

# Draft Climate Change Strategy 2024-2028



# Welcome to our Climate Change Strategy for Mid Devon



This document considers Mid Devon's strategic position, sets out the Council's approach to climate change and serves as a starting point for engagement with communities, businesses and other partners.

The strategy, aligned with our Corporate Plan, sets the Council's priority ambitions and aims. We provide some key facts and figures for Mid Devon, such as its carbon footprint and the renewable energy installed in our district so far. We also explore the Council's own carbon footprint and outline our climate action plan that aims to deliver operational net zero at the soonest opportunity.

To realise progress for the whole of Mid Devon, we must work in partnership, learn from those leading change, and support those who need help. Together we can co-create community climate action planning to cut greenhouse gas emissions for the district and adapt to build resilience in the face of the climate change already happening. Can you help create a vision for a sustainable future?

Councillor Natasha Bradshaw  
Cabinet Member for Environment and Climate Change

November 2024

# Climate Change and the Mid Devon district.



# Mid Devon Facts and Figures

## Potential to grow solar PV & wind power

A 2020 University of Exeter [study](#) found potential for 1,238 GWh per year from solar and wind power. Another [study](#) by University of Exeter & Friends of the Earth found that just 1.3% of land could generate 674 GWh annually with solar and wind.

## Annual solar PV & wind power generation

Solar over 56 GWh, Wind 2.5 GWh.  
UK govt 2022 data ([Link](#))

## Annual energy made by anaerobic digestors

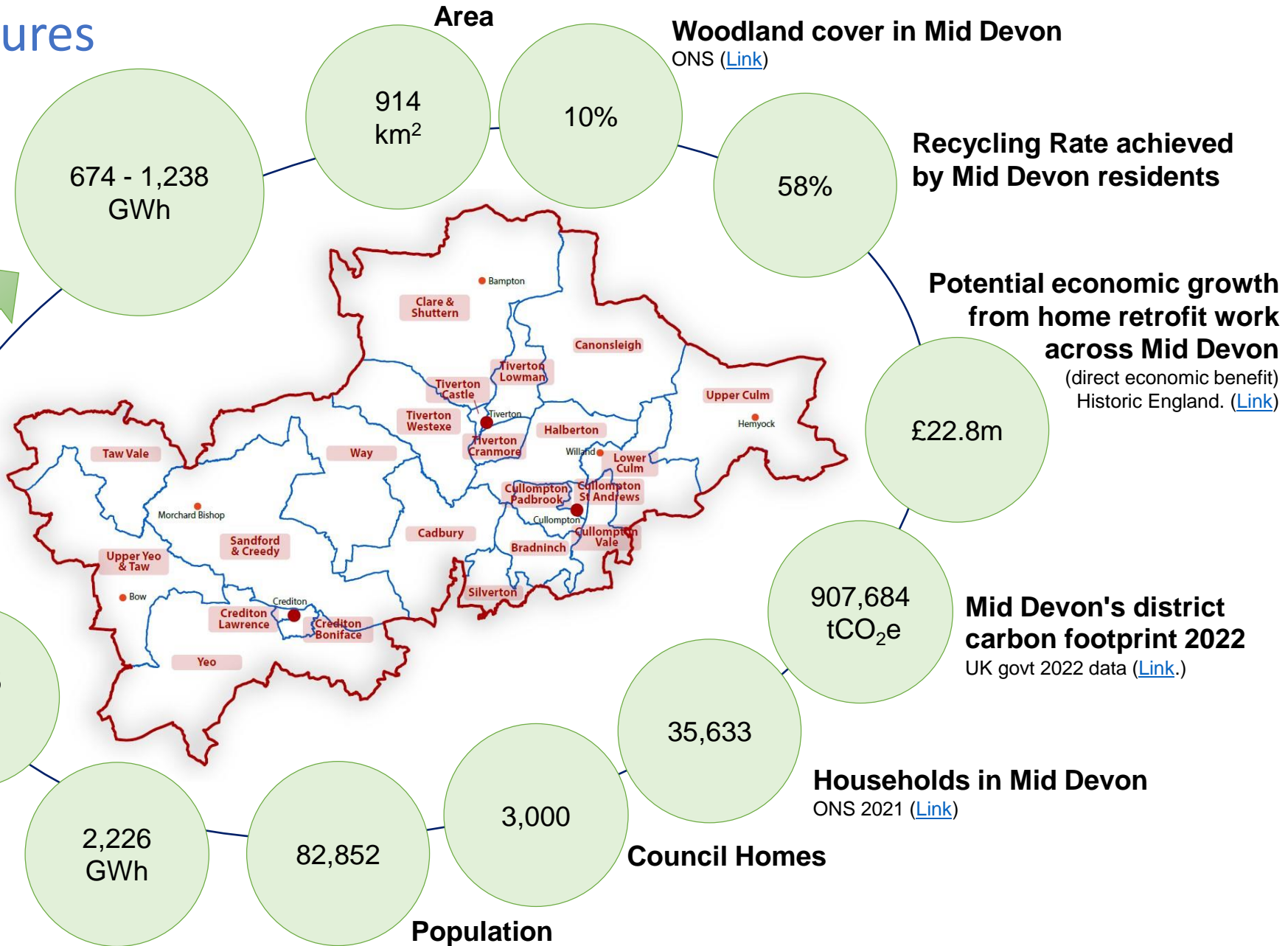
UK govt 2022 data ([Link](#))

## Electricity - Mid Devon's annual consumption

data.gov.uk 2021. ([Link](#))

## Total energy - Mid Devon's annual consumption

data.gov.uk 2021. ([Link](#))



# Working together for a brighter future

Working in partnership, the Council is determined to take positive action to address the climate emergency in every aspect of what we do - through strategy, how we operate, and how we support residents and businesses.

