

WELWYN
HATFIELD'S
TRANSITION TO
NET
ZERO
STRATEGY

MATTHEW COOK'S ENTRY OF
ELLENBROOK IN THE BIODIVERSITY
PHOTOGRAPHY COMPETITION



SUSTAINABLE | **ACCESSIBLE** | **BIODIVERSE** | **RESOURCEFUL** | **INCLUSIVE** | **RESILIENT** | **COLLABORATIVE**



**WELWYN
HATFIELD**

FOREWORD

FROM THE JOINT ADMINISTRATION

CLIMATE CHANGE IS THE MOST PRESSING AND CHALLENGING ISSUE FACING HUMANITY

The evidence from experts on the effects of climate change is startlingly clear. Global temperatures have risen by **1.1 degrees Celsius** since 1880, causing extreme weather patterns, disrupting the balance of nature, posing a threat to homes and communities, causing scarcity of resources and destroying precious wildlife habitats. These impacts are being felt all over the world and the United Kingdom is no longer immune, with increasing levels of flooding and heat waves ringing the warning bells. We know that unless we take action to intervene and reverse this cascade of damaging change, our way of life and the lives of the generations to come will be impacted in terms of economic security, social equality, quality of life, health and the natural environment.

Climate change poses huge challenges, but also presents opportunities to implement policies and actions that take advantage of innovations and progressive thinking around how we live and work, travel, use resources, construct our homes and neighbourhoods and adapt to a changing environment. It is an opportunity to influence long-term change in our behaviours and generate a culture of care for the natural environment.

We know that our residents consider climate change a priority, particularly in terms of impacts on the natural environment and high energy costs. To demonstrate our commitment, the council declared a Climate Emergency in 2019 and more recently, we have changed the Climate Change Members Sub-Group into the Climate Biodiversity

Cabinet Panel, to ensure that the council recognises the importance of climate change and allow the public to participate at the meeting to some degree. We have produced this Transition To Net Zero Strategy (TTNZS) to set out the areas that need to be tackled and the steps and actions we will take to create a more sustainable and resilient Welwyn Hatfield. We have also established the Climate Hub which offers a valuable resource, a 'one stop shop' for residents to access climate related information within the borough.

We aim to demonstrate leadership and action in achieving the goals of the TTNZS, and at the same time recognise we cannot deliver change alone. A whole borough approach will be needed with Welwyn Hatfield Borough Council playing a pivotal role in collaborating influencing and engaging to secure buy in from all parts of our community including residents, businesses, education providers, organisations and community groups.

Welwyn Hatfield is blessed with a strong sense of community, passionate and engaged voluntary and community groups, sporting and cultural facilities, towns and villages with a rich and distinctive heritage, precious green spaces and waterways, a strong industrial and business base and two universities. This offers a robust foundation to come together around a shared vision of where we want to be by 2050 and deliver the actions and changes needed.





Our vision for 2050 is for Welwyn Hatfield to be a place defined by a culture of sustainability, which informs our choices and the way we live, work and spend our leisure time; where our towns and villages are inclusive, equitable and accessible for all, through active travel and public transport; where we can showcase a successful marrying of the urban and natural environment through sustainable and attractive neighbourhoods and integrated, species rich, green/blue spaces, which offer a place for wildlife and people; where we recycle our waste easily and efficiently; where our homes and workplaces are comfortable and affordable to run, with low emissions and predominantly fuelled by green energy and where we embrace new thinking and innovation.

In achieving this vision, we want Welwyn Hatfield to become more resilient, socially equitable with a strong sense of community and improved health and wellbeing and quality of life – where everyone feels included and can play a part in the journey to net zero.



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INTRODUCTION



INTRODUCTION

It is scientifically proven that the burning of fossil fuels is the main cause of climate change, and since the Industrial Revolution, human activities have driven up the concentration of carbon dioxide in our atmosphere by 48%. It is the unprecedented speed of change that is most alarming, as nature and mankind have little time to adapt. The speed of change is increased due to positive feedback loops, which amplify the effects of climate change. For instance, permafrost is melting at faster rates due to the rising global temperature, which is releasing large stores of methane (an even more potent greenhouse gas than carbon dioxide) into the atmosphere which further exacerbates global temperature rise.

To slow down this rate of change, we need to reduce emissions (to limit the amount of carbon dioxide in the atmosphere) and enhance the natural environment (to capture and store carbon dioxide).

We also need to start adapting to the changing climate, because firstly, we are already experiencing impacts of climate change and secondly, because the effects of climate change will be experienced for many years to come due to the time lag between what we do and when we feel it and the long lifespan of greenhouse gases.

By working better together, we can make the difference. This strategy focuses on what we aim to do, what we are doing and what you can do, by setting out a clear vision, defining our roles and exploring how we can make the changes required to become less reliant on fossil fuels, embrace new behaviours, advance with new technologies and enhance nature.

It is not only a climate crisis, but also an ecological crisis, as we face an anthropogenic extinction. Species are disappearing at an alarming rate due to human activity and as we continue to burn fossil fuels, over exploit our natural resources, destroy habitats and pollute our waters, we are committing ourselves to an insecure and unsustainable world.

There is no Planet B, therefore we must all play a part in tackling the climate and ecological crisis to ensure a secure and liveable future for ourselves and our children.

Climate change is felt differently across the globe, and locally we are experiencing flooding, heatwaves, diminishing wildlife habitats and biodiversity, food insecurity and exacerbation of health, economic and social inequalities. We therefore all have a part to play in caring for the environment, reversing trends and embedding a long-term culture of change.

The purpose of this document is to set out how we, as a council, as a borough, and as individuals can play our part and transition to net zero in line with our 2030 and 2050 targets, increase our resilience to the impacts of climate change and improve biodiversity.



“

Our world needs climate action on all fronts: everything, everywhere, all at once.

**António Guterres,
UN secretary general**

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[SOURCE]



“

The truth is: the natural world is changing, and we are totally dependent on that world. It provides our food, water and air. It is the most precious thing we have, and we need to defend it.

**David Attenborough,
All time legend**

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[SOURCE]

BACKGROUND



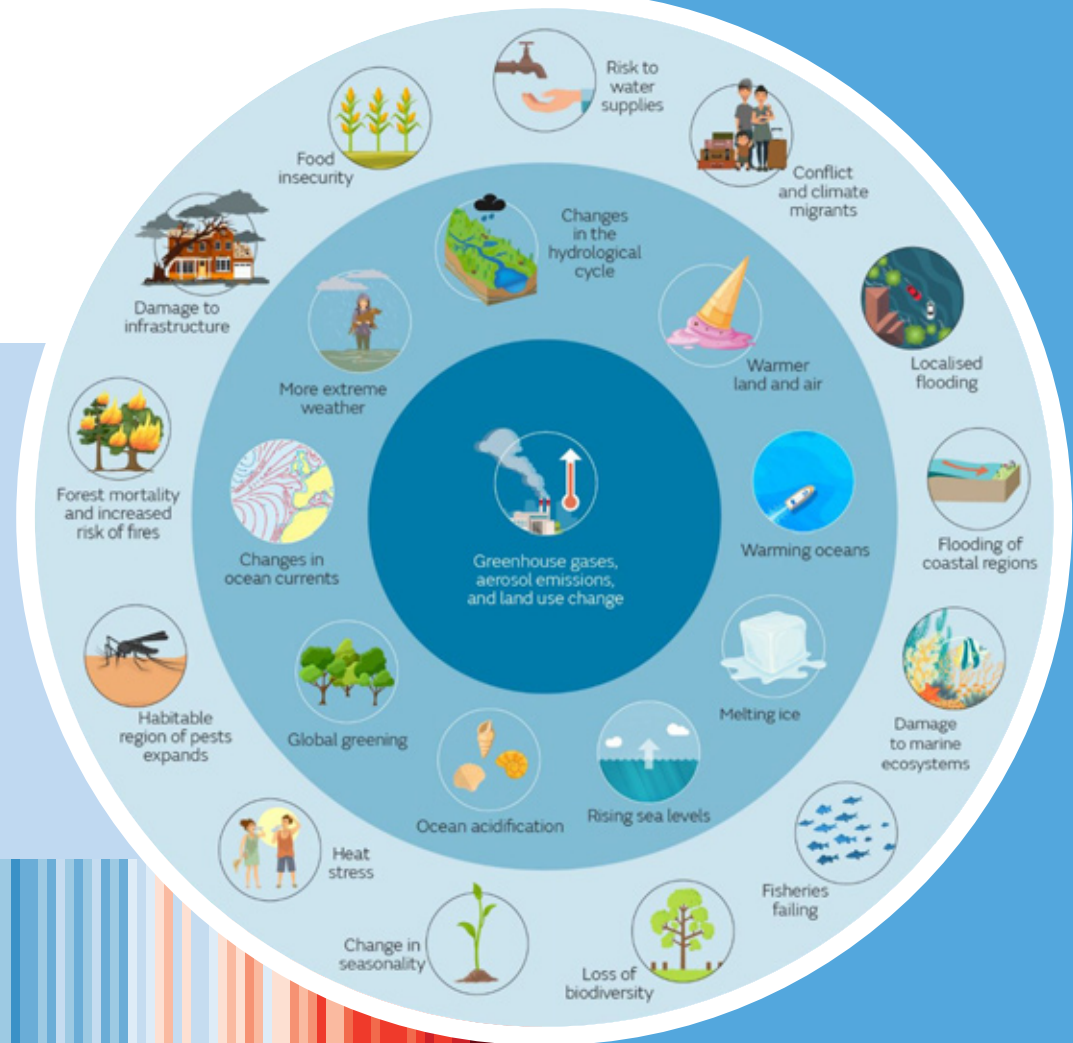
BACKGROUND

CONTEXT

We know the science behind climate change, with the **6th Intergovernmental Panel on Climate Change report** recently confirming:

Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above pre industrial levels.

Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. [QUOTE SOURCE]



- Drivers of climate change
- Changes to the climate system
- Impacts

The **Climate Stripes** (of which the Global version is shown above) developed by Professor Ed Hawkins at the University of Reading in 2018, clearly show how global average temperatures have risen over nearly two centuries.

As shown above right, the impacts of climate change are broad and varied and will be felt disproportionately depending on where we live, our age, health conditions and our financial status. [IMAGE SOURCE]

PROGRESS – GLOBALLY

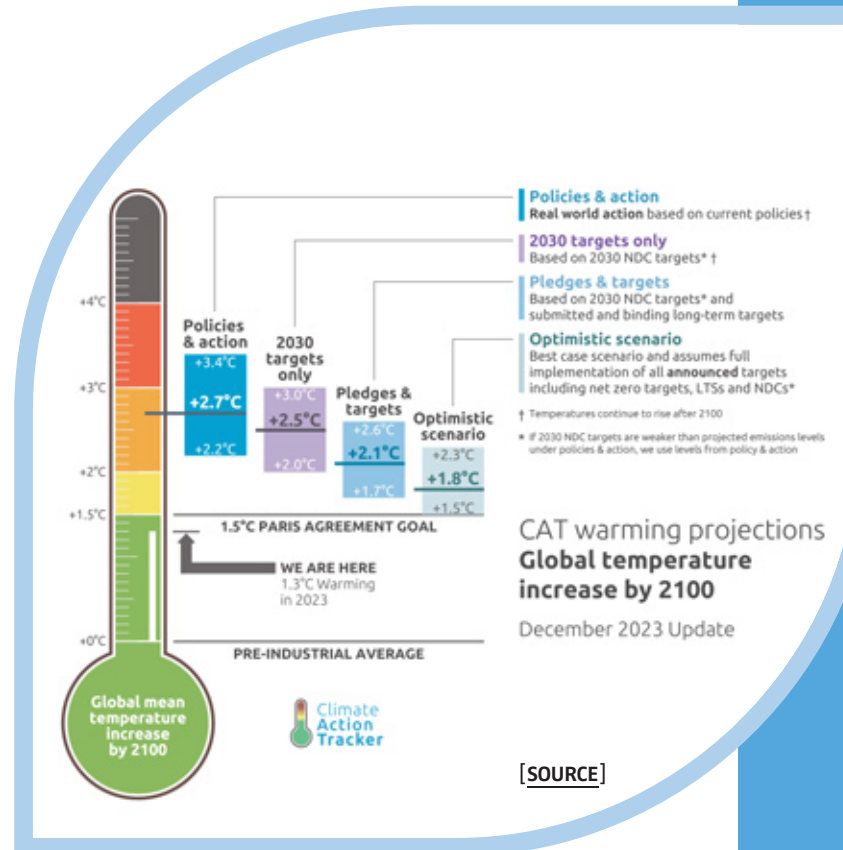
In 2015, 196 United Nations Parties signed the **Paris Agreement**, a legally binding international treaty on Climate Change, which aims to limit global warming to well below 2 degrees Celsius, preferably 1.5 degrees Celsius by the end of this Century.

