then replaces heating systems with low-carbon alternatives, and finally sources any electricity used from renewable sources.

Key activities involve:

- Reviewing existing practices, building equipment and energy management practices
- Commissioning full building energy assessments to review the building's fabric, heating system, water efficiency, and Solar PV potential and make recommendations to improve the building's energy efficiency and decarbonise heating and hot water. The assessments should also consider mechanical ventilation, shading, and cooling.
- Individual business cases will need to be worked up based on the recommendations.

Key delivery teams

Climate; Estates; Property

Activities

- Review and minimise energy demand in council offices, properties, and sites.
- Install half-hourly (HH) metering to improve energy monitoring.
- Complete energy assessments for all council offices, properties, and sites.
- Compile a database of building information for all council sites.
- Improve the building fabric in all council offices, properties, and sites.
- Install low-carbon heating in all council offices, properties, and sites.
- Install solar PV, where viable, on all offices, properties, and sites.
- Consider the cost of retrofit as part of wider cost assessments when acquiring new assets.

Key Performance Indicators

- Number of buildings with completed energy audits and decarbonisation plans.
- Percent reduction in gas and electricity use following building improvements.
- Number of buildings with a low-carbon heating system.

Co-benefits

😊 Cost savings for the Council from lower gas and electricity use.

🔧 Improves comfort inside the buildings because of draught-proofing, insulation and/or shading measures.

Risks and dependencies

- **Financing:** Constrained council budgets limits the amount available for investment in improving our buildings. Government funding is currently limited and competitive. Government borrowing is expensive. Private investment should be investigated.
- **Officer resource and capability:** Significant officer time required to plan, implement, and monitor the activities, with limited officers having the knowledge and skills to support project delivery under this theme.
- **Wellbeing:** If action to improve building energy performance and decarbonise heating and hot water is delayed, summer heatwaves and winter cold spells will have increasingly negative impacts on tenants and buildings occupants.
- **Future costs:** Piecemeal and ad-hoc action may lead to increased costs further down the line if they are not part of a planned, phased approach. Similarly, installing gas boilers and other fossil fuel infrastructure between now and 2030 may lead to sunken costs as the Council's carbon neutral target would require these systems to be removed by 2030, before their end-of-life.
- **Uncertainty:** The impact of new technologies on maintenance, replacement and operating costs is uncertain.
- **Market volatility:** Energy costs are exceedingly difficult to predict in the medium to long term, but these have a significant impact on the business case and payback periods. The cost of retrofit measures in the future is also unknown.
- **Infrastructure:** Early engagement with the district network operator (DNO) to understand costs and timeframes will be critical to delivery.

3. Whole building retrofit of leisure sites

Emissions from leisure sites made up 42% of the Council's baseline emissions in 2019/2020. To decarbonise our buildings, a hierarchy of actions should be followed to first reduce energy demand and improve energy efficiency of the building's fabric, then replace heating systems with low-carbon alternatives, and finally source any electricity from renewable sources.

Key activities involve:

- Reviewing existing practices, building equipment and energy management practices in partnership with council's leisure provider.
- Commissioning full building energy assessments to review the building's fabric, heating system, water efficiency, and solar PV potential and make recommendations to improve the building's energy efficiency and decarbonise heating and hot water. The assessments should also consider mechanical ventilation, shading, and cooling.
- Developing individual business cases as a result of the recommendations to secure funding for building retrofit, collaborating with the Council's leisure provider.

Key delivery teams

Climate; Estates; Legal; Leisure


Activities

- Determine existing demand reduction plans with council's leisure provider.
- Assess all leisure buildings for energy efficiency and decarbonisation measures.
- Improve the building fabric of all leisure buildings.
- Install low-carbon heating in all leisure buildings.
- Install solar PV, where viable, on all leisure buildings.
- Consider decarbonisation opportunities and investment as part of the procurement process for new leisure contracts.