## Vibrant landscapes at the heart of Devon

As part of reviewing Mid Devon's Local Plan (Plan Mid Devon), the overarching priority must be to respond to the climate emergency by moving to a net-zero carbon future and investing to adapt. The Local Plan will draw together policy to address interlinked issues, ranging from resource consumption to landscape and ecosystem conservation and recovery.

## Climate Resilient Communities

We work in partnerships such as the Blackdown Hills National Landscape and projects such as *Connecting the Culm* that work with farmers and communities on citizen science and nature-based solutions for climate adaptation and flood risks.

## Healthy Homes

The Council provides 3,000 homes and continually invests in maintenance, energy efficiency and retrofit to meet tenant needs. Our new Net-Zero-carbon homes are climate-adapted and affordable to run, A-rated and super-insulated with heat recapture and rooftop solar panels. We continue to help landlords and private tenants to access funding and advice for home improvements and retrofit. This is backed by climate-linked targets to raise standards in the Mid Devon Housing Strategy.

## Green Growth and Bright Futures

Climate is vital to our economic strategy and for Plan Mid Devon, shaping policy to help drive green growth, supported by greener travel infrastructure to enable more walking and cycling, public transport and EV charger networks. We need futureproofed developments as part of a resilient and prosperous Mid Devon.

## Sustainable Services and Spending

Bin It 1-2-3 collections enable Mid Devon's communities to cut greenhouse gas emissions by reaching higher recycling rates. The Council has cut emissions by investing to save energy in transport, IT, communications and buildings, investing millions to decarbonise leisure centres.



**Trees planted at Cullompton, in a sea of buttercups.**

The trees will absorb carbon dioxide from the air and their roots will help the ground to absorb flood water.

# Climate change resilience

Solutions to the challenges we face from climate change will overlap, as the problems are often interlinked, so acting in partnership is vital for climate adaptation.

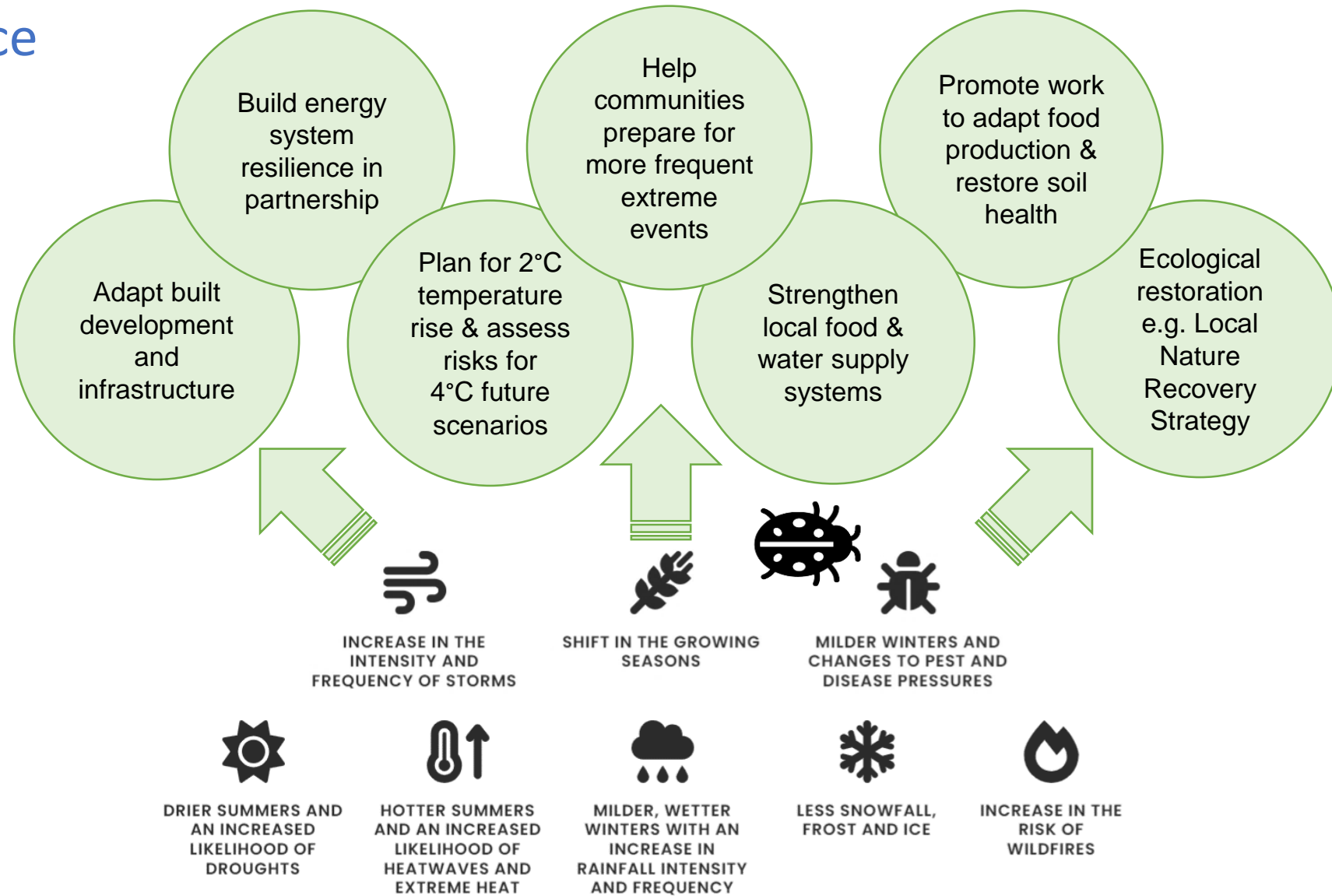
Risks to Mid Devon's residents e.g.

