OXFORDSHIRE COUNTY COUNCIL

Carbon Management Plan - Carbon Neutral Council by 2030 (5th update)

2026 – 2030

April 2026

Contents

1. Executive Summary

This update summarises Oxfordshire County Council's progress and likely pathway towards operational carbon neutrality by 2030. OCC has achieved a 72% reduction in emissions since the 2010/11 baseline, supported by major programmes including LED streetlighting, Public Sector Decarbonisation Scheme-funded building retrofit and fleet electrification.

Progress remains strong, but OCC is not currently on track to fully meet the 2030 target without further funding, technological development and decisions linked to Local Government Reorganisation (LGR). In 2024/25, the Council achieved a cumulative reduction of 201 tCO2e against a target of 240 tCO2e, highlighting the challenge of maintaining the pace required.

Current projections indicate emissions could reduce by around 85% by 2030, leaving approximately 3,910 tCO2e of residual emissions requiring offsetting. This creates a significant ongoing requirement for high-integrity carbon removals and associated funding.

The current delivery programme focuses on committed and deliverable activities across property retrofit and rationalisation, fleet electrification, high mileage users and highways electrical assets. The main constraints are:

- **Corporate buildings:** further large-scale decarbonisation from 2026/27 is constrained by the withdrawal of central government grant funding. The estimated funding gap for the remaining estate is c. £24.5m, although a significant proportion relates to building maintenance.
- **Fleet:** electrification is continuing, but specialist vehicles such as fire appliances and large minibuses remain dependent on the maturity and availability of suitable zero-emission technology.

As a result, a significant proportion of future activity is dependent on external funding for property, market readiness for specialist fleet and strategic decisions after LGR. The Plan will therefore need to be reviewed in 2028 to reflect successor authority structures, priorities and investment capacity, and to confirm a deliverable funded pathway to 2030.

Beyond net-zero: OCC agreed a policy in 2025, but no implementation date has been set and substantial offset financing will be required.

The Council is also addressing wider **Scope 3 emissions outside the 2030 carbon neutrality target**, including supply chain and maintained school emissions. Current work includes the Action on Carbon & Energy in Schools (ACES) programme, the interest-free loan scheme for maintained schools and embedding sustainability through procurement and contract management in line with the Ethical Procurement Policy and PAS 2080 whole-life carbon principles.

2. Introduction

In 2019, Oxfordshire County Council (OCC) committed to reaching carbon neutrality by 2030 for the emissions from our estate and operations and to embed climate considerations into all our decision making. In 2020, we published our first Climate Action Framework, setting out how we are going to reduce our emissions, transform into a climate active organisation and play our part in Oxfordshire's transition to net-zero. We updated the Climate Action Framework in 2026. A further Cabinet agreement was made in December 2024 to go beyond net-zero

This Carbon Management Plan sets out our approach to reducing the emissions from OCC's estate and operations, this includes emissions from our buildings, highway electrical assets (streetlighting, traffic signals and signage), fleet and staff business travel. These are the emissions that we committed to reduce to carbon neutral by the end of this decade. The Plan is part of a wider Climate Action Programme working across the county.

Decarbonisation Guiding Principles

Our decarbonisation approach is guided by the following principles:

- **Demand reduction**. We follow the energy hierarchy to prioritise avoiding energy use, saving energy and replacing fossil fuels with clean, renewable energy sources. Offsets will only be used for emissions which could not be reduced.

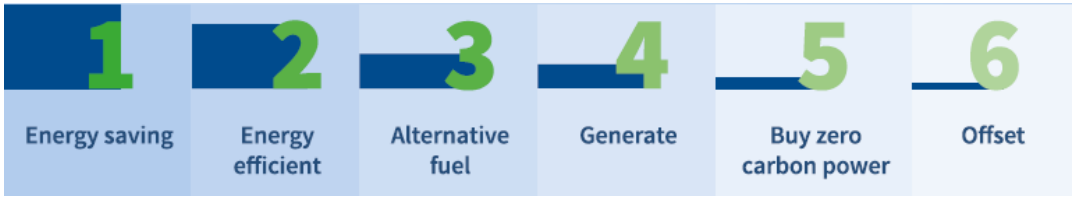


Figure 1. Hierarchy of approach to achieve carbon neutral target

- **Inclusive transition**. We engage and support communities, especially vulnerable ones, to ensure fair and participatory decarbonisation.
- **Innovation**. Our estate serves as a 'living lab' to trial ideas, share learning, and explore new business models for zero-carbon investment.
- **Achieve Carbon Neutrality by 2030**. By removing or reducing carbon emitting activities across the organisation, generating green energy from a variety of sources and finally, by offsetting carbon emissions which remain.
- **Reaching Net-Zero Emissions by 2050.** Once the above target is reached, we aim to continue making improvements across our areas of influence and continue investments in renewable energy and greener business operations to achieve organisational and countywide net-zero by 2050.

3. Measurement of Emissions

Emissions Sources

The Council has consistently published its annual Greenhouse Gas (GHG) report since 2010/11, which details the total emissions from its estate and operations. This Carbon Management Plan is informed by Scope 1, 2, and 3 emissions within the carbon neutral by 2030 target (highlighted by the red boundary in Figure 2), encompassing direct fossil fuel emissions, indirect electricity emissions, and emissions from grey fleet, hire cars, corporate water usage and corporate waste. While the focus is on these sources, the plan also considers emissions from maintained schools and the supply chain as part of the Oxfordshire net-zero by 2050 vision.