Key Performance Indicators

- Number of buildings that have undergone retrofit works.
- Number of buildings with detailed designs for low-carbon heating.
- Number of buildings with energy and solar assessments.
- Percent reduction in gas and electricity use following building improvements.

Co-benefits

-  Cost savings for the Council and leisure provider because of energy efficiency improvements.

Risks and dependencies

- **Financing:** Government funding to support retrofit projects is limited and highly competitive. Private investment should be investigated.
- **Long-term viability of the site:** council commitment to retaining sites is required to justify the business case for investment.
- **Officer resource and capability:** Significant officer time required to plan, implement, and monitor the activities, with limited officers having the knowledge and skills to support project delivery under this theme.
- **Market volatility:** Energy costs are exceedingly difficult to predict in the medium- to long-term but these have a significant impact on the business case and payback periods. The cost of retrofit measures in the future is also unknown.
- **Infrastructure:** Early engagement with the DNO for actions requiring electrification will be needed to understand costs and timeframes implications.
- **Cost risk:** Timelines for bidding, tendering, and delivering schemes make accurate financial forecasting difficult, increasing cost risk for the Council.
- **Leisure contract:** The viability of decarbonisation schemes is reliant on negotiating a contract change with the leisure provider to ensure the cost savings are shared.

4. Whole building retrofit of leased assets

Emissions from leased assets are not currently included in the Council's carbon account and the future implications of the Minimum Energy Efficiency Standards (MEES) is uncertain. However, as property owners it is good practice to improve the energy efficiency of these buildings and decarbonise them. Activities in this area are dependent on lease arrangements and may be limited to advisory and supportive activities in some areas. Most tenants have full repairing and insuring leases and are responsible for the building's structure, fabric, and heating, lighting, and ventilation systems. In these cases, the Council cannot make changes without the tenant's consent. Retrofit opportunities should be capitalised when leases are up for renewal or when tenants change.

As above, a hierarchy of actions should be followed to first minimise energy demand and improve energy efficiency of the building's fabric, then replace heating systems with low-carbon alternatives, and finally source any electricity from renewable sources.

Key delivery teams

Climate; Communications; Estates




Activities

- Provide resources and support to minimise energy demand in leased assets.
- Assess all buildings for energy efficiency and decarbonisation measures as part of the Asset Management Strategy.
- Improve building fabric and install low-carbon heating in leased assets.
- Install solar PV on leased assets, where suitable.

Key Performance Indicators

- Percent of buildings rated EPC B or above.
- Percent of buildings with a heat pump or low-carbon heating system installed.
- Percent of buildings with solar PV on the roof.



Co-benefits

-  Cost savings for tenants from improved energy efficiency.
-  Improved wellbeing for tenants from draught-proofing and thermal comfort.
-  Easier to let properties with a higher energy efficiency rating.

Risks and dependencies

- **Funding:** Some activities will require council funding, other activities may be able to leverage private finance. If the Council invests in building improvements it may not be able to recoup its investment, particularly if the tenants pay the bills and benefit from utility cost reductions. Solar PV does provide an opportunity to sell electricity to tenants.
- **Legal:** Opportunities for action are dependent on lease agreements and the level of ownership and control over different elements of the asset.
- **Property owner – tenant relations:** Getting buy-in from tenants for certain activities will be critical to their successful delivery. Some changes would be disruptive to tenants, possibly requiring rent-free periods.
- **Infrastructure:** Early engagement with the DNO for actions requiring electrification will be needed to understand costs and timeframes implications.

