

# Carbon Reduction Plan

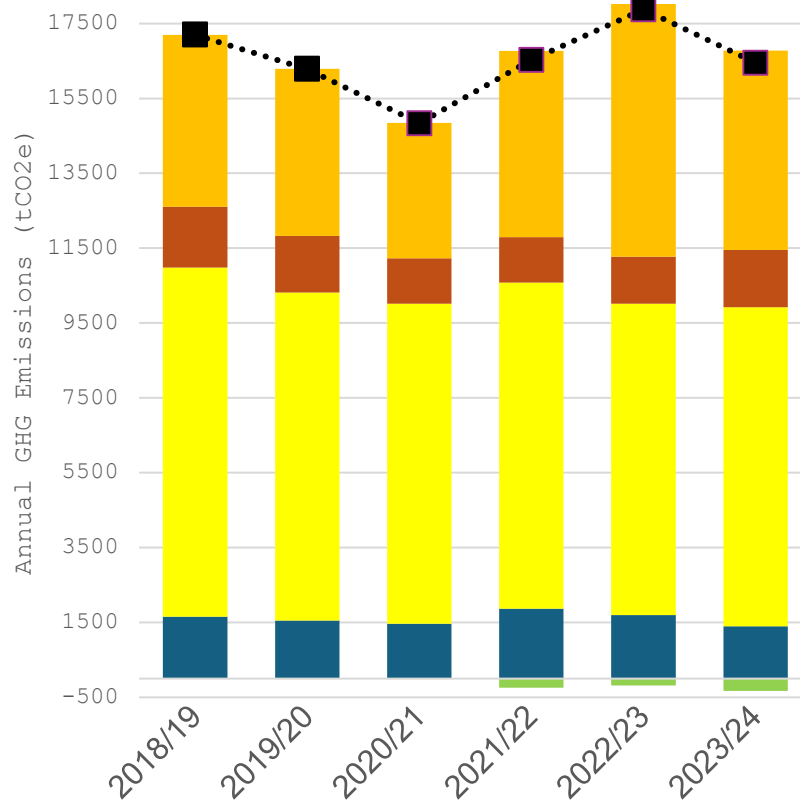
Mid Devon District Council, November 2024

## The Council's Carbon Footprint

Each year the Council commissions a carbon footprint report by the University of Exeter. Emissions are measured as tonnes of carbon dioxide equivalent (tCO<sub>2e</sub>).

- Total net greenhouse gas emissions for the 2023/24 period were 16,454 tCO<sub>2e</sub>.
- Offsets at -325 tCO<sub>2e</sub> made a small reduction in overall emissions with almost all due to the purchase of renewable electricity.

	Categories	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
8%	1. Buildings	1654	1554	1469	1865	1694	1398
51%	2. Social Housing	9326	8758	8547	8711	8319	8526
9%	3. Transport	1626	1513	1216	1220	1263	1531
32%	4. Procurement	4594	4469	3615	4975	6784	5324
-2%	5. Offsets	0	-9	-8	-241	-181	-325



## Actions to reduce climate impact (greenhouse gas emissions)

The following table is a summary of actions for 2024-2026 that will affect the Council's carbon footprint, through investing in energy efficiency and low carbon technologies. The figures for emissions saved are estimates of how much the actions would reduce our annual carbon footprint. Measured in tCO<sub>2e</sub> per year.

Year	Actions, Activities, Projects	Emissions Saved, tCO <sub>2e</sub> /year
	<b>Council Facilities</b>	<b>Subtotal 218</b>
2024	Pannier Market LED fixtures and controls.	2
2024	Exe Valley, additional solar car ports.	37
2024	Culm Valley, new ASHP, solar.	45
2024	Exe Valley CHP 70kW (*)	-50
2025	Solar Car Ports, Phoenix Lane multi-storey.	146
2025	Building Management System project at Phoenix House.	38
	<b>Transport Fleet</b>	<b>Subtotal 7</b>
2024	Replace 1 van	2
2025	Replace 4 vans	5
	<b>Housing</b>	<b>Subtotal 135</b>
2024-2026	Solid Fuel appliance removals from HRA Stock	50
2024-2026	Whole house UPVC window replacements to HRA stock	15
2024-2026	Internal Insulation upgrades to HRA stock	13
2024-2026	Whole roof Replacement to HRA stock	7
2024-2026	Renewable Heating installations to HRA stock	48
2024-2026	LED lighting to Bathrooms in HRA stock	1
	<b>Total</b>	<b>360</b>

(\*Combined heat and power. Gas use would counteract savings, so is shown as a negative.)

Fuel and power consumption by the activity areas above - council buildings, transport fleet and housing - are significant sources of greenhouse gas emissions.

Moving away from consuming fossil fuels where possible (Scope 1 emissions) will 'decarbonise' transport and the energy used to heat buildings i.e. within the council's rented commercial estate, and in social housing.

Actions to reduce energy demand will cut costs and carbon, such as works to improve insulation and the fabric on buildings e.g. door seals and windows, or changing to more efficient heating and cooling systems, or energy controls and management systems.

The climate impact linked to electricity generation and supply (Scope 2 emissions) is also expected to gradually decrease as the UK's generation mix continues to decarbonise, and due to future growth of localised generation. This will, in turn, reduce the impact of power used by the council's rented commercial estate, and in homes rented out by the council.

