



Dacorum Borough Council's CLIMATE AND ECOLOGICAL EMERGENCY STRATEGY

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**DECLARING A
CLIMATE & ECOLOGICAL
EMERGENCY**

We are facing a climate and ecological emergency

Dacorum and the Climate and Ecological Emergency

Dacorum Borough Council declared a Climate Emergency in 2019 following the release of the International Panel on Climate Change (IPCC) Special Report which announced that we have until 2030 to limit warming to 1.5C or face catastrophic circumstances. Over 75% of other local authorities in the UK have now also made this declaration.

The original IPCC warning has been further cemented by an additional report released in 2021, which gave a 'code red' for humanity and confirmed that human activity is unequivocally to blame for climate change and that we have a very small window of time to mitigate the worst impacts of climate change.

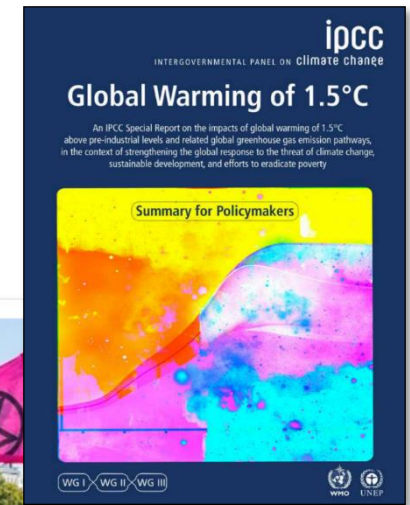
A similarly alarming 'Living Planet Report' was released in 2020, confirming that in the past 50 years global wildlife populations have plummeted by a shocking 68%. Climate change and biodiversity loss are intrinsically linked and it is impossible to talk about the causes and effects of one, without the other. In light of this, we will be working to address both of these environmental issues locally under the term 'Climate and Ecological Emergency'.

As part of our commitment to this work, we have made the Climate and Ecological Emergency one of our key priorities in our Corporate Plan.

This strategy outlines how we will be planning to tackle these environmental issues locally over the next few years and is based on three fundamental facts:

1. We are in a Climate and Ecological Emergency.
2. This has been caused by human actions.
3. This can be solved by human actions, and it is everyone's responsibility.

This strategy is a call to action. We call on you, as people who live, work, visit and invest in Dacorum, to join with us on this ambitious journey.



Dacorum's Key Objectives:

The challenge of addressing the Climate and Ecological Emergency cannot be underestimated. It requires rapid, far-reaching and unprecedented changes in all aspects of society. As part of our Climate Emergency Declaration and Statement of Intent (**appendix**), a number of commitments were made. Alongside consultancy with APSE Energy and discussion internally, these can be summarised in our three key objectives:

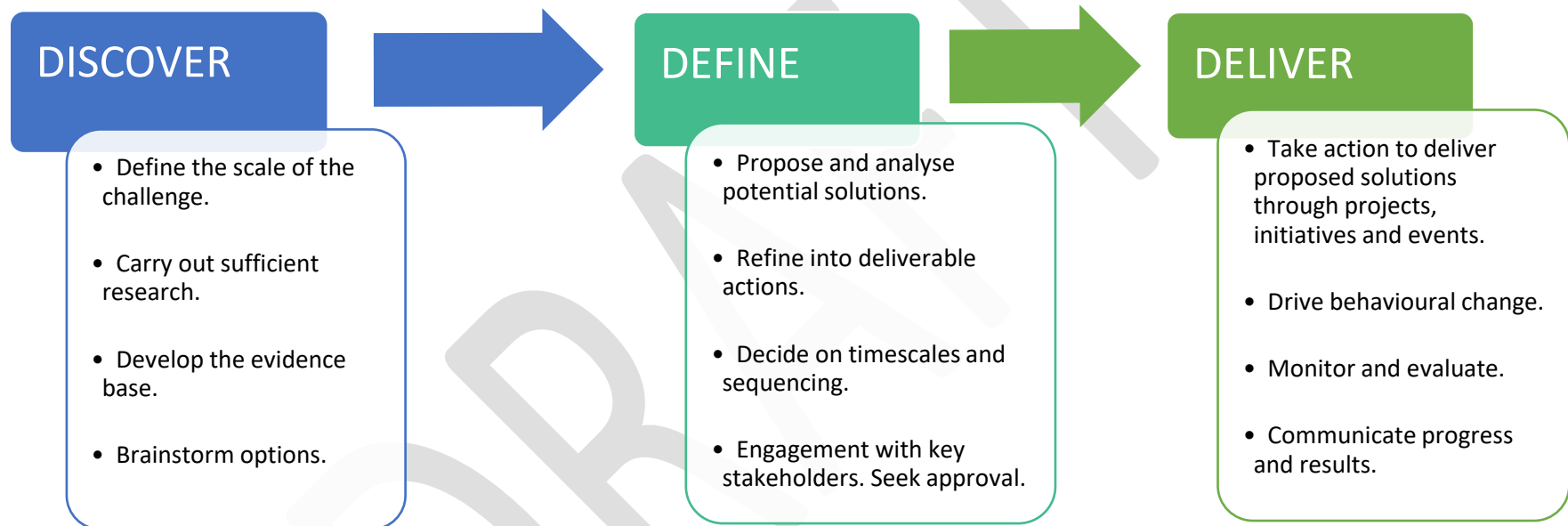
- 1. Reach net-zero emissions as an organisation by 2030**
- 2. Reach net-zero emissions for our Council housing stock as quickly as possible, by 2050 at the latest.**
- 3. Support the borough in reducing its emissions and reaching net-zero as quickly as possible, by 2050 at the latest.**
- 4. Support the borough in improving biodiversity**
- 5. Support the borough in creating more sustainable communities.**

Discover, define, deliver...

One of the original pledges when making the Carbon Emergency declaration was to “*evaluate all practical means to reduce the impact of council services on the environment as soon as possible*”. This has been a key part of our progress so far.

In order to implement solutions, it is important that we first ensure that we are taking the right actions. To do this we must carry out research to ensure that the steps we take are evidence-based and will be suitably impactful.

The phases we have been and will continue to be applying throughout this strategy can be broken down into three key stages:



These phases are not always simple and linear, and work streams can be at different stages depending on various factors, such as resources and finances.

As part of our 'Discovery' phase, we have been gathering information from a range of sources.

- Obtaining and processing emissions data
- Using expert consultants for particular projects
- Carrying out resident surveys, such as 'Learning from Lockdown'.
- Working in partnership with other organisations to share research, information and best practice.
- Attending various webinars and conferences
- Keeping abreast of topics via reports and news articles
- Becoming members of environmental groups
- Training our staff

Carbon Literate Organisation

Dacorum has become the first borough council in the UK to achieve a Silver level 'Carbon Literate Organisation' accreditation.

The Carbon Literacy Training course was recognised by the United Nations at the Paris Climate Conference, where it was chosen as one of 100 worldwide Transformative Action Programs. Following from our Climate Emergency declaration, we wanted to prepare staff for our net-zero journey by equipping them with sufficient knowledge on climate change. We worked with APSE Energy to deliver Carbon Literacy Training to 60 key members of staff, including our CEO, making her the second ever CEO of a council in the UK to achieve this.

Staff learned about the science and causes of climate change, the effect it is already having and the predicted future impact, before then exploring the solutions we can take as individuals, as well as a council.

By completing this training, Dacorum is now accredited as a Silver level Carbon Literate Organisation (CLO) as we have demonstrated that we have made a substantial commitment to Carbon Literacy.



UNDERSTANDING OUR EMISSIONS

UK's Greenhouse Gas Emissions

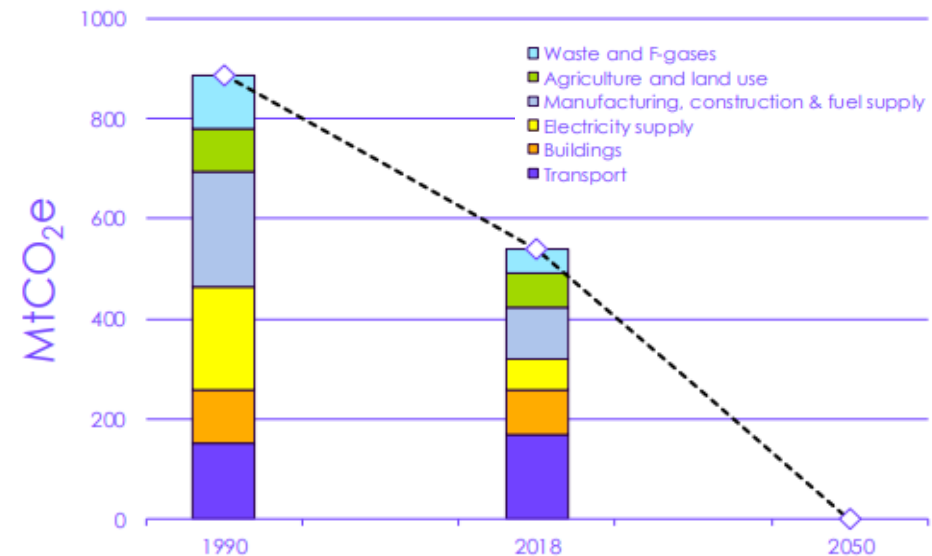
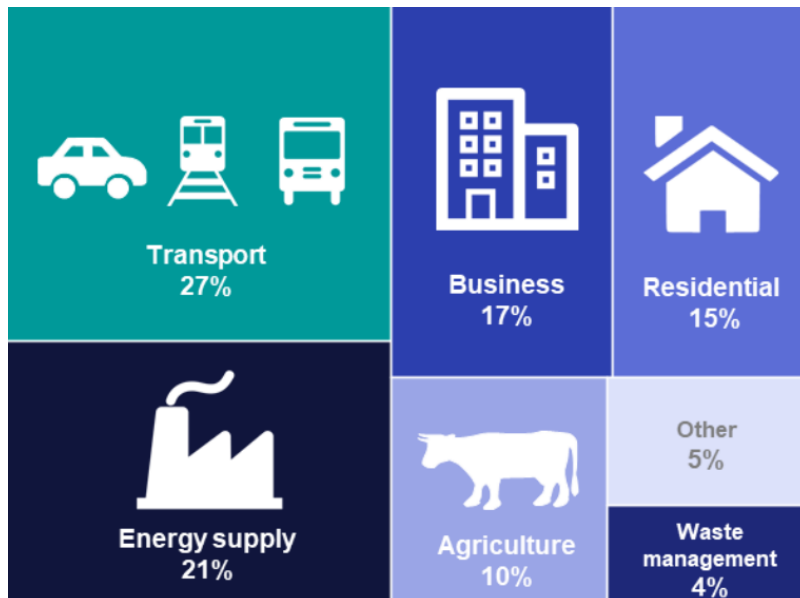
In 2019, the UK was responsible for 455 million tonnes of greenhouse gas emissions.