- Severe weather events risk increased.
- Vulnerable potentially most exposed to risk.
- Heat stress will affect people differently, depending on aspects such as age, health conditions, their home and their workplace.

Disruptive impacts e.g.

- threats to soils, nature and food supplies
- summertime heat stress for cattle
- extended crop growing season
- effects on the lifecycles of crop pests such as greenfly and midges, and their predators such as ladybirds and bats
- disruption to energy infrastructure, transport and supply chains could also arise from the consequences of impact felt elsewhere

South West England is already experiencing climate change, temperatures have increased (1884-2023) and many of the hottest years have occurred in the last few decades.

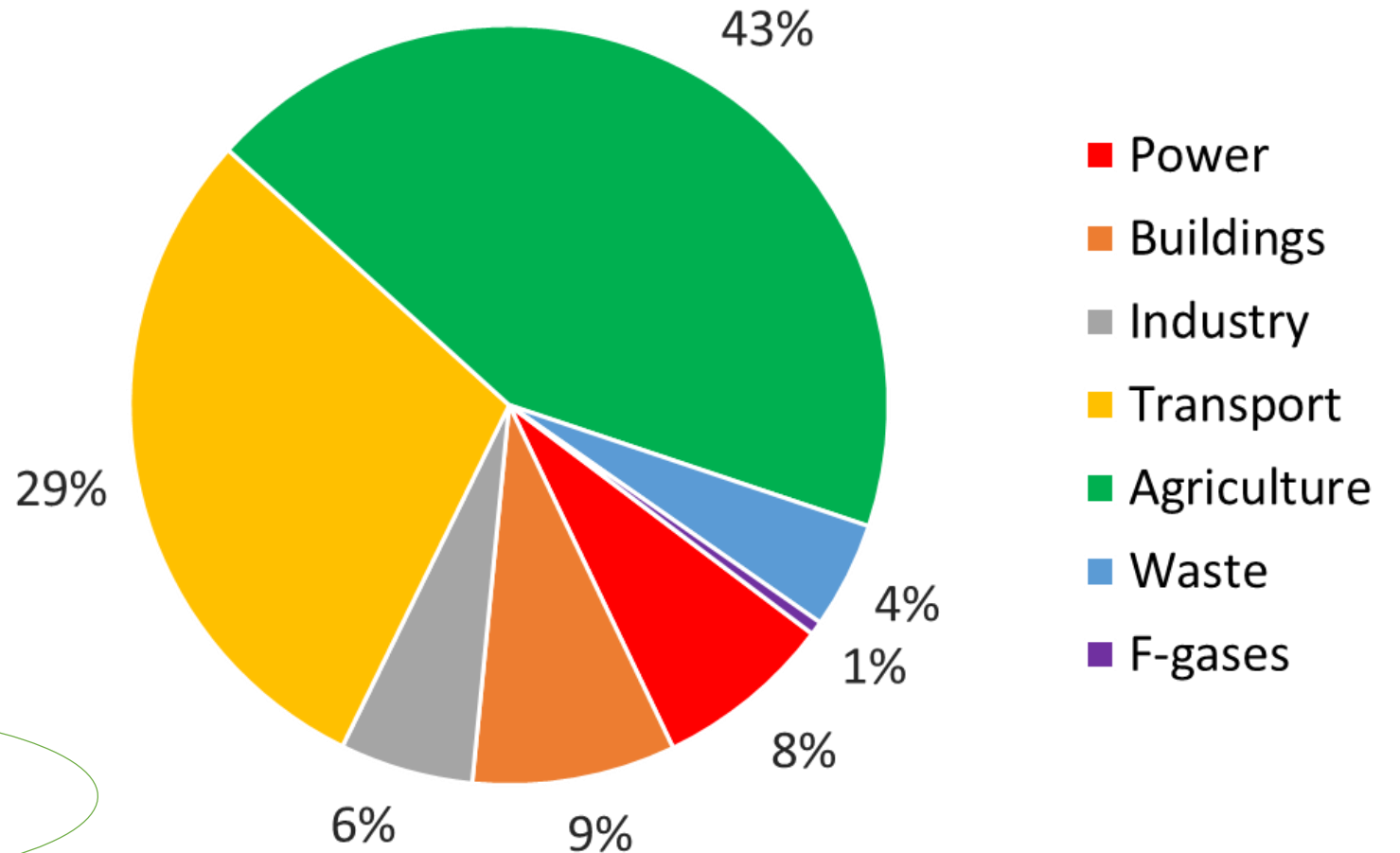


## Greenhouse Gas Emissions for the district; Mid Devon's territorial footprint

Mid Devon's 2022 territorial carbon footprint, excluding land use change, was 907,684 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e).