Water

5. Minimise water demand at all council sites
Emissions from the supply and treatment of water make up 1.6% of the Council's total carbon footprint. Most of this usage comes from leisure centres. Despite the overall proportion of water emissions being small, there are a number of other important environmental implications from water use which make this an important focus of action, such as water stress and water shortages, aquifer depletion, and water quality.
Key delivery teams
Climate; Leisure; Property
Activities
<ul style="list-style-type: none"> Assess water-efficiency measures for council leisure and leased buildings. Install water-efficiency measures and greywater recycling systems in council offices, where appropriate. Install water efficiency measures and grey water recycling systems in leisure buildings, where appropriate. Explore rainwater harvesting tanks for football pitches. Consider water monitoring performance indicators as part of annual review of leisure contract.
Key Performance Indicators
<ul style="list-style-type: none"> Number of buildings assessed for water efficiency. Number of water-efficient improvements made.
Co-benefits
 Cost savings from reduced water use.  Reducing water stress in the area.
Risks and dependencies
<ul style="list-style-type: none"> Financing: Internal investment will be required as there are not currently any government grants to reduce water consumption. Compliance and safety: Holding tanks in certain environments require regular compliance checks to decrease the risk of legionnaires disease.

Waste

6. Minimise consumption and waste in council offices
Emissions from waste are not currently included in the Council's carbon reporting. However, consumption and waste generate emissions upstream and downstream that the Council is responsible for, so reducing consumption and waste is an important action.
Key delivery teams
Climate; Procurement; Property
Activities
<ul style="list-style-type: none"> Conduct an internal waste audit. Minimise paper consumption from both council staff and Members. Ensure clear and accessible recycling bins are provided in council offices. Consult with procurement (under activity 9) to monitor and reduce unnecessary council consumption. Establish a method for measuring the Council's office waste and include emissions in future carbon reporting.
Key Performance Indicators
<ul style="list-style-type: none"> Emissions from waste.

Co-benefits

- ⊕ Waste disposal has negative environmental and health impacts so reducing the amount of waste the Council produces is an important action.
- 💰 Monitoring and reducing unnecessary council consumption will also produce cost savings.

Risks and dependencies

- Technology: There may be future opportunities to invest in systems and technologies that support a shift towards being paperless.
- Raising awareness: Education on recycling and waste reduction will be required to ensure behaviour changes are made and retained across the service areas.
- Internal processes: A commitment to changing internal processes and procedures to align with being a paperless council.

Transport**7. Minimise emissions from grey fleet (business travel)**

Emissions from transport can be split into those derived from council services, such as waste collection, parking, land management, and those resulting from staff business travel. Business travel only accounts for 1.9% of total emissions and covers public transport, vehicles owned by staff and Members, and flights. There are additional emissions from staff commuting which are also important to note even though these are not currently captured in the Council's carbon reporting, and these will be primarily addressed through a staff travel plan.

Key delivery teams

Climate; Property

Activities

- Assess the viability of installing EVCPs at council offices and leisure centres.
- Install EVCPs in line with Oxfordshire EV strategy and standards.
- Review existing demand for vehicle fleet - pool cars - and plan for their replacement with EVs once charging points are installed.
- Minimise emissions from staff and Member travel.
- Review staff benefits to encourage green and active travel.

Key Performance Indicators

- Number of EVCPs installed at council sites.

Co-benefits

- ⊕ Health benefits from shifting business travel vehicles to EVs which reduces air pollution and associated negative health impacts.

Risks and dependencies

- Financing: funding will be required to install EVCPs and to commission a Publica-wide staff travel review.
- Grid constraints: Infrastructure constraints and electricity network connection costs need to be understood as it may affect the deliverability of EVCPs.

8. Minimise emissions from council fleet

Emissions from the Council fleet covers liquid fuel used for waste vehicles, land management vehicles, parking and other council services, and vehicles operating on the Council's behalf for services such as maintenance of public conveniences.

While EV technology has advanced for cars and vans, low emission alternatives to RCVs and other large vehicles are not yet widespread. Therefore, certain activities under this action involve long-term plans which rely on the expectation that technology will continue to improve and that costs will fall.

Key delivery teams

Waste; Ubico; Parking; Procurement; Property; Climate

Activities

- Complete a resource-efficiency review of council's waste service, street cleansing and grounds maintenance contract.
- Review building, depot and bulking station need in West Oxfordshire.
- Work in partnership with Ubico to produce a Green Vehicle Fleet Transition Plan.
- Electrification of machinery made a stipulation of future waste, street cleansing and grounds maintenance contract delivery.
- Low-emission vehicles made a stipulation of future public convenience contracts.
- Install solar PV at council depots to provide electricity for zero-emissions vehicles, where suitable.
- Produce an anti-idling policy for staff and contractors on council business.