- This was a decrease of 3% compared to 2018 emissions, and 44% lower than 1990 emission levels.
- Emissions from energy supply are now 65% lower than they were in 1990.
- Transport remains the largest emitting sector, responsible for 27% of all greenhouse gas emissions in the UK.

The below infographic shows the UK greenhouse gas emissions breakdown by sector.

Current government targets are for the UK to become net-zero by 2050, however, the speed of emission reductions and the 'journey' taken to reach this target also has a great deal of importance. The government recently set a target of reducing emissions by 78% by 2035 based on 1990 levels. To meet net-zero in the UK, emissions must fall in all sectors and at a faster rate than the last 30 years.

More information about UK emissions is available in 'additional information'.



Dacorum's Greenhouse Gas Emissions

Comparing Emissions Data Sources

It is important when looking at emissions data to be clear on what scopes you are including, what year the data is based on and what greenhouse gases are being measured.

Due to the complexity of calculating emissions, there are a variety of ways to do so and even the most current information is typically over two years old.

For emissions at a local authority level, there are two different key data sources – as each of these are slightly different, but both useful, we will be providing both and explaining their key differences.

BEIS

The Government Department for Business, Energy and Industrial Strategy (BEIS) annually publish local authority level emissions data – known as their National Atmospheric Emissions Inventory. This data only accounts for carbon emissions (CO₂) under scopes 1 and 2.

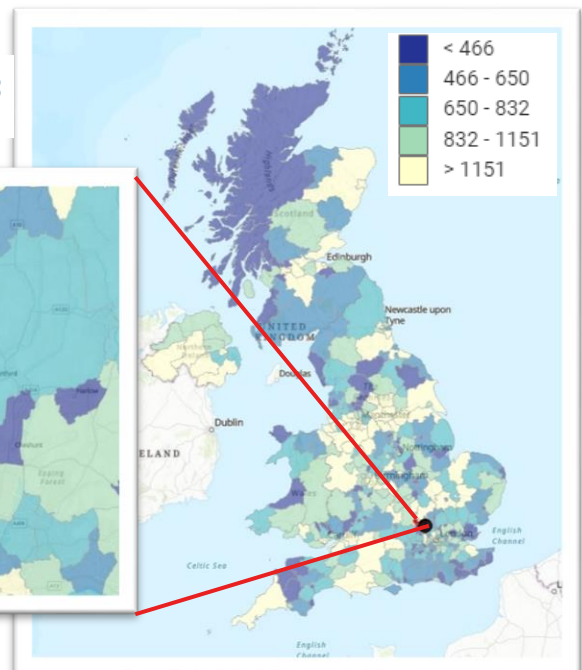
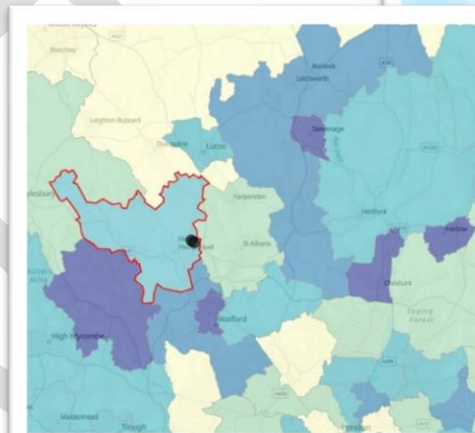
BEIS have published this data from 2005 - 2019.

**BEIS 2019 carbon emissions data for Dacorum
= 624,000 tonnes (tCO₂)**

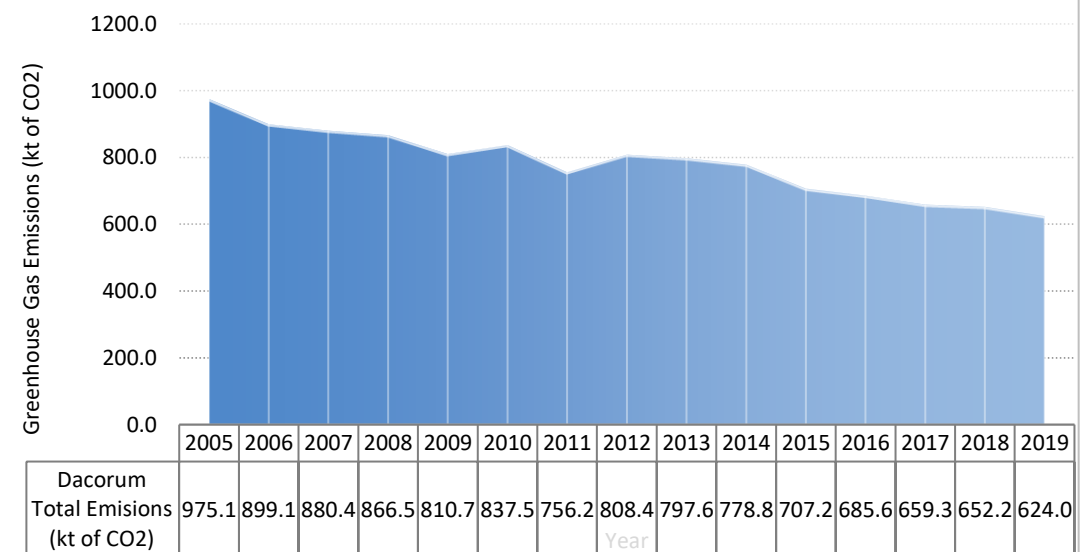
There was a decrease of 4.3% compared to 2018 emissions, and a 36% reduction on 2005 emission levels.

The boroughs emissions represent less than 0.2% of UK emissions. The main cause of this reduction has been the changes in the way our electricity from the National Grid is produced, with a reduction in coal fired power stations and an increase in renewables and nuclear power plants.

 National Atmospheric Emissions Inventory



Dacorum Carbon Emissions - 2005 - 2019



SCATTER

The Setting City Area Targets and Trajectories for Emissions Reduction (SCATTER) tool is a local authority focussed emissions resource which accounts for all greenhouse gas emissions and all scopes 1-3. SCATTER is a relatively new tool and has emissions data available for 2017 and 2018 only.

SCATTER 2018 greenhouse gas emissions data for Dacorum = 933,400 tonnes (tCO₂e)

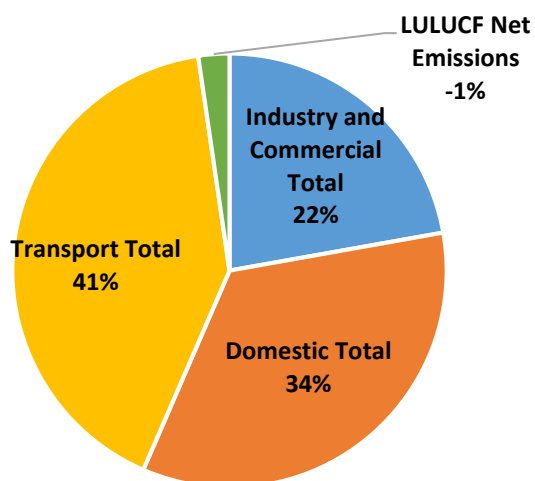
- The SCATTER CO₂e emissions data for scopes 1 and 2 is 739kt CO₂e – BEIS CO₂ emissions data symbolises 88% of this.
- The SCATTER CO₂e emissions for all scopes 1-3 is 933kt CO₂e - BEIS data symbolises 70% of this

The below charts show that although the difference between the two data sources is fairly high, the key breakdown information remains the same that transport and energy in buildings are the biggest emitters.

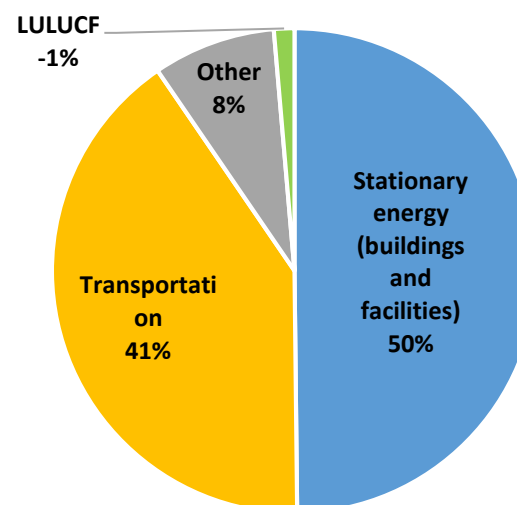


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Dacorum CO₂ Emissions - 2019
Scopes 1-2 BEIS



Dacorum Greenhouse Gas Emissions - 2018
Scopes 1 - 3 - SCATTER



SCATTER

SCATTER also has a Pathways tool allowing us to model different scenarios based on different sectors, such as domestic or transport and comparing the differences in future emissions between 'high ambition scenarios' and 'low ambition scenarios'. As an example, we are able to predict that by 2050, in order to reach net-zero in our domestic sector as a whole borough, we will need to be offsetting in the region of 400,000 – 1,315,000 tonnes of CO₂e.

More information about the borough's historical emissions, breakdowns of emissions data and SCATTER pathways is available in 'additional information'.

Dacorum Borough Council's organisational emissions

To reach our organisation's net-zero emissions targets and plan the necessary actions, we needed to first calculate our current organisational emissions. To do this we worked with APSE (Association for Public Service Excellence). The calculations were undertaken in accordance with best practise guidance by the Greenhouse Gas Protocol and carbon conversion factors published by BEIS.

Dacorum Borough Council was responsible for 39,000 tonnes of CO₂e as an organisation in 2019 for scopes 1-3.

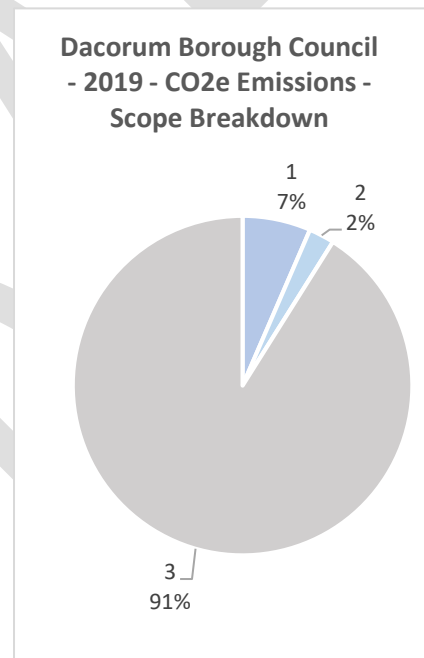
As an organisation, our emissions represent:

- 6.25% of the borough's total greenhouse gas emissions, if we include all scopes (which includes the housing stock)
- 0.5% of the boroughs' total greenhouse gas emissions, if we include just scopes 1 and 2
- Less than 0.01% of the UK's emissions

Emissions included within Scope 1 and 2 essentially cover assets where the Council are responsible for paying the fuel bills. The Council owned housing stock of 10,500 homes makes up the majority of the organisations emissions – these fall under Scope 3 as the Council own the buildings but do not occupy them or pay the energy bills.