The largest climate impacts came from **agriculture at 43%** (394,256t), mainly from livestock farming; **29% from transport** (267,527t) almost all from road transport; and **9% from heating fuels in buildings** (78,689t) with most of that (68,643t) from homes.

Mid Devon district is 914 km<sup>2</sup> of chiefly agricultural land with only around 10% woodland cover. Land use change captures around 68,000 tonnes of CO<sub>2</sub> per year, giving net emissions of 839,311 tCO<sub>2</sub>e.



What are F gases?

Fluorinated gases are used as refrigerants and have a very powerful greenhouse effect.

# Climate Change and the Council's work.

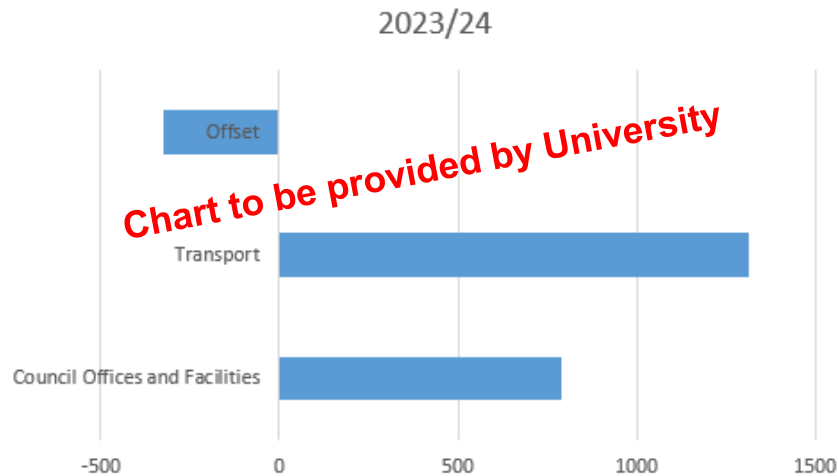




# Carbon Footprints linked to all council service areas

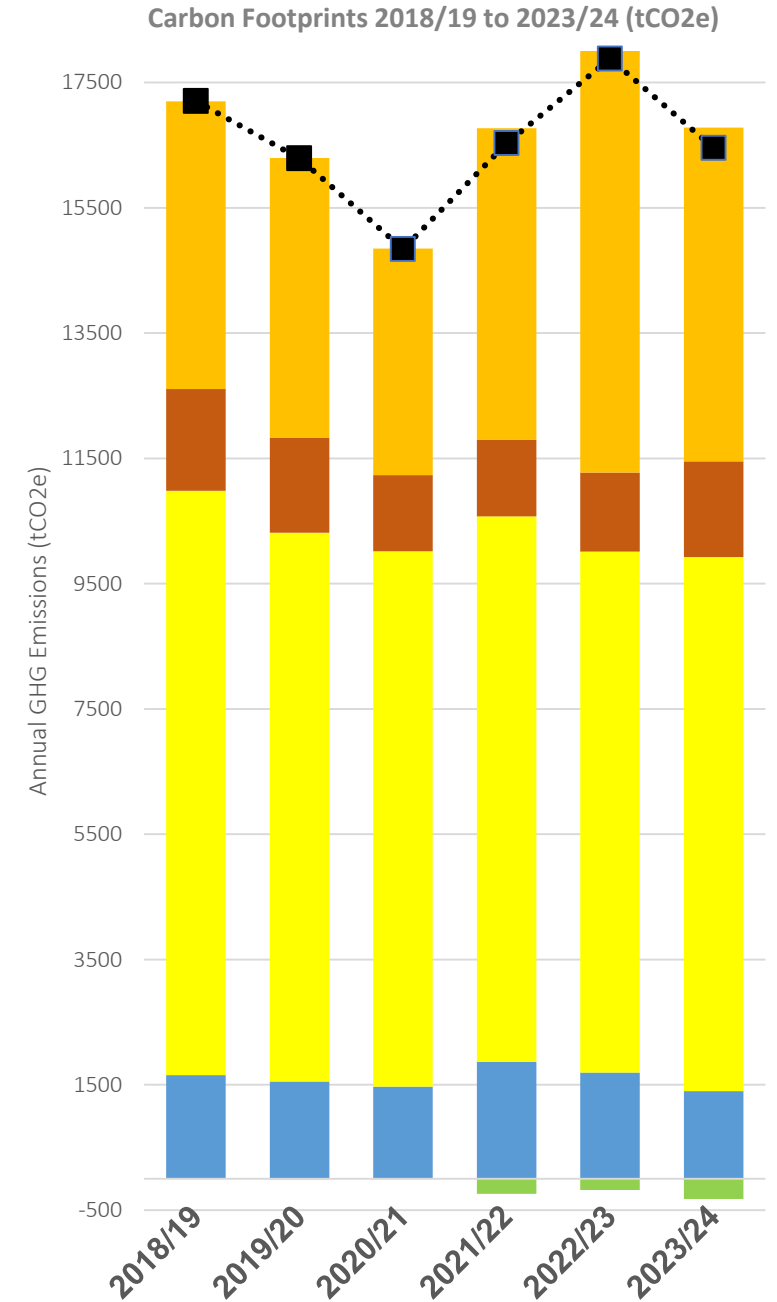
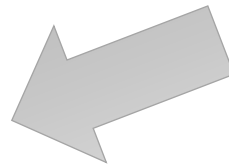
	Categories	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
8%	1. Buildings (exc. housing)	1654	1554	1469	1865	1694	1398
51%	2. Social Housing	9326	8758	8547	8711	8319	8526
9%	3. Transport	1626	1513	1216	1220	1263	1531
32%	4. Procurement	4594	4469	3615	4975	6784	5324
-2%	5. Offsets	0	-9	-8	-241	-181	-325