Key Performance Indicators

- Percentage of council-owned vehicles that are low-emission.
- Percentage of contractor vehicles delivering council services that are low emission.

Co-benefits

- ⊕ Health benefits from shifting to low-emission vehicles which reduces air pollution and associated negative health impacts.

Risks and dependencies

- **Timing:** Monitoring upcoming contract renewal dates to ensure new contracts include low-emission vehicle requirements.
- **Technological availability:** Availability of low-emission alternatives to certain vehicles is low, so requiring contracts to provide these in the short-medium term might be difficult.
- **Financing:** The business case for low-emission vehicles, particularly waste vehicles, is dependent on a range of factors. External funding will be required to decarbonise the Council's fleet ahead of 2030, some of which may involve bidding for limited and highly competitive funding and/or trials. Preparing these ahead of time will be key to being successful in any bids.
- **Policies:** Ensuring vehicle replacement policies take a low-emission first approach.
- **Grid constraints:** Infrastructure constraints and electricity network connection costs need to be understood as it may affect the deliverability of EVCPs.
- **Contract costs:** Requiring low emission vehicles may increase contract costs.

Procurement

9. Minimise emissions from procurement

Emissions from purchased goods and services are not currently included within the Council's carbon reporting boundary. However, where other local authorities report these emissions, these are known to be significantly higher than all other emissions combined. Therefore, it is good practice to address supply chain emissions. Doing so also contributes to wider improvements to district emissions as it encourages businesses to consider and reduce their environmental impacts.

Key delivery teams

Climate; Procurement


Activities

- Develop a Sustainable Procurement Policy (short-term).
- Establish a method for identifying and engaging with the Council's biggest contracts (medium-term).
- Follow best practice to calculate, monitor and minimise supply chain emissions (long-term).

Key Performance Indicators

- A Sustainable Procurement Policy is adopted.
- Number of tenders with sustainability criteria included.
- Number of key contracts that the Council is working with.

Co-benefits

 Cost savings from monitoring and reducing council spend.

Risks and dependencies

- Supply chain capability: There is a risk that the supply chain may not be able to meet new sustainability requirements, creating a bias in those suppliers bidding for and securing council contracts.
- AI software: Investment in AI software to calculate supply chain emissions would facilitate key activities under this action.
- Contract costs: Prioritising environmental benefits and making certain requirements for contracts may increase contract costs.

Residual

10. Offset and/or inset residual emissions

To reach the Council's carbon neutral target by 2030, any residual emissions will need to be inset and/or offset through verified means. Approaches which provide local benefit will be prioritised over national or international offsetting schemes. Developing an Offset and Inset Strategy that is approved by the Council before 2025 is critical to being able to implement approaches which allow the Council to claim offset or inset credits by 2030. For example, tree planting initiatives verified by the Woodland Carbon Code only start producing carbon credits after 5 years. These sites will need to be identified and registered in 2025 to claim carbon credits in 2030, if the Council chooses to prioritise investment in new sites. Nature based carbon sequestration will be considered alongside tree planting for carbon verification. As part of the Local Plan 2041, a Carbon Offset and Inset Fund should be established to provide ring-fenced funding from s106 developer contributions for carbon-reduction projects across the district.

Key delivery teams

Climate; Finance; Planning; Policy

Activities

- Develop an Offset and Inset Strategy.
- Set up a Carbon Offset and Inset Fund.
- Achieve verification of nature-based solutions for carbon credits.
- Implement insetting projects.
- Implement offset projects.

Key Performance Indicators

- Payments into the Offset and Inset Fund.
- Tonnes of CO₂e removed as a result of Offset and Inset Fund projects.
- Offset credits secured by the Council to offset residual emissions in 2030.