It states that to limit global warming to 1.5 degrees Celsius, GHG emissions must peak before 2025 at the latest and decline 43% by 2030.

The **Climate Action Tracker** is an independent scientific project that tracks government mitigation targets, policies and climate action and measures it against the aim of the Paris Agreement. The CAT tracks countries responsible for around 85% of global emissions and factors in the effects of climate policies and action on emissions, the impact of pledges, targets and National Determined Contributions (NDC's), and the comparability of effort against countries' fair share and modelled domestic pathways.

The most recent findings (December 2023), confirm that there is a 50% chance that warming associated with existing global pledges and targets scenario will exceed 2.0°C in 2100, and current policies and actions will result in an average rise of 2.7°C.

The **Global Carbon Project** reported a projected 40.6 billion tonnes of CO₂ (GtCO₂) in 2022, with no sign of the decrease that is urgently needed to tackle climate change. If current emissions levels persist, there is a 50% chance that warming of 1.5°C will be exceeded in 9 years.

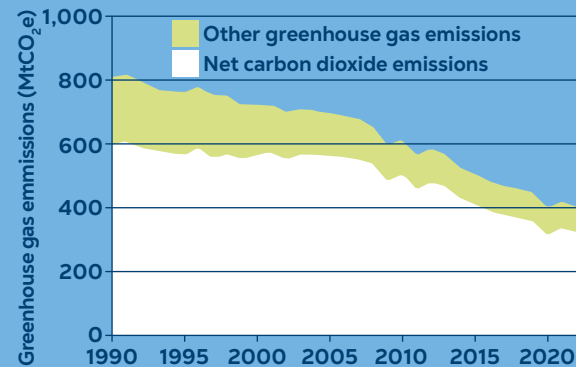
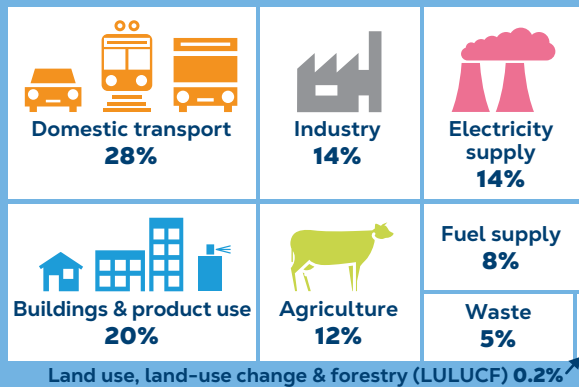


PROGRESS – AS A COUNTRY

The UK was the first country to make a net zero pledge, and we aim to do this, as a country by 2050. You can read more about the UK's Net Zero Programme [here](#).

Department for Energy Security and Net Zero (DESNZ) figures suggest that the UK was responsible for emitting 406.2 million tCO₂e in 2022 (the most recent reporting period), which is a 3.5% decrease from the previous year

(2021) and a 50% decrease from the baseline year of 1990. The largest emissions source continues to be transport, which makes up 28% of the overall carbon footprint of the country. The majority of emissions reduction come from the electricity supply sector, which is due to decarbonisation of the grid by investment in renewable electricity generation technologies such as solar photovoltaics and wind turbines.



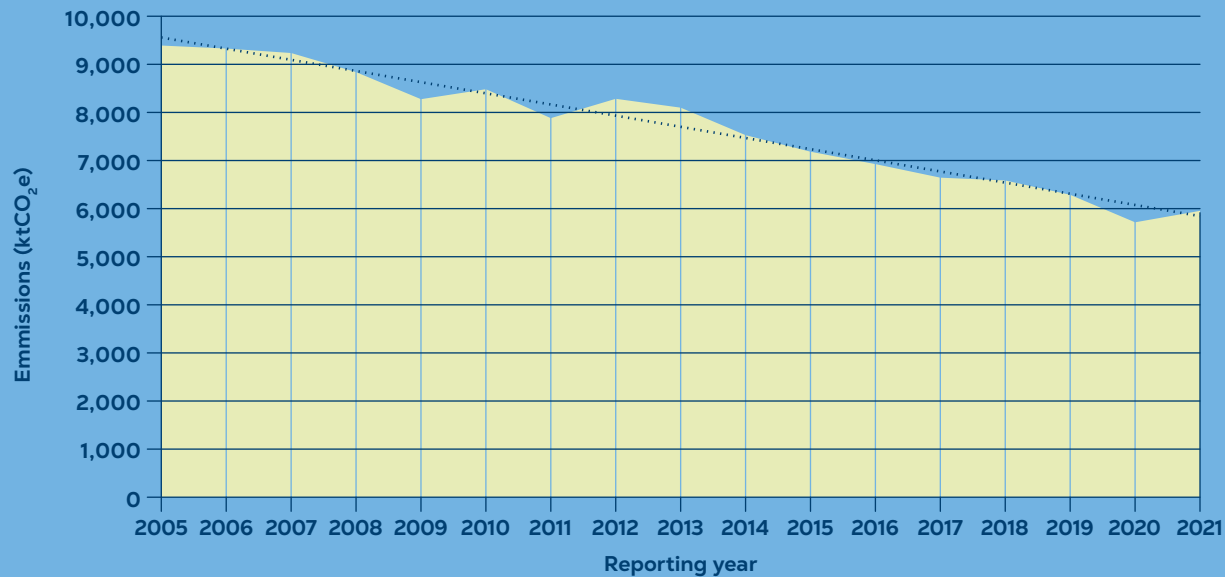
	% change 2021-2022	% change 2019-2022	% change 1990-2022
Total Greenhouse gas emissions	4%	9%	50%
Domestic Transport	2%	10%	12%
Buildings & product use	13%	12%	24%
Industry	5%	8%	63%
Electricity supply	1%	5%	73%
Agriculture	2%	3%	12%
Fuel supply	1%	17%	60%
Waste	0%	10%	74%

The most recent **Climate Change Committee report** (2023), presents slightly higher figures as it includes emissions from the UK's share of international aviation and shipping. On the whole the report suggests that "The rate of emissions reduction will need to significantly increase for the UK to meet its 2030

Nationally Determined Contribution." It goes on to highlight a significant slowing in progress in the UK and warns that strong targets need to be matched by policy and clearer strategies to achieve these targets, otherwise commitments to net zero cannot be met.

The UK also has a **national adaptation programme**, which is run on five-year cycles, to ensure continuous progress in adapting and building resilience to the impacts of climate change. The **Climate Change Committee independent assessment** of the third round of the National Adaptation Programme (NAP 3), reports that the Programme falls short of what is needed; lacking pace and ambition to address growing climate risks, suggests the current approach is not working and that an urgent refresh is required.

PROGRESS – AS A COUNTY



The **Hertfordshire Climate Change and Sustainability Partnership’s Strategic Action Plan 2023** sets out how the County plans to achieve net zero emissions across Hertfordshire by 2050, if not before. Data from DESNZ estimates that Hertfordshire emitted approximately 5,967.4ktCO₂e in 2021 (the most recent reporting

period), so there is a long way to go to reach net zero, however the partnership works collaboratively using direct and indirect policy where possible, legislation, influence, and encouragement and are already seeing great progress, with a 36.5% decrease in emissions since 2005.



PROGRESS – AS A BOROUGH

The Department of Energy Security and Net Zero annually publish Green House Gas emissions data for all local authorities. (Please note the data is always two years behind due to the complexity of the data collection process).

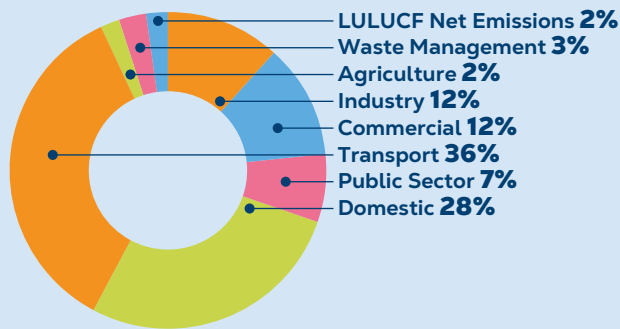
The most recent data demonstrates that in 2021, Welwyn Hatfield borough was responsible for 599.0 kt of CO₂e.

The council, as an organisation, is responsible for less than 1% of borough wide emissions, however we understand the part we must play in helping others reduce emissions through our sphere of influence.

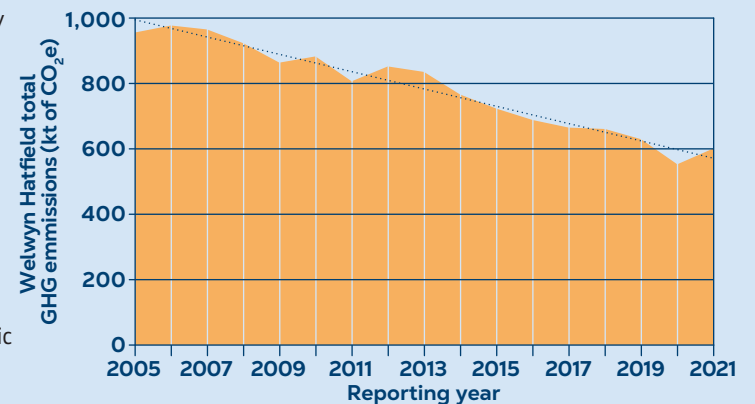


THE SIX SPHERES OF INFLUENCE
[SOURCE]

Transport was the largest emissions source in 2021 (36%), followed by domestic energy use (28%), commercial energy use and Industrial energy use (both 12%), public sector (7%), waste management (2%) and agriculture (2%). Land use, land use change and forestry resulted in carbon sequestration of 2%.



There has been a steady decline (37% decrease) in emissions since the baseline year of 2005. There was a slight increase from 2020 to 2021, however both 2020 and 2021 have been affected by the Covid-19 pandemic. 2021 emissions did not exceed pre pandemic levels.



PROGRESS – AS AN ORGANISATION

The most recent GHG assessment for WHBC relates to the 2022/23 financial period. Please refer to the full 2022/23 GHG assessment for more details, but to summarise, the council were responsible for 2,104 tCO₂e in 2022/23.

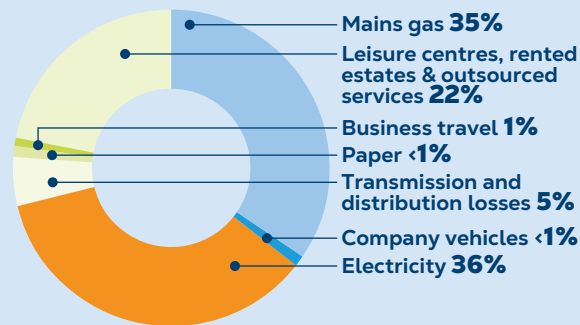


There has been a 50% increase in organisational emissions since the previous reporting period (2021/22), however this is predominantly due to the impacts of the Covid-19 pandemic. Both 2020/21 and 2021/22 saw reduced occupancy across the council's portfolio, which resulted in reduced energy use and lower emissions than usual in public buildings.

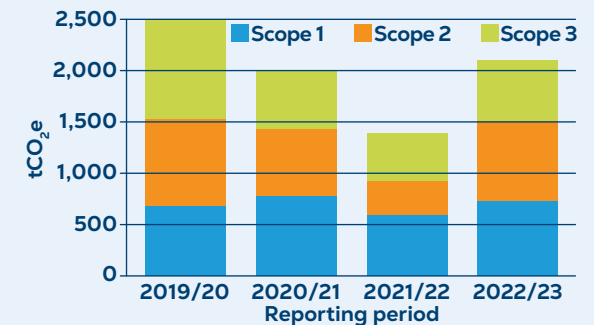
There has been a 16% reduction in overall emissions since the baseline year (2019/20), which is largely due to the decarbonisation of leisure buildings in Scope 3.

Emission source	2022/23 tCO ₂ e	%
SCOPE 1 Direct emissions		36
Mains gas	740.5	35
Company vehicles	10.6	1
SCOPE 2 Indirect emissions		36
Electricity	762.5	36
SCOPE 3 Other indirect emissions		28
Transmission & distribution losses	101.7	5
Grey fleet	21.7	1
Paper	3.3	<1
Business travel (taxi, tube, train)	0.1	<1
Leisure centres, rented estates & outsourced services	463	22
TOTAL	2,104	100

2022/23 GHG emission sources



Annual change in emissions



The table above displays GHG emissions as a result of the council's organisational activities during the financial period 2022/23.