This colour-coded table and chart show the 2023/24 carbon footprint split into key activity categories.

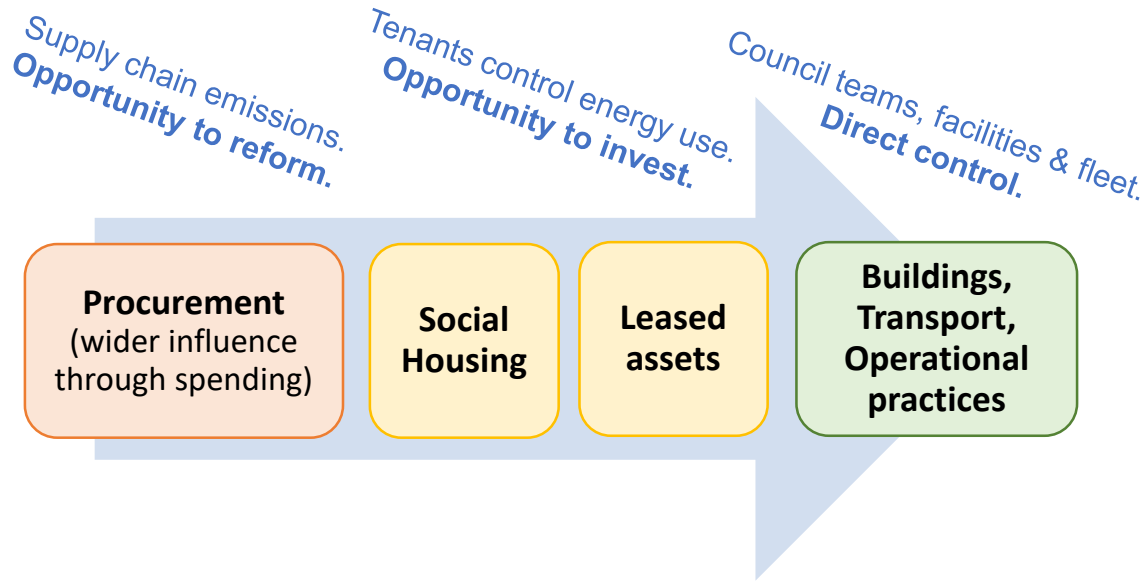


**Chart to be provided by University**

Elements under the direct control of the council - the corporate footprint - are a fraction of the overall impact.