Co-benefits

Insetting projects have greater co-benefits than generalised offsetting schemes due to their localised nature. Depending on the project, benefits can be cleaner air, improved indoor air quality, improved comfort, improved health and wellbeing, lower building energy costs, and support for the local economy.

An Offset and Inset Fund to offset emissions from future developments has the potential to deliver significant funding from developer contributions.

Risks and dependencies

- **Timing:** Inclusion of a Carbon Offset and Inset Fund in the Local Plan 2041, specifying ringfenced S106 funds from developer contributions, is critical to being able to deliver projects.
- **Officer time:** Successful collaboration with relevant teams to set up mechanisms to coordinate, implement and monitor offsetting projects.
- **Commissioning:** Specialist consultants may need to be brought in to support the development of insetting work, particularly to identify viable projects and calculate carbon savings.
- **Funding for resource:** Resource will need to be allocated to support delivery of the ring-fenced funding, either a full-time or part-time officer.

Annex:

Activity	Purpose	Timescale	Key delivery team	Status	KPI
1. Avoid future emissions					
Aligning policies and processes with Net Zero	Policies and processes inform council activities so ensuring these are aligned with net zero and support the Council's carbon neutral target is a critical activity.	2024 – 2025	Climate Estates Executive management Property	New - not yet started	Number of new and/or updated policies and processes aligning with net zero.
All new assets to be low carbon	To develop a policy ensuring that all new assets built or acquired by the Council should meet a minimum energy performance threshold, which includes a low-carbon heating system.	2025	Estates	New – not yet started	Whether there is a policy on assets being low carbon.
Embed use of the Sustainability Impact Assessment Tool	To embed environmental and social considerations within all council teams.	2024	All	In progress	Number of projects using the impact assessment tool.
Review the green electricity contract	To ensure the Council continues to use green electricity to power its buildings and vehicles.	2027	Climate Procurement	New – not yet started	New contract uses certified green electricity.
2. Whole building retrofit for council sites (except leisure and leased assets)					
Minimise energy demand in council offices, properties, and sites	Reducing energy demand is the first step in the energy hierarchy and will cut council costs.	Ongoing	Climate Property	In progress	Carbon emissions from energy.
Install HH metering to improve energy monitoring	Provide reliable data on energy use that will support future low-carbon heating and solar PV projects and monitoring.	2025	Property	New – not yet started	Number of buildings with HH metering installed.
Complete energy assessments for all council offices, properties, and sites	To provide the Council with a costed improvement plan for all council properties. Proposals can be worked up and integrated into existing plans and strategies.	2025	Climate Estates Property	In progress	Number of buildings with completed energy assessments.

Compile a database of building information for all council sites	To ensure all building information is accessible and up to date to support future funding opportunities.	2024	Climate Data Estates Property	New – not yet started	Existence of the database.
Improve the building fabric in all council offices, properties, and sites	To improve the energy efficiency of the building, enable the installation of low carbon technologies, reduce running costs, and improve thermal comfort.	By 2027	Climate Estates Property	In progress	Number of fabric measures in place for each council site.
Install low-carbon heating in all council offices, properties, and sites	To decarbonise heating and minimise emissions from gas in council buildings.	By 2030	Climate Estates Property	In progress	Number of buildings with low-carbon heating.
Install solar panels, where viable, on all offices, properties, and sites	To source electricity for the building from direct renewable sources, reducing running costs.	By 2026	Climate Estates Property	In progress	Number of buildings with solar PV.
3. Whole building retrofit for leisure buildings					
Determine existing demand reduction plans with the Council's leisure provider	To reduce the building's energy demand and operational costs. To identify opportunities for the Council to support the leisure provider.	2024	Climate	Existing – in progress	
Assess all leisure buildings	To provide the Council with the information necessary to prepare and apply for funding opportunities, and to allow the Council to plan for future investment.	By 2025	Climate Leisure	In progress	Number of buildings with energy assessments and decarbonisation plans.
Improve the building fabric of all leisure buildings	To improve the energy efficiency of the building, enable the installation of low carbon technologies, reduce running costs, and improve thermal comfort.	By 2030	Climate Leisure	In progress	Condition of the building fabric for all sites.
Install low-carbon heating in all leisure buildings	To decarbonise heating and reduce emissions from gas in council buildings.	By 2030	Climate Leisure	In progress	Number of buildings with low-carbon heating systems.

