



Dacorum Borough Council's
**CLIMATE AND ECOLOGICAL
EMERGENCY STRATEGY**

Dacorum Borough Council's Climate and Ecological Emergency Strategy

Foreword

The Climate and Ecological Emergency is a global issue and we are committed to playing our part in reducing carbon emissions. As a Council, we're responsible for less than 1% of direct carbon emissions within the borough. We understand that our wider role in helping to address the climate and ecological emergency will be supporting others in reducing and offsetting the remaining 99% of emissions.

We have made the Climate and Ecological Emergency one of our six Corporate Priorities because we are committed to playing our part in this global problem and in supporting our local residents and organisations.

This strategy sets out the challenges that we face, provides an explanation of our emissions data, outlines our key objectives and delivers an overview of our proposed actions under the key themes of transport, energy use, biodiversity and sustainable communities. We are living in a time of unprecedented change, and as we are working to important targets that are several decades into the future, we must ensure that we remain flexible in our response in order to make best use of developing technology, funding opportunities, legal obligations, commercial opportunities and community partnerships. As such, this strategy provides a high level overview to our approach, which we hope you find useful to understand what action we are taking and what actions you are able to do as well.

To help us plan our strategic environmental actions, since declaring a climate emergency we have been gathering vital information, such as:

- Working with various data sources to understand the borough's emissions
- Calculating our own organisational footprint and carrying out audits and surveys to understand the emissions from our buildings and fleet
- Working with Energy Saving Trust to understand the energy efficiency of all homes within the borough, to help our residents reduce their carbon footprint and save money on energy bills
- Working with electric vehicle specialists to forecast what charging infrastructure is required throughout the borough and help plan for this
- Carrying out a variety of biodiversity surveys and inventories throughout the borough's green spaces
- Launched local residents' surveys to help understand our residents' needs as we plan for a greener borough.

We are proud to have been paving the way nationally by becoming the first council in the UK to partner with the Energy Saving Trust to provide an energy efficiency app to help residents make energy savings and reduce carbon emissions at home, as well as the first borough council in the UK to achieve a Silver level 'Carbon Literate Organisation' accreditation. We achieved this by training over 70 members of staff – to learn about the science and causes of climate change, the effect it's having and the predicted future impact, as well as exploring the solutions we can take. In doing so we have demonstrated our substantial commitment to, and awareness of, the impacts of our everyday actions on climate change.

An extensive tree planting programme has already begun and wildflower areas created to encourage diverse wildlife in our borough. Wildflower meadows can contain up to 40 different species per square metre – so it's really important for our local ecology that we restore areas like this. We have been helping residents join us in this action by giving away thousands of free wildflower seed packets to plant in their own gardens, as well as running giveaways to schools and local groups.

In autumn 2021, we launched the Dacorum Climate Action Network (Dacorum CAN) which is designed to help bring together local individuals and organisations to help tackle the climate and ecological emergency. The new network aims to support, educate, encourage and enable its members to 'think global and act local' and make positive environmental changes. We are pleased that over 200 individuals and 50 organisations have already joined.

Many of these passionate individuals attended our first annual Dacorum CAN conference in November 2021, to coincide with COP26 – the global climate change conference. There were a diverse range of speakers and stall holders and attendees were able to learn about what environmental activities are happening locally and how they can get involved; ways to live more sustainably, reducing emissions at home and volunteering with local projects.

We have launched a new annual Green Community Grants scheme as part of the Dacorum CAN work specifically to enable local groups to 'think global and act local'. So far we have awarded £30,000 to 17 different local inspiring projects.

The coming years will continue to be challenging, but we are determined to succeed and believe that by working together on these important issues, we can create a safe and sustainable borough where nature and communities thrive.



A handwritten signature in blue ink that reads "Andrew Williams".

Cllr Andrew Williams
Leader of the Council



A handwritten signature in blue ink that reads "Claire Hamilton".

Claire Hamilton
Chief Executive

Contents

Declaring a Climate and Ecological Emergency	5
• Dacorum’s Key Objectives	7
Understanding Our Emissions	10
• UK’s Greenhouse Gas Emissions	13
• Dacorum Borough’s Greenhouse Gas Emissions	14
• Dacorum Borough Council’s organisational emissions	16
Planning for Action	20
• Climate and Ecological Emergency Tracker	21
• Climate and Ecological Emergency: Internal High Level Actions	24
• Climate and Ecological Emergency: External High Level Actions	26
Sustainable Transport	28
• Electric Vehicles	31
Energy Use in Buildings	33
• Homes	36
• Businesses	38
Improving Biodiversity	39
Sustainable Communities	43
• Dacorum Climate Action Network	45
Appendices	49

DECLARING A CLIMATE EMERGENCY



We are facing a Climate and Ecological Emergency

Climate Emergency

The International Panel on Climate Change (IPCC) announced in a [Special Report](#) in 2018 that we have until 2030 to limit warming to 1.5C or face climate catastrophe.

The IPCC's original warning has been further cemented by their [Sixth Assessment report](#), which has been delivered in three parts and provides a complete picture of the causes, consequences and solutions to climate change, with the final segment released in early 2022. This assessment gave a 'code red' for humanity, confirming 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. The final report gave a clear message that it is 'now or never' to act on climate change and limit future heating to 1.5C. It warned that current targets are falling short of meeting the delivered emission reductions, and outlined that we need to ensure that global emissions peak by 2025 and are halved by 2030.

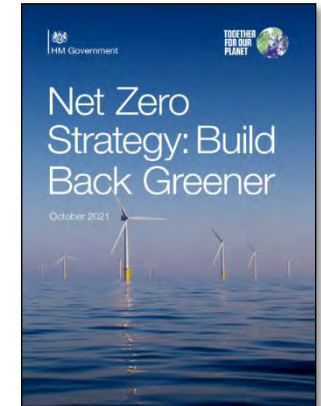
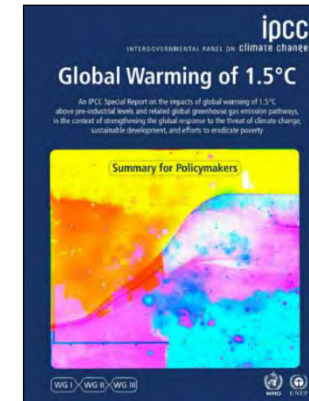
The UK government have responded to the IPCC by declaring a Climate Emergency and pledging to reach net-zero emissions by 2050. They have published a [Net Zero Strategy](#) to 'build back greener' to achieve the net-zero targets.

Dacorum Borough Council declared a Climate Emergency in 2019 (*appendix A and B*), along with over 75% of UK local authorities.

Ecological Emergency

A similarly alarming '[Living Planet Report](#)' was released in 2020, confirming that in the past 50 years global wildlife populations have plummeted 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, as a Council 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 (CEE) one of our key priorities in our [Corporate Plan](#).

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

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

This strategy not only highlights the actions that we will be taking as a Council, but is also a call to action. We call on you, as people who live, work, visit and invest in Dacorum, to join us on this ambitious and crucial 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, a number of commitments have been made. Alongside consultancy with APSE Energy and internal discussion, these can be summarised in our five 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.**

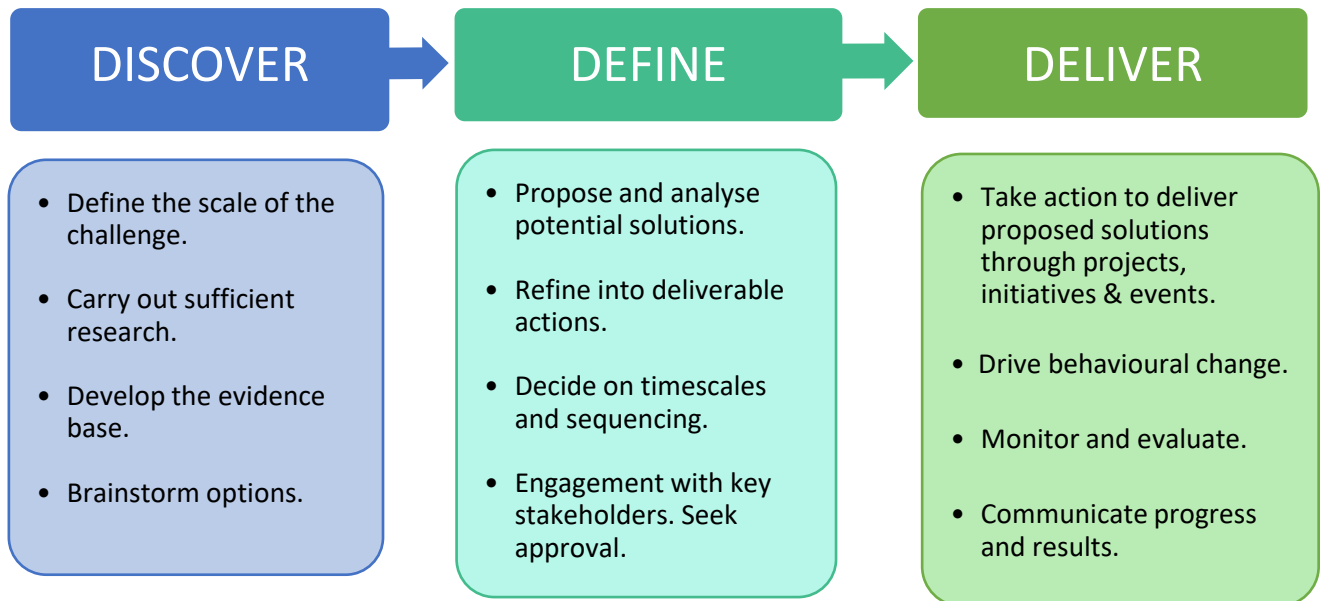
Discover, Define, Deliver

One of the original pledges when making the Climate 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 – e.g. electric vehicles charging infrastructure
- Carrying out resident surveys, such as 'Learning from Lockdown'.
- Working in partnership with local and national 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
- Delivering training to our staff

Becoming a Carbon Literate Organisation

Dacorum became 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 on 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 over 70 key members of staff and councillors, including our CEO, making her the second ever CEO of a council in the UK to achieve this.

Participants 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 becoming the first borough to have become a Silver level Carbon Literate Organisation (CLO) we have demonstrated a substantial commitment to understanding and tackling the climate emergency.