Many net-zero declarations from other local authorities, especially the ones with targets of 2030 or similar, exclude Scope 3 emissions and focus on Scopes 1 and 2 only.

Due to the scale of emissions that come from the Council housing stock and the amount of work that would need to be carried out, it would be unfeasible to make these homes net-zero by 2030. However, to ensure this crucial element is still addressed, this is why we have set a separate objective specifically to achieve net-zero for our housing stock by 2050.



Emissions Source	Scope	Tonnes CO ₂ e	% Split
Gas	1	2,123	5.4%
Council Vehicles	1	398	1%
Electricity	2	950	2.4%
Housing	3	33,978	87.1%
Leased Assets	3	1,381	3.5%
Transmission & Distribution	3	68	0.2%
Employee Vehicle	3	65	0.2%
Water Supply and Wastewater	3	39	0.1%
Total	-	39,002	100%

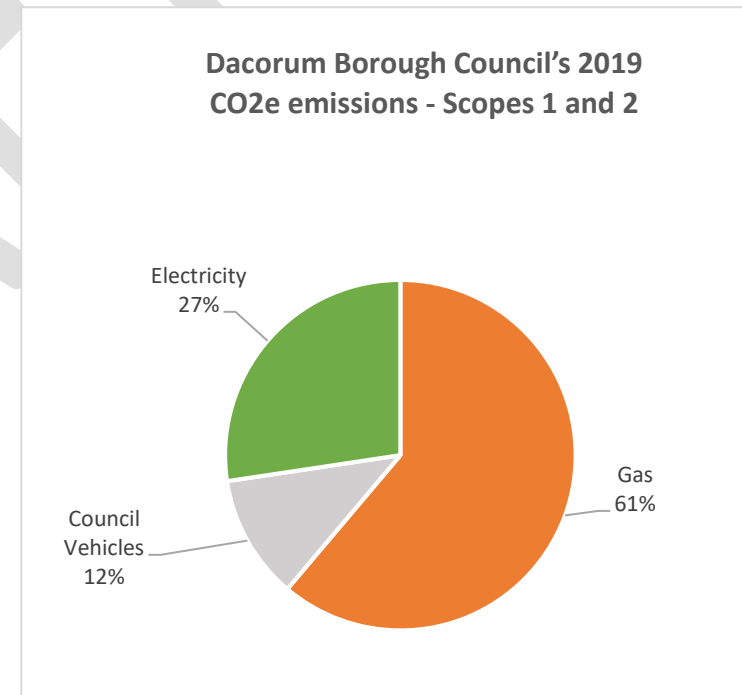
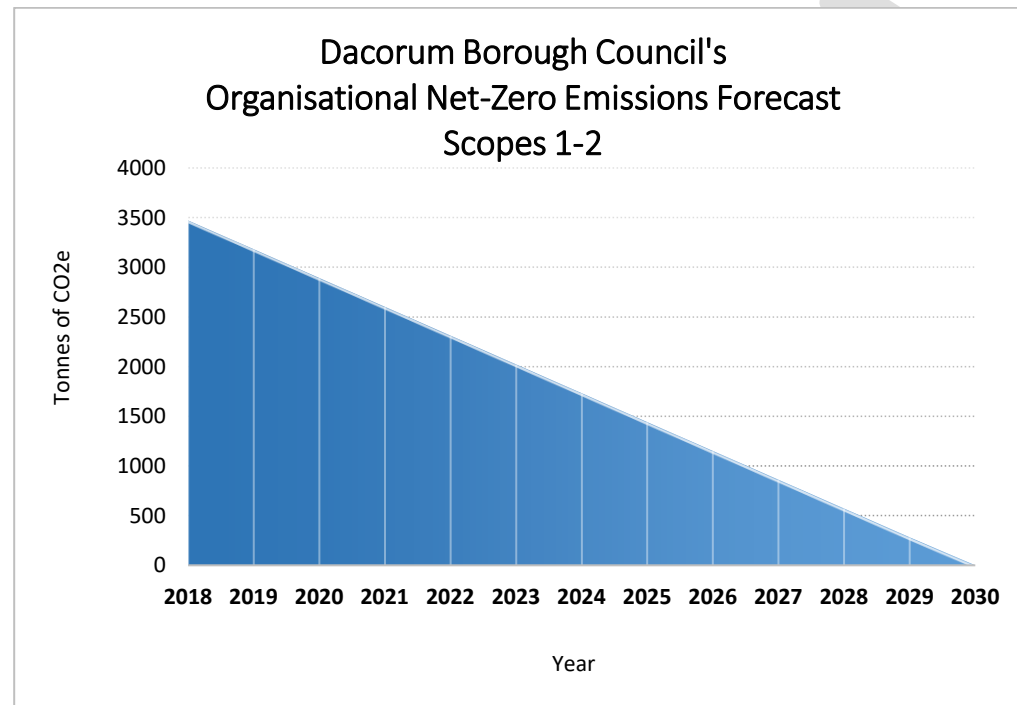
Reaching Net-Zero Emissions

Objective 1:

Being net-zero as an organisation by 2030

Our objective for reaching net-zero as an organisation by 2030 will be for Scopes 1 and 2 only. The majority of emissions come from gas (61%), then electricity (27%) and finally council vehicles (12%).

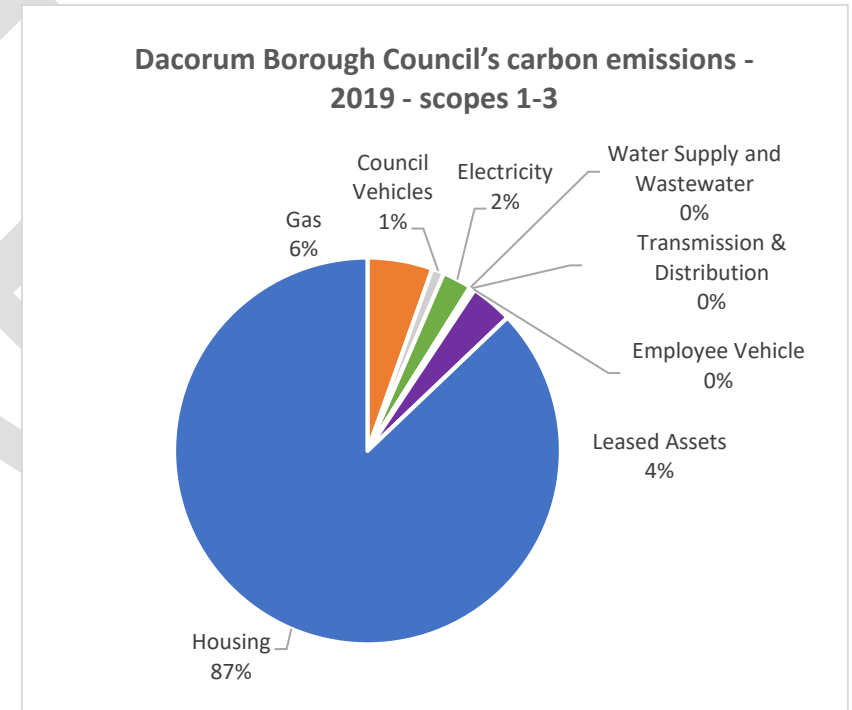
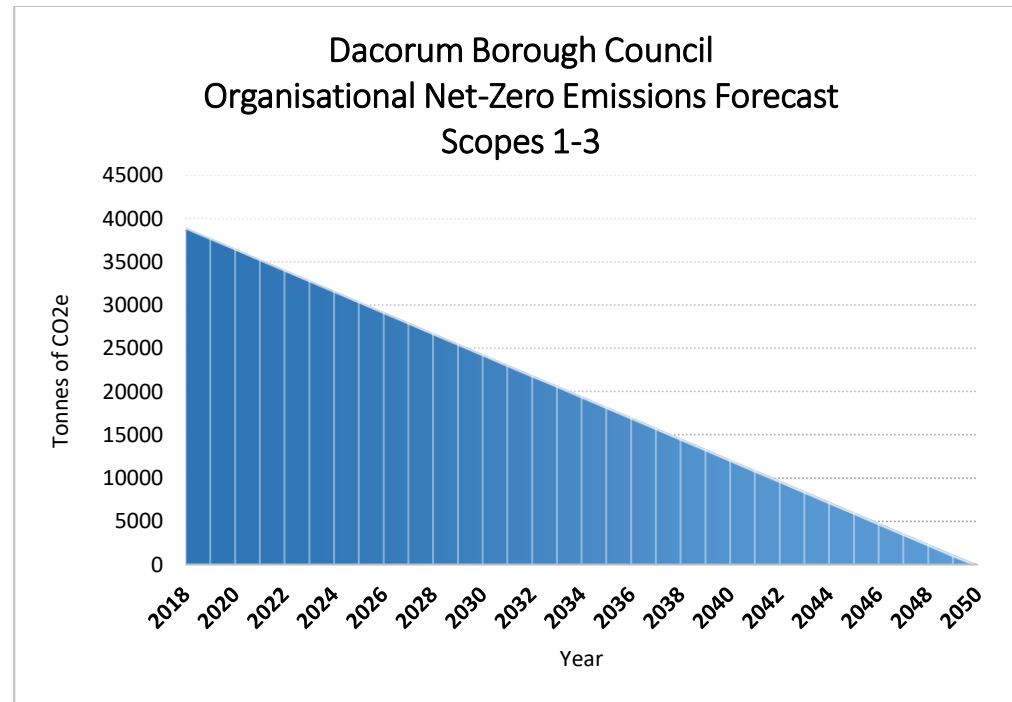
Measuring progress: By 2025, the organisational emissions should have dropped below 1440 tonnes of CO₂e for us to be on track for reaching net-zero by 2030.



Objective 2:

Having a net-zero housing stock by 2050.

Measuring progress: By 2025, the organisational emissions should have dropped below 30,500 tonnes of CO₂, and to below 34,500 by 2030, for us to be on track for reaching net-zero by 2050.



Objective 3:

Supporting the borough to become net-zero as quickly as practicably possible, by 2050 at the latest.

Measuring progress: By 2025, the borough's emissions should have dropped below 500,000 tonnes of CO₂, and to below 400,000 by 2030, for us to be on track for reaching net-zero by 2050.