Install solar panels, where viable, on all leisure buildings	To source electricity for the building from direct renewable sources, reducing running costs.	By 2030	Climate Leisure	In progress	Number of buildings with solar PV.
4. Whole building retrofit for leased assets					
Provide resources and support to reduce energy demand in leased assets	Reducing energy demand in leased assets reduces district emissions.	Ongoing to 2030	Climate	New – not yet started	Number of initiatives offered to tenants.
Assess leased buildings as part of the Asset Management Strategy	To provide the Council with the information required to make future investment decisions and prepare for upcoming legislation changes.	By 2027	Climate Estates	New – in progress	
Improve building fabric and install low-carbon heating in leased assets	To improve the energy efficiency of the building, improving thermal comfort and reducing running costs for tenants, and decarbonising heating.	By 2030	Climate Estates	New – not yet started	Number of buildings rated EPC B or above by 2030.
Install solar PV on leased assets, where suitable	To provide electricity from direct renewable sources, reducing district emissions.	By 2028	Climate Estates	New – in progress	Number of buildings with solar PV.
5. Minimise water demand at all council sites					
Assess water-efficiency measures for council, leisure, and leased buildings	To ensure all fixtures and systems are using water as efficiently as possible, allowing the Council, leisure provider, and tenants to plan for improvements as needed.	Ongoing to 2028	Climate	Existing – in progress	Number of buildings with water efficient fixtures.
Install water-efficiency measures and greywater recycling systems in council offices, where appropriate	To reduce water waste and save money, installing measures where required as opportunities arise.	By 2028	Property	Existing – not yet started	
Install water efficiency measures and grey water recycling systems in leisure buildings, where appropriate	To reduce water waste and save money, installing measures where required as opportunities arise.	By 2028	Climate Leisure	Existing – not yet started	
Explore rainwater harvesting tanks for football pitches	To reduce water use by using rainwater where possible.	By 2030	Climate Leisure	Existing – not yet started	

Consider water monitoring performance indicators as part of annual review of leisure contract	To ensure water use is monitored with targets to incentivise investment into improvement measures.	By 2025	Leisure	New – not yet started	The inclusion of water KPIs in the new leisure contract.
6. Minimise consumption and waste in council offices					
Establish a method for measuring the Council's office waste and include emissions in future carbon reporting	To ensure we are accounting for all emissions and are monitoring waste from council operations.	2024	Climate	Existing – in progress	Annual emissions from waste.
Ensure clear and accessible recycling bins are provided in council offices	Following best practice to maximise the amount of waste on site that can be recycled.	2024	Climate Property	Existing – not yet started	Number of clear and accessible recycling bins in the offices.
Reduce paper consumption	To reduce the environmental footprint of council activities.	2025	Climate Democratic services	Existing – not yet started	Number of new paperless processes.
Consult with procurement (under activity 9) to monitor and reduce unnecessary council consumption	To reduce the environmental footprint of council activities and operations. Monitoring this will allow teams to plan next steps to reduce their consumption.	2025	Climate Procurement	New – not yet started	See activity 9.
7. Minimise emissions from grey fleet (business travel)					
Assess the viability of installing EVCs at council offices and leisure centres	To support the use of EVs for staff travel, reducing emissions and air pollution.	2024	Climate Estates Property	Existing - ongoing	List of viable ECVs.
Install EVCs in line with Oxfordshire EV strategy and standards	To support the use of EVs for staff travel, reducing emissions and air pollution.	By 2025	Climate Estates Property	Existing – not yet started	Number of ECVs installed in council car parks.
Review existing demand for vehicle fleet - pool cars - and plan for their replacement with EVs once charging points are installed	To support the use of EVs for staff travel, reducing emissions and air pollution.	By 2025	Climate ERS HR Parking	Existing – not yet started	Produce a pool car demand report.