UNDERSTANDING OUR EMISSIONS



Understanding Our Emissions

Greenhouse Gases

Greenhouse gases (GHGs) trap heat in our atmosphere. The more GHGs released from activities such as the burning of fossil fuels for energy and transport, the greater the number of GHG's in the atmosphere - therefore the more heat being trapped. This concept is known as the **Greenhouse Effect** and causes Global Warming; the long-term warming of our planet.

The term 'climate change' encompasses global warming, but is also used to refer to the broader range of changes that are consequently happening to the planet – such as rising sea levels, melting ice, shrinking glaciers, seasonal ecological shifts and the long-term changes in average weather patterns.

The main GHGs (excluding water vapour) are shown in Table 1. 'F gases' is the collective name for Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF₆) and Nitrogen trifluoride (NF₃).


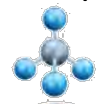


Greenhouse Gas	Typical GWP
Carbon Dioxide (CO ₂) 	1
Methane (CH ₄) 	28
Nitrous Oxide (N ₂ O) 	265
F gases 	10 – 10,000s

Table 1 - Greenhouse Gas Comparisons

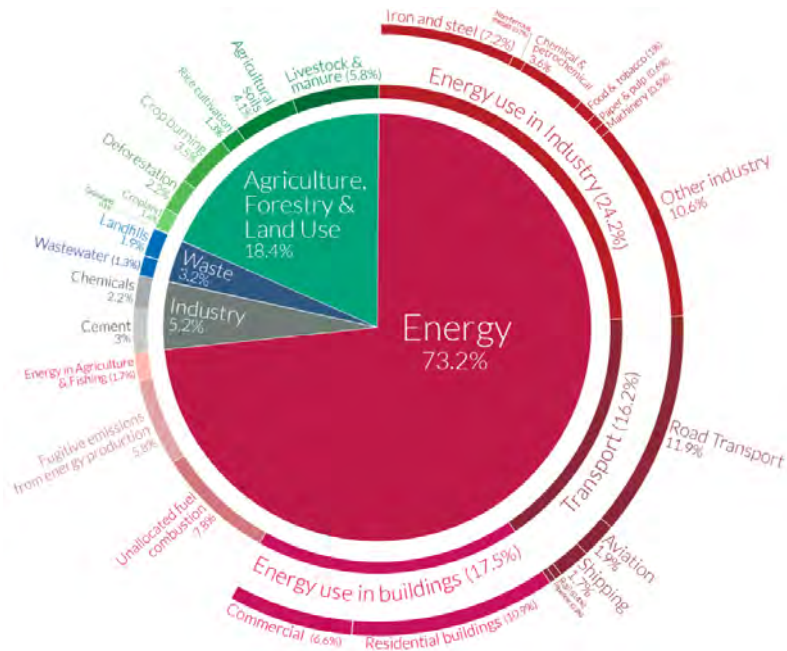


Figure 1 - Global Greenhouse Gas Emissions by Sector
Image Source: [OurWorldinData.org](https://www.ourworldindata.org) – [Climate Watch](https://www.climatewatch.org), [WRI](https://www.wri.org)

Global Warming Potential

GHG emissions are presented in carbon dioxide equivalent units (CO₂e).

This is in accordance with international reporting and carbon trading protocols, emissions from each of the gases is weighted by its global warming potential (GWP), so that total greenhouse gas emissions can be reported on a consistent basis. The GWP for each gas is defined as its warming influence relation to that of carbon dioxide over a 100-year period.

Net Emissions

Carbon dioxide is reported in terms of net emissions.

This means total emissions minus total removals of carbon dioxide from the atmosphere by carbon sinks. Carbon sinks are defined as “any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere”.

Global Emissions

We currently emit approximately 35 billion tonnes of CO₂e every year.

Figure 1 shows the breakdown of CO₂e global emissions by sector.

Emission Scopes 1, 2 and 3

Emissions are broken down into three categories or 'scopes' by the [Greenhouse Gas Protocol](#) in order to better understand the source.

The scopes correlate to who 'owns' those emissions and the level of control applicable to changing those emission levels at each stage.

For the context of a borough, this would be:

- **Scope 1:** GHG emissions from sources located within the borough's boundary
- **Scope 2:** GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the borough's boundary
- **Scope 3:** All other GHG emissions that occur outside the boundary as a result of activities taking place within the borough's boundary

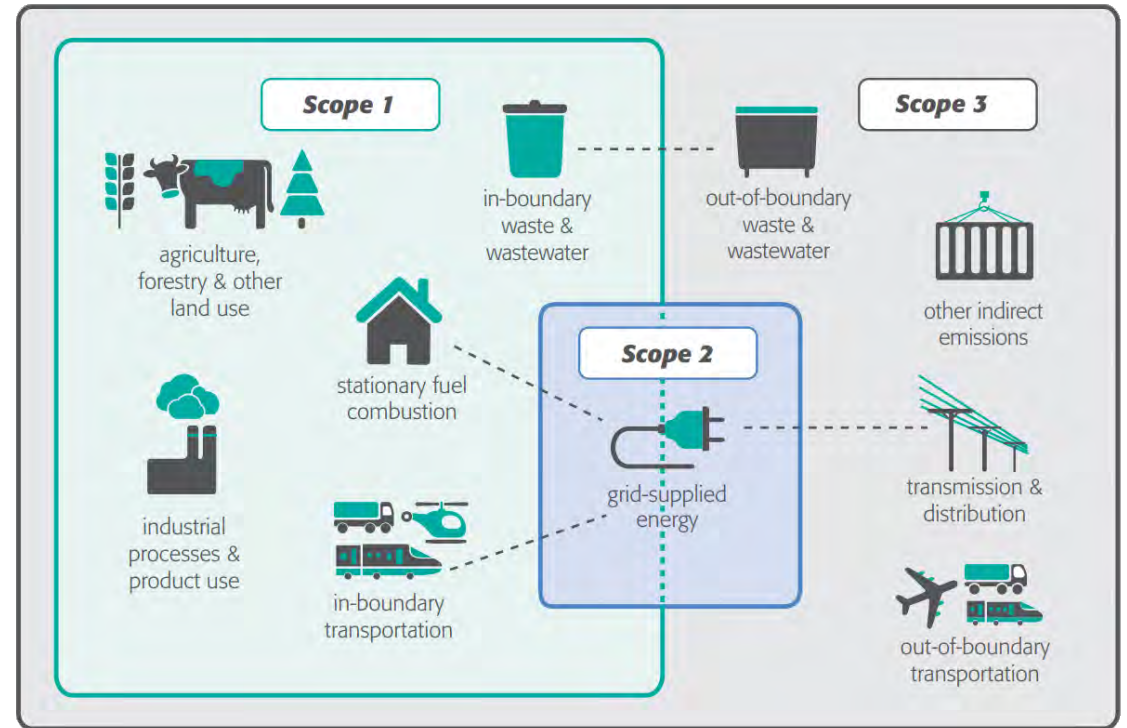


Figure 2 - Sources and Boundaries for Borough Emissions

Image Source: [GHG Protocol for Cities](#)

For the context of an organisation, this would be:

- **Scope 1:** All direct emissions from the activities of an organisation or under their control, e.g. fleet vehicles and fuel combustion on site such as gas boilers.
- **Scope 2:** Indirect emissions from electricity purchased and used by the organisation. Emissions are created during the production of the energy before it is eventually used by the organisation.
- **Scope 3:** All other indirect emissions from activities of the organisation, occurring from sources that they do not own or control. These are usually the greatest share of the carbon footprint, covering emissions associated with business travel, procurement, deliveries, waste and water.

Under the GHG Protocol it is mandatory to report emissions from scopes 1 and 2, whilst scope 3 emissions are only recommended. For our own organisational emissions, we are committed to reporting as many scope 3 emissions as possible, and will be working to continuously strengthen our data collection process to ensure that, as an organisation, we are measuring our emissions as accurately and fully as possible.

UK's Greenhouse Gas Emissions

In 2021, total UK greenhouse gas emissions were 424.5 million tonnes CO₂e.

The Government Department for Business, Energy and Industrial Strategy (BEIS) publish annual [GHG emission reports](#). The [2021 UK GHG report](#) states that emissions were 4.7% higher than 2020, yet 5.2% lower than 2019 – reflecting the impacts of the COVID-19 restrictions on emissions.

The government have set a legal target of [reducing UK emissions by 78% by 2035](#). The 2021 emissions were 47.3% lower than 1990 emission levels (*Figure 3*). We need to reduce our current emissions by nearly 60% to achieve the 2035 target.

Transport remains the largest emitting sector, responsible for over a quarter of all GHG emissions in the UK (*Figure 4*).

Emissions from energy supply are now 67% lower than they were in 1990. The largest driver of the long term fall in UK emissions has been the decrease of power station emissions, due to the shift in fuel use away from using coal for electricity generation towards gas and renewables.

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. Emissions must fall in all sectors and at a drastically faster rate than the last 30 years.

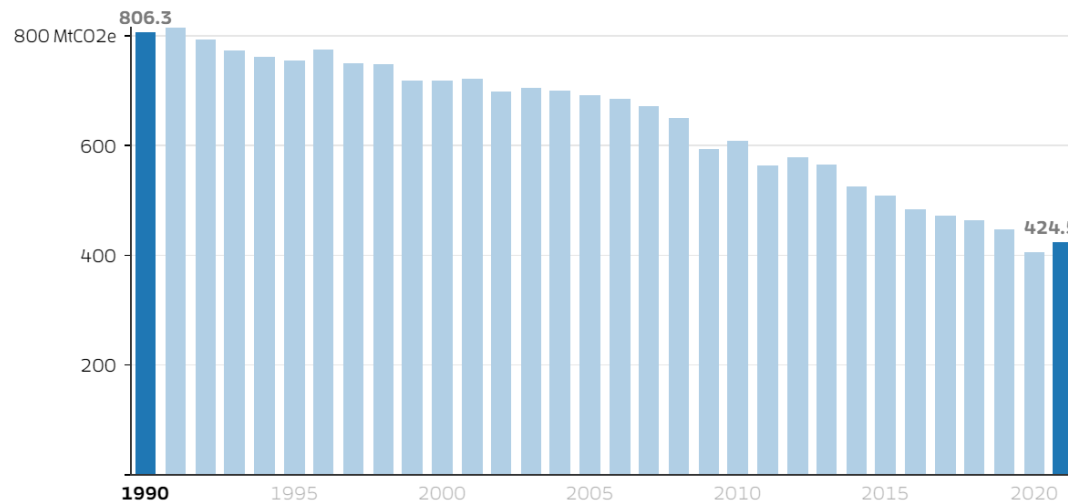


Figure 3 - UK Greenhouse Gas Emissions (BEIS data)



Figure 4 - 2019 UK greenhouse gas emissions by sector

Dacorum Borough'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 data 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

BEIS publish annual 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 - 2020.