Cumulative emissions

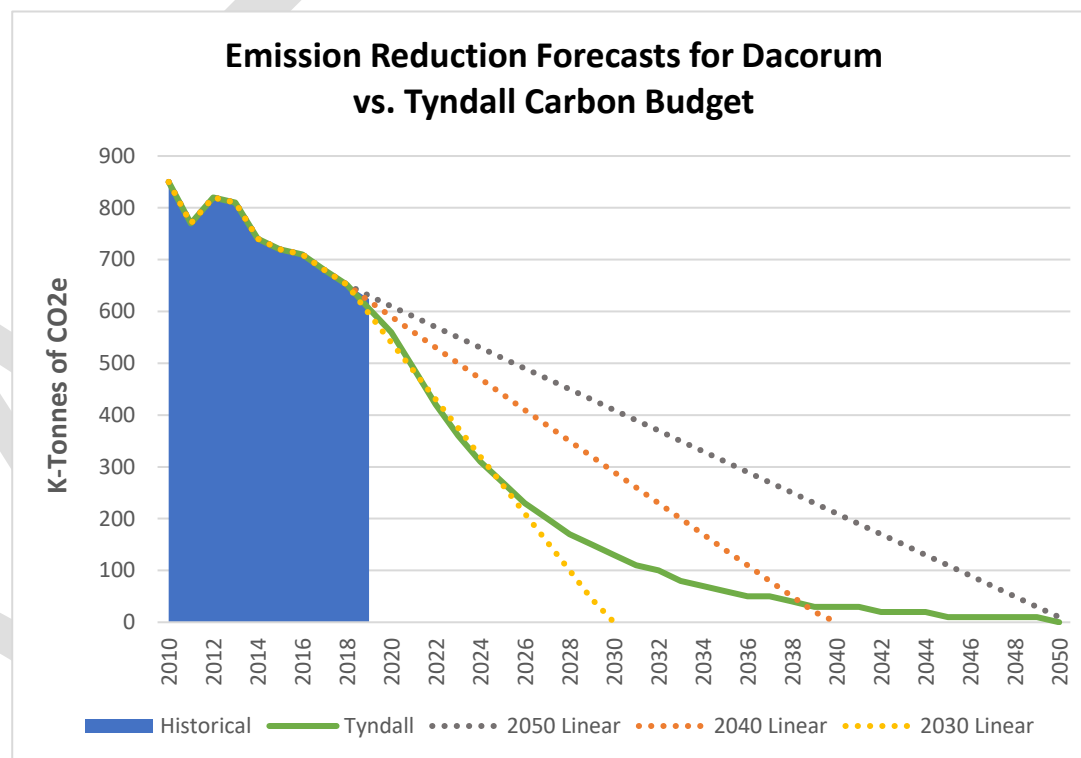
Once carbon dioxide reaches the atmosphere it can take between 300-1000 years to breakdown.

For this reason, it is crucial to take steps to lower emissions as quickly as possible in order to lower the cumulative amount of emissions.

The Tyndall Centre have outlined an emission reduction curve based on a carbon budget that has been specifically shaped for Dacorum and allows for cumulative emissions of 4,050,000 tonnes of carbon. This is based on the commitments made in the United Nations Paris Agreement. Read more about the [Tyndall report](#).

Forecast lines have been added onto the graph to demonstrate linear reductions for reaching net-zero by 2030, 2040 and 2050. The cumulative emissions would be as follows:

- **2,925,000** tonnes of CO₂ if net-zero by 2030
- **6,100,000** tonnes of CO₂ if net-zero by 2040
- **9,610,000** tonnes of CO₂ if net-zero by 2050



The cumulative emissions which will be in the atmosphere by the time we reach net-zero if we follow a linear route is more than double our carbon budget set by the Tyndall Centre. This demonstrates that we need to move as quickly as possible to help reduce the borough's emissions as significantly as we can.

Offsetting

In order to reach our net-zero targets there will be a need for 'offsetting' any emissions that we cannot avoid or reduce. This can be done through initiatives such as increasing the amount of renewable energy produced in the borough and capturing carbon naturally – such as with additional tree-planting. We will be developing a Carbon and Biodiversity Offset Fund to help pay for environmental projects

These schemes will be included in our CEE Action Plan and are highlighted throughout this strategy.

PLANNING FOR ACTION

Climate and Ecological Emergency Action Plan

We have broken down the areas that we will be focusing on to achieve our objectives into four key areas:

1. Sustainable Transport
2. Energy Use in Buildings
3. Improving Biodiversity
4. Sustainable Communities

As shown by the emissions data, transport and energy used in buildings are the two largest emitting sectors. However, as the Council itself is responsible for less than 4% of the borough's emissions, a large focus of our work will be supporting change from the wider community.

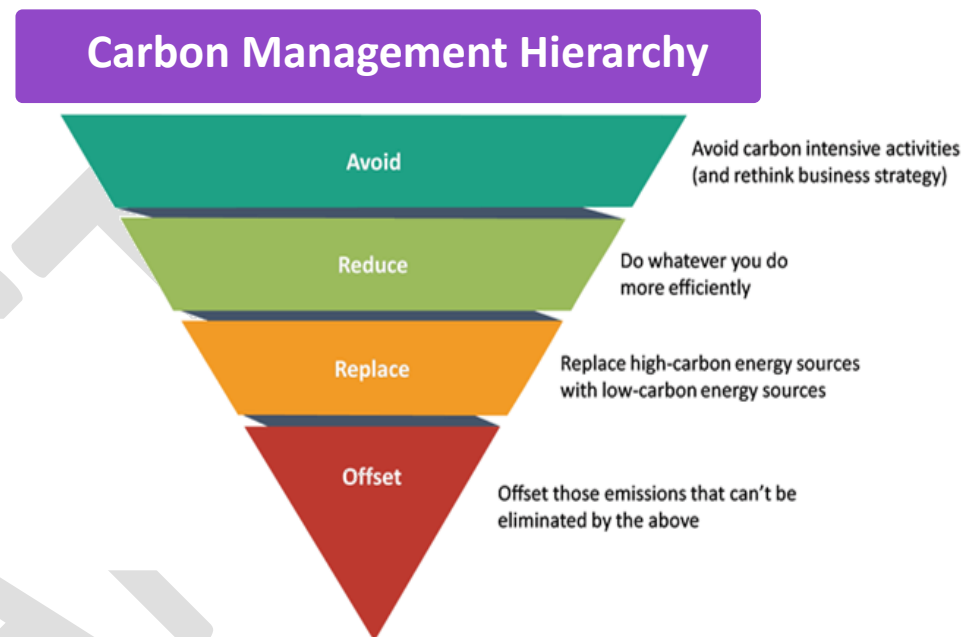
A Climate and Ecological Emergency (CEE) Action Plan has been developed which will collate all of the actions across all of our key work areas that will help us achieve our objectives.

The CEE Action Plan is broken down into short, medium, long-term and ongoing actions. It will remain a 'live' document – meaning that it will be under constant review and development and be updated regularly to reflect the progression of projects, initiatives and events. We will use it to track, monitor and report our progress on particular targets and assign responsibilities. Before actions are added into the CEE Action Plan, they will be evaluated to ensure that they are:

- Progressing the pathway to reaching our key objectives by their respective deadlines
- Following the Carbon Management Hierarchy, where applicable
- Evidence-based
- S.M.A.R.T. goals
- Futureproof
- Suitably ambitious

Within this strategy we outline some of the progress made in these key areas so far, as well as provide a high level overview of some of the actions that we will be working on. We have broken these down into internal and external actions, as well as suggested actions that individuals can take in these areas as well. This is by no means a comprehensive breakdown but is designed to provide an insight into areas of focus.

We will release an annual Climate and Ecological Emergency Report to outline progress made on our objectives and to report on the borough's emissions.



Spheres of Influence

The Council is able to make a larger impact through its '*spheres of influence*'.

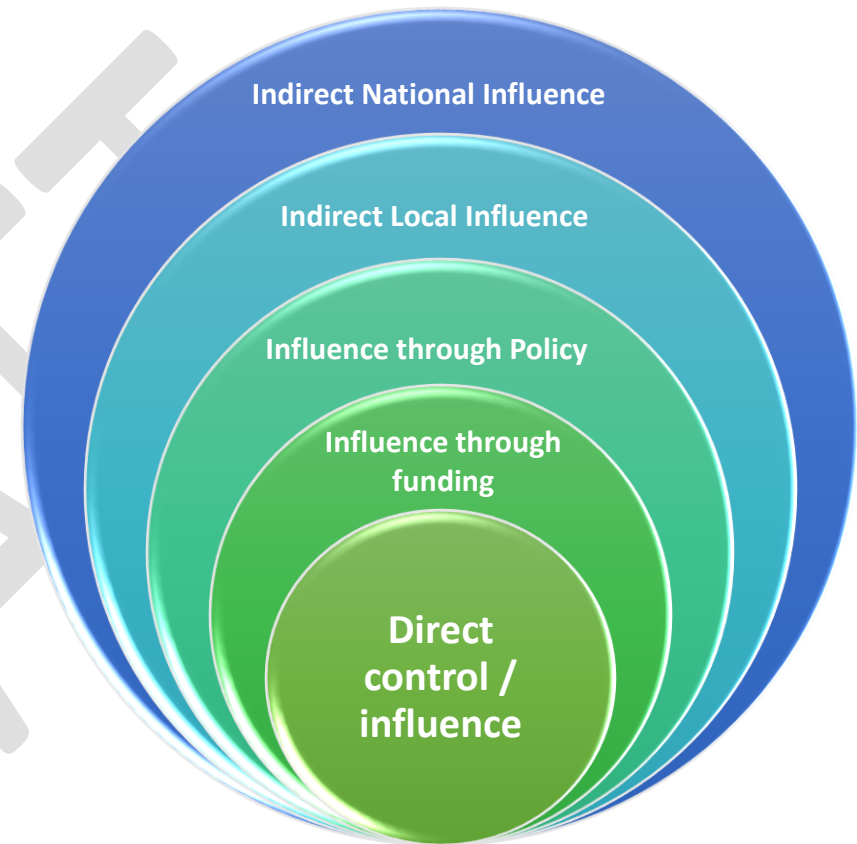
The Council has limited powers, responsibilities, resources and finances. Many of the changes that will be required to achieve our climate targets will be the responsibility of others including public, private and third sectors and individuals. It is therefore important that these net-zero targets are understood to be everyone's responsibility.

As a local authority, we are uniquely able to influence other areas outside of our direct control through funding and policy, as well as having additional indirect impacts locally and nationally.

These 'spheres' determine whether the actions the Council undertakes is direct and internally acted upon, done in partnership with others, or whether it is an indirect policy, funding or education role we have to play.

The impact the Council can have should not be underestimated as a third of UK emissions comes from residential buildings, surface transport and waste – all of which are key areas which councils can influence.

As we develop our CEE Action Plan, we will ensure that we will be considering all of the ways in which we can utilise our 'spheres of influence' to achieve the best possible impact and outcome.



Partnership working

The Council work closely with a range of partners to deliver on various projects.

One of the original pledges when making the Carbon Emergency declaration was to “*work with the established groups of Hertfordshire Public Sector Organisations to review their services and implement measures to reduce their impact on the environment and climate breakdown*”.