The Council switched to 100% green power at all its facilities, including offices, leisure centres and the waste depot, in October 2023. This saved over 300 tCO<sub>2</sub>e in 2023/24 and should save even more during this financial year.

Looking ahead to 2030, a series of projects are set to deliver important reductions to our annual carbon footprint.

- Renovating sports centres could save up to 200 tonnes per year.
- Workplace energy efficiency could save up to 200 tonnes annually.
- Replacing 57 vans with EV by 2030 will save over 140 tonnes annually.
- More renewable energy projects could save 200 - 600 tonnes annually.
- A programme to replace 22 old residential properties with Net Zero homes by 2030 will save up to 136 tonnes annually.
- Renovating council homes will save over 400 tonnes annually.

The scale of these reductions to the annual carbon footprint, circa 1,100 to 1,600 tCO<sub>2</sub>e are compatible with targets in the [Corporate Plan](#) 2024-2028. However, further reductions will be sought, and teams will submit external funding bids to enable more projects. Funding provided by central government plays a crucial part in making it possible and affordable for us to achieve and expand our action to address climate change.

In addition to the actions above, the Authority will seek to use its spending power to influence and require its suppliers to reduce the climate impact of the goods and services they provide (Scope 3 emissions). The reach of our influence, such as engaging with tenants, working in partnership, demanding supply side change, and leading by example, has the potential to outweigh and outlast what we can achieve in the short term within our directly managed buildings and transport.

## Working towards Net Zero

Components of the 2023/24 carbon footprint under the direct corporate control comprised 2,103 tCO<sub>2</sub>e with emissions that belong to Scope 1 (fuel) and Scope 2 (electricity). The Council's ability to fully decarbonise this 'corporate carbon footprint' is highly constrained, because currently the availability and costs of the alternative technology are inhibitive. For example, small vehicles can be replaced with electric vehicles (EV) but this is not a feasible option for most large vehicles, particularly in a rural district.

However, in theory, net zero for the 'corporate carbon footprint' can be achieved by a combination of cutting the impact of what the Council can directly control - and by balancing actions that reduce the impact of other elements. This is known as offsetting.

The top priority is to cut greenhouse gas emissions, particularly Scope 1 and Scope 2, and primarily those impacts under direct management control. Therefore any offsetting would be secondary to this, and would need to comply with recognised best practice standards such as the [Oxford Offsetting Principles](#), to ensure carbon credits are additional, measurable, etc.

The Council already offsets hundreds of tonnes of emissions annually, by buying green power, and it exports some of the power created by solar panels on its property (surplus

that cannot be used on site is absorbed by the local network). There is potential to grow this renewable energy portfolio.

By investing in actions to shrink the overall footprint in other areas e.g. housing, rented commercial property and procurement, which each create impact outside the Council’s direct control, this can be considered ‘insetting’ or ‘offsetting’ to help balance out the corporate carbon footprint.

The Council will also consider how nature-based [carbon capture](#) can contribute to offsetting, such as through land / habitat management and partnership projects.

The table below provides examples of different types of actions that could avoid, reduce or seek to balance out greenhouse gas emissions.

<b>Scope 1</b> , direct emissions, from fuel combustion	<b>Scope 2</b> , indirect, from purchase of electricity	<b>Scope 3</b> , indirect emissions linked to supply chains
<b>AVOID</b> Less travel.	<b>AVOID</b> Switch off / use less power.	<b>AVOID</b> Buy less.
<b>REDUCE</b> Replace vehicles with more efficient models and vehicles with low carbon energy technology, such as EV. Switch to low-carbon fuels. Staff culture and best practice.	<b>REDUCE</b> Replace plant and equipment with more efficient models and technology. Generate renewable power on Council sites. Staff culture and best practice.	<b>REDUCE</b> Require suppliers to reduce their emissions. Buy products and services with lower emissions. Avoid high impact options. Efficient supply chains e.g. buy local, combine delivery.
<b>INSET</b> Support / enable / invest in ways to reduce tenant energy use, and to decarbonise tenant energy.	<b>INSET</b> Council funds / supports / enables / invests in ways to reduce tenant energy use, and to decarbonise tenant energy.	<b>INSET</b> Actions taken by supply chain. Council supports / funds / invests to enable communities and businesses to reduce their climate impacts.
<b>OFFSET</b> Purchase gas from renewable sources e.g. biogas. Nature-based offset.	<b>OFFSET</b> Export / sell green energy. Purchase green power. Nature-based offset.	<b>OFFSET</b> Buy carbon-neutral products and services. Suppliers subscribe to (certified) offsetting schemes.

## Caveats and notes

Conversion factors are subject to change. Figures cited in this report relate to the relevant conversion factors used to estimate the carbon footprint of e.g., fuel use, travel, and other activities.

Estimates used in this report were, where possible, based on the UK 2024 conversion factors. However, some estimated values were provided by others e.g. the 2021 decarbonisation plan; solar PV suppliers; CHP supplier.

The climate impact of the UK’s electricity generation and supply is projected to decrease. Therefore, any estimates of carbon savings linked to reduced electricity consumption could be affected by interrelation to the grid’s conversion / emissions factor.

\* CHP = Combined Heat and Power.