Emissions from electricity make up the largest proportion on emissions (36%), followed closely by mains gas (35%), leisure centres, outsourced services and rented estates (22%), transmission and distribution losses (5%) and business travel (1%). The remaining 1% of emissions are associated with purchased paper and company vehicles.

A greenhouse gas assessment is only as good as the primary data collected, and therefore, as we transition to net zero we will strive to report more granularly, accurately and robustly to ensure what we report is representative of our organisational activities.

In future years, we will strengthen our data collection process and hope to include more Scope 3 emission sources.



Sustainable development is defined as:

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

United Nations General Assembly, 1987

The United Nations created 17 sustainable development goals.



OUR VISION



OUR VISION

APPROACH & PRIORITIES



CORE: COLLABORATIVE, OPEN, RESPONSIBLE AND EXCELLENT

As we transition to net zero, we will ensure we have sustainability embedded into all our activities, actions and decision-making processes and ensure a joined-up approach to delivery across our service areas. We aim to lead the way, as an example to others, in the transition to net zero, and support residents, businesses, and organisations with their own net zero journeys.

All service areas will follow up to date best practice guidance to ensure we are ahead of the game in terms of the science, technology and funding.


We will be ambitious with our plans, proactive in delivering projects and transparent in our approach to reaching net zero.

WHBC will ensure climate change actions are also geared towards addressing inequalities, expanding employment opportunities, enhancing the natural and built environment and improving the health and wellbeing of residents.

On our pathway to net zero we aim to make the borough, sustainable, accessible, more biodiverse, resourceful, inclusive, resilient and collaborative.

We have recently updated our **Council Corporate Priorities** to reflect our climate ambition, and have 'Action on Climate' as a key priority, with the following objectives:

- **Renew our commitments to be a net zero council by 2030 (and as a borough by 2050)**
- **Step up climate change adaptation and mitigation measures**
- **Lead by example and encourage others to make positive change**
- **Increase and promote biodiversity**

 <p>H Homes to be proud of</p> <p>Build new social and affordable homes High-quality homes for all Support and prevent homelessness Plan for future homes in the right places</p>	 <p>E Enable an economy that delivers for everyone</p> <p>Champion local businesses Support vibrant town centres Enable access to amenities in our neighbourhood centres Boost the economy in rural areas</p>	 <p>A Action on Climate Change</p> <p>Renew our commitments to be a net zero council by 2030 Step up climate change adaptation and mitigation measures Lead by example and encourage others to make positive change Increase and promote biodiversity</p>	 <p>R Run an effective council</p> <p>Be accessible Be accountable and adopt a first time right approach Make financial decisions to deliver efficient and quality services Build our reputation, locally and with partners</p>	 <p>T Together, create opportunities for our communities</p> <p>Be proud of our environment and heritage Promote health and wellbeing through local leisure and cultural opportunities Celebrate our diverse cultures and communities Help us feel safer where we live</p>
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GOVERNANCE



GOVERNANCE

STATUTORY OBLIGATIONS

There is a statutory obligation (Climate Change Act 2008) on local government to mitigate the effects of climate change, by reducing emissions and to adapt to climate change, by preparing for and building resilience to the longer-term impacts of climate change.

WHBC has a Climate Officers Group that consists of senior staff across all service areas and is chaired by a climate change officer who coordinates all key activities. The group has a Terms of Reference [link] and meets every two months to discuss the climate action plan, ensure projects are progressing in a timely and efficient manner and troubleshoot any challenges or barriers to successful delivery of actions. This collaborative approach across all service areas is crucial in meeting our climate objectives.

WHBC has a Climate Biodiversity Cabinet Panel which has representation from all political parties. The cabinet panel meets every two months and has overview of all climate related activities at the council and will review and make decisions on recommendations from officers. They have delegated authority to approve spend from the Climate Change earmarked reserve.

To ensure climate change is embedded into decision making processes, Committee reports, Executive Member Decisions and documented Officer decisions include a section on Climate Change impacts.

WHBC are also key members of the Hertfordshire Climate Change and Sustainability Partnership. We have Executive Member and Officer representation at the bi-monthly meetings which enables all districts and boroughs to work collaboratively within our county and address the challenges collectively.



MEASURING AND MONITORING EMISSIONS (CARBON FOOTPRINT)

We cannot reduce what we don't measure, therefore we calculate and report our emissions, and we do this in the form of a carbon footprint.

A carbon footprint (often called a greenhouse gas assessment) quantifies greenhouse gases produced by an organisation's activities. A GHG assessment is an essential step in any path to net zero as it identifies emissions hotspots, allows reduction targets to be set and endorses consistent monitoring.

GHG assessments quantify the main Kyoto Protocol GHGs, where applicable, and are measured in terms of tonnes carbon dioxide equivalence (tCO₂e), where equivalence means having the same warming effect as CO₂ over a period of 100 years.

The GHG's included in assessments are as follows; Carbon dioxide (CO₂); Methane (CH₄); Nitrous oxide (N₂O); Hydro fluorocarbons (HFCs); Sulphur hexafluoride (SF₆) and Perfluorinated carbons (PFCs).

We have followed the **Greenhouse Gas Protocol** to calculate the carbon footprint of **our organisation** and sourced **borough wide emissions data** provided by the Department for Energy Security and Net Zero, and will continue to do so moving forward annually.

The GHG Protocol breaks down emission sources into three distinct categories or 'scopes'.

Scope 1: Direct GHG emissions

Direct GHG emissions from activities owned or controlled by the council. Examples of Scope 1 includes emissions from combustion in council owned or controlled boilers, furnaces, vehicles and Fugitive gases.

Scope 2: Indirect GHG emissions

Indirect GHG emissions associated with purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of the council's electricity use but occur at sources that the council do not own or control. Examples include grid supplied electricity.

Scope 3: Other indirect GHG emissions

All other indirect emissions that are a consequence of the council's actions that occur at sources the council may or may not own or control. Examples of Scope 3 emissions include business travel by public transport or employee vehicles, disposing of the council's own waste, purchased goods in the supply chain, water supply and water treatment, employee commuting and upstream and downstream leased assets.



MEASURING AND MONITORING PROGRESS (CLIMATE ACTION PLAN)

The council has a Climate Action Plan which has been developed in accordance with the strategy and corporate priorities. It outlines specific actions that address the climate and ecological emergency and details key deliverables that will help us achieve our climate goals and net zero targets.

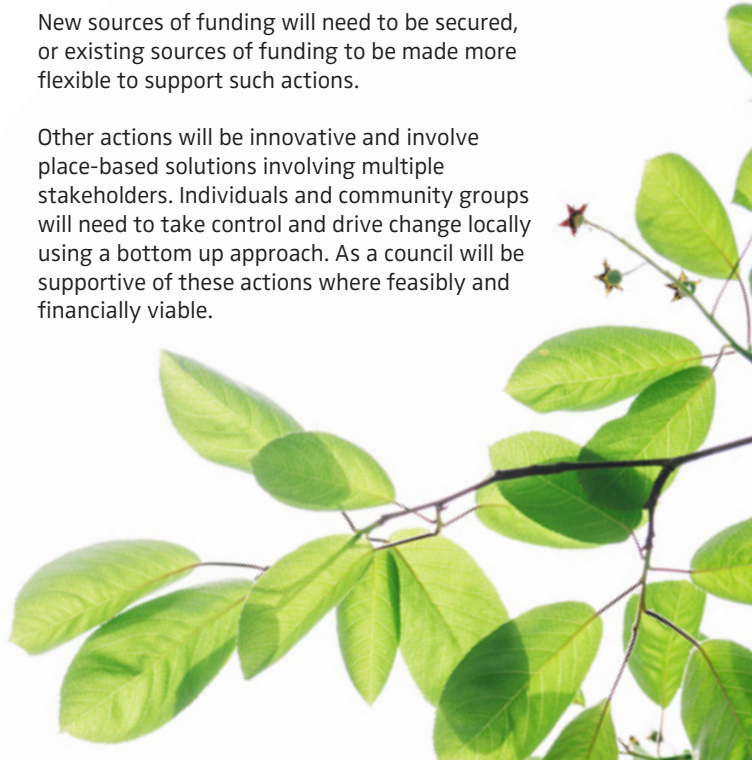
The Climate Action Plan is a live document that monitors the successful transition to net zero. It sets SMART targets, and provides details on the projects required to achieve net zero, categorised into impact areas/themes which will be explored in detail through subsequent chapters.

The CAP identifies responsibilities, time frames, carbon impacts, priorities, and co benefits, and is a vital tool used to monitor the progress of climate action and ensure we are on track to meet our net zero targets. The CAP will evolve with new actions, after they have been approved through internal mechanisms.

Some actions will require support, guidance and leadership from the UK Central Government and changes to National strategy and policy, in a top down approach.

New sources of funding will need to be secured, or existing sources of funding to be made more flexible to support such actions.

Other actions will be innovative and involve place-based solutions involving multiple stakeholders. Individuals and community groups will need to take control and drive change locally using a bottom up approach. As a council will be supportive of these actions where feasibly and financially viable.



The CAP places emphasis on co benefits, and we do this because tackling the climate crisis is not only about reducing emissions, but also about:

Health and wellbeing

Ensuring we can all sustain happy and healthy lifestyles.

Economy

Developing in a way that does not harm the environment or rely on fossil fuels.

Biodiversity

Protecting what remains of our biodiversity and enhancing nature where possible to maintain vital ecosystems services that we rely on and to sequester carbon.

Social equity

Guaranteeing those most vulnerable to the impacts of climate change are not affected disproportionately.

Resilience

Safeguarding our future by preparing for changes and building stronger communities.

Education and skills

Evolving new ways of thinking and learning new skills in line with new technologies and information.

The following sections will take you through the key themes of the climate action plan. We will provide an outline of what we aim to do within each impact area, explain what we are currently doing in order to achieve our aim, and highlight ways in which you can get involved and make a difference too.



ENERGY

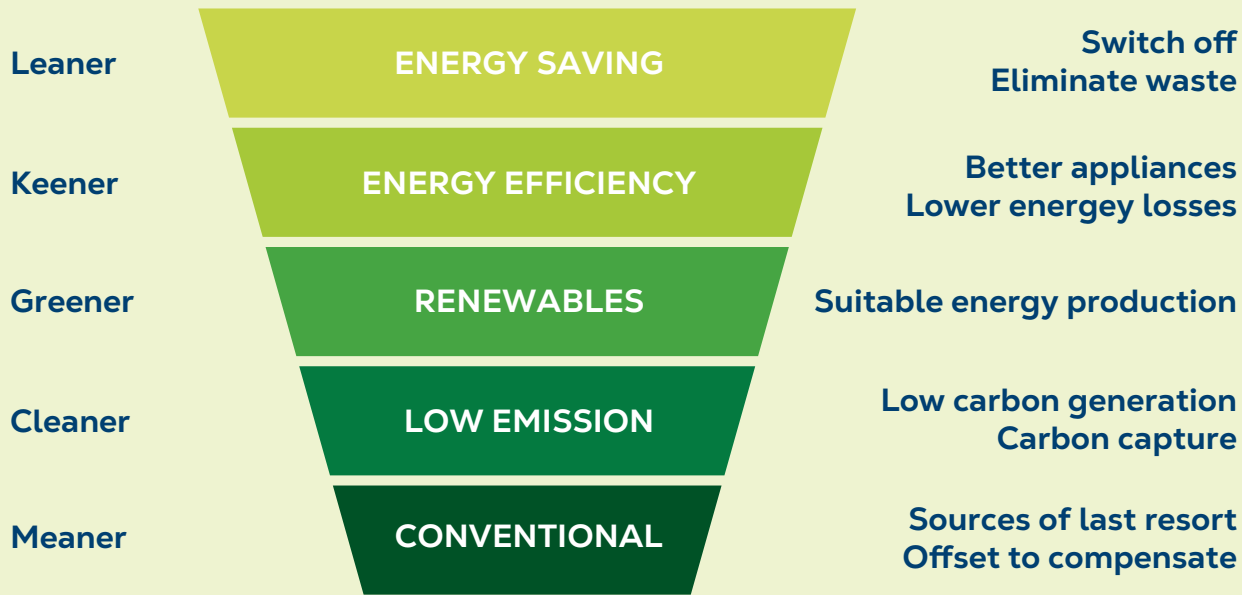


ENERGY

A SUSTAINABLE WELWYN HATFIELD

The retrofitting of homes, commercial properties and public buildings will be integral to meeting our organisational and boroughwide net zero targets, alongside investing in renewable, clean energy and transitioning away from fossil fuels.