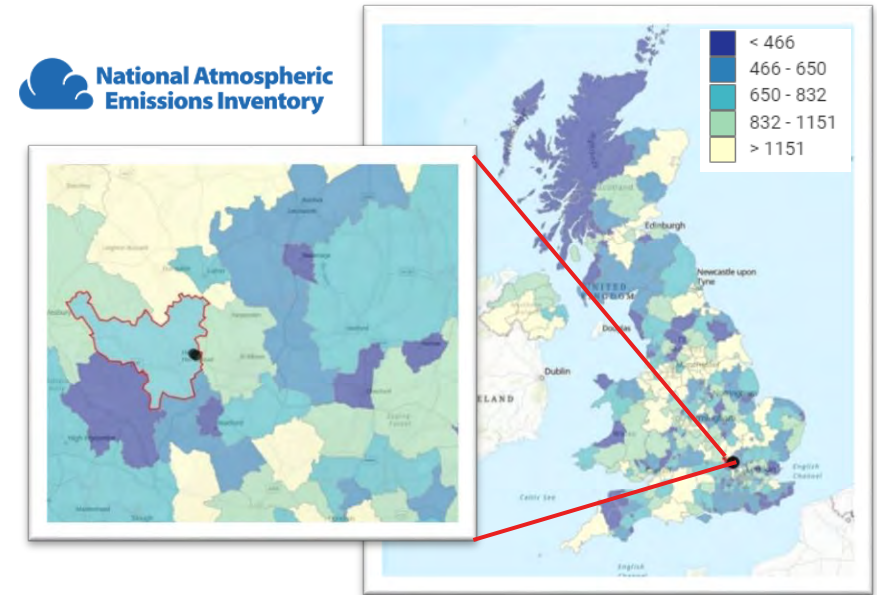


Figure 5 - [National Atmospheric Emissions Inventory](#) - Dacorum

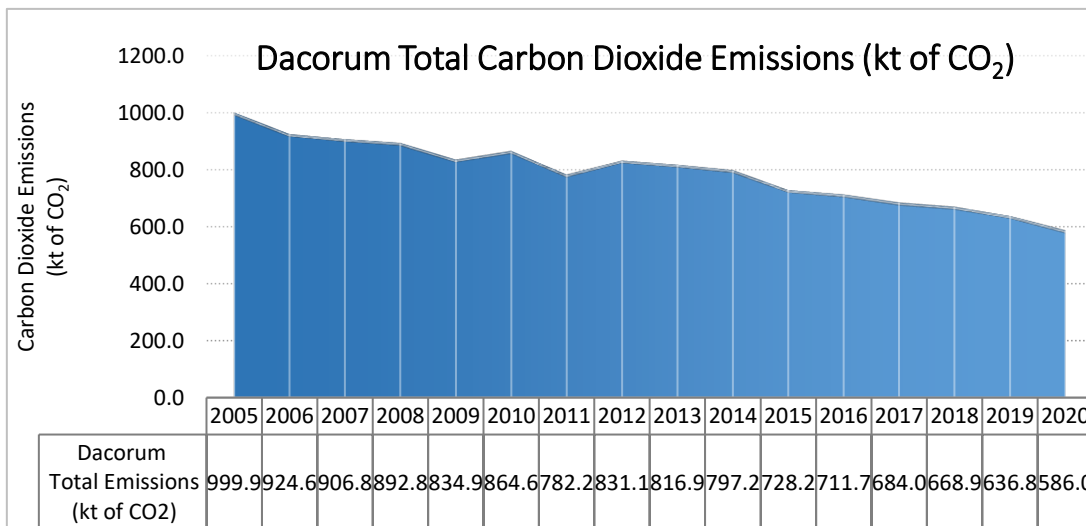


Table 2

BEIS 2020 carbon emissions data for Dacorum = 586,000 tonnes (tCO₂)

The boroughs emissions represent less than 0.2% of UK emissions.

The average decrease in emissions is 3% a year with a 41.4% reduction on 2005 emission levels – as shown in Table 2.

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.

See Appendix C for the breakdown of the borough's CO₂ emissions in full detail.

SCATTER

The Setting City Area Targets and Trajectories for Emissions Reduction (**SCATTER**) tool is a local authority focussed emissions resource which accounts for all GHG emissions and all scopes 1-3. SCATTER is a relatively new tool and has emissions data available from 2017 to 2019 only. The graphs below show a direct comparison for 2019 SCATTER and BEIS data.

SCATTER 2019 greenhouse gas emissions data for Dacorum = 895,328 tonnes (tCO₂e)

- The SCATTER CO₂e emissions data for scopes 1 and 2 is **707kt CO₂e** – BEIS 2019 CO₂ emissions data symbolises **90%** of this.
- The SCATTER CO₂e emissions for all scopes 1-3 is **895kt CO₂e** - BEIS 2019 CO₂ emissions data symbolises **71%** 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.



Department for
Business, Energy
& Industrial Strategy

Dacorum CO₂ Emissions - 2019
Scopes 1-2 (BEIS)

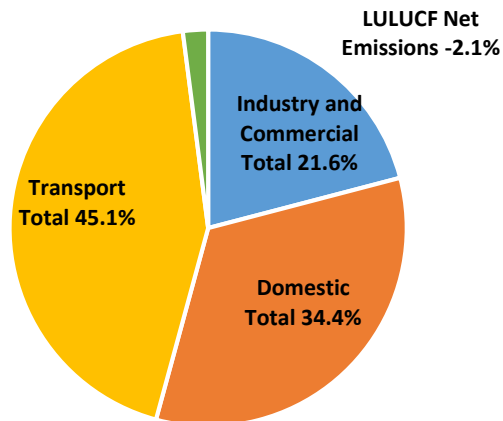


Figure 6

Dacorum CO₂e Emissions - 2019
Scopes 1 - 3 (SCATTER)

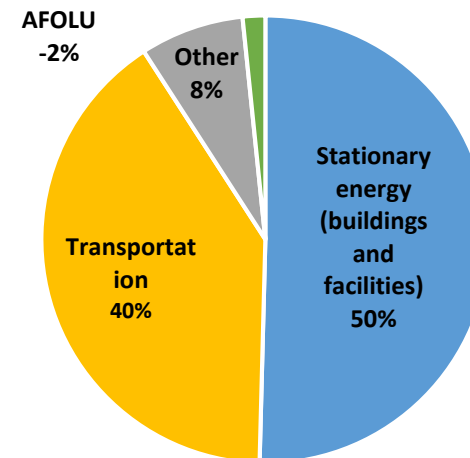


Figure 7

SCATTER

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.

Our organisational GHG emissions are outlined in Table 3 and displayed on Page 15.

The calculations to reach these were undertaken in accordance with best practice guidance by the [Greenhouse Gas Protocol](#) using emission conversion factors published and used by BEIS and DEFRA.

As an organisation, our emissions represents less than 0.01% of the UK's total 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 over 10,000 homes makes up the majority of the organisation's emissions – these fall under Scope 3 as the Council owns the buildings but does not occupy them or pay the energy bills.

As shown by Figure 10, Scope 3 makes up the majority of emissions. Many net-zero declarations from other local authorities, (especially those 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's 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.

DBC 2019 CO₂e Emissions Scope Breakdown

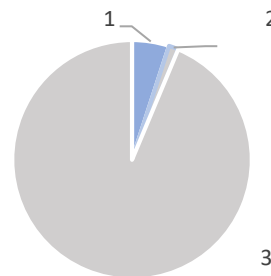


Figure 8

Emissions Source	Tonnes CO ₂ e	% Split	Total Tonnes CO ₂ e	Total % split
Scope 1				
Gas & Biofuel	328	0.9%	1,870	5%
Council Vehicles	1,542	4.1%		
Scope 2				
Electricity	494	1.3%	494	1.3%
Scope 3				
Housing	32,834	85%	36,225	93.9%
Leisure Centres	1,363	3.7%		
Other Leased Assets	1,916	5.1%		
Transmission & Distribution	42	0.1%		
Employee Vehicle	70	0.2%		
Total Organisational Footprint			38,589	100%

Table 3 - Dacorum Borough Council's Data Breakdown for Organisational Emissions

Dacorum Borough Council as an organisation in 2019/20 was responsible for:

2,364 tonnes of CO₂e for scopes 1-2
This represents 0.4% of the boroughs' total GHG emissions, if we include just scopes 1 and 2 (compared to BEIS data).

38,589 tonnes of CO₂e for scopes 1-3
This represents 4.3% of the borough's total GHG emissions, if we include all scopes (compared to SCATTER data).