Sustainable Hertfordshire

Hertfordshire County Council have also declared a climate emergency and have set out their three key commitments to make Hertfordshire cleaner, greener and more sustainable:

- 1. Lead in our own operations:** As an organisation, they want to be carbon neutral by 2030 and improve nature on their land by 20% by 2030
- 2. Enable sustainability with our programmes, policies and decisions:** In Hertfordshire, they want to be a net-zero carbon county before 2050 and to improve wildlife across the county by 20% by 2050
- 3. Inspire businesses and residents to take action:** They will ask energy companies to develop a regional net zero energy strategy; support public transport growth, including taxi, bus and rail and encourage walking and cycling over car travel and promote more low emission vehicles and charging points.

Hertfordshire Climate Change and Sustainability Partnership

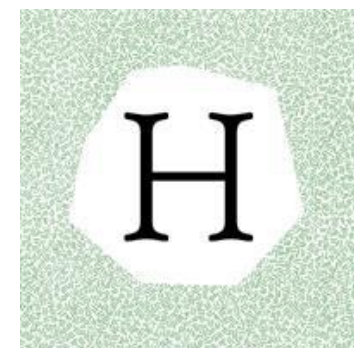
The Hertfordshire Climate Change and Sustainability Partnership (HCCSP) was formed in March 2020 and consists of all 10 districts and boroughs, Hertfordshire County Council (HCC), and the Hertfordshire Local Enterprise Partnership (Herts LEP). The partnership works collaboratively to identify joint work programmes on climate change, as well as wider sustainability and environmental issues throughout Hertfordshire. More information can be found on their website: www.hccsp.org.uk



Hemel Garden Communities

Hemel Garden Communities (HGC) is an ambitious development programme in partnership with St Albans District Council, HCC and the Herts LEP.

The project aims to transform Hemel Hempstead and create attractive and sustainable new neighbourhoods and communities to the north and east of the town, through the delivery of over 11,000 new homes. New neighbourhoods will be set around local centres, green spaces and play areas, all easily accessed on foot. Sustainable travel such as walking, cycling and public transport will be given priority as they aim to target a greener, healthier environment, which includes open spaces as well as new country and district parks.



Climate and Ecological Emergency - Internal High Level Actions

High level actions the Council will take to ensure it achieves net zero for Scopes 1 and 2 (emissions directly under our control) by 2030 and for Scope 3 (where the Council owns the buildings but doesn't control the use of energy) by 2050 at the latest.

Buildings owned and used by the Council to deliver services.

The Council will carry out the surveying work, initially on our main buildings (The Forum, Berkhamsted Town Hall, Victoria Hall, Cupid Green Depot, Adventure Playgrounds and Cemeteries) to determine the initial work required to make them as energy efficient as possible. This will take place in the next 12 months.

Following this a programme will be delivered to carry out the works required. Initially, this will be largely improvements to insulation plus installation of Solar Panels where possible. Achieving net zero will require non-fossil fuelled efficient and economic heating systems which currently are not yet sufficiently developed but should be in the next couple of years as we move away from gas.

Government decarbonisation grants have been made available for 'shovel ready projects' that have sufficient evidence, which is why it is crucial to get these sites surveyed.

New build Council Housing

The Council's programme of building new Council homes will achieve at least EPC B and will progressively move as close to net zero carbon as possible. This will require a credible and affordable alternative to gas heating.

Converting the Council's vehicle fleet and machinery from fossil fuel powered to green.

This will start by replacing petrol/diesel vehicles as they end their useful life. Initially this will focus on the smaller vehicles.

Our refuse freighters are only a couple of years old and have a lifespan of 7-8 years – as electric alternatives are not as efficient and are currently considerably more expensive. Replacing this part of the fleet is likely to start closer to the 2030 target date.

Introducing an effective offsetting programme

Offsetting is taking action that produces a reduction in greenhouse gas emissions and will be an important part in any carbon reduction plan. Examples are installing green energy such as Solar Farms and Wind Turbines, tree planting and other biodiversity work. It may take the form of

investment in green projects run by the private or public sector. The Council will need some offsetting and will introduce an investment programme to deliver this.

Retrofitting our 10,250 Council homes to achieve net zero carbon by 2050

As 87% of the Council's emissions come from our council homes this is by far the largest investment that will be needed to achieve net zero carbon. The approach will be 'fabric first' where the energy efficiency improvements like insulation and Solar are done before heating systems are changed. Currently there is no alternative to gas that is affordable to run for many tenants. Air and ground source heat pumps are part of the solution for homes not on the gas grid though they often require a secondary heating supplement to achieve acceptable temperatures. The Council will aim to have delivered the energy efficiency works to 90% of the stock by 2030. Introduction of non-fossil fuel heating will commence after 2030 as soon as a credible and affordable alternatives have become generally available.

Revising the Council's approach to procurement of contracts for services to maximise sustainability in delivery

This will involve reviewing contracts coming up for renewal or re-tender and for completely new contracts. Procurement Services will work with Services to build in the appropriate requirements.

Biodiversity Strategy and Action Plan

The Council is already working on developing a Biodiversity Action Plan and this will guide the way in which we build in more measures to improve biodiversity on Council owned land. This will also assist a wide range of voluntary and other organisations to move their land management in the same direction. Involvement of the community will be vital in helping achieve a sustainable Dacorum.

Increasing the Council's Recycling rate.

The Council will continue to work to increase the recycling rate in the Borough progressively with a recognition that early progress will assist the decarbonisation of the Borough.

Climate and Ecological Emergency - External High Level Actions

High level actions the Council will take to assist the Borough and its businesses and residents achieve net zero carbon by 2050.

As a borough, Dacorum must reduce its emissions at a rapid speed in order to remain within its designated carbon budget as per the Paris Agreement. Ideally, borough emissions need to drop by approximately 57% by 2025 compared to 2019 levels.

The Council accounts for less than 5% of the borough's emissions. For this reason, a large focus of the Council's work must be on supporting external action.

Buildings owned by the Council and leased to other organisations.

This includes Neighbourhood Centre shops, flats and maisonettes on top of the shops, Community Centres, commercial lettings and other properties leased to partner organisations including community organisations and the Sports Centres. Given the large volume of these, the deadline is 2050. The programme will commence with the surveying work and subsequent actions that this points to.

Ensure that the new Local Plan will result in the highest level of sustainable new development that the Planning regulations allow.

The developing local plan already includes requirements to deliver new development to at least the highest standards within government guidance and to promote net zero carbon development. It also has very strong protection for biodiversity and the environment requiring developers to ensure a biodiversity uplift. Where they can't they will have to pay the equivalent into a 'Biodiversity Offset Fund' which will help local sustainability action. Another key requirement for larger developments will be for them to demonstrate how they can deliver a sustainable place with a focus on accessible open space, facilities that are in walking distance and making it easier to walk and cycle.

Develop and implement a sustainable transport plan

This should encourage a move away from cars to walking, cycling and use of public transport together with a strategy to ensure we can engage with the private sector to install Electric Vehicle (EV) charging points and rapid charging centres in the Borough and that we have EV charging points in our Council car parks.

This element of work will be part of the Local Plan and all new developments and will be in partnership with Hertfordshire County Council, which is the Transport Authority. Some improvements will require government action and funding particularly in the move away from fossil fuelled vehicles.

We have already begun a project to predict electric vehicle requirements to 2030. As part of this work, it has been estimated that the number of electric vehicles in the borough will increase to 30,000 by 2030 (currently 1000). As over a third of our residents will be unable to charge their cars at home, in order to meet these demands we are likely to need around 700 chargepoints in the borough. We will have this as an ongoing and dedicated project to ensure these growing needs are met.

We are already taking action to install additional charging points in our own car parks and work on this will start in the next few months, however additional progress cannot be made without HCC's EV strategy.

The Council will work with home owners and the Private Rented Sector

A very large part of the CO2 emissions occur through the energy and heating requirements of the owner occupiers and Private Landlords properties. The government has pledged to ensure that rapid progress is made in achieving net zero carbon in the nations' homes by 2050.

The Council will play a key role in providing up to date information and advice to residents who want to improve their homes energy efficiency. Knowing where and how to access grant funding will be crucial and the Council will help in this.

We will also work directly with Private Landlords to make sure that they take advantage of grant support that will improve energy efficiency, making their properties better insulated and in due course as close to net zero carbon as possible and also add value to their properties in doing so.

Economic Development Regeneration strategy

The Council are developing an Economic Development Regeneration strategy to ensure that sectors championing delivery of products and services which reduce carbon emissions are supported and encouraged to locate in the Borough.

We are already working with the Enterprise Zone – Herts IQ – at Maylands where 8000 jobs will be delivered in the next 15 years or so with a focus on both getting High Tech and Companies focusing on sustainability. This would include getting off-site construction manufacturers located locally to have a more local input into the new homes for the Borough.

We will also work with local businesses to help them decarbonise their current operations and to take advantage of the huge amount of work that will take place in bringing the homes in Dacorum up to fully sustainable standard.

Community action

Community awareness and participation in working towards net zero and improved biodiversity will be facilitated and encouraged.

Whether encouraging residents to cycle more or turn their thermostats down, behavioural change will be vital to reducing the borough's emissions and increasing biodiversity. Working alongside the community to engage, enable and educate will be critical in order to achieve net-zero by 2050.

The Council will use its 'spheres of influence' to encourage as much change as possible through a wide programme of frequent campaigns and initiatives, utilising local, national and global action.

To support with this, Dacorum's Climate Action Network (Dacorum CAN) will be established and will work to deliver this programme, as well as encourage volunteer activities and partnership working and host events. The network will encourage residents to "think global and act local" and will work to bring together local groups and individuals. This will help to drive progress forward, amplify campaign messages, and support local initiatives and projects to get off the ground.

A range of sub-groups will be created to focus on specific demographics, such as for schools - Dacorum's Young Climate Action Network (You-CAN), businesses, and Parish and Town Councils, etc.

In order to help encourage action from local groups we have launched an annual Green Community Grant scheme, which has already given away £10,000 to local projects.

To keep the community informed and engaged, we will host an annual Climate and Ecological Emergency conference and networking event. This will update on and celebrate progress within the borough, as well as provide an update on the work that needs to be done in order to meet our environmental targets. Alongside this we will also publish annual Climate and Ecological Emergency progress reports on our website, as well as annual emissions reports for the wider borough.

SUSTAINABLE TRANSPORT

Sustainable Transport

In Dacorum, transport is responsible for over 40% of the borough's greenhouse gas emissions.

Sustainable Transport Hierarchy

The 'Sustainable Travel Hierarchy' is the most efficient way of reducing the borough's emissions.

Making changes to the way we travel will be crucial for meeting our net-zero goal. This will involve significantly reducing car use, increasing active travel (such as walking and cycling) and potentially eliminating some journeys altogether. Hertfordshire County Council are the local transport authority. The Government will need to legislate for change and provide funding and support moving forwards.