Our approach to this will be in line with the energy hierarchy, which we will adhere to internally and promote around the borough. We all have a part to play in how we use energy, and being mindful about how we use it (to avoid unnecessary waste), is the first rung of the energy hierarchy, followed by energy efficiency, renewable energy generation and low carbon technologies.



COMMERCIAL BUILDINGS

We understand that the decarbonisation of our operational commercial buildings will play a large part in meeting our 2030 net zero target.

WE AIM TO

- Improve energy performance in our commercial portfolio, which includes;
 - Corporate office buildings
 - Community centres
 - Landlord supplies for council-owned leased properties
 - Leisure centres
- We will do this by the development and maintenance of an Energy Management system (EnMS) and achieve the ISO 50001 standard, which will aim to;
 - Reduce energy use to avoid unnecessary expenditure
 - Improve energy efficiency to ensure cost effectiveness
 - Reduce emissions to lower the environmental impact
 - To remove our dependence on fossil fuels by investing in renewable energy
- Utilise feasible funding opportunities to pay for decarbonisation projects, such as future Public Sector Decarbonisation Schemes and the Heat Networks Transformation Scheme.

WHAT WE ARE DOING

- Any energy that we pay for across all our portfolio, is collected and monitored by Team Energy, through an energy platform called **SIGMA**. The software is a single data repository for our entire estate and allows for effective and efficient energy management with transparent, clear and actionable data. The platform provides a dashboard which flags anomalies in energy use and can therefore save the council money by alerting us to incorrect metering. It highlights buildings that are consuming higher than anticipated energy, so can guide the council towards addressing these buildings as a priority. Finally, it measures and tracks Scope 1 and Scope 2 emissions to ensure we are reporting our carbon footprint accurately.
- In obtaining £2.3 million of funding through the Public Sector Decarbonisation Scheme, we have upgraded the heating systems in Campus East, Campus West and the Hatfield Swim Centre. The schemes saw the removal of aged and inefficient gas boilers and installation of air source heat pumps and solar photovoltaic (PV) panels. Following the completion of work under this scheme, we are now collating energy data for these buildings to quantify the emissions savings.

RIGHT:
AIR SOURCE HEAT PUMPS
INSTALLED AT CAMPUS WEST

BELOW:
PHOTOVOLTAIC PANELS
INSTALLED AT CAMPUS WEST



- Analyse our portfolio's energy consumption, set out key priorities and create a plan to implement efficiency and reduction measures.
- Collaborating with partners to assist in a decarbonisation program of works for our commercial portfolio. This involves conducting site specific energy audits, carrying out feasibility studies for renewable and low carbon technologies and cost benefit analysis.
- All council-owned street lighting is LED, and we will be installing some new solar-powered street lighting in 2024/25.
- We are upgrading all lights in Mill Green Museum to LEDs through funding awarded in the SHARE Museum East's Towards Net Zero Carbon Scheme.
- The council's operations are powered by an 100% renewable energy tariff.

NEW DOMESTIC BUILDINGS (SOCIAL HOUSING AND PRIVATE)

It is estimated that 80% of homes that will exist in 2050 are already built.

However, there is still a high demand for affordable new homes within local authorities, and our **Local Plan** identifies 15,200 new homes will be built by 2036. It is important that we build them to a high standard to avoid the need to retrofit them in the future.

We want to ensure new developments that emerge will have improved opportunities for travelling by public transport, walking and cycling, using natural resources more efficiently, securing high quality sustainable design and managing risk of flood.

WE AIM TO

- Prepare a design brief for all new council owned affordable housing properties to codify our aspirations. These include:
 - Minimum energy performance levels for all properties, measured via the EPC rating of the property.
 - A fabric first approach to ensure high level energy performance.
 - Where feasible, the inclusion of green technologies such as air source heat pumps, PV panels etc to reduce the ongoing carbon footprint of properties.
 - A review of our procurement strategy to seek to encourage contractors to minimise their carbon footprint during the build process.
- The council will work with local communities, landowners and developers to ensure that renewable energy proposals are appropriately considered. The council will also work with developers to ensure that renewable energy solutions are integrated into all new built development where it is appropriate.
- Explore the options for securing local green energy generation, especially where major new development is planned.
- Remain up to date on innovations and best practice guidance on building design, clean energy and low carbon materials.



ABOVE: GREEN ROOF ON MINSTER HOUSE

WHAT WE ARE DOING

- Recent developments include:
 - The Commons and Ludwick Way (now called Marshlands Close). These new build homes have been built on garage infill land, and there are no fossil fuels on site. Homes benefit from solar PV, air source heat pumps, underfloor heating, dual flush cisterns, EV chargepoints and bike storage facilities.
 - Minster House, an over 60's complex, has been cleverly designed with living roof areas and has a car sharing scheme.
- Planning officers have begun work on the next Local Plan, which will factor in our new corporate priorities relating to climate change mitigation and adaptation.



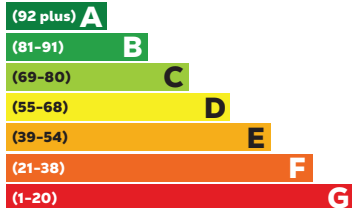
ABOVE: ACCESS TO OUTSIDE GREEN SPACES

EXISTING DOMESTIC BUILDINGS (SOCIAL HOUSING)

- Retrofitting our housing stock is a key priority, not only in terms of reducing emissions, but to ensure our tenants enjoy warm homes and cheaper energy bills. Our domestic housing portfolio consists of;
 - 560 blocks of flats
 - 8,940 dwellings
 - Hostels (temporary accommodation)
 - Sheltered accommodation

WE AIM TO

- Retrofit properties, using a ‘fabric first approach’. This will involve replacing single glazed windows and doors with double or triple glazing, providing cavity or external wall insulation, improving loft or floor insulation, to ensure our portfolio is efficient, affordable to maintain, and resilient to the impacts of climate change.
- Bring all our social housing stock to an EPC rating of C or above by 2030.



ABOVE: RETROFIT WORK AS PART OF THE SOCIAL HOUSING DECARBONISATION FUND

WHAT WE ARE DOING

- In 2023, WHBC were awarded £2.8 million as part of the Social Housing Decarbonisation Fund (SHDF), and work has commenced on this project, targeting 187 of our poorest performing domestic properties.
- We are in the process of conducting stock condition surveys on 100% of our domestic properties to gain a detailed understating of our baseline. This data will guide future decarbonisation work and help set out a robust programme to facilitate this line of work.
- We have a work programme in place, which is fully budgeted for, to upgrade all communal lighting to LED's and install movement detection sensors in all 560 social housing blocks.
- When a dwelling becomes vacant, we have a programme in place to install SMART energy meters, to enable future tenants to monitor their energy use and make financial savings.

EXISTING DOMESTIC BUILDINGS (PRIVATELY OWNED)

There are 26,176 privately owned and 7,586 privately rented properties in our borough (2021 census). Whilst WHBC does not have any direct control over these buildings.

WE AIM TO

- Signpost residents to relevant funding avenues. Funding programmes are notoriously confusing and difficult to navigate and we aim to support our residents by signposting to relevant funding avenues and provide support in determining eligibility and the application process through our partner Better Housing Better Health.
- Lobby central and regional government for more funding and grants.
- Provide information on how to reduce energy use, improve energy efficiency, and install renewable energy sources.
- Work with partners to provide county and country wide initiatives and incentives.
- Work with residents on community energy projects where feasible.

EXISTING DOMESTIC BUILDINGS (PRIVATELY OWNED)

WHAT WE ARE DOING

Solar together

This Hertfordshire-wide **scheme** gives residents the opportunity to purchase solar panels and battery storage at a reduced cost through the power of bulk buying. The scheme has run for two years, with over 1,000 residents in Welwyn Hatfield registering their interest.



Better Housing, Better Health

We have partnered with Better Housing, Better Health, that offers residents a single point of contact to get impartial expert advice to help improve the energy efficiency of homes, save money and improve comfort. They also provide small grants to fund electric blankets, draught excluders and LED lighting to residents who need assistance. Call 0800 107 0044 or visit www.bhbh.org.uk



Eco Flex 4 / Great British Insulation Scheme WHBC have published a **Statement of Intent** to confirm support of this funding scheme. We have partnered with National Energy Foundation (through Better Housing, Better Health) to help promote and facilitate this scheme. By signing up to Eco Flex 4 we, as a local authority, are able to expand the eligibility criteria for residents to apply for central government funding. To find out more please contact **Better Housing, Better Health.**



Hertfordshire Energy Advice Tool

In partnership with Energy Savings Trust, all residents within Hertfordshire can download this free app, which takes you on a bespoke tour around a virtual home and offers tailored advice on how you can reduce energy use in your own home and save money.



Home Upgrade Grant (HUG2)

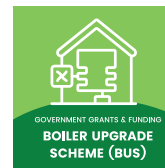
Through the Greater South East Net Zero Hub, we are able to offer eligible residents **energy-efficiency upgrades and low carbon heating** to households in England that: are low income, are off gas grid heating and have an Energy Performance Certificate (EPC) between D and G.



Greater South East Net Zero Hub

Boiler Upgrade Scheme

Funded by central government, **this scheme** offers up to £7,500 grants to eligible properties to replace existing oil, gas or electric heating systems with more efficient, low carbon heating systems such as air or ground source heat pumps or biomass boiler.



■ We are developing a Sustainability Supplementary Planning Document which, in addition to our recently adopted **Local Plan 2016-2036**, will:

- Provide additional information, help and guidance to those making a planning application on how they can improve the sustainability of their proposals;
- Encourage residents, developers and others to seek high environmental standards when planning development.



EXISTING DOMESTIC BUILDINGS (PRIVATELY OWNED)

WHAT YOU CAN DO

- Ensure your home is as energy efficient as possible, such as getting draught excluders if you cannot replace old windows, turn down your thermostat to between 18-21degrees, install loft insulation. **Energy Savings Trust** offers some great ideas.
- Be mindful how you use energy, for instance only fill your kettle enough for what you will use, put the lids on pots when cooking, turn off your lights when not in the room, turn off 'vampire' devices overnight. **Energy Savings Trust** offer some great tips.
- Calculate your carbon footprint using the **Climate Hero calculator tool**.
- Explore low carbon technology. During the energy crisis, the payback period of such investment may be far shorter than you think.
- Explore community energy projects.
- Stay up to date with funding opportunities and best practice guidance by signing up to our WHBC Climate Hub e-newsletter by emailing climatechange@welhat.gov.uk, or referring to our **webpage**.
- Explore different types of **retrofitting measures** that are applicable to your home.
- Learn about how your home is performing by understanding your **Energy Performance Certificate**.

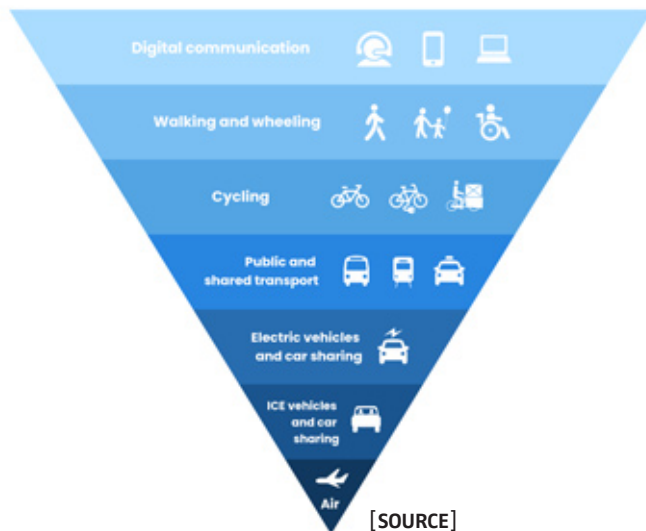


TRANSPORT



TRANSPORT

AN ACCESSIBLE WELWYN HATFIELD



Transport is the largest emissions source in our borough (36%). By following the Transport hierarchy, we hope to reduce emissions associated with travel, by improving infrastructure to facilitate more walking and cycling, promote and improve public transport services where we can, and improve facilities to enable a transition to electric vehicles. By doing so, we aim to make Welwyn Hatfield a greener and healthier place to live.

IN THE ORGANISATION

The council does not own and operate many fleet vehicles, as we outsource the waste operations to Urbaser and the landscape management work to Continental.