Dacorum Borough Council's 2019/20 CO₂e emissions: Scopes 1-2

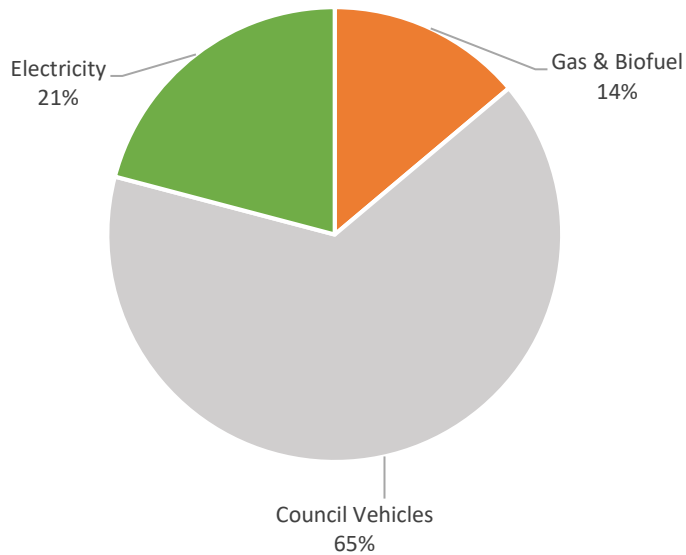


Figure 9

Dacorum Borough Council's 2019/20 CO₂e emissions: Scopes 1-3

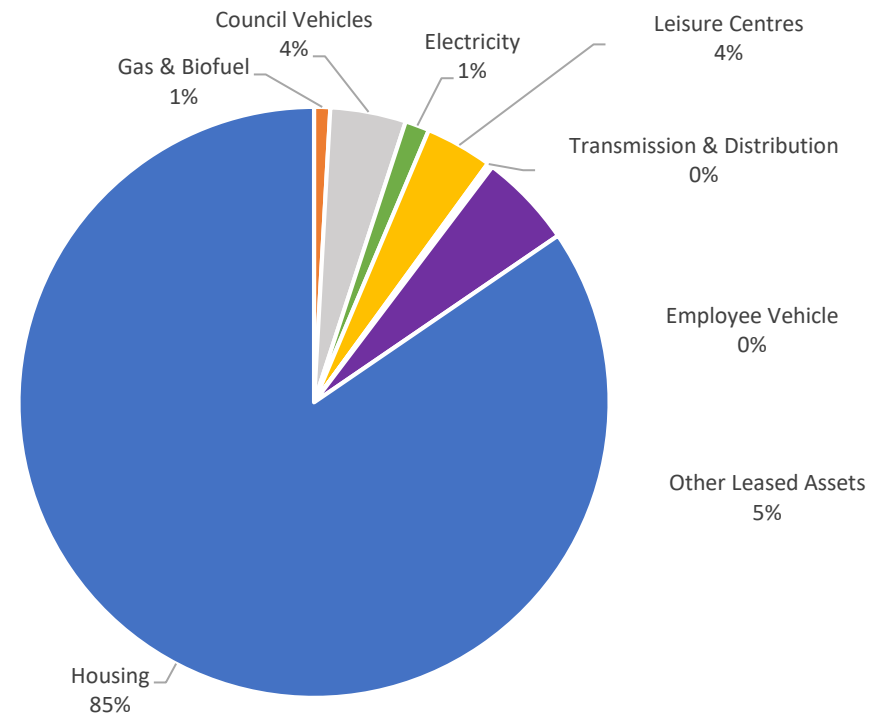


Figure 10

Reaching Net-Zero

Reducing emissions is not a simple or linear process. A combination of measures will be implemented systematically between now and 2050 in order to achieve our net-zero targets. The graphs below are intended to demonstrate the scale of the challenge and provide an indication of action required, not to be an accurate representation of how the emissions reductions will be achieved.

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 1-2 only. The majority of emissions come from council vehicles (65%), electricity (21%) and gas (14%).

Measuring progress:

By 2025, we hope that our emissions will have dropped below 1,000 tonnes of CO₂e to indicate that we are on track for reaching net-zero by 2030.

Objective 2:

Having a net-zero housing stock by 2050.

To help deliver this target, we will working to ensure that all DBC homes achieve an Energy Performance Certificate (EPC) rating of 'C' or above.

Measuring progress:

By 2030, we hope the housing stock emissions will have dropped to around 20,000 tonnes of CO₂e, and to below 10,000 by 2040, to indicate that we are on track for reaching net-zero by 2050.

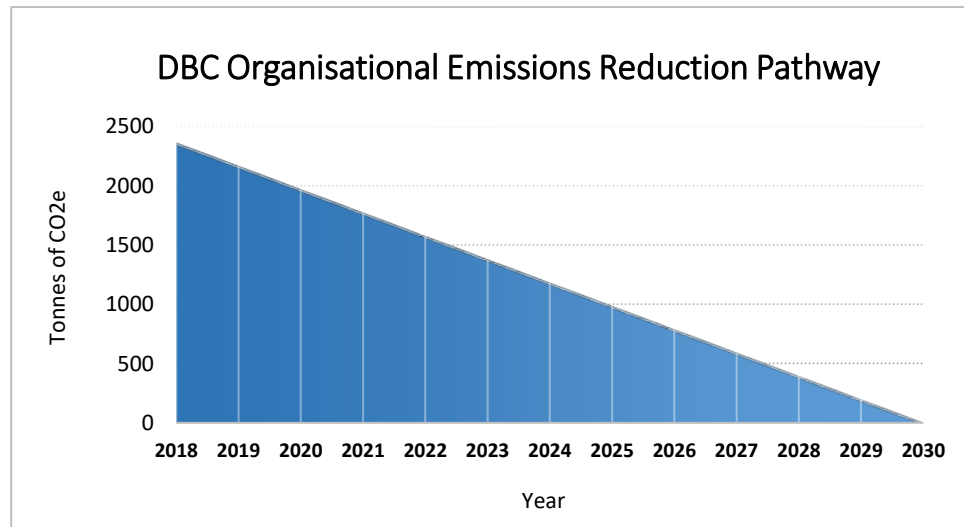


Figure 11

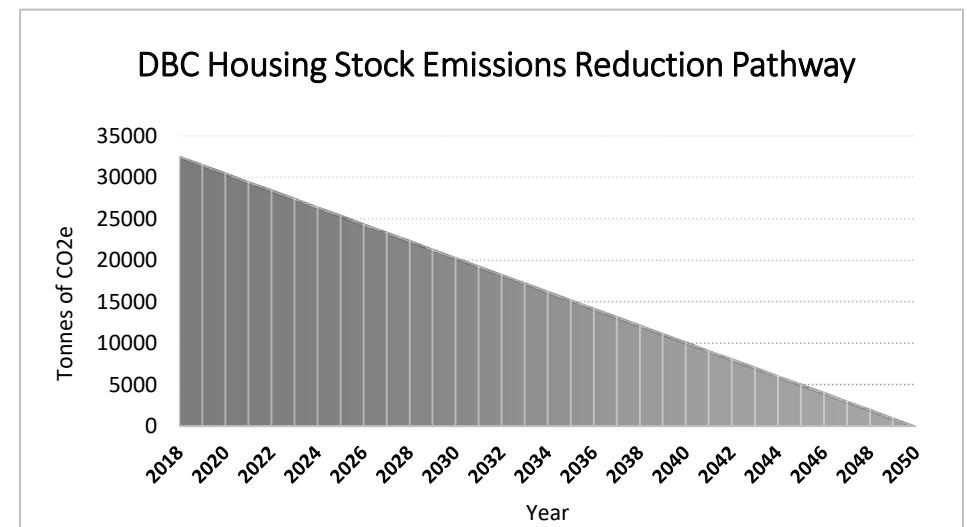


Figure 12

Objective 3:

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

Cumulative Emissions and Carbon Budgets

Once greenhouse gases reach the atmosphere they can take thousands of years to breakdown. For this reason, it is crucial to lower emissions as quickly as possible in order to lower the *cumulative* amount of emissions in the atmosphere.

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 4,100,000 tonnes of carbon between 2020 and 2100. This is based on the commitments made in the United Nations Paris Agreement. [Read the full Tyndall report for Dacorum.](#)

Forecast lines have been added onto the graph (Figure 13) to demonstrate linear reductions for reaching net-zero by 2030, 2040 and 2050. The cumulative emissions would be as follows:

- **3,223,000** tonnes of CO₂ if net-zero by 2030
- **6,153,000** tonnes of CO₂ if net-zero by 2040
- **9,085,000** tonnes of CO₂ if net-zero by 2050

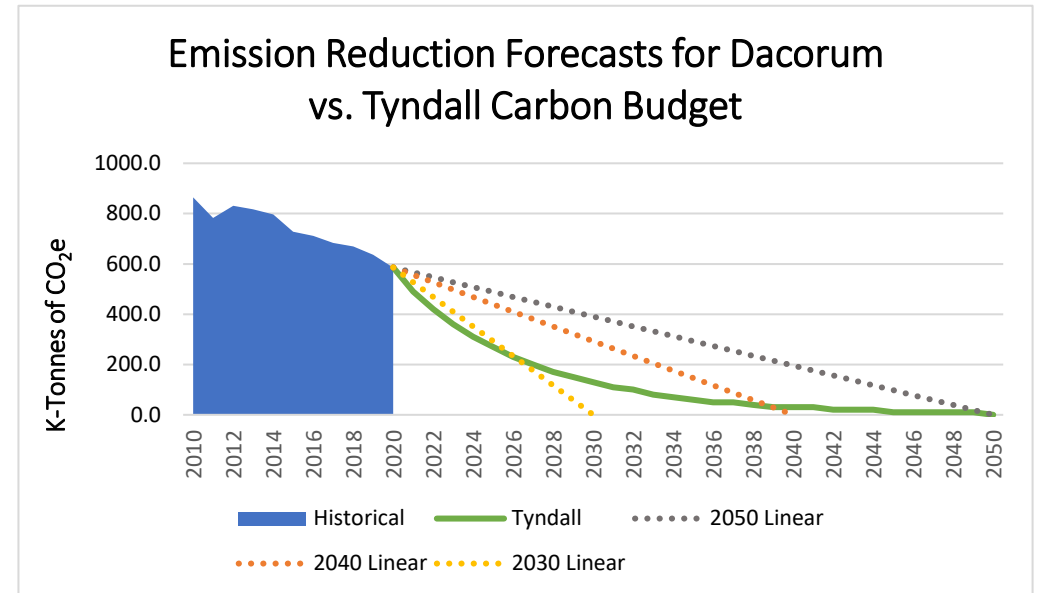


Figure 13

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.

Measuring progress: The borough's emissions (scopes 1-3) should have dropped below 295,000 tonnes of CO₂e by 2025, and to below 130,000 by 2030, for us to be on track for reaching net-zero by 2050, in line with the Tyndall centre recommendations.

Offsetting

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 these environmental projects.

PLANNING FOR ACTION



Climate and Ecological Emergency Tracker

The four key themes we will be focusing on to achieve our objectives are:

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 6% of the borough's emissions, a large focus of our work will be supporting change within the wider community.