Minimising emissions from staff and Member travel	To reduce emissions from staff travel.	By 2026	Climate	New – not yet started	Produce a staff travel survey.
Review staff benefits to encourage green and active travel	To support the use of low-emission travel options.	2026	Climate HR Management	New – not yet started	Review of staff benefits undertaken.
8. Minimise emissions from council fleet					
Complete a resource-efficiency review of council's waste service, street cleansing and grounds maintenance contract	To highlight key areas requiring support to reduce emissions from council fleet.	By 2025	Climate Ubico Contracts	Existing – not yet started	
Review building, depot and bulking station need in West Oxfordshire	To ensure that decisions made around waste buildings are aligned with emissions reduction and support a future transition to low-carbon vehicles.	By 2025	Climate Ubico Contracts	Existing - ongoing	
Work in partnership with Ubico to produce and present a Green Vehicle Fleet Transition Plan for decarbonisation of the vehicle fleet	To ensure the transition to low-carbon vehicles is planned and approved by the Council and that actions are taken to support the decarbonisation of the Council's fleet.	2024	Climate Ubico	Existing – in progress	Percentage of council-owned vehicles that are low-emission.
Electrification of machinery made a stipulation of future waste, street cleansing and grounds maintenance contract delivery	To reduce emissions from council fleet and reduce air pollution.	2025	Climate Contracts Procurement	Existing – not yet started	
Low-emission vehicles made a stipulation of future public convenience contracts	To ensure all vehicles delivering council services are low emission by 2030.	By 2030 (or next contract renewal)	Climate	Existing – not yet started	Public convenience contract requires EVs .
Produce an anti-idling policy for staff and contractors on council business	To reduce emissions and particulates from council services.	By 2026	Climate HR	New – not yet started	Adoption of an anti-idling policy.

Install solar panels at council depots to provide electricity for zero-emissions vehicles, where suitable	As the Council shifts to a greater proportion of EVs, these should be powered by renewable electricity on site to reduce emissions to zero.	By 2030	Climate Estates Waste	Existing – not yet started	Depots assessed for solar viability. Whether solar PV are installed.
9. Minimise emissions from procurement					
Develop a Sustainable Procurement Policy	To ensure all council procurement requires high environmental standards from contracts.	By 2025	Climate Procurement	New – not yet started	Adoption of a Sustainable Procurement Policy.
Establish a method for identifying and engaging with the Council's biggest contracts	Reducing supply chain emissions is considered best practice, with many Councils including these within their carbon reporting.	2025-2026	Climate Procurement	New – not yet started	Number of contracts committing to sustainability targets.
Follow best practice to calculate, monitor and minimise supply chain emissions	Once a method has been established for reporting on supply chain emissions, this should be extended to the whole supply chain.	2025 - 2030	Climate Procurement	New – not yet started	Emissions from supply chain.
10. Offset/inset residual emissions					
Develop an Offset and Inset Strategy	Plan and prepare for offsetting schemes, both as revenue opportunities for the Council and to meet council and district climate targets.	2024 - 2025	Climate	Existing – in progress	Adoption of the Offset and Inset Strategy.
Set up a Carbon Offset and Inset Fund	Establish a source of ring-fenced funding for emission-reduction projects, delivering upwards of £275 per tonne of CO ₂ e to the Council from developer contributions.	By 2025	Climate Finance Planning	New – not yet started	Payments into the Offset and Inset Fund.
Implement inseting projects	To implement projects that deliver emission reductions in the district alongside other co-benefits like health improvements and cost savings.	By 2030	Climate	New – not yet started	Tonnes of CO ₂ e removed as a result of projects.
Implement offset projects	To implement projects that support the Council's carbon neutral target and/or provides a revenue stream for the Council	By 2030	Climate	New – not yet started	Tonnes of CO ₂ e removed as a result of projects.