Our corporate fleet, which is owned and operated by WHBC staff, consists of:

- 5 diesel vans
- 1 petrol hybrid car
- 2 electric vehicles (EV) – leased

WE AIM TO

- Electrify our fleet by 2030, where financially viable.
- Install additional EV charge point in Cherry Tree Car Park to facilitate the powering of these vehicles.
- Work with outsourced service providers to trial alternative sustainable fuels such as hydrotreated vegetable oil and ultimately to electrify their fleet where possible.
- Encourage and support staff to travel actively or sustainably where possible and have a flexible approach in terms of remote working where viable.



WHAT WE ARE DOING

- Promoting the use of two electric vehicles for business travel purposes.
- Promoting the use of the pool bikes for shorter distance trips.
- Updated our **Campus East and Campus West Travel Plan** to ensure staff, members and visitors have up to date, reliable, relevant information on how they can travel more actively or sustainably.
- Providing staff and contractors with travel incentives that focus on sustainable or active travel, for instance the cycle to work scheme and discounted Arriva bus pass.

IN THE BOROUGH



LEFT :
ONE OF FIVE BIKE MAINTENANCE STANDS
INSTALLED AROUND THE BOROUGH

RIGHT :
WALKING AND CYCLING ROUTE ALONG
ALBAN WAY

FAR RIGHT :
SIGNAGE ALONG ALBAN WAY



Hertfordshire County Council are the highways authority and responsible for roads and pavements, however we will continue to work with them wherever possible on schemes to ensure maximum benefit and minimise disruption.

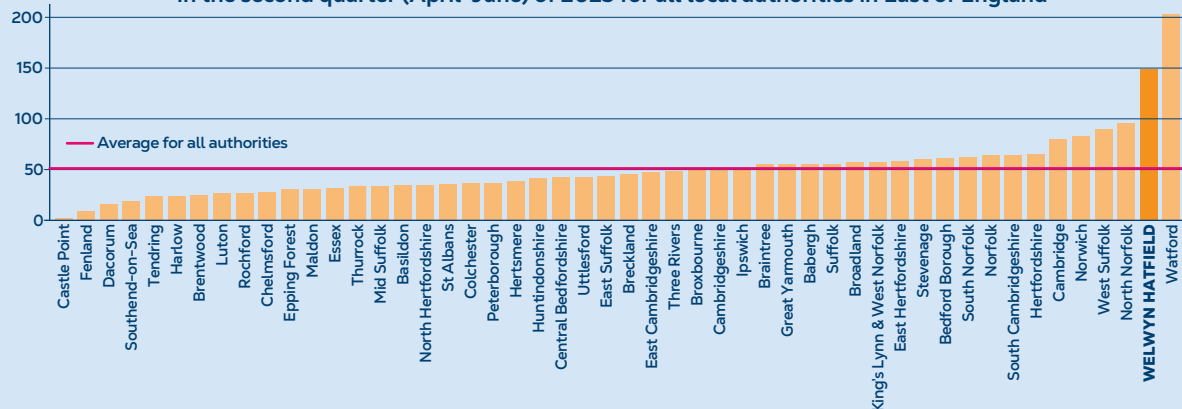
WE AIM TO

- Develop infrastructure fit for future purpose to facilitate EV's and active travel, by applying for relevant central government funding and working with Hertfordshire County Council.
- Working with Hertfordshire County Council on implementing schemes identified in the **Local Cycling and Walking Infrastructure Plan** to help facilitate an increase in walking and cycling.
- Work with external stake holders to ensure rural areas are more connected and have good accessible links to Welwyn Garden City and Hatfield.
- Improve the Alban way pathway to provide a network of wider pedestrian and cycling routes to connect destinations across Hatfield, St Albans and beyond. The improvement plan will also support and improve wildlife through the provision of well managed and biodiverse habitats and will celebrate and protect the Alban Way's heritage and historic features.

WHAT WE ARE DOING

- We have installed approximately 196 charge points in off street locations around the borough, which means Welwyn Hatfield has one of the highest rates of EV charge points per 100,000 people in the East of England (as of August 2023).
- In a recent survey conducted by **Citroen UK** (2022), an analysis of Government data identified the top local authorities that have recorded the biggest percentage growth in the number of public chargers per 100,000 people over that three years. Welwyn Hatfield was deemed the best performing local authority, boasting a 754% increase (October 2019 – October 2022).
- Under the **Local Electric Vehicle Infrastructure (LEVI) funding scheme**, we are working with Hertfordshire County Council (the lead Authority) to install approximately 27 on-street electric vehicle charge points.
- As part of the Local Cycling and Walking Infrastructure Plan, we received five bike maintenance stands and funding to facilitate two Dr Bike sessions to teach residents how to use the maintenance stands and provide free bike servicing. These will be installed and held in the Spring of 2024.

Publicly available electric vehicle charging devices at all speeds per 100,000 population in the second quarter (April-June) of 2023 for all local authorities in East of England



IN THE BOROUGH

WHAT YOU CAN DO

- Choose to walk shorter distances, if able, rather than drive.
- Avoid single occupancy car journeys, by investigating if there are any local car sharing clubs nearby, for instance:
 - [Hiyacar](#)
 - [HertsLiftShare](#)
- Ask your employer if they participate in 'cycle to work schemes' to help fund the purchase of a bicycle.
- Ask your employer if they participate in 'salary sacrifice schemes' to help fund the purchase of an electric vehicle.
- Utilise public transport as a sustainable option, where possible, and ask your employer if they participate in any public transport discount schemes, such as the Arrive Bus Pass Discount.



NATURE



NATURE

A BIODIVERSE WELWYN HATFIELD

The most recent **State of Nature report** (2023) revealed the stark reality of the scale of nature loss across England. The report confirms that, “overall, the UK is one of the most nature depleted countries globally due to human activity, with less than half of its biodiversity remaining”.

The report shows that approximately 1,500 species are at risk of extinction in the UK due to lack of available food, lack of habitat, impacts of climate change, invasive species and pollution. This is not only concerning for these listed species, but for many other species that are interconnected through the ecosystems; the loss of one species can have a profound impact on others.

The importance of nature and these complex ecosystems cannot be stressed enough. We rely on nature and ecosystem services for pollination, nutrient cycling,

medicines, water purification, materials, mental health and wellbeing, pest control, carbon sequestration and flood defence, and it is vital we protect and enhance what we have left.

Welwyn Hatfield has a rich and diverse tree heritage, with more than 30,000 individual trees, along with various woodland areas, open spaces, allotment sites, micro-orchards and several sites of special scientific interest (SSSI). Which is why, along with the hard work of the dedicated and passionate landscape and ecology team, Welwyn Hatfield has been awarded **Tree City of the World** recognition for 2023 for the fifth consecutive year! The global scheme celebrates and promotes places that create green space in urban areas and Welwyn Hatfield has yet again joined 170 cities recognised across 21 countries.



ABOVE: THE DANESBURY FERNERY AT DANESBURY PARK, NEAR WELWYN.



ABOVE: STANBOROUGH LAKES, WELWYN GARDEN CITY

The council manages large woodlands and nature reserves across the borough as well as numerous smaller woodlands and green spaces. We also manage the street trees both on Welwyn Hatfield land and on Hertfordshire Highways land within the towns and villages. This equates to over 27,000 individual street trees.

Two of the council's managed woodlands, Sherrardspark Wood and Northaw Great Wood, are Sites of Special Scientific interest (SSSi). The council manage the verges, public open spaces, town centres, memorial gardens and allotments. Many of the parks in the borough are managed by the council, some are managed by Town Councils and some of the larger parks and leisure facilities are managed by **Better** on the council's behalf.

Three sites in the borough have **Green Flag** status, King George V Playing Fields, Stanborough Park and Oakhill Lawn Cemetery.

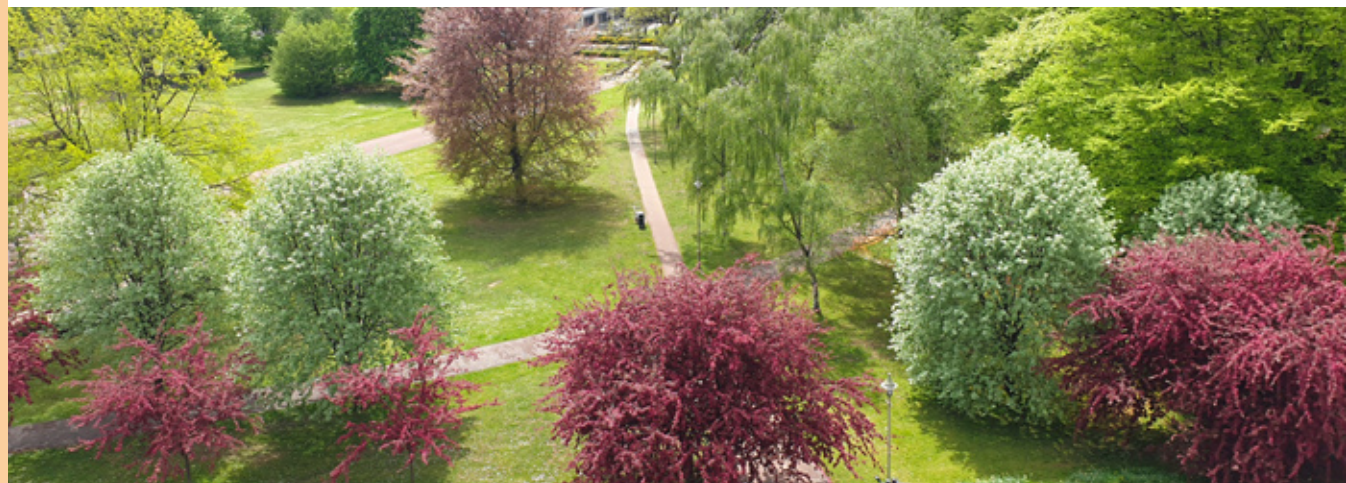
WE AIM TO

- Increase and maintain wildflower meadows, flowers and trees across the borough.
- Implement **Biodiversity Net Gain Policy** in accordance with Government Legislation to ensure biodiversity net gain of at least 10% for all new developments.
- Enhance biodiversity and connectivity across our sites throughout the Borough by working with partners and stakeholders.
- Develop local plan policies that: protect the countryside, open spaces, parks and green spaces; enhances the borough's critical environmental assets; creates and enhances green infrastructure links across the borough; protects and enhances ecological networks and biodiversity assets.
- The council is looking to broaden its scope and engage with more groups across the borough to encourage more people to access nature and explore our woodlands and green spaces.
- Endorse the **Local Nature Recovery Strategy**.
- We will create an interactive map identifying, walking trails, heritage sites, wild flower areas and other blue/green infrastructure of importance.
- Support the **Convention on Biological Diversity** (CBD) agreed at COP15 (Kunming-Montreal Global Biodiversity Framework).

WHAT WE ARE DOING

TREES & WOODLANDS

- The **Welwyn Hatfield Tree and Woodland strategy** set the council's approach to managing its trees and woodland. The strategy draws upon the council's knowledge and experience as well as accepted industry standards to sets aims for the planting, promotion and protection of the treed landscape and provide continuity in the long-term management of trees and woodland.
- Inspecting and managing the council's trees and woodlands on a regular cyclical basis to ensure they are in good health and condition.
- Planting a minimum of 300 street trees a year.
- Undertaking proactive woodland management to ensure there is natural regeneration of trees and that habitats are retained or improved.
- Actively seeking grant funding for additional tree and vegetation schemes.
- Planting and managing community orchards across the borough.



ABOVE: TREES AT THE CAMPUS, WELWYN GARDEN CITY

WHAT WE ARE DOING

BIODIVERSITY

- Identifying additional areas suitable for long grass/flower meadows on council managed land and managing existing areas.
- Moving to sustainable planting in our flower beds where it is appropriate.
- Encouraging and enhancing wild flower meadows - The council has a number of areas across the borough where grass is allowed to grow to encourage wild flowers and other types of grass. These areas of Conservation Grassland, Wildflowers or Ecotones are cut annually in autumn. This type of management increases biodiversity by improving the range of flowers and plants, which in turn improves conditions for invertebrates, birds, small mammals and amphibians.