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

The CEE Tracker 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 Tracker, they will be evaluated to ensure that they are:

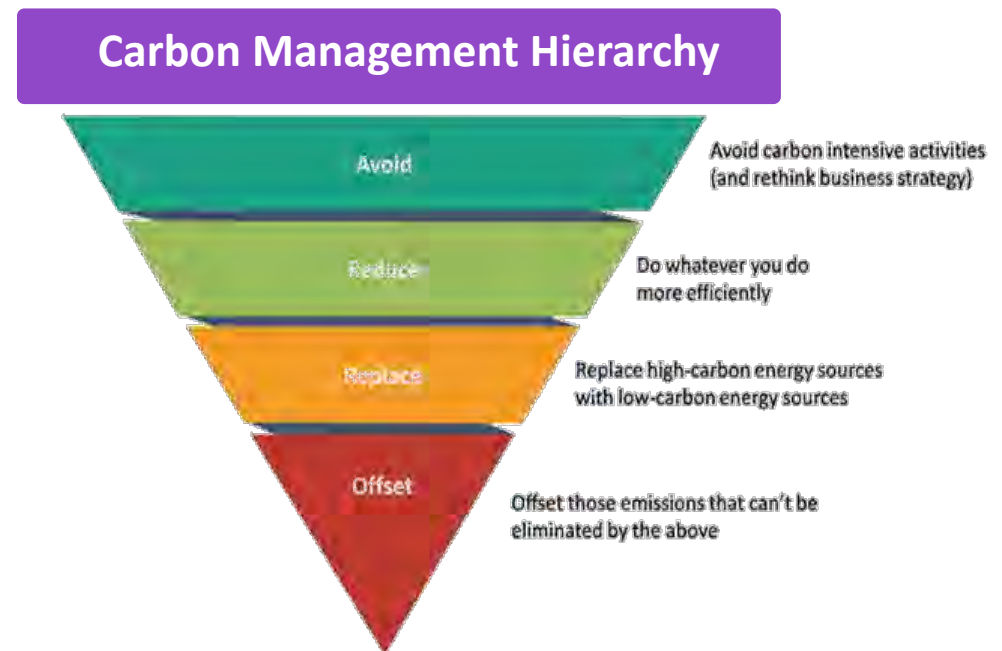
- Progressing the pathway to reaching our key objectives by their respective deadlines
- Following the Carbon Management Hierarchy (*Figure 14*), where applicable
- Evidence-based
- S.M.A.R.T. goals
- Futureproof
- Suitably ambitious

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 not 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.

Figure 14



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.

However, 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 are direct and internally acted upon, done in partnership with others, or whether it is an indirect policy, funding or educational 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 Tracker, we will ensure that we will consider all of the ways in which we can utilise our 'spheres of influence' to achieve the best possible impact and outcome.

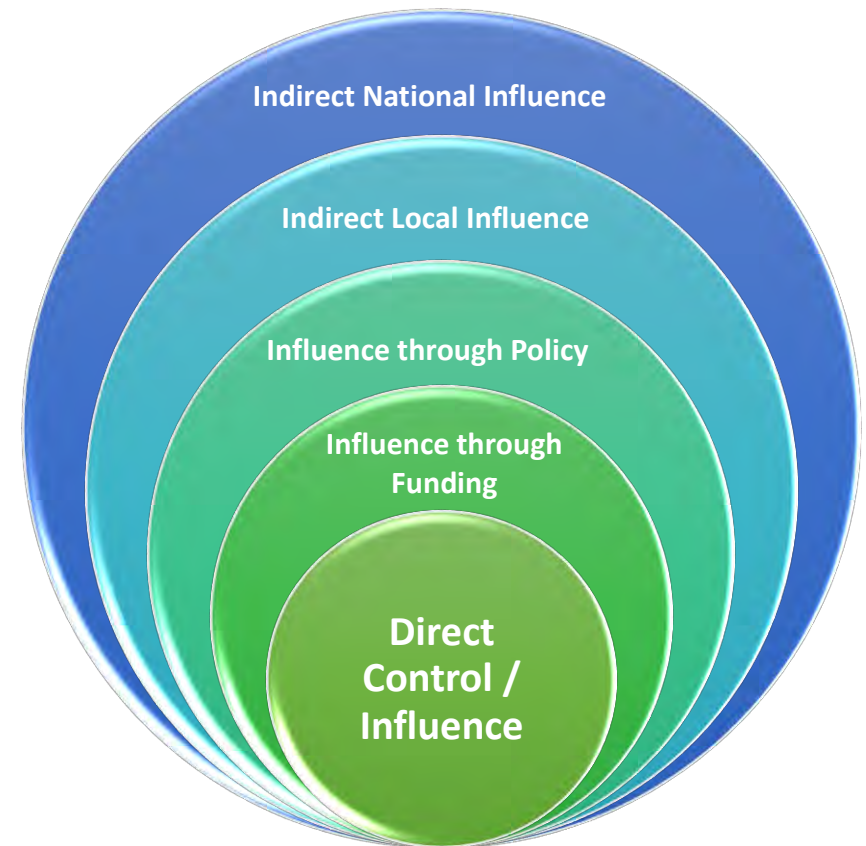


Figure 15 - Dacorum Borough Council's Spheres of Influence

Partnership working

The Council works 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”.

Hertfordshire County Council

Hertfordshire County Council (HCC) has also declared a climate emergency and set out its own [Sustainable Hertfordshire Strategy](#), with three key commitments to make Hertfordshire cleaner, greener and more sustainable:

- 1. Lead its own operations:** As an organisation, HCC want to be carbon neutral by 2030 and improve nature on its land by 20% by 2030
- 2. Enable sustainability with its programmes, policies and decisions:** In Hertfordshire, HCC 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:** HCC 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) consists of all 10 districts and boroughs, 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.



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 and 10,000 new jobs. 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 internally to achieve the key climate and ecological emergency objectives.

Buildings owned and used by the Council to deliver services

The Council will carry out the surveying work, initially on our main buildings with the biggest emissions, to determine the work required to make them as energy efficient as possible. A programme will be drawn up regarding 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 few 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.

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 as our refuse freighters are only a few 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.

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.

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 Council housing stock to achieve net zero carbon by 2050

As 85% 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 once credible and affordable alternatives have become available.

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.

The new Local Plan will require all developers and their schemes to deliver 'Biodiversity Net Gain' either within their development, or if this is not possible paying into a Council operated Biodiversity Fund. This action is likely to exceed the extent to which the Council itself can deliver.

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.

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. The Council's target is to achieve a 63% recycling rate by 2025.

Climate and Ecological Emergency: External High Level Actions

As the Council accounts for less than 6% of the borough's emissions, a large focus of the Council's work must be on supporting external action. These are the high level actions the Council will take to achieve its key climate and ecological emergency objectives.

Ensure the new Local Plan results in the highest level of sustainable new development that 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.

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 for them reaching net-zero is 2050. The programme will commence with the surveying work and subsequent actions that this points to.

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 form part of the Local Plan and all new developments and will be in partnership with Hertfordshire County Council, which is the Transport Authority. The Council will continue to work with HCC on its Local Transport Plan covering the Borough. Some improvements will require government action and funding, particularly in the move away from fossil fuelled vehicles.

Working with private sector providers will form an ongoing and dedicated project to ensure these growing needs are met. The Council is already taking action to install additional EV charging points in its own car parks. The level of additional progress required, however, cannot be made without the conclusions of the government and HCC's EV strategy.

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

A substantial amount of emissions occur through the energy and heating requirements of home owners' 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 the energy efficiency of their homes. Knowing where and how to access grant funding will be crucial and the Council will help with 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 is 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. Maylands overall has received a £2M decarbonisation grant to assist businesses to become more energy efficient and sustainable.

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

Working alongside the community to engage, enable and educate will be critical in order to achieve net-zero by 2050. Community awareness and participation in working towards net zero and improving 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.

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) has been 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.

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

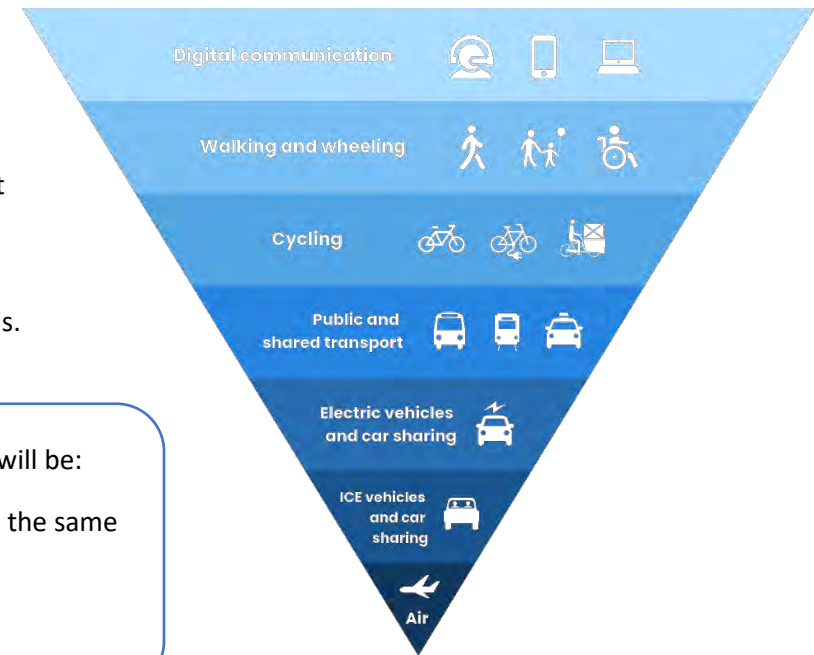
In Dacorum, transport is responsible for over 40% of the borough’s greenhouse gas emissions.

Changing the way we travel in line with the ‘Sustainable Travel Hierarchy’ (figure 16) will be the most effective way of reducing the boroughs emissions and is crucial for meeting our net-zero goals.

This will involve significantly reducing car use, increasing active travel and eliminating some journeys altogether. Hertfordshire County Council is the local transport authority and will play a key role in this. The Government will also need to legislate for change and provide sufficient funding and support.

Figure 16 - Sustainable Transport Hierarchy

Image Source: [Energy Saving Trust](#)



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 active travel and lift share incentives for staff

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 (e.g. bike confidence classes), lift-sharing and anti-idling
- 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.
- 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

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 reduce these commuting journeys, 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 helps as this reduces 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 plan to incorporate into our CEE Tracker.