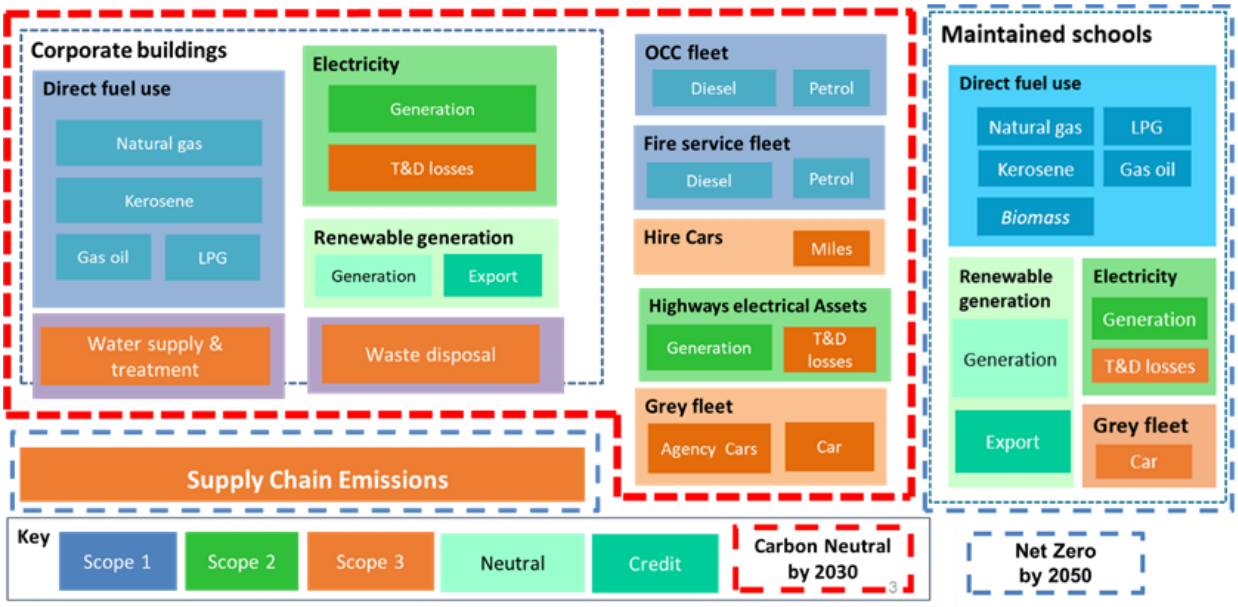


Figure 2. Carbon Neutrality Boundary and Emission Sources

Decarbonisation of the Electricity Grid

The council's electricity-related carbon emissions (e.g. lighting, EV charging) are calculated by multiplying electricity use (kWh) by a carbon factor set annually by the Department for Energy Security and Net Zero (DESNZ). This factor varies each year based on the power station fuel mix, renewable energy levels, and net imports.

To estimate OCC's future emissions, a projected grid factor aligned with the Government's Clean Power 2030 Action Plan is used. This plan anticipates carbon intensity falling below 50gCO2e/kWh by 2030. However, DESNZ's factor reflects the energy mix from two years earlier, so the 2030 target wouldn't be reported until 2032. Therefore, OCC is projecting 85gCO2e/kWh in 2030 to account for this lag.

If the government does not meet their 50g target, residual emissions in 2030 could rise by up to 1,000 t CO2e.

	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Predicted Carbon intensity (gCO2/kWh)	**207**	**171**	**154**	**136**	**119**	**102**	**85**

Table 1. Predicted electricity grid intensity following Governments Clean Power Trajectory

4. Progress to Date

Since the Carbon Management Plan was enacted in 2022, headway has been made in reducing Oxfordshire County Council's total carbon emissions. Figure 3 shows that there has been a consistent reduction in emissions year-on-year.

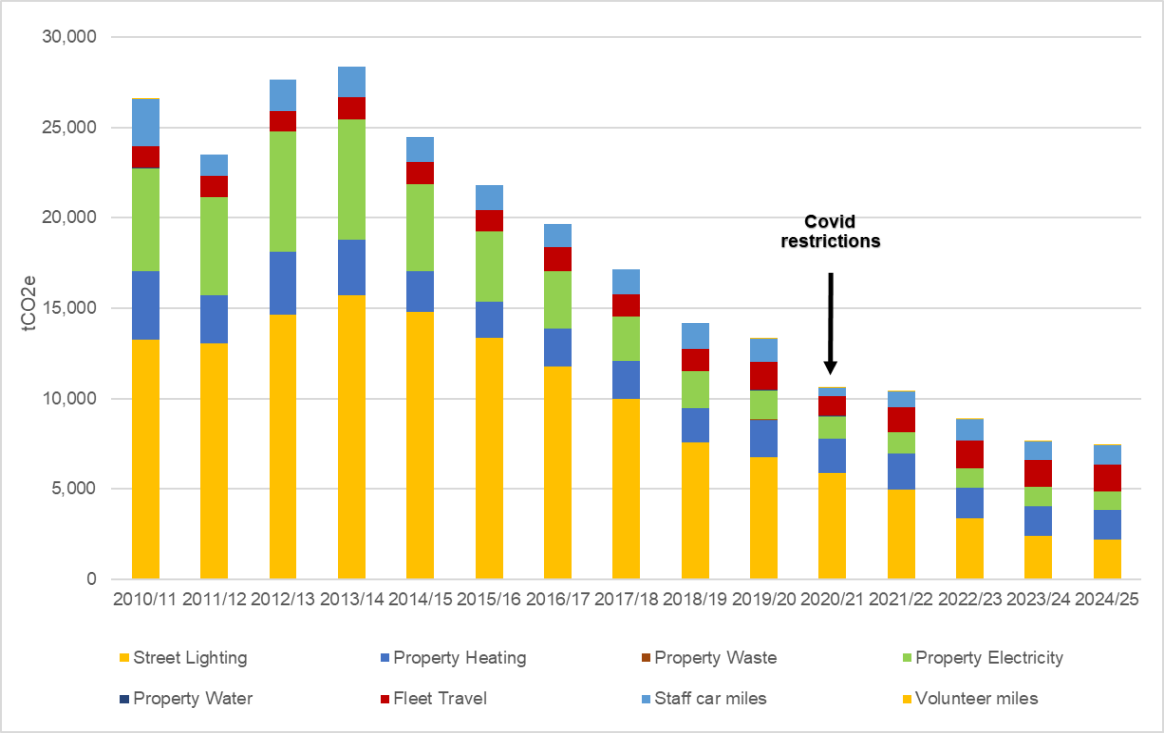


Figure 3. Shows the annual source of carbon emissions from OCC service areas

Emissions reduced 72% by the end of 2024/25 (compared to the 2010/11 baseline). In 2024/25, emissions decreased by 3%, equating to 201 tonnes of CO2e saved compared with the previous year. Appendix 1 shows a breakdown of the individual activities completed over 2024/25 that contributed to the reported emissions reduction. The key programmes in 2024/25 were:

- Completion of the street lighting LED upgrade programme, accounted for a 9% reduction in emissions from highways electrical assets in 2024/25 compared to 2023/24.
- Emissions from council properties decreased by 1% in 2024/25, supported by retrofitting projects funded through the Public Sector Decarbonisation Scheme.

- Staff mileage emissions saw a 5% increase compared to 2023/24, while fleet emissions increased by 0.1%.

Projects that were completed in 2025/26 for which the emissions savings will be reported in the 2025/26 greenhouse gas report are:

- 19 traffic signal sites and 553 illuminated bollards and signs either de-illuminated or converted to LED.
- 14 corporate properties were decarbonised; works commenced on an additional 33 properties and are in progress; and detailed energy audits were completed for the whole estate that identify the future property decarbonisation requirements.
- The council's focus on transport decarbonisation remains a priority. In 2025/26, 14 diesel fleet vehicles were replaced with electric vehicles, resulting in 18% of the council's 460 vehicles now being electric, supported by 77 charge points across 31 sites.