WORKING WITH PARTNERS & STAKEHOLDERS

- The council runs and works with a number of volunteer groups. These groups help manage and maintain our woodlands, nature reserves and open spaces. The work the volunteers undertake is fundamental to the management of green spaces across the borough helping to improve biodiversity and habitats. This work also encourages public engagement with nature and the natural world. The council has a successful **Tree Wardens group** which is supported by the **Tree Council**, as well as a number of successful **'Friends of' groups** that volunteer at a various locations around the borough throughout the year.
- Evidence shows that a thriving, wildlife-rich environment benefits both physical and mental health. People with access to nature are more active, mentally resilient and have better all-round health. The council encourages all to visit our woodlands, nature reserves and green spaces. As such, the council run a number of walks, talks and activities on our sites. These included, amongst other things nature walks, orienteering and children's nature crafts. The council engages with Hertfordshire University giving students access to talks and nature-based activities such as tree planting.
- Engaging with Hertfordshire County Council on the Local Nature Recovery Strategy.



ABOVE: CUTTING REGIME TO ENCOURAGE BIODIVERSITY

MANAGEMENT

- Managing the council allotments to ensure they are well used and encourage sustainable methods for growing fruit and vegetables.
- We are producing Landscape Management Plans (LMP's) for the nature reserves we manage – the most recent are Singlers Marsh and Danesbury nature reserves. These LMP's set out how the sites will be managed over 10 years and include the current habitats and wildlife provided by the sites and an action plan for ongoing management and improvement. The documents aim to capture all of the basic requirements to manage the site effectively and seek to make meaningful site improvements where opportunities are unidentified.
- Managing the mowing regimes of our green spaces, including parks and road verge.

WHAT YOU CAN DO



- Sign up to the next round of **Your Tree Our Future** initiative – As part of a scheme to provide 100,000 trees by December 2025 residents, businesses, and community can sign up for free trees which are given away in the winter. Residents can choose from eight different species. A limited number of hedgerow packs are also available, which include 36 trees – enough to plant approximately 6 metres of hedgerow.
- Make the best use of rainwater and reduce hosepipe use by capturing and storing rain in water butts.
- Add flowering pots and window boxes to encourage pollinators.
- If you have a garden consider reducing mowing to create an undisturbed wildflower patch. These create natural corridors for wildlife to move through towns and cities.
- Allow vegetation to dieback naturally, leave twigs, leaves and natural debris as shelter for insects and other wildlife.
- Leave seedheads which are a source for food source for birds and homes for insects.
- Add a bird box and feeders to your garden or outdoor space.

- 63% of the total carbon is locked in our soil is found in peatlands, help conserve them by using only peat-free garden products.
- If you have a driveway or are considering building one, why not make it a green driveway.
- Volunteer at a local nature reserve or woodland or join one of the tree warden or 'friends of' groups listed above.



ABOVE: VOLUNTEERS AT WORK IN SHERRARDSPARK WOOD

RIGHT: JAMES WILDEY'S ENTRY OF HATFIELD TOWN CENTRE IN THE BIODIVERSITY PHOTOGRAPHY COMPETITION



RESOURCES



RESOURCES

A RESOURCEFUL WELWYN HATFIELD

SUPPLY CHAIN

As a council, we have the opportunity to demonstrate a leadership role in best practise and help support residents to buy locally by ensuring our town centres are vibrant, sustainable attractive and accessible. As consumers, we hold the power to choose what we purchase, and by making a conscious decision to shop more sustainably and locally has many benefits, such as:

- Decreasing your carbon footprint – Many items purchased online travel a significant distance before they arrive at your door. Shopping locally means fewer transport kilometres, which means fewer greenhouse gas emissions.
- Reducing waste – Buying locally usually results in less packaging; therefore reducing waste.
- Energy conservation – Local businesses are usually run on a smaller scale, which should use less energy for manufacturing and storage.

- Raw material use – Local businesses usually source their raw material locally, meaning even less transport miles and more sustainable supply chains.
- Improving the local economy – For every £1 spent with a small or medium sized business 63p stays in the local economy, compared with 40p with large businesses.
- Additionally, if every adult spent an extra £5 per week locally, rather than online, it would be worth an additional £13.5 Billion to the UK economy.



It is estimated that we would require 1.75 Earth's to support our current rate of consumption, which is clearly not sustainable. It is imperative that we consume less, waste less, embrace the circular economy and use our resources more mindfully.



SUPPLY CHAIN

WE AIM TO

- Embed sustainability into our supply chain and operations, to ensure we lead by example.
- Put sustainability into the heart of decision making
- Help others do the same
- Ensure our supply chain is resilient to external threat.



WHAT WE ARE DOING

- We have created a new **sustainable procurement appendix** which will be added to the Procurement and commercial improvement strategy to ensure sustainability is embedded within our value chain. It establishes the process of purchasing goods and services that takes into consideration the social, economic and environmental impact on people and community. In terms of goods, it considers the whole life cycle of a product; materials used, how they are disposed off etc. In terms of services, it considers what companies are doing to minimise and limit their impact on the environment through their operations. It also includes a minimum of 5% sustainability criteria in the tender evaluation process (for contracts over £50K).
- Phasing out the use of disposable cups in council facilities.



ABOVE: CLOTHES SWAP IN WELWYN GARDEN CITY DURING GREAT BIG GREEN WEEK

WHAT YOU CAN DO

- Think about your purchases and how you have the power to make a difference.
- Shop ethically, sustainably and responsibly:
 - Do you need it, can you source it second hand, can you repair or reuse what you already have, can you borrow and return it?
 - What materials are used, how labour or energy intensive is the manufacturing process, how far has the product travelled, how long will the item be used for and how will it be disposed of?
- Refer to the WHBC Climate Change Hub to find out about local events such as clothes swaps and local repair and upcycling projects such as **Recover** in Welwyn Garden City.

WASTE



In 2022, the Department for Environment, Food and Rural Affairs published the most up to date progress report on **Recycling and Recovery targets for England 2020.**

It reported that total waste from households in the UK was 22.6 million tonnes, and that the UK had missed its target to recycle 50% of household waste by 2020. The recycling rate for UK household waste dipped from 45.5% in 2019 to 44% in 2020, attributing backwards progress to Covid-19 lockdown restrictions.

Total household waste across the county (kg per household)

Year	Broxbourne	Dacorum	East Herts	Hertsmere	North Herts	St Albans	Stevenage	Three Rivers	Watford	Wel Hat	Herts C C	H W P
2022/23	785	840	824	816	770	798	788	830	765	763	130	929
2021/22	897	891	882	885	829	855	863	881	798	828	139	1,001
2020/21	950	933	917	930	864	943	896	910	858	876	120	1,029
2019/20	865	838	867	854	795	825	814	862	802	781	139	969
2018/19	871	851	884	863	803	838	829	864	810	800	143	985
2017/18	916	873	901	899	866	859	846	899	841	788	144	1,013
2016/17	923	895	889	904	872	868	861	907	821	821	145	1,024
2015/16	907	895	910	912	875	869	881	927	858	871	141	1,031

In the same period, the council's recycling rate increased from 46.6% in 2019/20 to 47.8% in 2020/21.

Since 2018/19, Welwyn Hatfield has seen a steady decline in residual waste per household (excluding a temporary increase during 2020/21 due to lockdown) from 437kg in 2018/19 to 400kg in 2022/23.

Regarding overall total household waste, in 2022/23 households in Welwyn Hatfield produced, on average, 763 kilograms of waste.

Keep Britain Tidy have recently redesigned the waste hierarchy to simplify the best approach in managing waste.



WE AIM TO

- Increase the recycling rate of the borough to at least 53% by 2024/25 and we are reviewing the possibility of increasing this to 55% by 2026 and aiming to achieve the government target of 65% by 2036.
- Phase out the use of disposables cups in council facilities
- Break down the barriers to recycling (through sign posting, behavioural change campaigns, education and development of services)
- Keep abreast of innovations, new technologies and good practice to ensure our service is as efficient and affective as possible.
- Ensure we are prepared for the Department for Environment Food and Rural Affairs' (DEFRA) requirement for local authorities to provide weekly food collection service to all residential properties in the borough by 31st March 2026.
- Ensure we are prepared for the Department for Environment Food and Rural Affairs' (DEFRA) requirement to increase the amount of recyclable waste streams for plastics, paper and card, metals and glass by 1st April 2026.

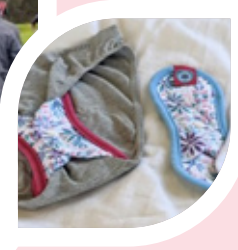
WASTE

WHAT WE ARE DOING

- The council are members of **WasteAware**, which is a partnership of county, district and borough councils working together to reduce, reuse and recycle Hertfordshire's waste. The latest **Annual Report 2022/23** was recently published and outlines key statistics of recycling and progress being made within our county.
- As part of the Partnership, we promote and run a number of campaigns throughout the year focusing on specific areas of waste. For instance:
 - #Worth saving – Save food, save money
 - Clothes swaps
 - Home composting; 10 tonnes of compost derived from collected garden waste was collected by resident in March 2023
 - Let's SCRAP fly tipping
 - Reusable nappies and sustainable periods.
- The new Welwyn Garden City Depot and Recycling Centre was opened in May 2023. In collaboration with Hertfordshire County Council (HCC), the new future-proofed street scene depot and recycling centre was developed, that comprises of a vehicle wash, vehicle workshops, waste storage bays, office and welfare facilities a multistorey car park and a **Recover**; a re-use and repair work shop. The new development has helped to make waste disposal and recycling significantly easier and more efficient.

RIGHT: COMPOST GIVEAWAY IN 2023

FAR RIGHT: SUSTAINABLE PERIOD PADS



- You can drop off your still good items to buy 16 at the WGC Recycling Centre so items can find their next home through the network of re-use shops.
- We support the **Refill Campaign** as Welwyn Hatfield borough has 38 refill water stations and 10 refill coffee stations.
- We have recently implemented the removal of cardboard from the roadside, to make it easier to remove and recycle.
- We are currently running a pilot on recycling for flats with the purchase and distribution of fifty 1,100 litre dry mixed recycling bins which have a dedicated collection day. Next steps will be decided once analysis of the trial has been conducted.
- New dry mixed recycling bins will soon be replacing the old ones at recycling centres, which will make sorting and disposing of recycling easier for residents as what can be put in them will align with what can be put in their blue-lidded bins at home. The new bins will help to improve the efficiency of our collection service and aims to increase our borough's recycling rate.



WHAT YOU CAN DO

- Remember to sort your waste into the correct bin, and if you don't know; refer to our **website** for guidance on what goes where.
- Plan your meals to avoid buying excess in the shop and throwing leftovers in the bin.
- Take unwanted items to charity shops rather than the bin to avoid them being sent to landfill.
- Visit a clothes swap shop or charity shop (there is no shame in second hand!)
- Visits a repair café to mend things rather than throwing them away.
- Follow the waste hierarchy and circular economy.
- Visit the **WasteAware campaigns page** to see what initiatives are being run and get involved.
- Download the **Refill App** to discover locations where you can reduce, reuse and refill for free.

WATER

It is estimated that there are 200 chalk streams in the world, 10% of which are in Hertfordshire. This means we are custodians of a very rare and valuable natural resource. Unfortunately, these chalk streams are in critical danger due to climate change, pollution and over abstraction.

The two main water companies in the borough have their own water management plans; **Affinity Water (water and waste water)** and **Thames Water (waste water only)**. The Affinity Water management plan sets out to address the significant future shortfall in water resources in our area. For instance, without intervention they estimate their supply area faces a possible shortfall of 449 million litres a day by 2050!

The actions within the management plan include reducing customer demand, driving leakage down, smart metering and significant investment in new infrastructure for new sources of water – working across the water industry to plan and share resources regionally, for instance the **Grand Union Canal Project**. The plan will also make the region's water supplies more resilient to droughts, which are becoming more frequent due to climate change.

Whilst we have no direct control over the way our water companies operate, we will engage with them as key stakeholders where possible and attend meetings such as the River Lea Catchment Partnership to ensure we are representing our residents needs and protecting our natural resources as fully and responsibly as possible.



WATER

WE AIM TO

- Protect and enhance our precious chalk streams.
- Ensure residents have access to clean and safe drinking water.
- Reduce water usage within the council's operations and around the borough.
- Develop policies within the local plan that encourage grey water recycling and rainwater harvesting within new development.
- Continue to work with water companies and partners to explore the potential for further measures to support water conservation, including rainwater harvesting.
- Promote the use of SUDS and permeable surfaces to combat local flooding within the sustainable Supplementary Planning Document.