# Cutting the Council's operational carbon footprint - a route map to 2030

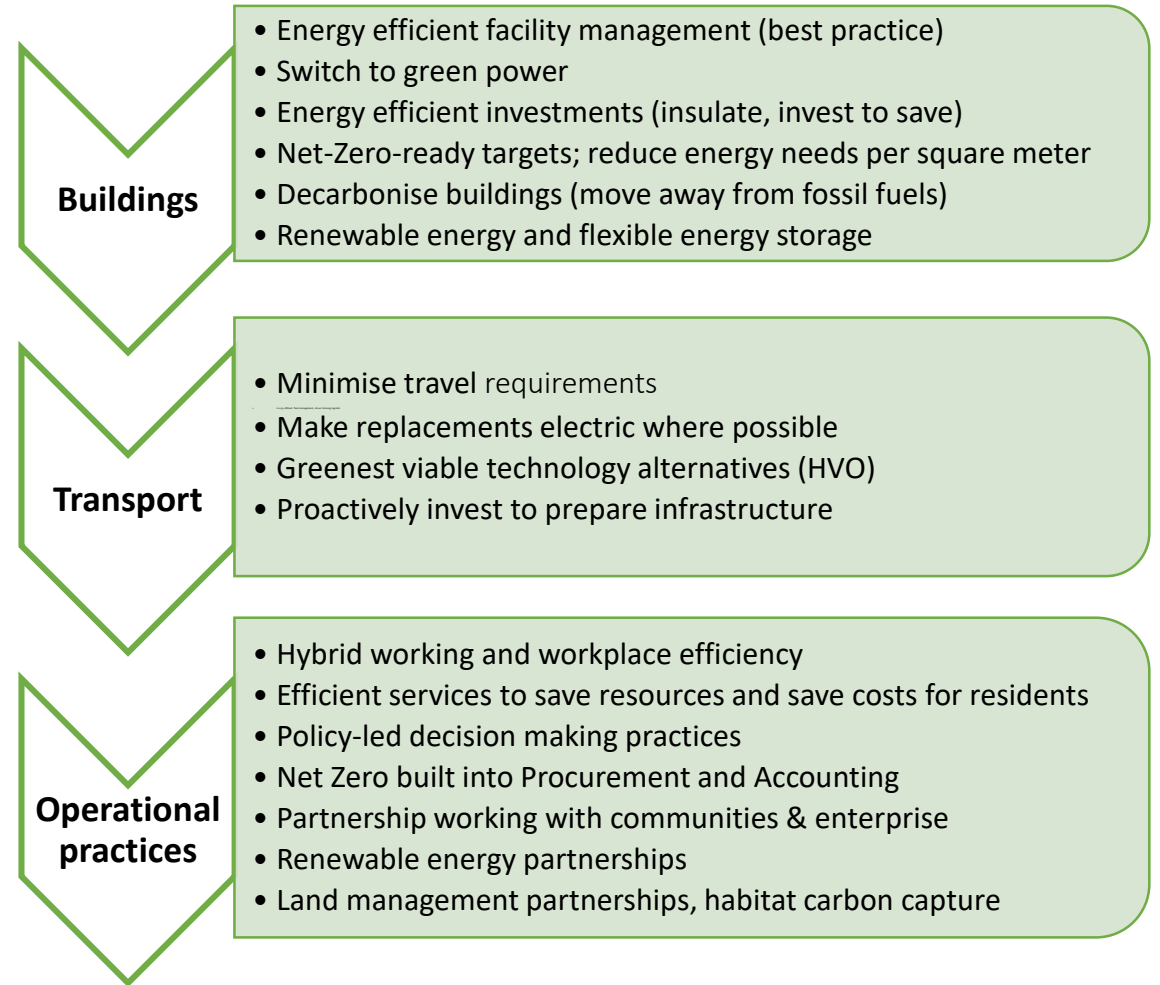


## Where is the Council best able to act?

The Council has direct control over its own activities, so we will prioritise efforts to reduce areas of the operational carbon footprint where we have direct control. Lower emissions for our fleet, facilities and services will feature alongside renewable energy projects and support for trees and habitat schemes.

Retrofit work will seek to achieve healthy, net-zero-ready housing and greener leased non-residential buildings. This relies strongly on external financing, so we will bid for additional funding to make our journey towards net zero a reality. We will lead and influence through best practice, as a workplace, by how we spend, and acting in partnership.

## A strategic approach to cutting carbon.



## The council recognised the climate emergency in 2019... how have we been cutting carbon since then?

We put all Council facilities onto a certified **100% renewable electricity supply** in 2023.

We invested **£2.8 million** from the Public Sector Decarbonisation Scheme (PSDS) at the Crediton and Tiverton leisure centres to make them Net-Zero-ready.

- ✓ **Exe Valley Leisure Centre** is heated and cooled by ground-source and air-source heat pumps, with power boosted by solar photovoltaic (PV) arrays on the roof and new solar car ports.
- ✓ **Lords Meadow Leisure Centre** has a biomass boiler [fuelled by locally-sourced wood](#), and boasts a new ground-source and air-source heat pumps plus extra solar PV on the roof.

Our **Street Scene depot** has [solar PV panels](#). Our office base **Phoenix House** hosts a solar PV array and range of [energy saving measures](#). We invested **£300k to boost efficiency** with smart LED lighting to save **520 tonnes of CO<sub>2</sub>** in their lifetime. New LED lighting at **Tiverton's Pannier Market** will save the equivalent of around 2 tonnes per year.

We have **solar PV on 1,000 council homes** and will fit solar on all new social housing.

**Our new modular-build homes are Net-Zero by design** with triple-glazed windows and doors, solar PV panels, heat pumps, and mechanical ventilation that recaptures over 80% of outgoing heat.

Council home energy upgrades 2020-24 e.g. insulation and roofing, cut **over 600 tonnes CO<sub>2</sub>e** per year.

We cut commuter traffic with **hybrid working** which benefits the wellbeing of our teams and communities.

The Council has **10 Electric Vehicles** that will save **25 tonnes CO<sub>2</sub>e** annually. We prioritise the greenest options each time we replace a vehicle.

We have worked in partnership to help **plant more than 2,400 trees** across Mid Devon since 2021.

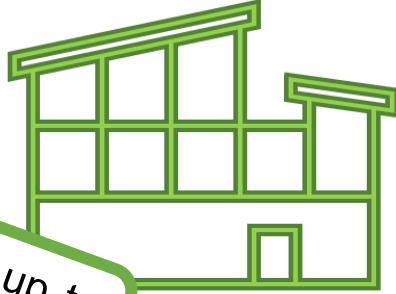


Solar panels




Heat pumps at Exe Valley Leisure Centre

## Plans to reduce the Council's carbon footprint further




Renovate sports centres = save up to 200 tonnes CO<sub>2</sub>e annually.

More renewable energy projects = save 200 - 600 tonnes CO<sub>2</sub>e annually.




Workplace energy efficiency boost = save up to 200 tonnes CO<sub>2</sub>e annually.



Replace 57 vans with EV by 2030 = save over 140 tonnes CO<sub>2</sub>e annually.



Renovate council homes = save over 400 tonnes CO<sub>2</sub>e annually.