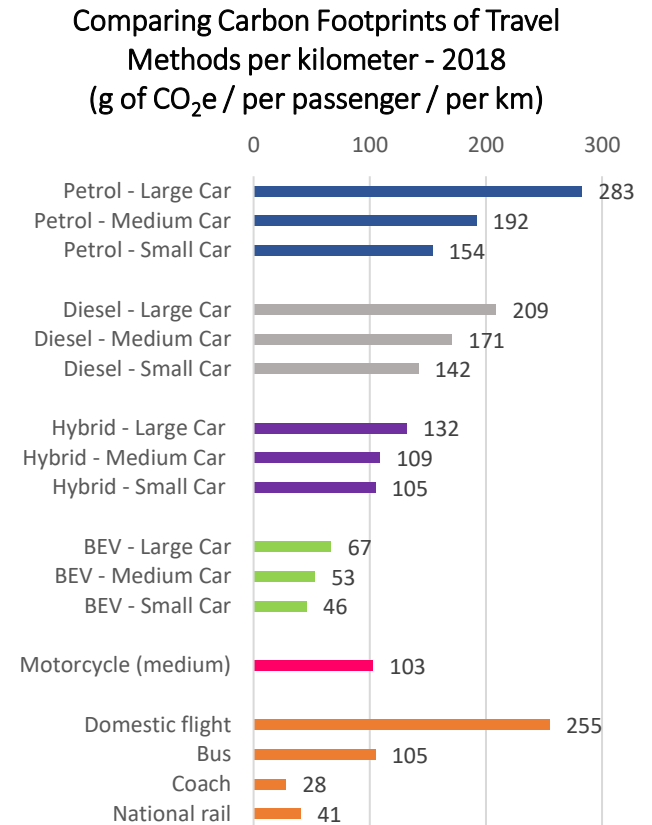


Figure 17 – Comparing Transport Method Emissions
Data Source: [Our World in Data](#)

Electric Vehicles

The number of electric vehicles 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.

EVs produce less than 30% of the emissions of fossil fuel powered cars (*Figure 17*). Additionally, as the National Grid also decarbonises and is powered by more renewable energy sources, the GHG 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 charge points in our car parks for staff
- 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 inform our infrastructure planning and support applications for funding and land use
- Developing an Electric Vehicle Strategy and installing more EV charge points throughout the borough on our own land (e.g. car parks)
- Working in partnership with other organisations to encourage them to increase the number of EV charge points available for residents

What can you do?



- Make your next vehicle purchase an electric vehicle. The Energy Savings Trust has lots of useful [information and advice](#).
- If eligible, use the government's [Electric Vehicle Homecharge Scheme](#) grant to receive up to 75% of the cost of a charge point
- Encourage your local businesses to install EV charge points in their car parks

Electric Vehicle Charging Infrastructure in Dacorum

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

The Government has released a [Transport Decarbonisation Plan](#) and a variety of local authority toolkits which outline what government, business and society will need to do to deliver the emissions reduction needed. Various pots of funding have also been made available to support this transition.

As part of our 'discovery' phase for electric vehicles, we have been working with specialist sustainability consultants in order to gain a greater understanding of what EV charging infrastructure will be required within Dacorum. The results from this work has showed us that:

- By 2030 there is forecast to be at least 30,000 electric vehicles in the borough – there are currently 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 (*Figure 18*)
- The borough is estimated to need around 700 publicly available charge points to facilitate the extra demand.
 - Achieving this will need a collaborative effort between all land-owners, businesses and organisations.

Listening to our residents

We have an ongoing [Electric Vehicle Resident Survey](#) on our website, which enables us to hear from thousands of 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 charge points were installed in their local area.

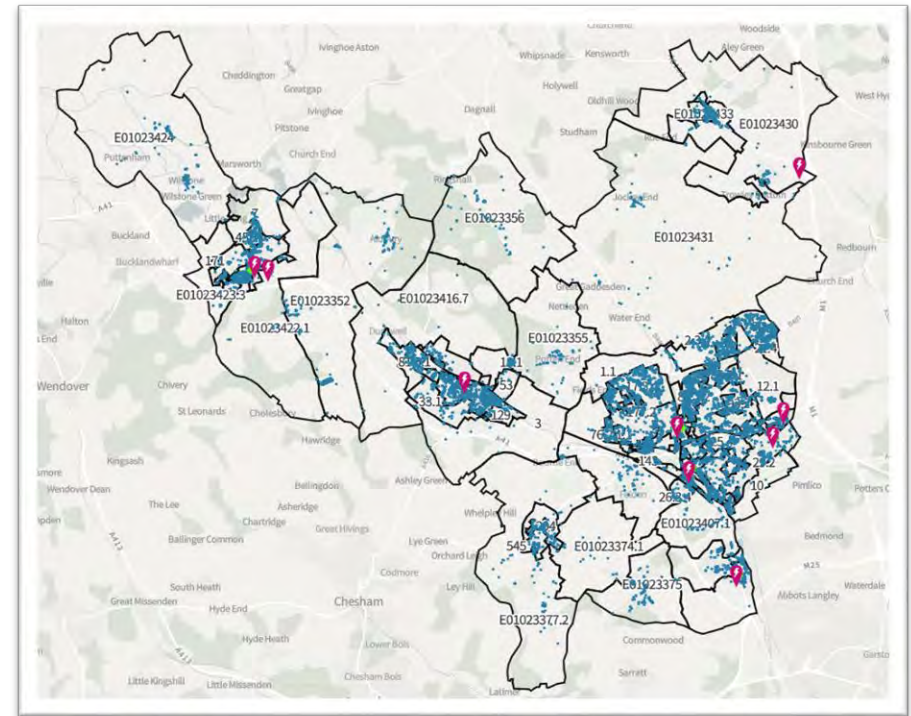


Figure 18: Blue dots - homes without off-street parking within Dacorum

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 (Figure 19), being 'Lean, Clean and Green' is the most efficient way to reduce emissions from buildings. Our actions have been planned in line with this hierarchy. As we are currently in an energy crisis, these steps will be more important than ever for many of our residents in order to reduce living costs as well as emissions.

Using Less Energy

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 make the improvements to our buildings as quickly as possible

What will we be doing to support others?



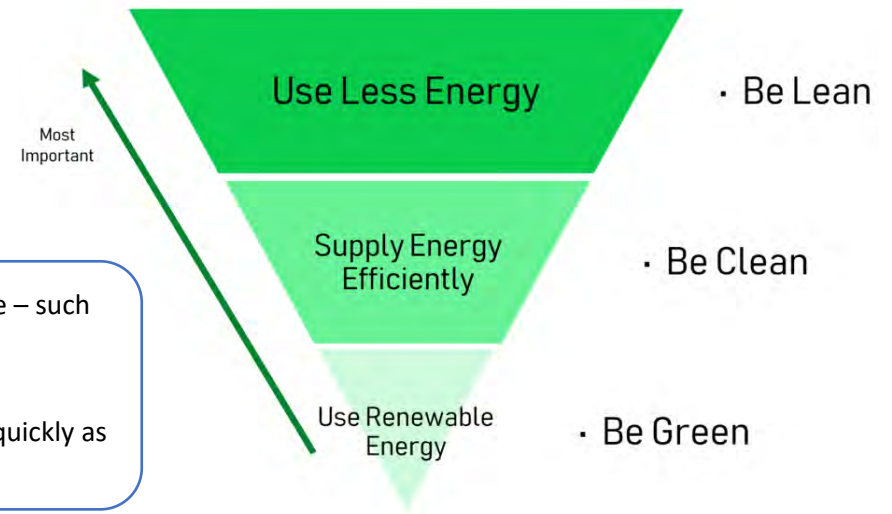
- We have launched an energy saving app to support our residents, in partnership with the Energy Saving Trust and HCCSP.
- Developing awareness campaigns and initiatives for residents to learn more about how to reduce their energy use – e.g. thermal camera loan scheme
- Developing awareness campaigns and initiatives for organisations to learn about how to reduce their energy use at in their own offices and buildings

What can you do?



- [Download our free energy saving app](#) for tailored advice and use other [energy saving guides](#) to see what else you can do.
- Get a Smart Meter so that you can identify other areas for reducing energy around your home
- 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.

Figure 19 - Energy Hierarchy



Energy Efficiency

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's housing stock to improve the EPC ratings of homes
- Developing targeted initiatives and campaigns – e.g. encouraging landlords to reach minimum energy efficiency standards.
- [Promoting available funding](#) to help carry out the improvements needed – for example ECO funding, Green Homes Grants

What can you do?



- [Find out your homes EPC Rating](#) and identify what improvements will improve your EPC rating to as high as possible
- Make use of available funding and support, such as the [Green Homes Grant](#), to help make improvements to your home
- Only purchase energy efficient appliances with high energy star ratings, and LED lightbulbs

Renewable Energy

What will we be doing within the Council?



- We have switched to a 100% green energy supplier
- Installing more renewable energy sources on our sites, such as solar panels
- Investigate our options for generating renewable energy technology, such as solar panels, throughout the borough

What will we be doing to support others?



- Delivering a solar bulk-buy scheme for our residents to support them with purchasing PV panels
- 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?



- When the time is right, switch to a [green energy tariff](#) (ideally 100% renewable energy)
- Investigate installing 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.

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.

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. There are [funding schemes](#) available that can help with the costs of home improvements.

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. Government funding will be crucial to support 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). Homes are required to have an EPC rating when they are constructed, let, or have been sold in the past 10 years. EPC documents 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 your homes EPC rating online](#).

As part of our ‘discovery phase’, we have worked alongside the Energy Savings Trust to understand the actual and estimated EPC breakdown of homes around the borough (*Figures, 20, 21*). This shows that nearly two thirds of homes within the borough are below an EPC C.

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. A great deal of work will be required to meet these minimum standards.