WHAT WE ARE DOING

- We have a policy in place in the Local Plan that states new homes must achieve a water consumption rate of a maximum of 110 litres per person per day.
- We have installed a number of water-saving devices in commercial buildings.
- We have partnered with Affinity Water and established a domestic water – saving device work programme that is two-fold:
 - We promote Affinity Water's **Home Visits**. These are free and you will receive advice and expert help from water-saving experts tailored to your household. Additionally, the experts will be able to fit any recommended water-saving devices for free, and can identify and repair small leaks (where possible). The home visits are a great way to help you save water, save money and help protect our chalk streams.
 - We have introduced a water-saving device programme as part of the 'business as usual' work programme in our building repairs team. Devices will be included where possible in planned maintenance, responsive repair, void properties, retrofit works and new developments.



WHAT YOU CAN DO

- Be conscious about the water you use by trying to reduce and reuse water where possible. Visit [Affinity Water website](#) for many water-saving tips, such as installing a water butt, washing clothes on eco mode and turning the tap off whilst you brush your teeth.
- You can also calculate your **water footprint**, and claim some **free water-saving devices**.
- Sign up to a **free home or virtual visit**.



COMMUNITY



COMMUNITY

AN INCLUSIVE WELWYN HATFIELD

We know it is vital that we include residents, community groups and businesses in our pathway to net zero as a borough by 2050 and whilst the council has no direct control over people's decisions and lifestyle choices, we do have a responsibility and role to play. To deliver fundamental and lasting changes, we must encourage, educate, enable and empower our residents, local businesses and wider community to take personal decisions to reduce their own carbon footprints and live more sustainably.

Our lifestyle and daily choices have an impact on the environment, and it is important we all make conscious decisions to reduce the negative aspects of this. Some lifestyle changes may be harder than others, but if we all act together, we really can make a difference and create a sustainable future for everyone.

In November 2023, we ran a Community Climate Action Survey for residents. The aim of the survey was to gauge current levels of resident engagement with climate related issues, to gain a better understanding of what people are currently doing to mitigate and/or adapt to climate change. The findings of the consultation will help

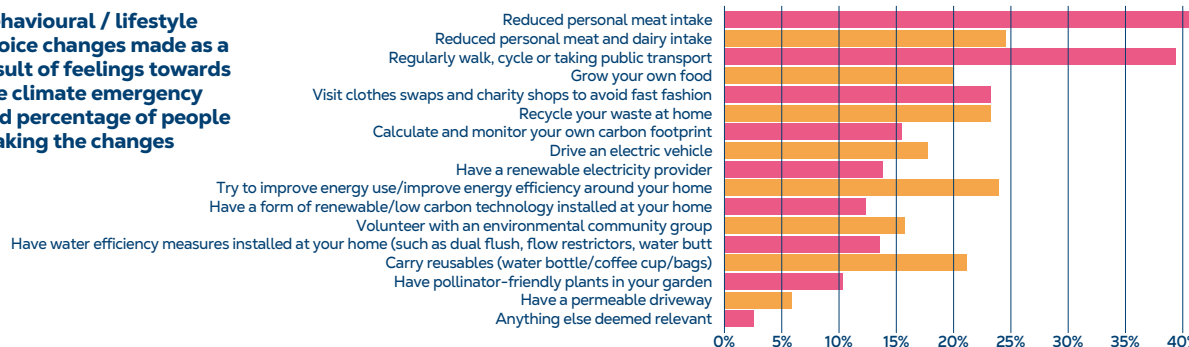
the council to develop initiatives and host events that support residents in achieving some of their climate aspirations, as well as creating a stronger, fairer and more resilient community.

61% of respondents were either very or extremely concerned about climate change.

The main behaviour/lifestyle choice identified as already being taken were reducing personal meat intake (41% of respondents) followed by regularly walking, cycling or using public transport (39% of respondents).

When asked what motivates individuals to make these lifestyle choices, the majority of participants indicated it was improving the natural environment (62%), followed by reducing emissions (36%), increasing resilience to the impacts of climate change (35%), health and wellbeing (32%), improving air quality (25%), financial savings (22%), because someone they know does it (8%) and 2% specified 'other' reasons. (Please note respondents could pick more than one reason). **[FULL SURVEY RESULTS]**

Behavioural / lifestyle choice changes made as a result of feelings towards the climate emergency and percentage of people making the changes



WE AIM TO

- Continue to provide information through the main websites and social media platforms, particularly through the Climate Change Hub.
- Offer guidance on best practice.
- Signpost to available grants and funding schemes.
- Support and offer advice on climate related issues.
- Promote and facilitate environmentally friendly events and initiatives within the borough.
- Report updates transparently so everyone understands how we are progressing on our pathway to net zero.
- Welcome feedback to improve our climate action.
- Ensure everyone is included in this journey, particularly those who will be affected disproportionately to the impacts of climate change or may find it harder to transition into a net zero borough.



ABOVE: RESIDENT ENGAGEMENT DURING GREAT BIG GREEN WEEK

BUSINESSES

WHAT WE ARE DOING

- The council has created the 'In Welwyn Hatfield Business Matters' business support website, information can be found from the council and its partners on finance, events and training, workforce, and sustainability.
- Since 2022, the council has facilitated six carbon literacy training sessions to 95 local businesses and two sustainability conferences in partnership with key stakeholders.
- The Welwyn Hatfield Business Forum was set up in 2017 to provide an opportunity for Welwyn Hatfield based businesses and organisations with an interest in developing and growing the local economy to come together with the council to form a partnership that can steer future work and have areas of focus to promote the economic growth of the borough. Steering group meetings take place three times per year, and we have around 25 members attending on a regular basis.
- In the Autumn of 2023, we launched the Wenta Action Zero programme, which has been designed to support small businesses to understand how to tackle climate change, reduce their carbon footprint, and to produce greener goods and services, creating a more sustainable future. The programme is the start of a long climate change journey rather than a quick win. At the end of the course, for those that complete the gold standard, they will have gained enough knowledge to be able to measure their carbon footprint and be able to set realistic reduction goals and a net zero target.

WHAT YOU CAN DO

- Sign up to our [Business Matters newsletter](#).
- Sign up to the [WENTA programme](#).
- Refer to [Climate Change Hub](#) for funding opportunities.
- Start measuring your emissions.
- Review your energy supplier and switch to a sustainable energy provider.
- Develop a [green supply chain](#).



ZERO
GOLD
NET ZERO FUTURE

RESIDENTS

WHAT WE ARE DOING

- As a direct response to feedback in the Climate Action Survey, we have established the WHBC Climate Hub to engage with residents on climate related matters. The Climate Hub is a one stop shop for climate action progress, relevant articles, case studies of local success stories, local events, initiatives being run, local volunteering opportunities, signposting to various funding sources and best practice guidance on things such as energy advice and climate anxiety help.
- The Climate Hub also provides residents an avenue to offer feedback on Welwyn Hatfield's climate action plan. We value the communities' opinions and ideas, and we understand we must be inclusive and accessible in order to tackle this challenge successfully. We aim to ensure that no one gets left behind as we transition to net zero, and recognise that some people and groups will find the transition harder, and some will be impacted more by the affects of the changing climate.
- The Climate Hub aims to support residents in taking climate action in order to achieve their own climate goals and aspirations.
- We will be running in person and online events sporadically throughout the year, so make sure you visit the Climate Hub so you don't miss out. You can even pick up some free wildflower seeds to plant in your garden and scan the QR code to be taken friendly to the Climate Hub page.



WHAT YOU CAN DO

- Explore the Climate Hub to find out about everything climate related in the borough.
- Sign up to the Climate Hub e-newsletter.
- Email climatechange@welhat.gov.uk to have your say and find out more information.
- Take climate action – every action and positive behaviour change makes a difference.
- Sign up to **Take the Jump**, a movement that focuses on trying six shifts (easy behavioural changes) that will allow you to “help protect our Earth and live with joy”.



COMMUNITY GROUPS



WHAT WE ARE DOING

Tackling the climate crisis cannot be done in silo, and often actions we take and decisions we make for environmental reasons, can actually be helping mitigate climate change as well.

There are a number of community groups within the borough that either focus specifically on environmental issues or have positive environmental impacts as a co benefit of their work.

- We created the WHBC Climate Hub, which is a great place to find out about active eco groups within the borough that are doing great work to mitigate climate change and increase biodiversity.
- We have established and are members of a number of groups that are designed to ensure individuals feel included in our community and have access to support networks to help with a wide range of issues. Often, these have a cross over with our action on mitigating and adapting to climate change. These meeting groups include:
 - **Community Inclusion Partnership Group**, which aims to create stronger, more connected and resilient communities, explore and understand challenges and opportunities, and increase collaboration and commitment of working together. The group meets quarterly and project updates are distributed regularly. Key stakeholders include Citizens Advice, Herts Sports & Physical Activity Partnership, Herts schools, food banks, community

leaders, charities and interfaith groups. The partnership is useful to promote initiatives, gain feedback, explore co benefits of projects, and develop relationships further with community groups working towards aligned goals.

- Cost of living steering group, which is made up of officers from a variety of teams in the council that work closely with residents. The aim of the group is to discuss the household support fund and any other opportunities to support with the **cost of living crisis**. Reducing energy use and being more efficient has the double benefit of reducing bills and reducing emissions, and it is important we utilise this co benefit to expand our impact on helping residents and tackling the climate emergency.
- Sports facilities strategy operations group, is made up of local organisations such as leisure operators and national governing bodies. The purpose of the group is to ensure all parties are working collaboratively to deliver the Sports facilities strategy Action Plan. Leisure facilities are often very energy intensive and it is important that the council work with partners to reduce consumption and improve efficiency of their buildings, whilst also encouraging people to be more active by ensuring facilities are available and accessible.
- Developing new collaborative opportunities with community groups, such as Girl Guiding, the Youth Council and interfaith groups.

BELOW: COMMUNITY ENGAGEMENT AND THE CHANCE FOR RESIDENTS TO SHARE IDEAS AND FEEDBACK DURING THE GREAT BIG GREEN WEEK

WHAT YOU CAN DO

- If you run or are part of a local group, please get in touch at climatechange@welhat.gov.uk so we can add you to our Climate Hub directory. This will improve the promotion of your group, increase your impact and help others to get involved too.
- Check out the Climate Hub Eco Group Directory or Volunteering Database to get involved.



STAFF

WHAT WE ARE DOING

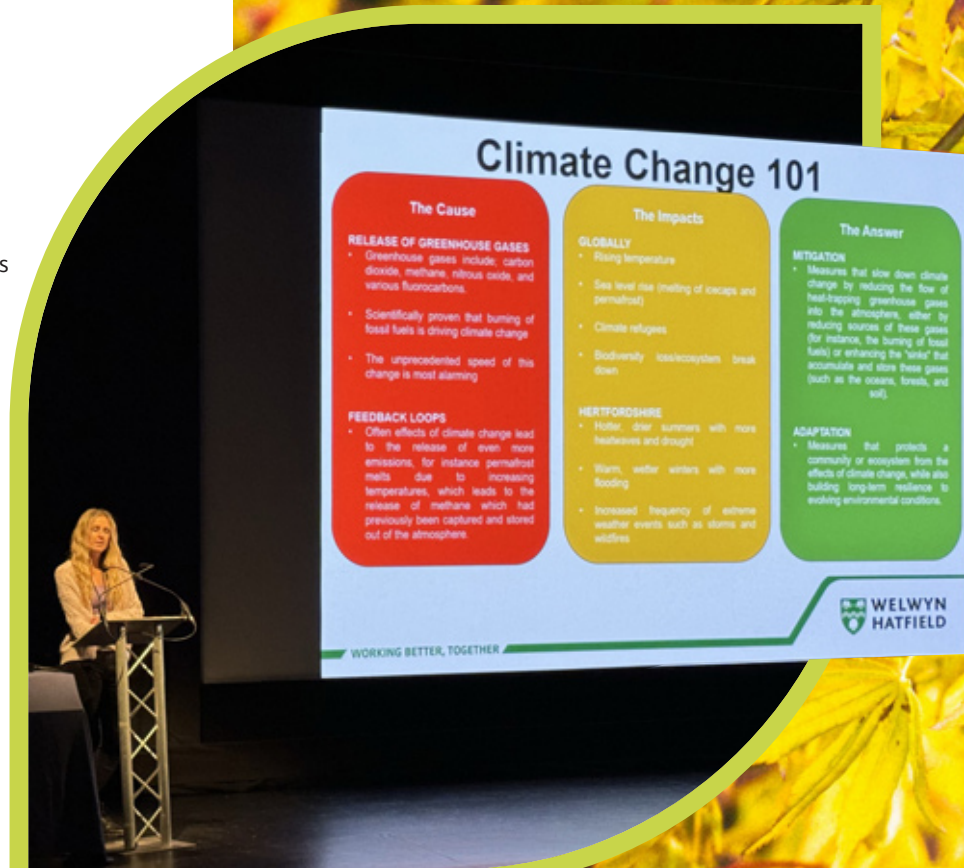
Whether employees of Welwyn Hatfield Borough Council live in the borough or not, they are still part of our community and, as we are all on this transitional journey together, we will endeavour to educate, support, enable and empower staff to take climate action.