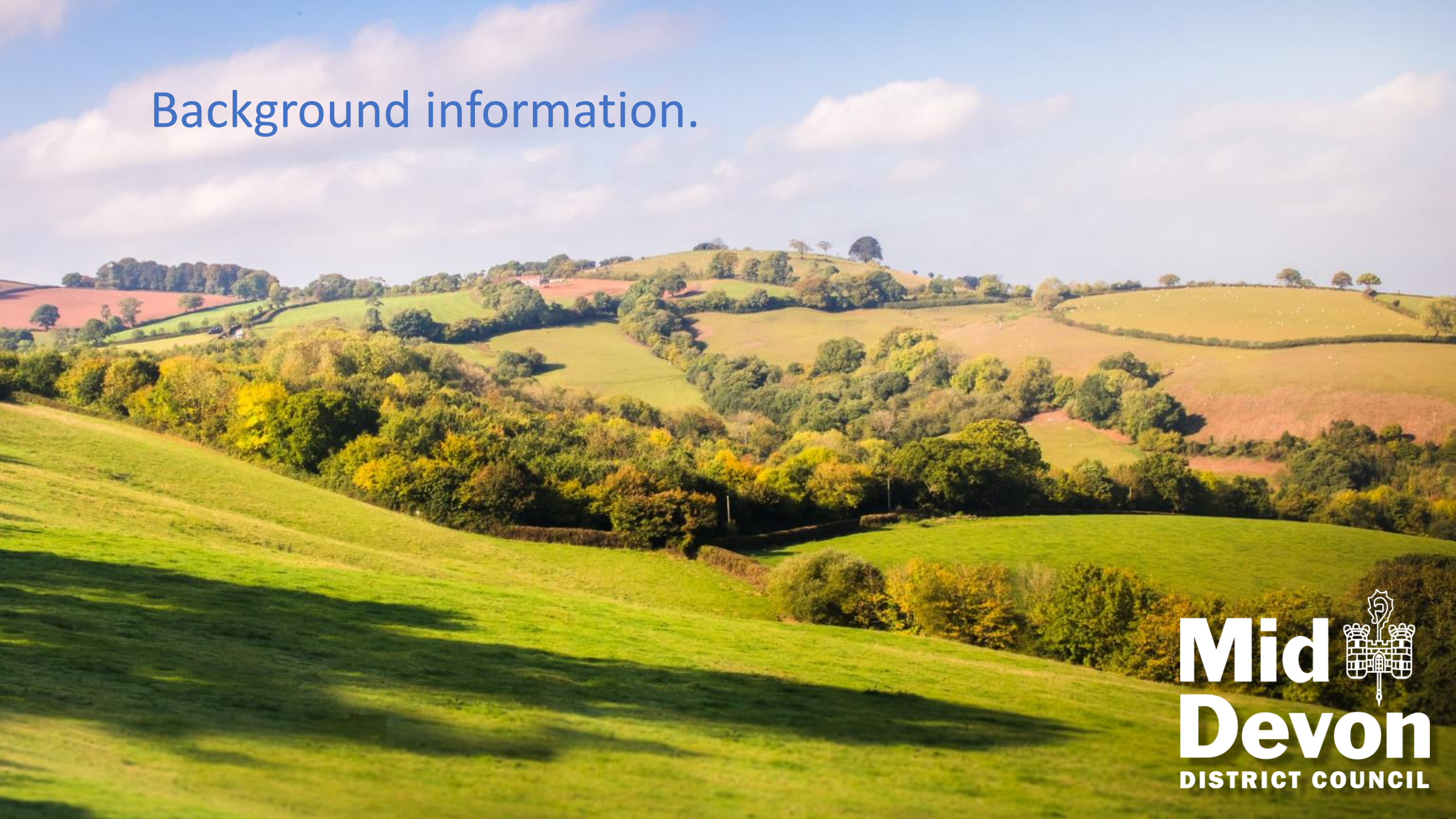


Replace 22 old residential properties with Net Zero homes by 2030 = save up to 136 tonnes CO<sub>2</sub>e annually.

## How our Corporate Plan priorities link into this Climate Change Strategy

Corporate Plan theme	Climate Strategy theme	Corporate Plan aims	Devon Carbon Plan theme
Planning, Environment & Sustainability	Vibrant landscapes at the heart of Devon	<ul style="list-style-type: none"> <li>• Demonstrate climate leadership through achieving ambitious net zero targets.</li> <li>• Support the district's response to the climate emergency.</li> <li>• We will work with stakeholders to introduce planning policy which reflects the key issues and challenges facing the district.</li> <li>• Value and protect Mid Devon's natural and built environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Food, land and sea</li> <li>• Transport</li> <li>• Energy supply</li> <li>• Economy and resources</li> <li>• Built environment</li> <li>• Cross-cutting themes</li> </ul>
Community, People & Equalities	Climate Resilient Communities	<ul style="list-style-type: none"> <li>• We will support the health, wellbeing, and safety of our residents.</li> </ul>	<ul style="list-style-type: none"> <li>• Cross-cutting themes</li> </ul>
Homes	Healthy Homes	<ul style="list-style-type: none"> <li>• We will build, promote, and encourage the building of energy efficient and low carbon homes and communities.</li> <li>• We will invest in our homes. We will upgrade our social housing by installing energy efficiency measures and renewable energy.</li> </ul>	<ul style="list-style-type: none"> <li>• Built environment</li> </ul>
Economy & Assets	Green Growth and Bright Futures	<ul style="list-style-type: none"> <li>• We will work with partners to ensure that Mid Devon has the infrastructure it requires to meet its potential.</li> <li>• We will support business and economic development across Mid Devon, enabling job creation, and sustainable tourism growth.</li> </ul>	<ul style="list-style-type: none"> <li>• Economy and resources</li> <li>• Built environment</li> <li>• Transport</li> </ul>
Service Delivery & Continuous Improvement	Sustainable Services and Spending	<ul style="list-style-type: none"> <li>• We will maintain our leisure services and ensure they are fit for the future.</li> <li>• We will continue to improve and transform our services. (e.g. digital)</li> <li>• We will further increase our recycling services, enabling our communities to achieve even higher levels of recycling.</li> </ul>	<ul style="list-style-type: none"> <li>• Economy and resources</li> <li>• Transport</li> </ul>