Figure 20
EPC Ratings of Dacorum's Homes

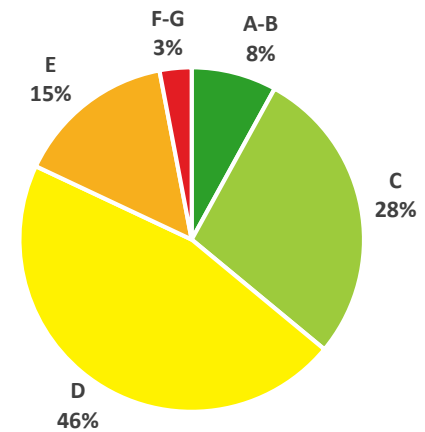
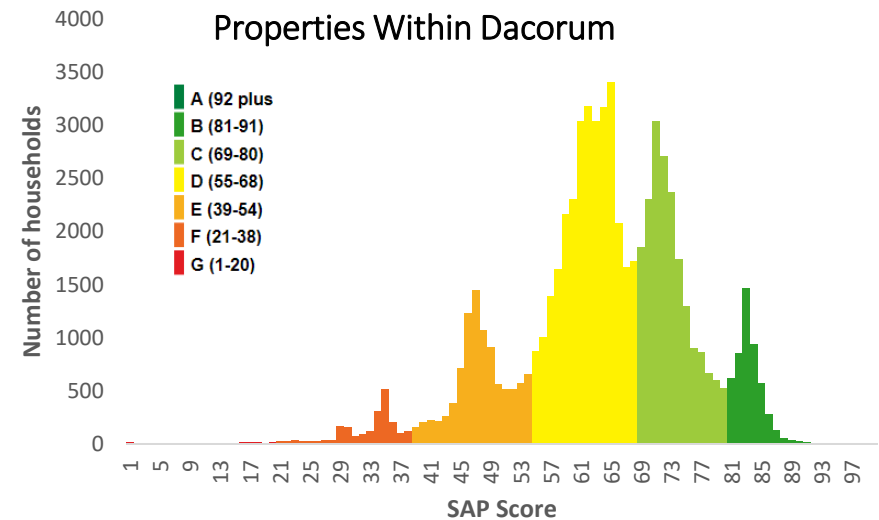


Figure 21

EPC Profile Breakdown for all Properties Within Dacorum



Hertfordshire Energy Advice Tool (HEAT app)

We have become one of the first councils in the UK to partner with Energy Saving Trust to provide an energy efficiency app to help residents make energy savings and reduce carbon emissions at home.

The unique and easy-to-use app is called the Hertfordshire Energy Advice Tool (HEAT). It takes you on a virtual tour around a typical home, asking questions and giving you advice along the way. Based on the answers provided, quick, easy, low or no-cost actions are suggested to help save you money on your energy bills and reduce your carbon footprint too – a win for you and the planet.

Once you've finished, your tailored advice report can be emailed to you, giving you a summary of the potential energy and money savings. The average saving from using the app is £70 a year. As a third of Dacorum's greenhouse gas emissions come from our homes. By taking small steps to be more efficient at home we can all help do our part to help tackle the climate emergency.

The app was developed by the Energy Saving Trust, the UK's leading trusted expert organisation regarding home energy and is being rolled out by the HCCSP with Dacorum taking the lead, and as such it is available to all Hertfordshire residents.

The app is [free to download](#) and available on both Google Play and the Apple store.



**energy
saving
trust**



Businesses

In Dacorum, emissions from industry and commercial use are responsible for around 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 throughout Dacorum 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 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%**

We are 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 climate change. The last mass extinction event was 66 million years ago, when an asteroid collided with the Earth and famously wiped out the dinosaurs.

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 (HMWT) 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 – such as the wildflower giveaway events

What can you do?



- Improve wildlife in your garden with essential actions e.g. providing pollinator friendly plants, nest boxes, food, ponds, insect hotels, hedgehog holes, providing access to soil (no concrete or Astroturf), etc. [HMWT](#), [RSPB](#) and [RHS](#) have a range of informative resources
- Learn to 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 - [Dacorum CAN](#) helps to signpost to these

As part of our 'Discovery' phase, we have been gathering a range of information which will feed into the development of our Biodiversity Strategy:

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

Hertfordshire State of Nature report

[Herts and Middlesex Wildlife Trust](#) published a 'State of Nature' report highlighting local biodiversity information. Since 1970, 10,863 species have been recorded in Hertfordshire. 1 in 5 of these species are now either threatened, or have gone extinct (*Figure 22*).

Biodiversity Net Gain

National planning guidance and the [new Environment Act 2021](#) 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 play an important role as they help towards both removing carbon from the atmosphere, as well as improving biodiversity.

A study has indicated that the existing Council owned trees sequester 1000 tonnes of CO₂ per year. An extensive tree planting programme which will see several thousand more trees being added to the borough has already begun, with over 1000 new trees already planted since 2020.

Additional tree planting is a long term approach and still hugely important, but it is essential to remember that it takes 30-40 years to reach sufficient maturity to have maximum impact. Therefore safeguarding existing trees and focusing on the carbon management hierarchy will be the most effective approach.

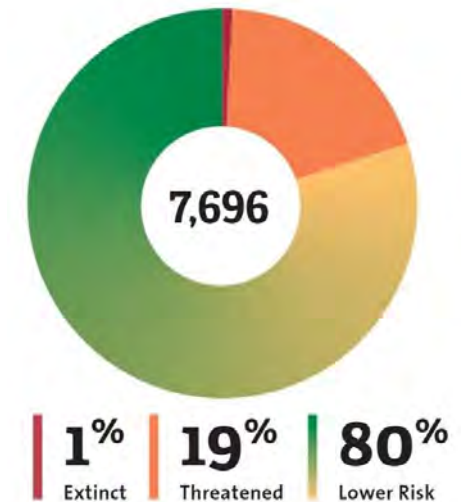


Figure 22 - Threat Status of all Assessed Species
Source: [Hertfordshire State of Nature Report](#)

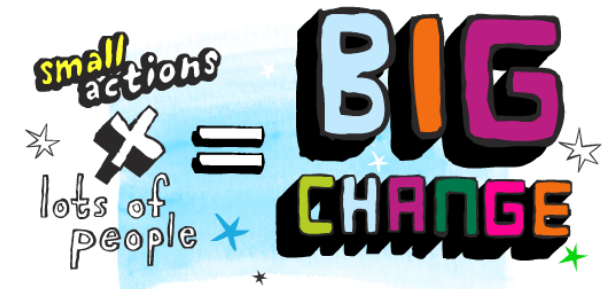




**SUSTAINABLE
COMMUNITIES**

Sustainable Communities

With a global population of 8 billion people, it can be easy to believe individual actions don't matter. But every single action has an impact on the planet. The climate and ecological emergency has been caused by lots of little unsustainable actions creating big, negative changes. Now we must work together, as individuals, organisations and communities, to make lots of little sustainable actions and create big, positive changes.



Small Actions Create Big Change

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, clothes we wear, 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. 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?



- Rolled out Carbon Literacy Training to staff and Members
- Introducing Sustainability Impact Assessments to analyse each new project or policy
- Developing an internal Sustainability Policy, alongside 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, e.g. [food](#)
- Consider your own 'spheres of influence' and how you can encourage more positive change
- [Join Dacorum's Climate Action Network](#) to take action locally and take part in our range of environmental initiatives

Dacorum Climate Action Network

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 Tracker. 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 aim to engage with thousands of local residents throughout the borough, as well as organisations. Local environmental and community groups, schools, parish councils, charities and large companies are all invited to join.

Dacorum CAN is free to everyone who lives, works and plays in Dacorum and pledges to take positive environmental actions. [Click to sign up now!](#)



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

Benefits for individuals...

- 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

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.

Dacorum CAN Annual Conference

To harness the energy of COP26, at the beginning of November we hosted the first Dacorum CAN annual event, which saw passionate individuals come along to engage with a variety of speakers and stall holders.

Attendees learned about what environmental activities are happening locally and how they can get involved in ways such as living more sustainably, reducing emissions at home and volunteering with local projects. Speakers included Council representatives, Affinity Water, Green Community Grant winners, Hertfordshire and Middlesex Wildlife Trust, Affinity Water and Sunnyside Rural Trust.

To help engage with the public even further during COP26, we also held a Climate and Ecological Art Exhibition at the Marlowes Shopping Centre in partnership with Herts Visual Arts, showcasing art submitted by local residents. The exhibition aimed to encourage people to reflect on the challenges that lie ahead of us, but also provide an opportunity to learn about the available solutions, feel inspired, and get involved in local climate action.



Green Community Grants

As part of the Dacorum CAN work, one of the ways we enable change is through our [Green Community Grant](#) scheme, which supports projects in our community that benefit the environment, as well as 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 with projects that either reduce carbon emissions; increase travel by walking or cycling; improve biodiversity; increase sustainability; or raise environmental awareness locally, whilst also engaging with or benefiting the local community. The projects with the greatest impacts will be awarded the funding.

So far we have awarded £30,000 to 17 different local inspiring projects, including: rewilding and monitoring of wildlife at various sites, tree planting at multiple locations, the creation and management of several ponds, wilder allotment and gardening initiatives, community fridges, bike projects, a 'make and mend' project incorporating clothes swaps and many more.

Find out your carbon footprint

Your carbon footprint is a measure of how many emissions you are responsible for producing 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. WWF set a target of having a 10.5 tonne carbon footprint, however widely respected climate scientist Mike Berners-Lee recommends that we should be aiming for a 5 tonne lifestyle.

Average UK carbon footprint = 13 tonnes CO₂e per person

Average global carbon footprint = 7 tonnes CO₂e per person

Community Gardens and Orchards

Community gardens and orchards can be brilliant ways to create sustainable communities. We are 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, storage and packaging, improve self-sufficiency, increase climate resilience and adaptation, 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 90% telling us they would buy food from a local community garden. This would reduce the need for packaging and reduce carbon emissions from transportation and storage, etc.



Reduce, Reuse, Recycle

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**.

Another global issue that falls under this area is **plastic pollution** which also impacts the environment and wildlife populations, especially marine life. As such, it is important to make conscious, ethical choices as consumers, whether you are an individual or an organisation. 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 practical choices, we are able to have a positive environmental impact both on carbon emissions and biodiversity.

Following the waste hierarchy (*Figure 23*) 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 many more.

Monsters on a Mission

To help embed sustainable behaviours from a young age we have worked with school children across Dacorum to help them understand the link between food waste and climate change with a fun and interactive campaign called 'monsters on a mission'. Each primary school classroom was provided with a caddy, a sheet of stickers and an information pack which explained that they had to feed their monster food waste to help save the planet. Alongside this we launched a photo competition for the best monster – schools sent in their photos and these were put up on social media during Halloween week, with the most popular photo winning a prize for their school.



Figure 23 - Waste Hierarchy

Image Source:

London School of Economics



Appendix A:

CLIMATE CHANGE MOTION TO DACORUM BOROUGH COUNCIL

The declaration was approved in the Council meeting on 17 July 2019, Agenda Item 5.