What will we be doing within the Council?

In order to reduce the transport emissions from our own organisation and staff we will be:

- Creating a Green Transport Plan and encouraging other local organisations to do the same
- Encouraging virtual meetings, flexible working and working from home.
- Exploring and rolling out cycling and lift share incentives

What will we be doing to support others?

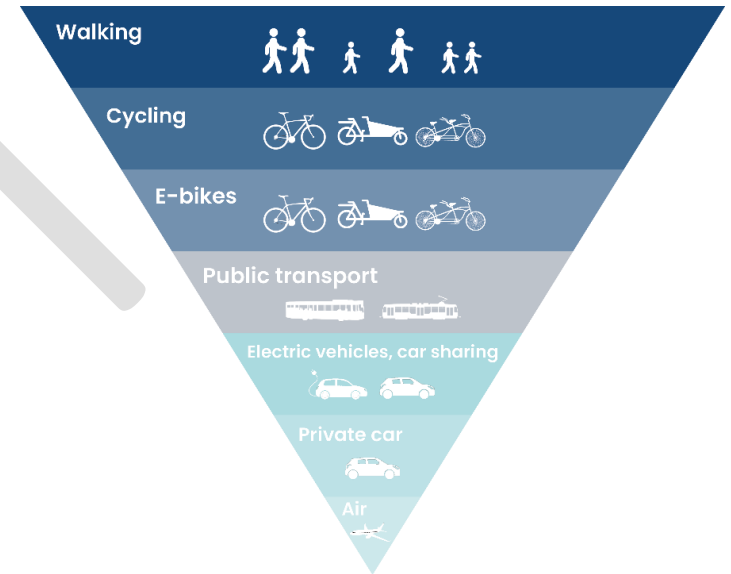
There are a number of ongoing projects that are taking place to improve sustainable transport throughout the borough – for example with Smart Go Maylands, the Hemel Garden Community project, and Hertfordshire County Council.

- Creating a Sustainable Transport Strategy and delivering projects that improve walking and cycling routes and infrastructure
- Delivering campaigns and initiatives that encourage and enable active transport – such as bike confidence classes and the second-hand bike market.
- Exploring the feasibility of implementing rental schemes for bikes, e-bike and e-scooters

What can you do?

By rethinking the journeys that you make on a regular basis using the Sustainable Transport Hierarchy, you could drastically cut your personal carbon footprint, as well as other co-benefits including saving money, leading a healthier lifestyle and improving the air quality of your local neighbourhood.

- Consider whether you are able to eliminate any journeys, such as by working from home more frequently, or doing a weekly food shop instead of daily.
- Identify what the barriers are that prevent you from walking, cycling or scooting more regularly and think how you can overcome these.
- Make pledges that are realistic for yourself and your capabilities – such as pledging to always walk if the destination is within a mile away



Electric Vehicles

The number of electric vehicle drivers is rapidly growing and it's a trend that's set to continue.

A third of the borough's greenhouse gas emissions come from cars. From 2030 the sale of new petrol and diesel vehicles will be banned.

Electric vehicles (EVs) have zero tailpipe emissions, making them better not only for drastically helping to reduce emissions in comparison to regular cars, but for improving our air quality too. There are also numerous key benefits for owners such as savings on fuel and running costs.

As shown by the BEIS graph, EVs produce less than 30% of the emissions of fossil fuel powered cars. Additionally, as the National Grid also decarbonises and is powered by more renewable energy sources, the greenhouse gas emissions from electric cars will fall even lower in the future.

As such switching to EVs will be a crucial step in order to lower our emissions. However, as outlined by the Sustainable Transport Hierarchy, we must also drastically reduce the amount of journeys made by car at the same time.

What will we be doing within the Council?

- Installing EV chargepoints in our car parks for staff (programme commencing 2021/22)
- Providing the intelligence on demand to facilitate the private sector to invest in charge points in the Borough
- Replacing our fleet with electric vehicles, where technology allows, and optimising our routes
- Consider establishing an electric car pool scheme for staff

What will we be doing to support others?

- Collecting evidence about the need for EV infrastructure around the borough and using this to support applications for funding and land use.
- Developing an Electric Vehicle Strategy and installing more EV chargepoints throughout the borough on our own land.
- Working in partnership with other organisations to encourage them to increase the number of EV chargepoints available for residents

What can you do?

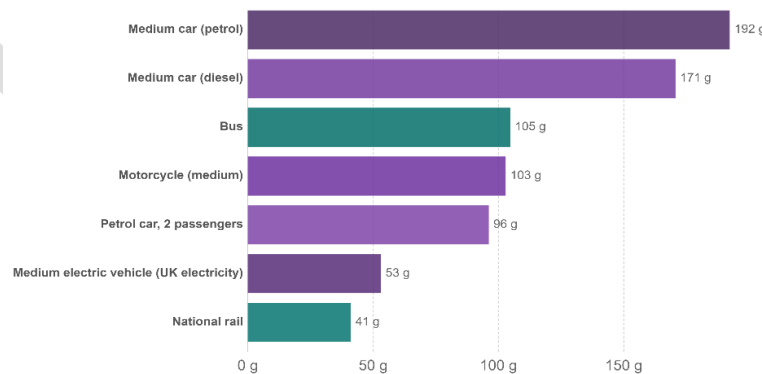
If you would like to learn more about electric vehicles, the Energy Savings Trust website has lots of useful information and advice.

- Make your next vehicle purchase an electric vehicle
- If you have a driveway at home, use the governments Electric Vehicle Homecharge Scheme and receive a grant of up to 75% of the cost of a chargepoint.
- Encourage your local businesses to install EV chargepoints in their car parks.

Carbon footprint of travel per kilometer, 2018

The carbon footprint of travel is measured in grams of carbon dioxide equivalents per passenger kilometer. This includes carbon dioxide, but also other greenhouse gases, and increased warming from aviation emissions at altitude.

Our World
in Data



Source: UK Department for Business, Energy & Industrial Strategy. Greenhouse gas reporting: conversion factors 2019.
Note: Data is based on official conversion factors used in UK reporting. These factors may vary slightly depending on the country, and assumed occupancy of public transport such as buses and trains.

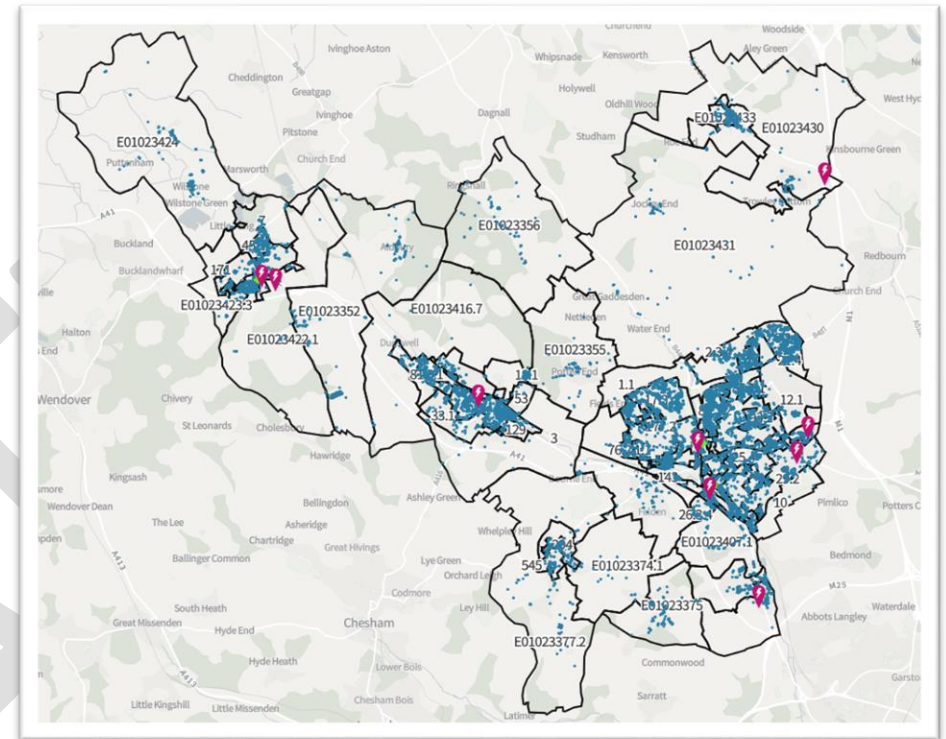
CC BY

Planning for the Electric Vehicle Re-volt-ution in Dacorum

Whilst the majority of residents will be able to easily charge their electric vehicles from home on their own driveways, this option will not be available for many of Dacorum's households.

As part of our 'discovery' phase for EVs, we have been working with sustainability consultants Field Dynamics in order to gain a greater understanding of what the transition to electric vehicles will look like within Dacorum. The results from this work have showed us that:

- By 2030 there is forecast to be at least 30,000 electric vehicles in the borough – currently there are around 1000.
- At least a third of households (over 20,000 homes) do not have driveways or garages and will be reliant on alternative charging infrastructure
 - These households are symbolised by blue dots on the map
- The borough is estimated to need around 700 publically available chargepoints to facilitate the extra demand.
 - Achieving this will need a collaborative effort between all land-owners, businesses and organisations.



The Government is developing a plan to accelerate the decarbonisation of transport which will set out in detail what government, business and society will need to do to deliver the emissions reduction needed. Once released, we will review our planned actions and objectives and ensure they align with this plan.

Listening to our residents

We have an ongoing Electric Vehicle Resident Survey on our website, which enables us to hear from residents directly and understand their needs.

From this data we have learned that:

- Over 60% of respondents plan on buying an electric vehicle within the next five years, or own one already.
- The two main reasons why people want to switch to electric is to help mitigate the climate emergency and to help improve air quality.
- The main concern for switching to EVs is availability of charging points. Over 60% of respondents would be encouraged to buy an EV sooner if more chargepoints were installed in their local area.

If you are interested in taking part in the survey, please visit: www.dacorum.gov.uk/sustainability

Commuting

In the UK, commuting is responsible for around a fifth of all miles travelled.

During the COVID restriction lockdowns many people were able to discover new, more flexible ways of working. It will be important to embrace these positive changes moving forward.

For the UK to reach its national climate targets, we require a reduction in car use by 2030 of between 20% - 60%, depending on the speed of the switch to electric vehicles. If people are able to work from home more frequently and eliminate these commuting journeys, then this will help put us on track for reaching our climate targets.

If you do still need to travel by car, even by being flexible about travelling at different off-peak times to avoid contributing to slow-moving traffic can help as this helps to reduce emissions from sitting still with an engine idling.

'Learning from Lockdown'

We ran a survey called 'Learning from Lockdown' to identify how behaviours changed due to the restrictions in ways that could be beneficial for the environment.

As many needed to shield, furlough or work from home, residents told us that they noticed several benefits to there being less cars on the road; including less air pollution, more wildlife and quieter and safer roads.