Background information.



## What is the future for renewable energy in Mid Devon?

Whilst the future growth of renewable energy in the district is potentially very significant, it needs to be achieved in an environmentally responsible way.

A special study for Mid Devon by Exeter University's Centre for Energy and the Environment identified potential for between 15 and 66 large wind turbines (2 MW) plus potential for between 140 and 368 smaller-scale turbines (500 kW) to generate a yearly total of 245 to 797 GWh. Solar PV of between 194 and 312 sites were also identified with the potential to generate between 1,934 and 4,036 GWh annually.

This work was published in 2020 as the [Low Carbon and Climate Change Evidence Base](#) for the former [Greater Exeter Strategic Plan](#).

Other research by the University of Exeter's *Environmental Intelligence Centre* and Friends of the Earth sought to identify suitable land across England for renewable energy developments. [Their 2023 research](#) suggested that just 1.3% of Mid Devon land could generate 674 gigawatt-hours (GWh) each year. That is more than 10 times the 59 GWh currently generated annually, with over 56 GWh from solar, and around 2.5 GWh per year from wind.

Renewable Energy Installations	Photovoltaics	Onshore Wind	Hydro	Anaerobic Digestion	Sewage Gas	Landfill Gas	Plant Biomass	Total
	4,963	37	2	10	1	1	1	<b>5,015</b>

Mid Devon has over 5,000 renewable energy installations, mostly solar photovoltaic arrays. This may sound like a lot, but the current total [annual energy consumption](#) (2,226 GWh) already far outweighs [local power generation](#) (88 GWh).

Future projections and national strategy recognise that Mid Devon energy system demands will need transformational change, particularly to enable decarbonised heating and cooling in our homes, and more electrically powered transport.

The way ahead and the pace of change depends on a range of factors such as Planning policies, developer or investor strategies, and the power grid configuration.

# Useful Resources

## Saving energy and carbon at home.

- [The Energy Saving Trust](#) has great [energy-saving tips for the kitchen](#).
- [Centre for Sustainable Energy](#) free [resources](#) on practical DIY, such as how to fit loft insulation.
- Find clever ways to save water on the [Waterwise website](#).
- [Historic England's guidance](#) on working with roofs, walls, windows and doors to conserve energy in heritage buildings.

## Healthier, greener lifestyles

- Delicious [recipes](#) to help you save money and avoid food waste.
- [Devon Community Energy](#) offers advice for communities that seek to embrace eco-friendly initiatives.
- Cycling and walking routes feature on the [Visit Mid Devon](#) website.

We share a range of resources on our [Sustainable Mid Devon](#) website, where we welcome contributions of articles, news and events about the many fantastic community projects across Mid Devon.



## References used in this paper

### Mid Devon District Council

- The MDDC [Corporate Plan 2024 - 2028](#).

### Adaptation.

- Devon, Cornwall and Isles of Scilly (DCIoS) Climate Adaptation Strategy: [Link](#).
- Met Office 2024 summary for Mid Devon: [LACS](#) (Local Authority Climate Service).
- Met Office: Food, farming and natural environment risks. [Link](#).
- The CCC: UK Climate Risks. [Link](#).
- Devon Climate Emergency page. [Link](#).

### Carbon Footprint (Council).

[Annual carbon footprint reports](#) (greenhouse gas accounting) are published on the Council's [Sustainable Mid Devon](#) website.

### Carbon Footprint (Community).

- Explore your local emissions data with the free Impact Tool [here](#).
- The chart and figures in this paper were from analysis provided by the Centre for Energy and the Environment, University of Exeter, which used the [UK local authority & regional greenhouse gas emissions statistics](#) (2022 data) published July 2024.
- Woodland data was from the ONS, Forestry Research and Defra. [Link](#).

### Mid Devon's Renewable Energy Generation Potential.

- The University of Exeter's Centre for Energy and the Environment 2020 [Low Carbon and Climate Change Evidence Base](#) for the former [Greater Exeter Strategic Plan](#).
- Research by Exeter University's Environmental Intelligence Centre and Friends of the Earth. [Article and interactive map](#). Full data: [Link](#).

### Retrofit.

Historic England estimated the potential economic value of Mid Devon district's retrofit needs as £22.8 million of direct economic output (2018 prices). That would require, on average, 180 more jobs per year to support the work. [Link](#).