Service Area Carbon Emissions	2010/11	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Business Travel	2,647	1,294	446	858	1,199	1,034	1,088
Fleet Vehicles	1,142	1,522	1,069	1,386	1,497	1,474	1,475
Highways Electrical Assets	13,273	6,783	5,885	4,943	3,360	2,423	2,196
Corporate Properties	9,527	3,712	3,194	3,204	2,799	2,701	2,671
ALL OCC ACTIVITY	**26,590**	**13,311**	**10,595**	**10,391**	**8,857**	**7,632**	**7,431**
Percentage decrease from 2010/11 Baseline	-	50%	60%	61%	67%	71%	72%

Table 2. Reduction in Actual Carbon Emissions (t CO2e) from Baseline (2010/11) for OCC emissions [1]

In the first half of 2025/26, there was a 10% reduction in emissions compared to the same period in the previous year, continuing the downward trend in overall carbon emissions. Further reductions are anticipated as the benefits of ongoing property retrofits and fleet decarbonisation initiatives begin to take effect.

Service Area Carbon Emissions	Q1&2 2024/25	Q1&2 2025/26
Business Travel	535	570
Fleet Vehicles	714	639
Highways Electrical Assets	899	814
Corporate Properties	812	628
ALL OCC ACTIVITY	**2,960**	**2,651**

Table 3. Comparison of Previous and Current Q1 and Q2 Actual Carbon Emissions (t CO2e)

[1] Source: 2024/25 Greenhouse Gas Report.

Current Challenges

There remains an unfunded element to the property decarbonisation programme from 2026/27 onwards due to central government withdrawing the Public Sector Decarbonisation Scheme (PSDS), which means that there is no further grant funding to support building retrofit.

A further challenge to the delivery of the Carbon Management Plan is the uncertainty related to Local Government Reorganisation (LGR), in particular in relation to the Council's future estate portfolio. LGR will create one or more new organisations from 2028 and lead to a bringing together of estates and assets. Whilst we now anticipate decisions on future phases of the property retrofit programme to be made post LGR, pressures on organisations will make covering this financing challenging.

A lack of availability of zero-emission vehicles for specialist fleet, such as fire appliances and large minibuses, and grid infrastructure restrictions may also make it difficult to implement fleet and property reductions.

Business travel remains a difficult area to reduce and will require additional resources to tackle effectively.

Emissions from the electricity grid depend on the pace of the Government's Clean Power by 2030 plan, which is outside of OCC's control, so if progress of this is slower than expected our residual emissions will be higher (estimated at an additional 1,000 t CO2e).

5. Emissions Reduction Trajectory

The actions set out in this plan, combined with the decarbonisation of the electricity supply, are likely to put the Council on a trajectory to reduce emissions to around 3,910 t CO2e annually by 2029/30, which is equivalent to an 85% reduction from our 2010/11 baseline. This residual figure will then need to be offset using carbon reduction and removal schemes to allow the carbon neutral target to be reached.

Two key factors will determine the council's carbon emissions by 2030:

I. **The effectiveness and timely delivery of the property and fleet decarbonisation programme to reduce fossil fuel use**. The planned interventions for each service area are listed in Appendix 2 & 3.

II. **The pace at which the national electricity grid is decarbonised.** Central Government's - Clean Power 2030 Action Plan sets the expected grid emissions factors for future years.

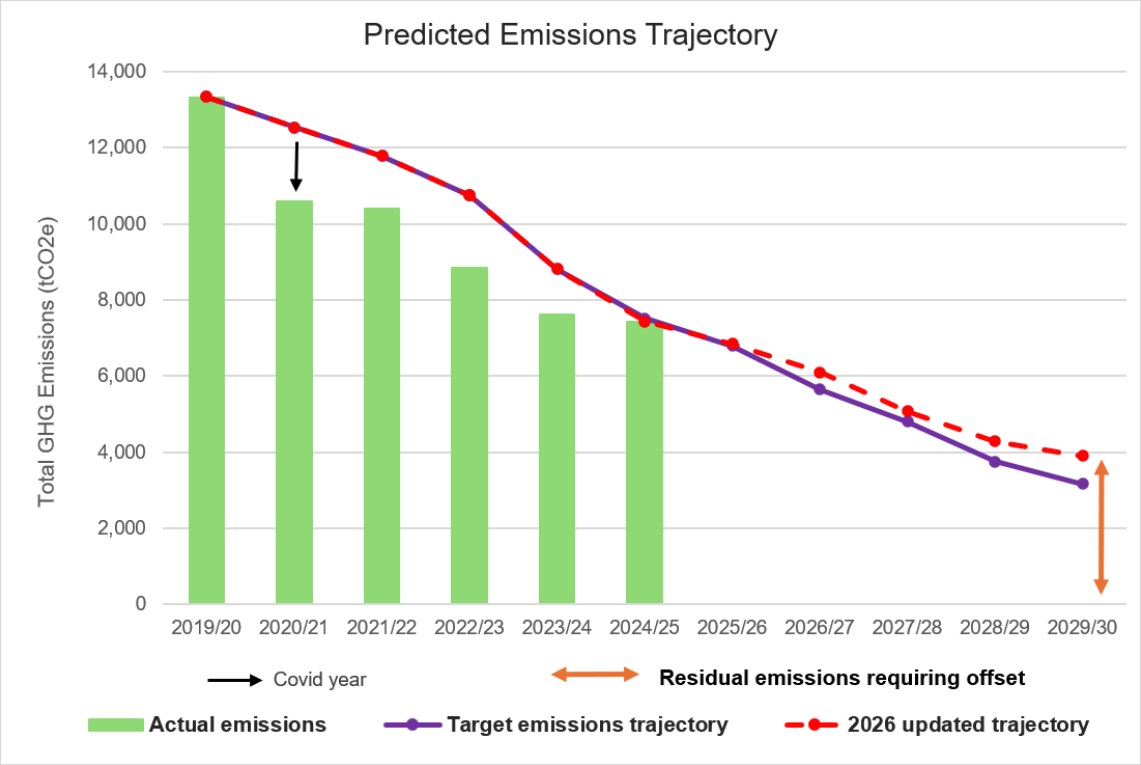


Figure 4. Shows the modelled predicted trajectory of carbon emissions (purple solid line) based on factors I and II. The second red, dashed line shows the April 2026 updated trajectory.

A new key performance indicator (KPI) for carbon emissions was established in the 2025 Carbon Management Plan, to allow tracking of our progress towards reaching the 2029/30 predicted emissions figure by reporting on the annual required cumulative reduction of GHG emissions (t CO2e) to reach this goal.

	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Predicted carbon emissions for all OCC activity (t CO2e)	7,640	7,400	6,670	5,650	4,800	3,750	3,160
KPI target - required reductions (cumulative)	-	**-240**	**-970**	**-1,990**	**-2,840**	**-3,890**	**-4,480**
Actual emissions reduction (cumulative)	-	**-201**					

Table 4. Shows the KPI target of cumulative reductions required to reach the 2030 target (figures rounded)

The predicted annual emissions trajectory has been updated to reflect the known 2024/25 emissions; the known 2025/26 government published emission conversion factors; the projects completed in 2025/26; and the updated plan for future projects.