- We have placed stickers strategically in meeting rooms, community centres and other commercially owned premises to remind building users to switch off lights and equipment after use to save both energy and money.
- We are embedding sustainability guidance in our team charters to ensure individual teams are aware of our climate agenda; what we are striving for and how their behaviour will make the difference.
- Offer staff the opportunity to get involved in planned environmental events if they so wish.
- We have a climate champion in our annual staff awards to highlight staff members that exemplify best practise behaviour.

- Provide climate change training and climate action updates through our internal training platform, newsletters and staff update sessions.
- We will ensure staff understand the challenge and issues and how they can play their part in achieving our net zero targets.



ABOVE: CLIMATE CHANGE TRAINING



ADAPTATION



ADAPTATION

A RESILIENT WELWYN HATFIELD



Climate change impacts are predicted to continue for the rest of the century even if mitigation targets are achieved, due to the long lifespan of some greenhouse gases and the time lag between what we do and when we feel it.

Using the UK Climate Projections 2018 (UKCP18), we can expect wetter and warmer winters with greater potential for flooding, and drier and hotter summers with greater potential for heatwaves and drought, along with an increase in frequency of extreme weather events, such as storms and wildfires in Welwyn Hatfield.

These climate impacts have related risks across all service areas, some of which are outlined on the right.

Therefore, it is vital that whilst we mitigate climate change to reduce future impacts, we also adapt to climate change to minimise damage and take advantage of limited opportunities.

BUILT ENVIRONMENT AND ENERGY

- Damage to commercial and domestic buildings
- Overheating in buildings – reduced productivity
- Increased flood risk – changes required in design and maintenance
- Disruption of power networks and supply

RESOURCES – WATER AND SUPPLY CHAIN

- Reduced or polluted water supply
- Increased competition between households, agriculture, businesses and nature.
- Flash flood risk
- Risk to supply chain; certain products unobtainable and volatile price increases; particularly food and energy

TRANSPORT

- Damage to infrastructure
- Decreased accessibility – road and rail infrastructure
- Increased number of accidents in adverse weather conditions
- Disruption in ability to provide services

NATURAL ENVIRONMENT

- Damage to natural habitats and ecosystems through drought, flooding and wildfires
- Increase in invasive species and risk to native species
- Depletion of natural carbon stores and sequestration
- Increased risk of diseases

COMMUNITY (HEALTH AND WELLBEING)

- Increased heat-related illness and death – particularly those already classified as vulnerable
- Reduced access to facilities and services
- Reduced air quality and subsequent negative impacts, particularly those with existing respiratory diseases
- Exacerbation of social inequalities
- Increased mental health issues

WE AIM TO

- Adapt and increase our resilience to climate change proactively rather than reactively.
- Explore opportunities that may arise from these changes and benefit from cost savings.
- Enhance our business continuity by strengthening our preparedness, which will allow us to maintain our high level of service throughout the borough in times of extreme events.
- Build community resilience and local business continuity by sharing best practice guidance and advice on addressing and adapting to climate risks.



WHAT WE ARE DOING

- Using the **Local Partnerships Climate Adaptation Toolkit**, we have conducted a climate change risk assessment, whereby we reviewed and assessed all climate related risks in all our service areas. Controls measures already in place were noted, and actions have been identified to reduce specific risks further, and are being embedded into business continuity plans, service plans and the climate action plan appropriately.
- Some adaptation actions will compliment and double down on our mitigation efforts, such as tree planting, which will not only sequester carbon but can also alleviate the heat island affect and reduce flooding. Others will require new funding streams and partnership working with external stakeholders.
- An overarching climate change adaptation risk has been added to our strategic risk register, alongside our climate change mitigation risk. This risk will be monitored and managed within our risk management process.

LEFT: THE ADAPTATION CYCLE, BASED ON THE **UKCIP ADAPTATION WIZARD** AND **ADAPTATION SCOTLAND CYCLE**. REDRAWN FROM ORIGINAL **SOURCE**.



WHAT YOU CAN DO

- Think about your home and how it performs in very hot weather. Consider ways to make it cooler for instance, insulation, painting external walls white, adding shutters or blinds, or improving green spaces around the building.
- Ensure your gutters are kept clear to reduce the chance of flooding.
- Be conscious about the water you use by trying to reduce and reuse water where possible. Visit Affinity Water's website for many **water saving tips** such as getting a water butt, washing clothes on eco mode and turning the tap off whilst you brush your teeth.
- You can also **calculate your water footprint**, and claim some **free water saving devices**.
- Replace impermeable surfaces with permeable paving for driveways.
- Sign up to **Met Office weather warnings** so you can be prepared for extreme weather events.
- Take head of heat advice on websites such as the **NHS**, so you can be proactive in avoiding negative consequences of extreme weather.

PARTNERSHIPS



PARTNERSHIPS

A COLLABORATIVE WELWYN HATFIELD

Hertfordshire Climate Change and Sustainability Partnership

This partnership is a strategic **group** which acts as the lead partnership organisation for partners to collaborate and identify joint work programmes on environmental, climate change and wider sustainability issues.

It consists of Hertfordshire County Council, the 10 local districts/boroughs and the Local Enterprise Partnership (LEP).

There are six subgroups with specific focus areas; adaptation, behaviour change, biodiversity, carbon, transport and water. The subgroups each have action plans and districts/boroughs are responsible for implementing actions within their own sphere of influence.

WHBC fully supports this partnership, provides valuable input at the meetings and has representation on all the subgroups. WHBC promotes subsequent initiatives and takes advantage of the partnership to expand the impact of ideas and opportunities.



We will be exploring partnerships with:

Local education providers

We recognise the vital importance that children and young adults play in tackling the climate emergency and we are committed to working with our local primary schools, secondary schools, colleges and universities to develop projects and initiatives that educate and empower the next generation to take climate action.

Local Parish Councils

We are exploring how to work more collaboratively with Parish Councils to assist in bringing together local communities more succinctly. By working closely together and supporting one another, we can ensure policy, plans and initiatives are promoted and endorsed within areas, which will lead to bigger impacts.

Agricultural sector

We understand the crucial role farmers play in our pathway to net zero as a borough; the value they can bring in terms of nature-based solutions for offsetting and climate adaptation measures and their essential part in the food supply chain.

We collaborate with a number of companies, businesses and community groups; exploring, developing and promoting innovative solutions and supporting and implementing initiatives that met our aligned goals on our pathway to net zero. A selection of these organisations are highlighted below.

Affinity Water

RVC Royal Veterinary College
University of London

energy saving trust

Greater South East Net Zero Hub

University of Hertfordshire UH

Hertfordshire Local Enterprise Partnership

GLL
better for everyone

National Energy Foundation

WONDERFUL WELWYN GARDEN CITY

CPRE The countryside charity
Hertfordshire

Isabel Hospice
Together we care

citizens advice

Herts & Middlesex Wildlife Trust

Better Housing Better Health

HCCSP
Hertfordshire Climate Change and Sustainability Partnership

Herts Sport & Physical Activity Partnership

RESIDUAL EMISSIONS



RESIDUAL EMISSIONS



OFFSETTING

To be a net zero council, we will first reduce emissions as far as possible, and any emissions that cannot be eliminated will have to be 'offset'.

The concept of carbon offsetting is to negate the same amount of carbon emissions released into the atmosphere. Offsets can be bought or sold in the form of carbon credits, which are measured in tonnes of carbon dioxide equivalent.

There are two main types of carbon offsetting; ones that involve carbon reduction and ones that involve carbon removal.

Offsets relating to carbon reduction, focus on projects that result in emissions avoidance or reducing the flow of emissions into the atmosphere, for instance, renewable energy technologies.

Offsets relating to carbon removal, focus on projects that actively remove and store carbon from the atmosphere, through either nature based solutions (planting of trees) or technological solutions (direct air capture).

We aim to use only certified offset credits that are fully accredited and ones that involve carbon removal rather than reduction or avoidance.

INSETTING

A relatively new term, insetting is essentially the same as offsetting, however it relates to carbon removal or reduction within an organisations borders or supply chain.

HCCSP has engaged with the University of Hertfordshire to conduct a **study** on how to deal with unabated emissions within Hertfordshire. We will work within the partnership to determine the best approach to addressing this issue.

We will, of course, focus on eliminating emissions in the first instance and use offsetting and insetting mechanisms as a last resort to account for any remaining unabated emissions.



GLOSSARY



GLOSSARY

KEY WORDS, KEY CONCEPTS & TERMINOLOGY

Adaptation – The process of adjusting to and preparing for current or expected climate change and its effects for instance heatwaves and flooding

Anthropogenic extinction – also known as the Holocene extinction or Sixth mass extinction, is the disappearance of species due to human activity

Biodiversity – The biological diversity of life on Earth. The number and variety of organisms found in a particular habitat or eco-system

Blue infrastructure – Water elements, like rivers, canals, ponds, wetlands and floodplains, which provide infrastructure functions or services

Climate and ecological crisis/emergency – The multiple threats from rising emissions and destruction of nature which will lead to destabilisation or destruction of life on earth as we know it

Carbon equivalent (CO₂e) emissions – The release of Greenhouse gases into the atmosphere (see Greenhouse gas emissions)

Carbon footprint – The total amount of greenhouse gas emissions caused directly or indirectly by an individual, group or organisation.

Carbon insetting – Relates to carbon removal or reduction within an organisations borders or supply chain.

Carbon offsetting – This is to negate the same amount of carbon emissions released into the atmosphere.

Circular economy – A concept which encourages more efficient use, and greater reuse and recycling, of materials through the economy, rather than the conventional approach of 'take-make-waste'.

Decarbonisation – The reduction or removal of emissions from a product or process.

Embodied carbon/energy – The sum of energy or carbon involved in the production of goods and services, including the extraction and transportation of raw materials, manufacture, assembly and maintenance.

Energy efficiency – For buildings, this is the rate at which energy is lost from the building, and the rate at which energy is used to meet the needs of occupants. Lower energy efficiency means energy is lost faster from the building, which means you need more energy overall to keep warm.

Governance – This is the framework of authority and accountability that defines and controls the outputs, outcomes and benefits from projects, programmes and plans.

Green infrastructure – The network of multi-functional green space and other green features, urban and rural, which can deliver quality of life and environmental benefits for communities.



Greenhouse gas emissions – Gases which get trapped in the atmosphere resulting in increasing global average temperatures. The primary greenhouse gases include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆), and are emitted predominantly from human activities such as burning fossil fuels and agriculture.

Heat networks – A heat network is a distribution system of insulated pipes which takes heat from a central source (an energy centre, or source of waste heat) and delivers it to a number of domestic or non-domestic buildings.

Heat pump – A device that transfers heat from a colder area to a hotter area by using mechanical energy. Heat pumps are very efficient ways of producing heat – each unit of electricity used to power the heat pump is typically transformed into 3-4 times the amount of heat, meaning you need much less electricity than direct electrical heaters.

Insetting – Carbon insetting is a mechanism to reduce emissions while driving business value. It uses organization investment to promote sustainable practices and reduce your company's carbon footprint within your own value chain.

Mitigation – In climate change terms, this is predominantly associated with the reduction and removal of greenhouse gas to slow down climate change

Net zero emissions – A point that is reached when overall emissions are zero, through prioritising emissions reductions and compensating for any residual emissions through offsetting by carbon sequestration/removal.

Offsetting – Carbon offsetting is a trading mechanism that allows entities such as governments, individuals, or businesses to compensate for their greenhouse gas emissions by supporting projects that reduce, avoid, or remove emissions elsewhere.

Operational emissions – Emissions associated with the use or operation of an asset or building.

Power Purchase Agreements (PPAs) – A long-term electricity supply agreement between two parties, usually between a power producer and a customer (an electricity consumer or trader).

Renewable energy – Energy which is generated using natural resources which are renewed such as wind, sun, ground heat or biomass.

Resilience/climate resilience – The ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate change

Retrofit – The addition of new technology or features into existing older buildings, often applies to energy efficiency measures.

Sustainable – Capable of being maintained at a certain level without depleting natural resources.

Sustainable development – Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