Motion A

To assist and inform the development of the new Corporate Plan for 2020 – 2025, which will outline the council's vision and priorities for the next five years, this Council notes that:

1. The overwhelming weight of scientific evidence pointing to dangerous manmade climate change in terms of CO₂ Global Warming, loss of habitat for wildlife leading to a dramatic drop in bio-diversity, alarming consequences of the accumulation of plastic waste across the planet and the continuing unsustainable depletion of natural resources. The harmful effect that such climate change and other human impact on the planet is increasingly feeding back into our lives, eco-systems, erratic rainfall and poor air quality.
2. The Special Report on Global Warming of 1.5C published by the IPCC in October 2018 which describes the enormous harm that a 2C average rise in global temperatures is likely to cause, and advises that limiting global warming to 1.5C may still be possible with ambitious action from national and sub-national authorities, civil society and the private sector.
3. Local residents have been actively involved in environmental initiatives and have organised into campaign groups looking to influence all levels of government policy. DBC recognises that this is a reflection of their concerns about climate change and loss of biodiversity.
4. UK Central Government has announced a target for net zero emissions of greenhouse gas by 2050 for the UK, and Council recognises that if this is to be achieved, immediate action and progress in advance of that schedule is required at all levels of government.
5. Dacorum Borough Council has been working on environmental issues, based upon the "Nottingham Declaration" endorsed by Council in 2000 and in continuing to improve recycling rates.

6. District authorities are well placed to lead the vanguard in reducing carbon emissions and protecting biodiversity, as their responsibility for planning policies and housing stock opens up a range of sustainable transport, buildings, household and commercial/community waste and energy opportunities.
7. This Council has control over local policies and services, the Local Plan and particularly the specification of the housing stock.

Motion B

In recognition of the factors noted above the Council resolves to –

1. Join other councils at all levels of Local Government in declaring a climate emergency that requires urgent planning and action, and commits to work towards reducing carbon emissions across the full range of council activities to net zero by the end of budget year 2029/30, this to include the production of a strategy and action plan to make the activities of Dacorum Borough Council carbon neutral by 2030 in accordance with the IPCC recommendation
2. Evaluate all practical means to reduce the impact of council services on the environment as soon as possible.
3. 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.
4. Urge the two Dacorum Members of Parliament to impress upon Central Government the need for regulations and resources that will support communities to meet the goal of carbon neutrality by 2030.
5. Ensure the new Local Plan and associated regulations when adopted contains all available measures to cut carbon emissions and reduce the impact on environment.
6. Having regard for the duties required under the General Fund Account and the Housing Revenue Account, and consider the use of available reserves to introduce improvements to social housing energy efficiency.
7. Implement evolving environmental best practice wherever/whenever there is an opportunity to re-specify services at reasonable and cost-effective intervals.
8. Engage with local residents and businesses, in all sectors of our communities to publicise this declaration and gain their active support in reducing and preventing environmental harms and tackling climate change by making wise, early, significant choices towards achieving carbon neutrality and environmental sustainability.

Appendix B:

Climate Emergency- Statement of intent

“A Borough that takes robust action to tackle the local and worldwide threat of climate change, both internally and in partnership with local organisations and residents, and to minimise its environmental impact by cutting carbon, waste and pollution”

Dacorum Borough Council is determined to play its part in helping to tackle the Climate Emergency. We have committed to ensuring that the operations, activities, and impact of our built assets will be net carbon neutral by 2030. This will be achieved through a combination of specific new projects, use of our policy making and regulatory powers and incorporating climate change and sustainability a part of business as usual. In doing so, we will adhere to the highest standards of quality in our efforts to provide services that add value to our residents, partners, and employees - and to protect the earths' vital resources for the future.

We will demonstrate leadership through ensuring that Dacorum Borough Council, its operations and activities will be net carbon neutral by 2030 and promise/pledge to:

- Lead by example in reducing carbon emissions year on year
- Use our powers, such as Town Planning, to require all new development to be as low carbon as is possible
- Work with government, business, community groups and other partners to maximize our impact on decarbonisation
- Encourage and support residents, community groups and businesses to reduce their emissions across the borough
- Prepare and plan for the impacts of climate change and their mitigation in our own services together with residents, community groups, businesses and partners
- Keep residents and businesses as fully informed as possible about what action can be taken

Appendix C: BEIS Annual Carbon Dioxide (CO₂) Emissions Data for Dacorum Borough

Source: BEIS data - <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-greenhouse-gas-emissions-national-statistics-2005-to-2020> (tab1.2)

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Industry Total	63.2	55.1	53.0	53.2	48.1	50.3	44.1	50.2	47.4	46.4	40.3	41.2	41.3	40.0	37.8	37.7
Industry Electricity	38.3	35.0	33.1	34.8	31.4	32.7	29.1	34.0	31.9	27.3	24.2	23.0	23.1	21.3	20.1	19.1
Industry Gas	7.0	3.3	3.2	3.4	3.0	3.3	2.5	2.7	2.9	5.8	2.4	4.6	3.3	3.7	4.6	6.3
Large Industrial Installations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.2	1.0	0.9	0.5
Industry 'Other'	17.9	16.8	16.7	15.1	13.7	14.4	12.5	13.4	12.6	13.4	13.6	13.3	13.8	14.0	12.2	11.8
Commercial Total	176.4	137.6	131.0	137.5	123.7	130.0	112.7	130.0	124.7	131.3	96.8	87.5	77.5	75.9	73.2	72.4
Commercial Electricity	122.4	111.7	105.8	111.2	100.3	104.4	92.9	108.8	102.1	87.3	77.4	62.4	57.0	53.1	48.6	42.5
Commercial Gas	52.3	24.6	24.1	25.2	22.5	24.7	18.9	20.5	21.8	43.1	18.3	24.2	19.5	21.8	23.7	29.5
Commercial 'Other'	1.6	1.2	1.1	1.1	0.8	0.9	0.9	0.7	0.8	0.9	1.0	0.9	1.0	1.0	0.9	0.5
Public Sector Total	82.6	52.7	50.8	53.0	47.5	50.7	42.5	47.7	47.3	64.2	37.3	33.4	29.6	29.2	26.6	25.1
Public Sector Electricity	30.6	27.9	26.5	27.8	25.1	26.1	23.2	27.2	25.5	21.8	19.4	16.2	14.6	14.0	13.0	11.3
Public Sector Gas	50.6	23.8	23.3	24.3	21.7	23.9	18.3	19.8	21.1	41.7	17.7	16.9	14.7	14.9	13.3	13.7
Public Sector 'Other'	1.4	1.0	1.0	0.9	0.7	0.7	0.9	0.7	0.7	0.7	0.2	0.2	0.2	0.2	0.2	0.1
Domestic Total	358.0	356.7	347.9	346.5	315.1	341.2	298.6	321.4	316.2	267.7	261.1	251.6	232.2	227.3	219.0	217.5
Domestic Electricity	148.9	155.8	155.7	147.0	132.3	138.7	131.3	139.5	128.0	108.0	93.0	76.0	65.5	59.2	53.2	50.8
Domestic Gas	196.8	188.8	180.5	186.8	171.1	189.8	155.9	170.9	176.7	149.0	157.5	165.1	156.2	157.5	155.8	156.6
Domestic 'Other'	12.3	12.1	11.7	12.6	11.7	12.7	11.3	11.1	11.5	10.6	10.6	10.6	10.5	10.7	10.0	10.1
Transport Total	320.9	325.2	328.2	307.1	305.5	297.2	290.1	287.1	287.6	293.1	300.1	304.6	310.8	304.0	287.5	240.7
Road Transport (A roads)	140.2	138.0	137.5	130.9	127.5	126.1	123.9	120.6	119.2	118.7	123.8	123.6	123.6	117.5	110.5	85.6
Road Transport (Motorways)	45.8	43.6	42.8	40.8	46.9	42.2	40.4	43.2	45.6	48.7	50.5	51.5	51.3	54.7	48.5	50.1
Road Transport (Minor roads)	125.7	134.5	138.8	126.7	122.4	120.2	117.6	115.0	114.4	117.2	117.8	121.8	128.4	124.5	120.9	98.6
Diesel Railways	7.5	7.4	7.4	7.1	7.0	7.1	6.6	6.9	6.9	7.0	6.5	6.3	6.2	5.8	6.2	5.1
Transport 'Other'	1.6	1.7	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.4	1.3
LULUCF Net Emissions	-10.1	-10.3	-11.0	-11.7	-11.7	-11.8	-12.4	-12.2	-12.9	-12.8	-13.6	-12.6	-13.3	-13.2	-13.4	-13.3
Agriculture Total	9.0	7.5	7.0	7.2	6.8	6.9	6.6	6.9	6.5	7.4	6.2	6.1	5.9	5.7	6.2	5.8
Dacorum Total Emissions (kt of CO₂)	999.9	924.6	906.8	892.8	834.9	864.6	782.2	831.1	816.9	797.2	728.2	711.7	684.0	668.9	636.8	586.0
% from baseline	0.0%	-7.5%	-9.3%	-10.7%	-16.5%	-13.5%	-21.8%	-16.9%	-18.3%	-20.3%	-27.2%	-28.8%	-31.6%	-33.1%	-36.3%	-41.4%
% from previous year	0.0%	-7.5%	-1.9%	-1.5%	-6.5%	3.5%	-9.5%	6.3%	-1.7%	-2.4%	-8.7%	-2.3%	-3.9%	-2.2%	-4.8%	-8.0%

Population ('000s, mid-year estimate)	138.6	139.0	139.5	140.8	142.2	143.7	145.3	146.7	148.1	149.5	151.1	152.4	153.3	154.3	154.8	155.5
Per Capita Emissions (tCO₂e)	7.2	6.7	6.5	6.3	5.9	6.0	5.4	5.7	5.5	5.3	4.8	4.7	4.5	4.3	4.1	3.8
Area (km ²)	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5	212.5
Emissions per km² (kt CO₂e)	4.7	4.4	4.3	4.2	3.9	4.1	3.7	3.9	3.8	3.8	3.4	3.3	3.2	3.1	3.0	2.8

UK Total Emissions (MtCO₂)	538.9	536.8	526.6	512.6	463.1	480.6	439.6	459.4	451.1	413.0	398.0	375.1	362.9	356.6	341.6	305.9
Dacorum emissions as % of UK	0.186%	0.172%	0.172%	0.174%	0.180%	0.180%	0.178%	0.181%	0.181%	0.193%	0.183%	0.190%	0.188%	0.188%	0.186%	0.192%