	2026/27	2027/28	2028/29	2029/30
2026 updated predicted carbon emissions for all OCC activity (t CO2e)	6,100	5,080	4,290	3,910

Table 5. Shows the April 2026 updated estimated annual emissions (figures rounded)

6. Service Area Predicted Emissions

For each service area the predicted trajectory for emissions is calculated from the projects currently completed alongside the scheduled works to decarbonise those service areas. The specifics of these decarbonisation plans are outlined in Appendix 2 & 3. If planned projects are not completed the residual emissions in 2030 will be larger and to reach carbon neutrality targets the need to offset will increase.

Service Area Predicted Carbon Emissions (t CO2e)	2010/11	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Business Travel	2,647	1,088	1,080	1,018	949	925	895
Fleet Vehicles	1,142	1,475	1,375	1,264	904	661	580
Highways Electrical Assets	13,273	2,196	1,897	1,624	1,444	1,264	1,083
Corporate Properties	9,527	2,671	2,496	2,192	1,783	1,435	1,349
ALL OCC ACTIVITY	**26,589**	**7,431**	**6,848**	**6,098**	**5,080**	**4,286**	**3,907***
Percentage decrease from 2010/11 Baseline	-	***72%***	***74%***	***77%***	***81%***	***84%***	***85%***

*Table 6. Shows the actual emissions for 2010/11 and 2024/25 and the predicted emissions for service areas (*residual emissions to be offset)*

Buildings

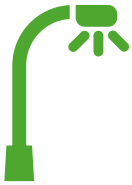
Decarbonising corporate buildings is a key objective of our Property Strategy. Emissions include electricity, heating (gas, gas oil, LPG), water, and waste. Works to date have resulted in a fall of 72% compared to the 2010/11 baseline. OCC owns and operates almost 120 corporate sites, to date, 24 have had decarbonisation works completed. 62 corporate sites are currently in scope for improvements to reach the carbon neutral by 2030 target, the decarbonisation approach is based on the following principles:

Estate rationalisation. Consolidate assets by rationalising underused spaces, co-locating with partners and reviewing leaseholds.

Retrofits. Deliver low-carbon measures to reduce energy consumption and replace fossil fuel heat systems.

Heat networks. Engage with viable heat network opportunities.

Highways Electrical Assets (streetlighting, traffic signals, CCTV, signage)



The Council's highways electrical assets include over 60,500 streetlights, over 450 traffic signal sites, and over 5,200 illuminated signs and bollards. Significant carbon savings (83% reduction to date compared to 2010/11 baseline) have been achieved over the past few years. This has included the replacement of standard halogen fittings with lower energy LED fittings and reducing the number of illuminated assets. The 2030 carbon emissions target for the remaining highways electrical assets emissions is based on the following principles:

Policy. Follow the Street Lighting and Illuminated Assets Policy which supports optimised, energy-efficient lighting to reduce environmental impact in new developments.

Street Lighting. Investigate opportunities for part-night lighting with town and parish councils.

Traffic Signals. Conversion of the remaining 114 halogen traffic signals and crossings sites to LED. Utilising funding from Department for Transport where available.

Signage: Continue to either de-illuminate or convert remaining illuminated signs and bollards to LED as part of BAU maintenance. Emissions from illuminated signs and bollards represented 2% of the Council's total emissions in 2024/25. Opportunities for solar bollards will also be explored during maintenance.

Fleet Vehicles

The Council's fleet includes around 460 vehicles used across services such as Oxfordshire Fire and Rescue, Supported Transport, Facilities Management and Highways. Emissions from the fleet have increased by 29% since the 2010/11 baseline, largely due to service expansion due to population growth. The table below shows the breakdown of the Council's fleet vehicles.

Type of vehicle	OCC Main Fleet	Number of which EV	Oxfordshire Fire & Rescue	Number of which EV
Total Fleet Size	306	57	156	24
Heavy/ Specialised Vehicles	-		56 fire appliances	
Minibus	154	15	-	-
Car/Van	152	42	100	24

Table 7. Shows the breakdown of fleet vehicles[2]

[2] Figures based on 31.03.26 data

Decarbonisation of the fleet is underway, focusing on rationalisation, electrification and EV charging infrastructure development. The approach to achieving carbon neutrality by 2030 is based on the following principles:

Fleet replacement. Transition to electric vehicles where feasible, with over 80 EVs now in use and significant replacements planned for 2026-2028 (detailed in appendix 2&3).

Charging infrastructure. Expand workplace and home charging for staff using fleet vehicles and ensure access to public charging networks.

Innovation for specialist vehicles. Engage with emerging technologies to address the harder-to-decarbonise fleet, including fire appliances. Continue to participate in research and development initiatives such as the Innovate UK-funded projects to explore hydrogen fuel cell options for fire engines.

Staff Business Travel

Business travel includes work-related journeys by Council staff, agency workers, and volunteers. Emissions have reduced by 59% compared to the 2010/11 baseline, reflecting new working practices and a shift toward virtual meetings and agile working. The decarbonisation of business travel is guided by the following principles:

Policy. Develop and implement a new Employee Business Travel policy to support lower-carbon travel choices.

Electric alternatives. Expand access to low-emission vehicles via salary sacrifice schemes, electric pool cars, and service-specific electric vehicles.

Behaviour change. Encourage walking, cycling, and car sharing, and support staff use of electric bikes and electric pool cars.

7. Offsetting Residual Emissions for Carbon Neutrality by 2030

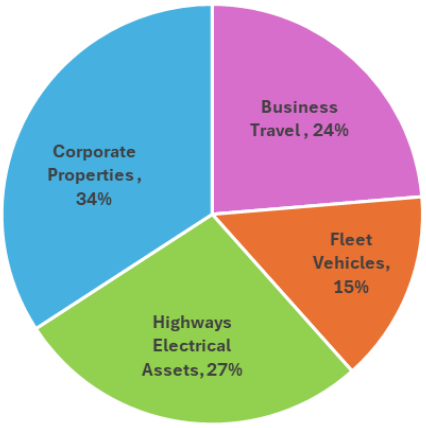
While Oxfordshire County Council is committed to reducing emissions through energy demand reduction, energy efficiency improvements and innovative decarbonisation solutions, we recognise that residual emissions will remain by 2030, particularly from challenging assets such as listed buildings and specialist fleet (fire engines) and from business-related travel. The Council has developed and adopted an offsetting policy centred on high integrity carbon credits preferably from carbon removal projects that have additional co-benefits for Oxfordshire residents.

A budget of £30,000 per annum for 5 years was approved in 2025/26 for forward purchasing carbon credits. This funding allowed us to test the market and process of purchasing carbon credits, however, offsetting our total emissions in 2030 and onwards is currently unfunded.

An approach for forward purchasing carbon credits was agreed in 2025 and the Council conducted a procurement exercise to purchase carbon credits to start meeting residual emission needs. Work will continue in 2026/27 to further develop the Council's procurement strategy that will explore:

- Establishing agreements to secure high-quality carbon credits in advance, ensuring both availability and price stability.
- Developing standardised legal contracts to ensure the integrity and traceability of purchased credits.
- Exploring collaborations with established providers of nature-based carbon removal projects.
- Maintaining transparency and public trust, we will implement a proactive communications plan to clearly articulate the criteria and rationale of projects.