This led to 9 out of 10 residents telling us that they want to see less cars on the road in the future.

Over 75% of participants said that they will be using video conferencing to reduce the need for external meetings and commuting. Before COVID, change on such a large scale would have been unheard of and shows how quickly society can adapt when they need to. It is crucial this positive change is harnessed moving forward.

We also gained several insights around cycling within the borough:

- A third of participants cycled more over lockdown.
- Over a third of people said that the key barrier to them cycling more was concerns about road safety.
- Nearly 1 in 4 participants, said they would be interested in bike classes to increase their confidence, which many listed as a barrier to them riding more
- Half of all participants own a bike - however 16% of these do not work.
- 14% of all participants don't have a bike, but want one – of these, over a third listed 'I cannot afford a bike' as their reason for not having one.

To help increase cycling rates in the borough, we will be using this information to address the issues highlighted. Many of the barriers can be overcome with offering cycling confidence classes, encouraging a second hand bike market, promoting bike repair workshops and ultimately discouraging driving which will increase people's confidence on quieter roads. All of these have been factored into the initiatives which we will plan to incorporate into our CEE Action Plan.

To read more about the survey results, visit www.dacorum.gov.uk/sustainability

ENERGY USE IN BUILDINGS

Energy Use in Buildings

Heating rooms, generating hot water, and powering all of our appliances and devices as we go about our daily lives are all actions that use energy and consequently create emissions.

Energy Hierarchy

Following the Energy Hierarchy by being 'Lean, Clean and Green' is the most efficient way to reduce emissions from buildings.

- 1. Reduce energy demand**
- 2. Become more energy efficient**
- 3. Use renewable energy sources**

Reducing Energy Demand

What will we be doing within the Council?

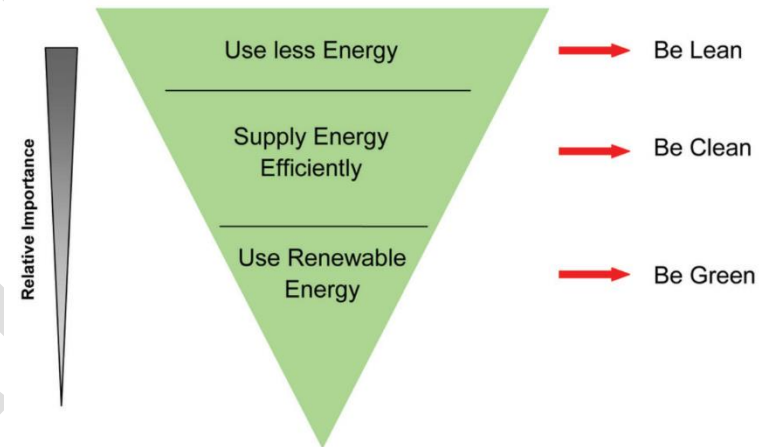
- Auditing our buildings to identify what improvements could be made – such as installing light motion sensors.
- Encouraging staff to turn off equipment when not in use
- Applying for funding to support with making our buildings as efficient as possible.

What will we be doing to support others?

- Launching an energy saving app in partnership with the Energy Saving Trust to support residents.
- Developing awareness campaigns and initiatives for residents to learn more about how to reduce their energy use.
- Developing awareness campaigns and initiatives for organisations to learn about how to reduce their energy use at in their own offices and buildings

What can you do?

- Get a Smart meter to monitor your energy use so that you can identify areas for improvement.
- Turn down your thermostat and make sure to put on a jumper before turning the heating on.
- Get into the habit of turning appliances off, not just putting them on stand-by.



Becoming more Energy Efficient

What will we be doing within the Council?

- Ensuring that all new build homes meet high energy efficient requirements
- Making improvements within our own buildings, such as improving insulation and switching to LED lightbulbs
- Only purchasing energy efficient appliances

What will we be doing to support others?

- Carrying out a retrofitting programme on the Council Housing stock to improve the EPC ratings of homes
- Developing targeted initiatives and campaigns – for example, encouraging landlords to reach minimum energy efficiency standards
- Promoting available funding to help carry out the improvements needed – for example ECO funding

What can you do?

- Find out your homes EPC Rating and identify what improvements you can do that will improve your EPC rating to as high as you can get it.
- Take a look at some energy saving guides (and download our app!) and follow the advice for how to make changes around the home
- Only purchase energy efficient appliances

Using Renewable Energy Sources

What will we be doing within the Council?

- Switching to a genuinely 100% green energy supplier
- Investigating whether we could install renewable energy sources on our buildings, such as solar panels or air or ground source heat pumps
- Investigate our options for using renewable energy technology, such as solar panels, throughout the borough

What will we be doing to support others?

- Investigating partnering with a solar community project or bulk-buy scheme
- Investigating the feasibility of developing a large-scale community solar farm within Dacorum
- Promoting available funding to help install renewable energy measures

What can you do?

- Switch to a green energy tariff (ideally 100% renewable energy).
- Investigate whether you could install renewable energy sources on your property, such as solar panels or an air or ground source heat pump
- Investigate whether you could have a home energy or heat storage system at your property.

Homes

Homes account for over a third of the borough's total CO2 emissions.

Emissions from our homes represent approximately a quarter of the average person's carbon footprint. There are a range of actions that can be taken to reduce this – some are quick and easy and will save you money, others could be expensive to install but are likely to save you money and emissions long-term.

The borough has over 66,500 homes with several thousand more expected to be built over the coming years and so focusing on reducing these emissions will be crucial for meeting net-zero carbon targets.

In order for us to reach our net-zero targets by 2050, we must make sure that we make our homes as energy efficient as possible. This requires the Government to provide funding for households to carry out the work and support to the construction industry to be ready for the change to non-fossil fuel heating.

Energy Performance Certificates (EPC ratings) are ranked from A (very efficient) to G (very inefficient).

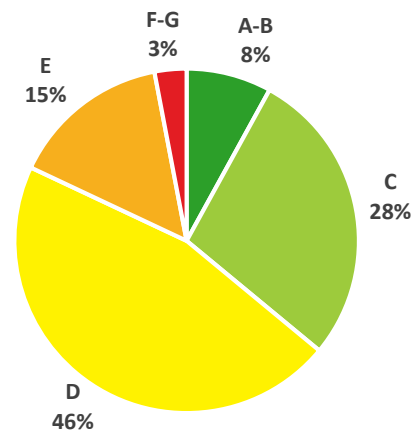
A home is required to have an EPC rating when it is constructed, let, or has been sold in the past 10 years. EPCs also include recommendations on measures that would make your home more energy-efficient, along with estimated costs for implementing the changes and the potential savings you could make.

You can find yours online through the [government website](#).

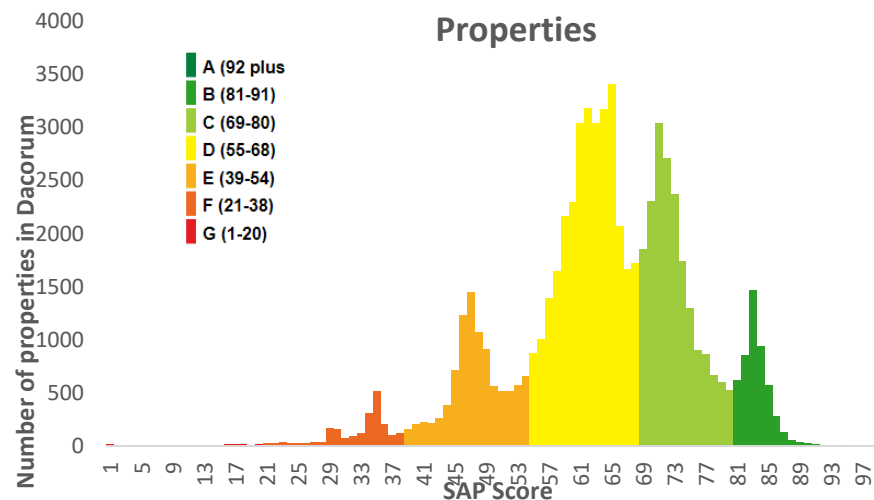
As part of our 'discovery phase', we have been working alongside the Energy Savings Trust (EST) to understand the actual and estimated EPC breakdown of homes around the borough.

The Domestic Minimum Energy Efficiency Standard (MEES) Regulations set a minimum energy efficiency level for private rented homes. Since 1 April 2020, landlords can no longer let properties if they have an EPC rating below E. The minimum standard is set to increase to an EPC energy rating of D by 2025 and C by 2030. As shown by the chart, nearly two thirds of homes in the borough are currently at a rating of D and below.

EPC Ratings of Dacorum's Homes



EPC Profile Breakdown for All Dacorum Properties



Businesses

In Dacorum, emissions from industry and commercial use is responsible for over 22% of the borough's greenhouse gas emissions.

An ambitious project has been launched to support the decarbonisation of local organisations.

The Eastern New Energy (ENE) research project, led by the University of East London, aims to accelerate the race to net zero at a ground roots level by decarbonising Maylands Business Park in Hemel Hempstead.

Herts IQ (of which Dacorum Borough Council is a partner) has been instrumental in bringing £3million worth of investment to this site, which is one of the UK's largest business parks and home to over 650 businesses.

The overall project is worth £10.2million and is spread over various other areas of the Eastern region. The project will help local businesses and organisations identify ways to rapidly decarbonise communities, buildings and transport.

Many UK business owners understand that they must reduce their own carbon footprint by 2050, but many don't know where to start. As well as helping businesses to develop new technology, the ENE project will address the challenges that business owners face by analysing the barriers to adopting low carbon practices and providing practical solutions on the ground.

The ENE project will work with businesses in Maylands Business Park to reduce their carbon footprint by providing free advanced metering systems, energy audits, vehicle fleet audits and grants for the deployment of energy measures. It will also collaborate with businesses to develop an Energy Services Company (ESCo) to help deliver Net Zero action plans.

For businesses based in Maylands that take part in the project, it is also offering free fleet and energy audits that include recommendations for cost effective energy measures.

The Herts IQ group are also already working to improve sustainable transport across Maylands in addition to this project.

The ENE project is funded by the England European Regional Development Fund as part of the European Structural and Investment Funds Growth Programme. This ambitious pilot is funded until early 2023, and if proven successful, will provide a model for other business parks elsewhere in the country.



IMPROVING BIODIVERSITY

Improving Biodiversity

In the past 50 years, global wildlife populations have decreased by 68%

The last mass extinction event was 66 million years ago, when an asteroid collided with the Earth and famously wiped out the dinosaurs. We are now entering the sixth mass extinction period. This new period is called the Anthropocene and is caused by human activities such as habitat loss and degradation, species overexploitation, invasive species and disease, pollution and of course, climate change.

We can improve biodiversity on a local level through direct actions such as growing more trees, plants and flowers, improving green spaces for local wildlife, changing how often we cut grass and many more.