8. Remaining Opportunities



The Carbon Management Plan has identified and allocated funds for a substantial number of carbon saving activities. The remaining predicted emissions by 2030 show around 34% will be from the electricity consumption of our properties and remaining gas heated properties; 27% will be from electrical demand for highways electrical assets; 38% will be from vehicle emissions. There are some remaining interventions that could further reduce our carbon emissions which will be developed and business cases prepared where applicable.

Figure 5. Projected proportion of emissions in *2029/30*

The further interventions identified include:

- Investigating power purchase agreement to ensure a greener energy supply.
- Delivery of property rationalisation and linked investment decisions for the properties currently not included in the decarbonisation programme.
- Electrification of the remaining 53 diesel/petrol OCC fleet vehicles and 13 diesel OFRS fleet vehicles (cars & vans) currently due to be replaced post 2030.
- Decarbonisation of the diesel specialised vehicles (fire appliances and large vehicles).
- Reduction in emissions from business travel through the introduction of better route planning, car sharing, service-specific electric vehicles and location-based electric pool vehicles.

9. Financing the transition

Some elements of the transition to carbon neutrality are expected to deliver financial savings, such as replacing street lighting with LEDs. An initial £40.8m investment, based on a 2018/19 business case, projected a 9.7-year payback period and £77m in savings over 20 years. However, retrofitting buildings and replacing specialist vehicles will require significant investment, unlikely to yield financial returns within the Council's standard payback period. Data gathered in 2022/23 has allowed the estimation of the investment needed to make buildings and fleets carbon neutral. Energy audits and fleet usage through telematics will provide further insights, enabling the development of an invest-to-save programme and funding business cases.

Capital requests for property and fleet have been approved and are being implemented through a number of projects. A PSDS round 3C application for heat decarbonisation was secured for energy efficiency work to be completed in 2025 for 25 corporate sites and round 4 PSDS funding for a further 21 properties in 2026. However, a funding gap exists. As previously highlighted under current challenges, there remains an unfunded element to the property programme from 2026/27 onwards. This is due to central government withdrawing the SALIX's Public Sector Decarbonisation Scheme (PSDS) grant funding and the expectation that no further funding will be available for property decarbonisation until post Local Government Reorganisation when estate consolidation takes place.

10. Net-Zero and Beyond

The 2030 carbon neutral target agreed in 2019 has formed the basis of Oxfordshire County Council's plans to tackle its own operational emissions to date. There are some associated emissions which are not currently part of this target including some scope 3 emissions from its supply chain and emissions from maintained schools.

In December 2024 the Council announced plans to go beyond net-zero committing to a pathway that extends beyond the current carbon neutral target, by implementing programmes to reduce associated scope 3 and school emissions and developing carbon removal and offsetting projects within the county as outlined in offsetting emissions.

Scope 3 Emissions

Following OCC's Climate Action Framework and the council's Supply Chain Emissions Policy, we are working in decarbonising our supply chain which are part of the council's Scope 3 emissions. Whilst supply chain emissions are not included in our 2030 carbon neutrality target, we recognise their importance and the strong influence we can have which will contribute towards a zero carbon Oxfordshire by 2050. We have identified top emitter suppliers, and we are engaging them as part of our decarbonisation strategy to obtain better data and understand their carbon reduction plans. In 2025/26, we supported

our Procurement colleagues to develop a sustainability focused Ethical Procurement Policy which integrates carbon and broader sustainability requirements as part of OCC's procurement process.

To tackle Scope 3 Capital Goods emissions, OCC is adopting whole-life carbon governance principles for infrastructure projects through PAS2080:2023. This approach aligns with OCC's long-term capital investment programme. Methods for accounting for whole-life carbon impacts will be integrated into decision-making processes.

To align our supply chain emissions with science-based targets, we aim to:

- Engage with our key suppliers on their carbon emissions and expand supply chain emission reporting, using emissions data provided by suppliers.
- All new Council contracts of a value of over £1 million per annum will also include a requirement for reporting of scope 1 and 2 emissions to the Council.
- Collaborate with our suppliers on decarbonisation opportunities.
- Implement low carbon principles and specifications in future Council contracts.
- Maximise the effectiveness of Oxfordshire County Council's Social Value Policy to realise further supply chain emission reduction opportunities.
- Increase our ambitions for a low carbon supply chain over the next 5 years.

Scope 3 - Highways Maintenance and Transport

We are implementing strategic decarbonisation approaches in our procurement processes starting with high value contracts. In the recent renewal of the Highways Maintenance contract with MGroup (formerly Milestone), the Milestone – OCC partnership had scored highly in an internal assessment in relation to infrastructure carbon governance standard PAS2080.

In the new MGroup-OCC contract we are addressing PAS2080 gaps for continuous improvement. For example, we are working with MGroup to translate the company's validated Science Based Targets to the OCC contract whilst improving carbon reporting practices and data sharing. The new contract includes a performance management framework that incentivises MGroup with contract extensions and financial gains, contingent on meeting Operational Performance Indicator (OPI) targets, including two related to carbon reduction.

Following policy 27 in the Local Transport and Connectivity Plan, we are also working with OCC procurement, transport planning and delivery colleagues to implement improved carbon governance processes in transport infrastructure projects following the standard PAS2080.

Maintained Schools

We report emissions from OCC's 118 maintained schools in our annual Greenhouse Gas report (eight schools became academies in 2024/25). However, as schools manage their own operations and budgets, these emissions are not included in our carbon neutral by 2030 target. Decarbonising schools is part of the zero carbon Oxfordshire by 2050 target and we are committed to supporting our maintained schools to improve energy efficiency.

Key support provided:

- **ACES Programme**. Funded by OCC, this service helps schools implement energy-saving measures to cut emissions, reduce bills, and improve comfort. Support includes energy assessments, tailored energy plans, advice, and support in identifying funding for energy saving measures.
- **Condition Surveys and Energy Audits**. Completed condition surveys for all OCC maintained schools (excluding Voluntary Aided) and energy audits for 50 schools identifying energy efficiency needs to allow funding cases to be developed.
- **Grant Funding.** We supported nine schools to secure £1.6m from the Public Sector Decarbonisation Scheme for insulation, solar PV and low-carbon heating, saving over 150 t CO2e.
- **OCC Loan Scheme**. Capital-funded, interest-free loan scheme launched in July 2023 and extended an additional year in 2025 for LED lighting and solar PV.

Our support going forward:

We have committed in both our Climate Action Framework and the newly adopted Property and Assets Strategy to support and invest in our maintained schools. We therefore plan to build on the support provided to date:

- **Energy audits -** We plan to complete energy audits for remaining schools as part of a rolling programme, using the results to outline decarbonisation pathways and develop business cases for government funding.
- **Action on Carbon and Energy in Schools (ACES) programme** – We will continue to fund the ACES programme in 2026/27. This support service can also support schools in understanding and evaluating the quotes received for energy efficiency measures and what to consider when selecting contractors.

11. Carbon Management Actions

Types of actions

The Carbon Management Plan includes **direct actions** that generate measurable emissions reductions – e.g. replacing lighting with LEDs – and **enabling actions** that create the conditions for future reductions – e.g. installing a fleet management system.

Monitoring and reporting

The Carbon Management Plan Delivery Group formed by the Officer Leads will be accountable for delivery of the Carbon Management Plan and the service area Key Performance Indicators will reflect the outcomes required to reach target emissions.

When possible, progress will be monitored using the Council's Carbon Neutrality dashboard, which displays the latest energy and fuel consumption data; carbon emissions; and progress on key projects, along with KPIs and targets agreed with services.

Progress on the actions will be reported to:

- Carbon Management Plan Delivery Group
- SLT and Members six-monthly via Corporate Performance report
- Cabinet annually.

Appendix 1: Completed projects - 2022/23, 2023/2024, 2024/25 & 2025/26

Appendix 2: Projects planned for 2026/27

Appendix 3: Future projects 2027/28-2030/2031

Appendix 1: Actions undertaken in 2022/23, 2023/24, 2024/25 and 2025/26

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Highways Electrical Assets					
Convert street lighting to LED	2022/23	Direct	£40.8m total	Completed – capital programme	1,522 t CO2e
Convert 8 traffic signals to LED		Direct	£575k	Completed - annual BAU capital budget (£160k) and DfT funding (£415k)	4 t CO2e
De-illuminate 32 bollards		Direct	--	Completed - annual BAU maintenance works	0.5 t CO2e
Complete conversion of street lighting to LED	2023/24	Direct	£40.8m total	Completed – capital programme	269 t CO2e
Convert 43 traffic signals to LED		Direct	£310k	Completed – annual BAU capital budget and capital programme	20 t CO2e
De-illuminate 83 bollards		Direct	--	Completed – annual BAU maintenance works	1.2 t CO2e
Explore options for reducing emissions from heritage street lighting lanterns.	2024/25	Enabling	--	Ongoing – options sourced	TBD
Convert 7 traffic signal sites to LED		Direct	£250k	Completed - BAU capital budget	8 t CO2e
Finalise funding for traffic signal sites LED conversion programme		Direct	c.1.5m	Ongoing – continued into 2025/26	c. 88 t CO2e
Convert 355 bollards to LED, solar power or de-illuminate		Direct	--	Ongoing – rolled into 2025/26	4.6 t CO2e
Implement new Street Lighting and Illuminated Assets Policy – develop implementation plan for part-night dimming/ lighting		Direct	--	Ongoing – rolled into 2025/26	TBD

[3] The full year carbon savings for actions implemented will be realised 12 months from project completion.

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Complete budget proposal for replacing heritage street lighting with LED	2025/26	Direct	--	Decision not to proceed due to material costs, resourced and limited savings.	--
Convert 7 traffic signal sites to LED		Direct	£250k	Completed 9 sites – fully funded BAU capital budget. A further 10 were converted as part of other schemes.	8 t CO2e
Finalise and initiate traffic signal sites LED conversion programme		Direct	£1.5m	Ongoing – funding route tbc	c. 88 t CO2e in total
Convert 355 bollards to LED system and assess sites for de-illumination		Direct	--	327 converted to LED, 161 de-illuminated	7.5 t CO2e
Implement new Street Lighting and Illuminated Assets Policy		Direct	--	Updated Streetlighting and Illuminated Policy approved in October 2025	TBD
Complete local engagement exercise regarding part-night lighting and complete trials – dependant on consultation results		Enabling	--	Engagement completed and new part-night lighting application framework developed & approved.	TBD
Properties					
Complete delivery of PSDS[4] round 1 projects.	2022/23	Direct	£1.3m	Completed – PSDS round 1 grant	187 t CO2e
Deliver heat decarbonisation measures at Hook Norton Fire Station.		Direct	£16k	Completed - PSDS round 3a	10 t CO2e
Carry out energy audits & condition surveys at 50 corporate sites.		Enabling	£76k	Completed - successfully awarded Phase 3 Low Carbon Skills Fund funding for audits	--
Release 1 building (estate rationalisation)		Direct	--	Completed – revenue saving	9 t CO2e[5]

[4] Public Sector Decarbonisation Scheme

[5] One building released end 2022, first full year saving 2023/24.

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Complete phase 1 lighting project at Oxfordshire County Music Service and decarbonisation works at Chinnor Library. Complete lighting works at Samuelson House.	2023/24	Direct	c. £122k	Completed – capital request	5 t CO2e
Submit PSDS 3c funding bid for phase 1 decarbonisation of 25 sites		Direct	£3.1m	Completed - funding awarded	350 t CO2e
Release 1 building (estate rationalisation)		Direct	--	Completed - revenue saving	58 t CO2e[6]
Deliver funded PSDS 3c energy efficiency projects (25 sites)	2024/25	Direct	£10.4m	Ongoing – 14 completed in 2025, 11 to be completed in 2026	350 t CO2e
Deliver energy efficiency works to Faringdon Fire Station		Direct		Completed – Practical Completion certificate issued September 2025	6 t CO2e
Initiate active building management		Direct		Under review – BMS system chosen but not planned for all sites	--
Carry out energy audits		Enabling		Completed – audits for all sites	--
Prepare for PSDS 4 and submit bid		Enabling		Completed – bid submitted x16 sites	--
Release 1 building (estate rationalisation)		Direct		Completed – 1 site vacated	89 t CO2e
Begin PSDS 4 Energy Efficiency works for 22 buildings for a range of measures	2025/26	Direct	£10m	Ongoing - works in progress for all sites, to be completed 2026/27 - PSDS funding and capital programme	330 t CO2e
EV Charging Infrastructure – all sites with parking to have charging points installed		Enabling	Fleet budget	Ongoing - provision included where grid upgrades have been applied for.	--

[6] One building released end 2023, first full year saving 2024/25.