What will we be doing within the Council?

- Developing a Biodiversity strategy to ensure that we are managing council land in a way to maximise biodiversity
- Implementing a Biodiversity Net Gain Supplementary Planning Document
- Developing a Carbon and Biodiversity Offset Fund to help pay for environmental projects

What will we be doing to support others?

- Working with local organisations such as HCCSP and Herts and Middlesex Wildlife Trust to identify areas of joined up working
- Running a Green Community Grant scheme for local groups
- Running a variety of campaigns, initiatives and events for organisations, local groups, schools and individuals.

What can you do?

- Improve wildlife in your garden by looking at resources such as the [Herts and Middlesex Wildlife Trust](#) website.
- Live more sustainably, thinking of the direct and indirect impacts of your actions.
- Get involved with local wildlife groups and help to support local projects and initiatives



As part of our 'Discovery' phase, we have been gathering a range of information:

- Treeconomics inventory of all trees on the Council's land.
- Working to establish a 'biodiversity baseline' for the borough, in partnership with the HCCSP
- Carrying out a 'Green Spaces Audit' for all council-owned land
- HCC are working on a tree canopy project

Hertfordshire State of Nature report

The Herts and Middlesex Wildlife Trust published a '[State of Nature](#)' report in 2020 which highlights information about biodiversity locally. We are very fortunate to have this information as they are one of the only Wildlife Trusts in the UK that has been able to create a report such as this.

Since 1970, 10,863 species have been recorded in Hertfordshire. The report shows that 1 in 5 of the species that were able to be assessed are now either threatened, or have gone extinct.

Biodiversity Net Gain

National planning guidance and the forthcoming Environment Bill require development to create a 10% net gain for biodiversity for a site.

Where these measures are not able to be achieved onsite, payments can be made to a biodiversity net gain fund equivalent to the cost of achieving the required number of biodiversity units elsewhere.

Trees

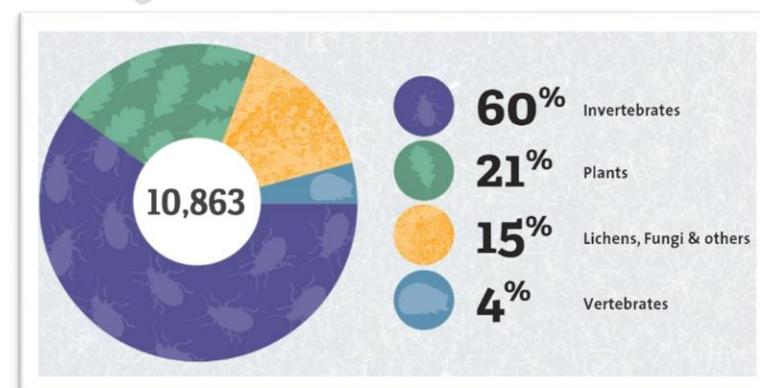
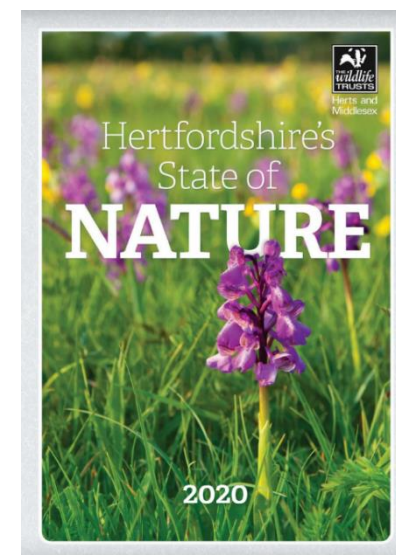
Trees are important as they help towards both reducing emissions, as well as improving biodiversity.

We are developing a tree planting strategy which will see several thousand more trees being added to the borough. Over 1000 new trees have already been planted since 2020.

Wildflowers

The UK has lost 97% of its wildflower meadows in less than 100 years.

To increase the number of wildflowers locally we are designating more spaces for wildflowers and reviewing cutting processes. To celebrate Biodiversity Day 2021 we gave away over 1000 packets of wildflower seeds for free to residents and local schools. We also ran a primary school competition with an insect sit-and-study centre as the prize.



SUSTAINABLE COMMUNITIES

Sustainable Communities

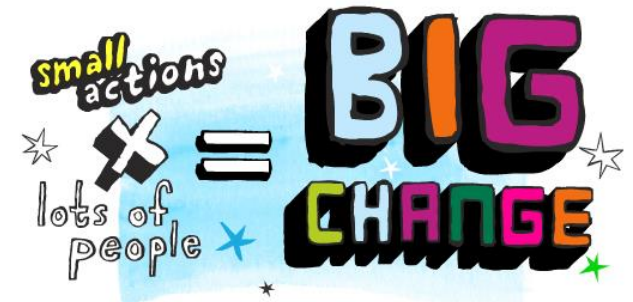
To tackle the Climate and Ecological Emergency, change will need to come from individuals and organisations.

Small Actions Create Big Change

With nearly 8 billion people in the world, it can be easy to believe that individual actions don't matter. But every single action has an impact on the planet. The climate and ecological emergency has gradually been caused by lots of little unsustainable actions that have all created big changes.

Whether considering biodiversity or carbon emissions, the consequences of our individual actions are often not contained within the borough itself and instead have negative impacts elsewhere – e.g. a simple action of eating a cheeseburger can be linked to the negative impact of deforestation in the Amazon rainforest.

Throughout our daily lives we can all choose to make more sustainable choices; from the food that we eat, to the products we buy, the journeys we make and the energy we use. The consequences all add up, which is why the climate and ecological emergency is *everyone's* responsibility. This is why adopting sustainable lifestyles together as a community is so important. It is by working together and thinking about the little actions that we can help to fix the problems that we have created. Of course we will also need big changes from governments and industries, but the best way to spark these larger changes is with people power.



What will we be doing within the Council?

- Introducing Sustainability Impact Assessments to analyse each new project or policy
- Rolling out Carbon Literacy Training to more staff and to Members
- Developing internal sustainability initiatives and campaigns for staff

What will we be doing to support others?

- Developing Dacorum's Climate Action Network and using our 'spheres of influence' as far as possible
- Running a Green Community Grant scheme for local groups
- Running a variety of sustainability campaigns, initiatives and events for organisations, local groups, schools and individuals.

What can you do?

- Find out your carbon footprint and identify areas where you can make changes that align with a 5 tonne lifestyle
- Consider your own 'spheres of influence' and how you can encourage more positive change
- Join Dacorum's Climate Action Network and work with us to take action locally

Dacorum's Climate Action Network (Dacorum CAN) brings together local individuals and organisations to 'think global and act local'.

Dacorum CAN supports, educates, encourages and enables its members to make positive environmental changes, which will help to tackle the Climate and Ecological Emergency.

The network will help facilitate and encourage meaningful change throughout the borough by providing a platform to help to bring together local individuals, community groups, schools and organisations to share ideas, initiatives and take action to drive down our emissions, improve biodiversity and increase sustainability.

The network will support the delivery of many of the community initiatives identified in our CEE Action Plan.

By working together we will be able to amplify our actions and make progress faster. Actions will include running environmental campaigns and initiatives; hosting events to increase public engagement; increasing environmental education and awareness through training sessions and presentations, and much more.

We will aim to engage with thousands of local residents throughout the borough, as well as organisations.

If you would like to join DacorumCAN, please email sustainability@dacorum.gov.uk

Dacorum Climate Action Network is free and open to everyone who lives, works and plays in Dacorum and pledges to take positive environmental actions.

Benefits of joining Dacorum CAN

- Discover local environmental events
- Access environmental webinars and training
- Discover local groups and initiatives
- Collaborate with like-minded people
- Stay up-to-date on local environmental initiatives
- Be inspired by Sustainability Superstars
- Receive information and advice about positive environmental actions



**THINK
GLOBAL**
**ACT
LOCAL**

Additional benefits for organisations...

- Amplify environmental projects and campaigns
- Free promotion of environmental events
- Find volunteers to help support initiatives
- Discover funding opportunities
- All organisations are welcome, including schools, community groups, businesses, charities, and more.

To join the network simply fill out a quick registration form: www.dacorum.gov.uk/dacorumcan

What's your carbon footprint?

Your carbon footprint is a measure of how many carbon emissions you produce in your everyday life. Calculating your carbon footprint helps you to understand what impact the actions in your daily life are having and how you are contributing to climate change.

You can find out your carbon footprint quickly and easily and see how it compares to the average UK or global citizen using [WWF's carbon footprint calculator](#). Your results are broken down into four key areas; food, home, travel and 'stuff' – which is essentially everything else that you buy or use.

- Average UK carbon footprint = **13 tonnes CO2e** per person
- Average global carbon footprint = **7 tonnes CO2e** per person.

WWF set a target of being 10.5 tonnes, however widely respected climate scientist Mike Berners-Lee recommends that we should be aiming for a 5 tonne lifestyle.

Green Community Grants

We have established a Green Community Grant scheme specifically to support projects in our community that benefit the environment, as well as Dacorum's residents. The purpose is to encourage and enable local groups to "*think global and act local*" whilst tackling environmental challenges.

Groups can obtain a maximum of £3,000. Proposed projects must demonstrate that they will actively help towards the mitigation of the climate and ecological emergency locally, whilst also engaging with or benefiting the local community. The projects with the greatest impacts will be awarded the funding.

Community Gardens and Orchards

Community gardens and orchards can be brilliant ways to create sustainable communities. We will be planning to establish more of these throughout the borough.

Locally grown produce can benefit the society in a number of ways: provide fresh and nutritious food, reduce the greenhouse gas emissions from its transport, improve self-sufficiency, increase climate resilience and improve the sense of well-being of the community.

In the 'Learning from lockdown' survey, over half of participants said that they would be willing to volunteer at a community garden. With 9 out of 10 participants telling us they would buy food from a local community garden. This would reduce the need for packaging, carbon emissions from transportation and storage, etc.

Reduce, Reuse, Recycle

The impacts of the items we choose to buy and how we dispose of them are often hidden, but by becoming aware of these and making sensible choices, we are able to have a positive environmental impact both on carbon emissions as well as biodiversity.

Supply chain impacts account for more than 80% of greenhouse gas emissions and more than 90% of the impact on air, land, water, biodiversity and geological resources. For this reason it is important to make conscious, ethical choices as consumers, whether you are an individual or an organisation.

Following the waste hierarchy by reducing, reusing and recycling as much as possible is a key element to developing a sustainable lifestyle.

To support with this, alongside the recycling service that we provide to residents we also work as part of WasteAware, the Hertfordshire Waste Partnership, to run a wide range of campaigns and initiatives throughout the borough. For example; Refill Hertfordshire, food waste challenges, Sustainable Clothes Swaps, reusable nappy initiatives, and more.



APPENDICES AND ADDITIONAL INFORMATION

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