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Continued delivery of remote access BMS system across whole estate		Enabling	--	Ongoing – continue into 2026/27	TBD
Release buildings (estate rationalisation)		Direct	--	3 vacant properties released – revenue saving	--
Investigate power purchase agreement to allow low carbon grid energy purchase		Enabling	--	Ongoing – continue into 2026/27	c. 1,000 t CO2e
Fleet					
Procurement of fleet Management IT System – Jaama Key2	2022/23	Enabling	£250k	Ongoing - fully funded via ICT and Property	--
Fleet replacement capital request business case submitted.		Enabling	£18m requested	Capital request approved, £18m over 3 years	595 t CO2e over 3 years from 2024/25
Set up & launch Fleet Management IT System – Jaama Key2.	2023/24	Enabling	£250k	Ongoing – alternative system implemented in 2025/26	--
OCC fleet - order 10 electric minibuses		Direct	£18m (part of)	Ongoing – rolled into 2024/25	595 t CO2e over 3 years
OFRS - order 10 electric vehicles		Direct	--	Completed – vehicles now operational	11 t CO2e
Launch HYER (HySPERT phase 2) - building of a prototype hydrogen range extender fire engine		Enabling	TBC	Launched and ongoing – research and development stage fully funded	--
Replace c. 99 end-of-life/lease cars, vans and minibuses with EV's (OCC fleet)	2024/25	Direct	From £18m	Under review – 31 purchased and operational in 2024/25	284 t CO2e (replace 99)
Analyse fuel data using VMS to identify vehicles for EV replacement		Enabling	--	Delayed – New programme manager now in place to review 2025/26	--
Review and expand EV charging infrastructure		Enabling	£100k	Delayed – New programme manager now in place to review 2025/26	-

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
OFRS – order 8 electric vehicles to replace 8 ICE vehicles	2024/25	Direct	£350k	Completed – 10 EV vehicles delivered	11 t CO2e
Delivery of HYER (HySPERT phase 2) design and build prototype hydrogen fuel cell range extender fire engine		Enabling	--	Ongoing – refuelling contract signed and engine body build complete.	--
Complete VMS data system integration – Analyse fuel usage data collated via the new fleet management system to identify vehicles suitable for replacement with EV.	2025/26	Enabling	--	Completed	--
Rationalise/ Replace with electric vehicles 60 end-of-life/lease OCC cars, vans and minibuses		Direct	£1.5 m (from the total £18 m)	Ongoing: Completed - 4 rationalised, 3 electric minibuses operational. Carry forward – 10 to be rationalised, 43 to be converted to EV in 2026/27	175 t CO2e
Replace 14 ICE vehicles with EV (carried over from 2024/25)		Direct		Completed – 14 electric vans delivered	--
OFRS – Replace 10 end-of-life/ lease cars and vans in Fire & Rescue with electric vehicles		Direct	£350k	Carry forward - 12 EVs and 2 plug-in hybrids to be ordered Q1 2026/27	11 t CO2e
Expand EV charging infrastructure		Enabling	£600k	Ongoing – extant partner has removed themselves from UK market and new contractors being sought. Partly funded c. £450k available	--
Procure and install telematics system and start analysis of data.		Enabling	--	Ongoing - Initial business case has been signed off by ICT and Property Board. Full business case and supporting policy for use of telematics being developed.	--

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Continued delivery of HYER (HySPERT) – prototype hydrogen range extender fire engine and H2 refuelling infrastructure at Drayton Highway Maintenance depot.		Enabling	Innovate UK funding	Refuelling infrastructure complete. Ongoing – trial of hydrogen range extender fire engine, ambulance and highways utility vehicle to commence in 2026/27	TBD
Carry out a feasibility study and environmental impact assessment to shift to HVO. (Carried over from 2024/25)		Direct	TBD	Completed – HVO is not compatible with Euro 5 engines. Revisit once OFRS fire appliance fleet is fully Euro 6.	TBD
Staff Travel					
Initiate staff business travel programme	2022/23	Direct	--	Ongoing – 10% carbon reduction targets committed to by three service areas	12 t CO2e
Implement staff business travel programme – start developing new Employee Business Travel Policy based on best practice from other LAs.	2023/24	Enabling	--	Ongoing - still under review in 2025/26	--
Consider provision of essential user vehicles - identify eligible staff for 25 essential user vehicles	2024/25	Enabling	£800k	Ongoing – Plan being developed	61 t CO2e[7]
Attain approval of new Employee Business Travel Policy and begin implementation.	2025/26	Direct	--	Ongoing – policy to be approved	45 t CO2e[8]
Identify high mileage claimants and locations for vehicle charging facilities. Implement 6 month trial allocation of fleet EV.		Direct	£800k	Continued from 2024/25. Ongoing – commence trial 2026/27	61 t CO2e (as per 2024/25)

[7] Estimated saving based on 2021/22 mileage claims data.
[8] Based on the carbon reduction targets agreed by three service areas

Action	Year of delivery	Type	Estimated investment	Status and source of funding	Est. annual CO2e saving[3]
Insetting & Financing					
Develop our internal offsetting strategy – develop our requirements and specification for an offsetting strategy and appoint consultants.	2023/24	Enabling	£25k	Completed – consultants appointed, work to complete Q2 2024/25.	--
Complete offsetting strategy/ policy	2024/25	Enabling	--	Ongoing – work with consultants completed. Development of offsetting policy rolled into 2025/26.	--
Develop our Supply Chain Emissions Policy / Ethical Procurement Policy		Enabling	--	Policy developed and supply chain emissions being reviewed.	-- --
Develop carbon offsetting policy	2025/26	Enabling	--	Complete – Carbon Offsetting Policy approved by Cabinet November 2025	--
Test market with initial carbon credit purchase		Direct	£30k p.a.	Ongoing – procurement exercise underway	--

Appendix 2: Actions for 2026-27

Action 2026/27	Year of delivery	Type	Estimated investment	Status and source of funding	Estimated CO2e saving[9]	Officer Lead	Directorate
Highway Electrical Assets							
Keep a watching brief on opportunities to convert heritage street lighting to LED	2026/27	Direct	TBD	Staff time	TBD	Head of Highway Maintenance	Highways Management
Convert 12 traffic signal sites to LED as part of routine asset upgrades	2026/27	Direct	£471k	Fully funded – annual BAU capital budget/ other schemes	5 t CO2e	Head of Network Management	Highways Management
Continue to progress the conversion of roadside assets to LED within scope of the overall traffic signals upgrade programme	Ongoing until 2029/30	Direct	TBD	TBD	c. 88 t CO2e in total	Head of Network Management	Highways Management
Evaluate opportunities to either convert to LED or de-illuminate signs and bollards.	Ongoing	Direct	--	As part of ongoing BAU maintenance	TBD	Head of Highway Maintenance	Highways Management
Implement Street Lighting and Illuminated Assets Policy in relation to new street lighting[10].	Ongoing	Direct	TBD	Existing funding	--[10]	Head of Highway Maintenance	Highways Management
Carry out part-night lighting expressions of interest process.	2026/27	Enabling	-	Staff time	TBD	Head of Highway Maintenance	Highways Management

[9] The full year carbon savings for actions implemented in 2024/25 will be realised in 2025/26 & reported in the 2025/26 GHG report.
[10] The Policy sets out guidance related to new street lighting installed for new developments. No associated carbon saving.

Action 2026/27	Year of delivery	Type	Estimated investment	Status and source of funding	Estimated CO2e saving[9]	Officer Lead	Directorate
Property							
Complete delivery of PSDS 3c funded upgrades at 11 properties	2026/27		£10.4m	PSDS and match funding	350 t CO2e	Ops Manager Minor Works and Decarbonisation	Property & Assets
Continue delivery PSDS phase 4 - funded upgrades at 22 buildings	2026/27		£10m	PSDS and match funding	330 t CO2e	Ops Manager Minor Works and Decarbonisation	Property & Assets
EV Charging Infrastructure – all sites with parking to have charging points installed	Ongoing	Direct	TBD	Fleet budget	-	Ops Manager Minor Works and Decarbonisation / Fleet Manager	Property & Assets
Review operational remote access BMS systems installed in 2025/26 and embed BMS as part of wider decarbonisation programme.	Ongoing to 2030	Direct	--	Staff Time (review) Unfunded	TBD	Ops Manager Minor Works and Decarbonisation	Property & Assets
Release buildings (estate rationalisation)	Ongoing	Direct	--	Revenue saving	TBD	Operation Manager – Assets and Investment	Property & Assets
Investigate power purchase agreement to allow low carbon grid energy purchase.	Ongoing	Enabling	TBD	Current revenue utility costs	c. 1,000 t CO2e	Ops Manager Minor Works and Decarbonisation / Corporate Climate Manager	Economy & Place

Action 2026/27	Year of delivery	Type	Estimated investment	Status and source of funding	Estimated CO2e saving[9]	Officer Lead	Directorate
Fleet							
Replace 56 OCC fleet vehicles with electric vehicles	2026/27	Direct		Fully funded – capital programme	160 t CO2e	VMS Strategic Fleet Manager	Property & Assets
Rationalise 10 OCC vehicles and replace 43 OCC ICE vehicles with electric vehicles	2026/7 carried over from 2025/26	Direct		Fully funded – capital programme		VMS Strategic Fleet Manager	Property & Assets
Replace 10 end-of-life/ lease cars and vans in Fire & Rescue with electric vehicles	2026/27	Direct	£350k	Fully funded – OFRS budget	10 t CO2e	OFRS Business Manager	Community Services and Safety
Replace 12 end-of-life/ lease cars and vans in Fire & Rescue with electric vehicles	2026/7 carried over from 2025/26	Direct	£350k	Fully funded – OFRS budget	11 t CO2e	OFRS Business Manager	Community Services and Safety
Expand EV charging infrastructure – Investigate charging network on OCC sites alongside Property colleagues.	2026/27	Direct	£600k	Partly funded – c. £450k available	To enable Fleet saving,	VMS Strategic Fleet Manager	Property & Assets
Work with Highways and Transport colleagues to identify the pre-requisites and to develop the business case to make our highways and transport depots compatible with EV charging	2026/27	Enabling	--	Staff time	--	VMS Strategic Fleet Manager / Highways Policy Manager	Property & Assets / Highways
Procure and install telematics system and start analysis of data.	2026/27	Enabling	TBC	Capital programme	--	VMS Strategic Fleet Manager	Property & Assets

Action 2026/27	Year of delivery	Type	Estimated investment	Status and source of funding	Estimated CO2e saving[9]	Officer Lead	Directorate
Continued delivery of HYER (HySPERT) – commence 12-month trial of prototype hydrogen range extender fire engine and H2 refuelling infrastructure.	2026/27	Enabling	TBC	Fully funded – Innovate UK	TBD	Head of iHub	Corporate Services
Staff Travel							
Implement low carbon staff travel programme - attain approval of new Employee Business Travel Policy and begin implementation (carried over from 2025/26)	2026/27	Direct	--	Staff time	45 t CO2e[7]	Director of Property & Assets	Finance
Allocate EVs to high mileage claiming staff (carried over from 2025/26)	2026/27	Direct	£750k	£800k - capital programme	61 t CO2e	Director of Property & Assets	Finance
Carbon Offsetting & Finance							
Finalise procurement exercise and purchase carbon credits.	2026/27	Direct	£30k p.a.	Capital – agreed budget	750 t CO2 (as an offset)	Head of Climate Action	Environment

Appendix 3: Actions for 2027-2031

Key Focus Areas

- Delivery of committed projects
- Review future delivery programme from 2028 based on LRG outcome.
- Promote policies supporting EV adoption and low-carbon staff travel.
- Continue estate rationalisation to reduce energy use.
- Ensure robust carbon credit purchase system adopted.

Year	Intervention	Service Area	Action Type	Est. t CO2e Saving	Estimated Investment	Funding Status	Lead Officer / Team
2027/28	Convert 8 traffic signal sites to LED	Highways Electrical Assets	Direct	3	£450k	Annual BAU Capital	Head of Network Management
2027/28	Complete remaining PSDS4 works	Buildings	Direct	330	£10m	Funded	Decarbonisation Manager
2027/28	Replace 71 OCC fleet EVs	Fleet	Direct	204	£15m	Funded	Fleet Manager
2027/28	Replace 10 OFRS diesel vehicles with EVs	Fleet - OFRS	Direct	10	£350k	Capital	OFRS Business Manager
2027/28	Allocate EVs to 10 high mileage claiming staff	Business Travel	Direct	45	--	Staff time	Property & Assets Director
2027/28	Install EV charging at all depots	Infrastructure	Enabling	--	TBD	Partially funded	Fleet Manager
2027/28	Release vacant buildings via rationalisation	Buildings	Direct	--	-	Revenue saving	Property Team
2027/28	Advance purchase carbon credits to offset 2029/30 residual emissions	Offsetting	Direct	750	£30k	Funded	Head of Climate Action
2028/29	Convert 8 traffic signal sites to LED	Highways Electrical Assets	Direct	3	£450k	Annual BAU Capital	Head of Network Management
2028/29	Scale-up solar PV installations	Buildings	Direct	TBD	TBD	TBC	Decarbonisation Manager

2028/29	Replace 13 OCC fleet EVs	Fleet	Direct	37	TBD	TBC	Fleet Manager
2028/29	Replace 10 OFRS diesel vehicles with EVs	Fleet - OFRS	Direct	10	£350k	Capital	OFRS Business Manager
2028/29	Advance purchase carbon credits to offset 2029/30 residual emissions	Offsetting	Direct	750	£30k	Funded	Head of Climate Action
2029/30	Convert 8 traffic signal sites to LED	Highways Electrical Assets	Direct	3	£450k	Annual BAU Capital	Head of Network Management
2029/30	Replace 10 OFRS diesel vehicles with EVs	Fleet - OFRS	Direct	10	£350k	Capital	OFRS Business Manager
2029/30	Continued roll out of EV pool car allocation and promotion	Business Travel	Direct		TBD		Fleet Manager
2029/30	Offset residual emissions via carbon credits – review actual emissions at Q4 to ensure correct number is purchased.	Offsetting	Direct	~3,910 tCO2e (to be offset)	TBD	Pending	Head of Climate Action
2030/31	Replace 10 OFRS diesel vehicles with EVs	Fleet - OFRS	Direct	10	£350k	Capital	OFRS Business Manager
2030/31	Continued roll out of EV pool car allocation and promotion	Business Travel	Direct	TBD	TBD		Fleet Manager
2030/31	Offset residual emissions via carbon credits – review actual emissions at Q4 to ensure correct number is purchased.	Offsetting	Direct	~3,480 tCO2e (to be offset)	TBD	Pending	Head of Climate Action