

# **APPENDIX 1**

# Climate Change and Sustainability Strategy

FINAL

Dr Sarika Jain Version 1.4 26/06/2020

# Contents

Chapter 1 Introduction	2
Chapter 2 Understanding greenhouse gas emissions	3
Chapter 3 Energy Efficiency	4
Domestic Electricity	4
Domestic Gas	5
Action Points Identified	5
Chapter 4 Renewable Energy	ε
Renewable Electricity	ε
Renewable Heat	7
Action Points Identified	8
Chapter 5 Sustainable Transport	8
Action Points Identified	11
Chapter 6 Waste and Resource	12
Action Points Identified	13
Chapter 7 Carbon Offsetting and Climate Resilience	14
Action Points Identified	14
Chapter 8 Local food	15
Action points identified	15
Table 1 Hertsmere carbon dioxide emissions 2005-2017 (kt CO <sub>2</sub> per year)	3
Table 2 Breakdown on electricity consumption by product for all households (%)	
Figure 1 Mode share trends for all journeys	c
	10

## **Chapter 1 Introduction**

In 2019, Hertsmere Borough Council declared Climate Emergency and committed to achieving carbon neutrality as soon as possible and no later than 2050.

In order to achieve carbon neutrality, the following principles will be embedded in all aspects of the functioning and development of Hertsmere:

- reducing consumption,
- minimising waste,
- switching to renewable forms of energy,
- switching to active, public and sustainable forms of transport and reducing the need to travel overall
- implementing principles of circular economy,
- buying and consuming local produce,
- ensuring sustainable and zero carbon new developments with compensatory improvements to greenbelts,
- protecting and enhancing greenbelts, open spaces and biodiversity, and
- building climate change resilience.

The Council will lead the implementation of this strategy by example. It will implement these principles in its own operations and within its jurisdiction in the Borough. The corporate and community projects, awareness campaigns and local planning to implement this strategy will be funded via a range of public, private and non-profit programmes, funds and partnerships.

This strategy document presents evidence on the current sources of greenhouse gas emissions (GHG) from Hertsmere. It identifies the actions and measures that will:

- Enable the Council to reduce its own emissions leading up to net-zero emissions by 2050;
- Enable the Council to offset its own operational emissions that are unavoidable:
- Further the implementation of sustainability and circular economy in the operations of the Council;
- Enable the Council to influence the land use and operational impact of residents, businesses and organisations to reduce and offset their own emissions;
- Help build resilience against impacts of climate change on the Council;
- Promote zero carbon and sustainable development of the Council; and
- Improve well-being and quality of life of the residents of the Council.

## **Chapter 2 Understanding greenhouse gas emissions**

The strategy to reach carbon neutrality starts with understanding of current levels of greenhouse gas emission and sources.

The main sources of carbon dioxide (CO<sub>2</sub>) emissions, which are broken down by local authority area, are published by the UK Government annually<sup>1</sup>. These include industrial and domestic energy consumption, agriculture and transport. Table 1 shows the level of these emissions for Hertsmere for the period 2005-2017. Greenhouse gas emissions from agriculture and waste are primarily methane and nitrous oxide and are not included in the data.

Table 1 Hertsmere carbon dioxide emissions 2005-2017 (kt CO<sub>2</sub> per year)

Year	2005	2017	% reduction
A. Industry and Commercial			
Electricity	164	66	60
B. Industry and Commercial Gas	65	46	30
C. Large Industrial Installations	-	-	
D. Industrial and Commercial Other			
Fuels	46	36	22
E. Agriculture	1.3	1.2	3
Industry and Commercial Total	277	149	46
F. Domestic Electricity	106	47	56
G. Domestic Gas	145	121	16
H. Domestic 'Other Fuels'	2.7	2.4	12
Domestic Total	254	171	33
D   T   (A   1)	0.4	70	40
I. Road Transport (A roads)	84	73	13
K. Road Transport (Minor roads)	66	68	-2
M. Transport Other	1.7	1.5	13
Transport Total	152	142	6
Grand Total	683	462	32
Population	0.4	404	40
('000s, mid-year estimate)	94	104	-10
Per Capita Emissions (t)	7.2	4.4	39

Hertsmere, at 4.4 kt CO<sub>2</sub> per capita emissions from sources within the remit of Local Authorities, is just above the average of England at 4.3 and just below UK average of 4.5 kt CO<sub>2</sub> per capita. Overall, there has been a 39% reduction in CO<sub>2</sub> emissions in Hertsmere since 2005.

3

<sup>&</sup>lt;sup>1</sup> https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017

In Hertsmere, emissions are almost evenly distributed between industrial and commercial sources (33%), domestic sources (37%) and transport (31%). Emissions from industrial and commercial sources have reduced by 46%, domestic by 33% and transport by 6.4% since 2005.

The biggest source of emissions on the local authority level is domestic, industrial and commercial energy consumption. This includes electricity, heat and other fuels. Emissions from consumption of electricity have reduced by 58%. This trend is seen all across the country and is primarily due the change in the electricity mix of the country as it has moved away from using coal and increased renewable electricity capacity<sup>2</sup>.

In order to reach carbon neutrality by 2050 for its own operations, as well as influencing the emissions of other individuals and organisations, Hertsmere will need to take ambitious actions. Detailed analysis of the sources of emissions and potential action points are discussed in the following chapters.

## **Chapter 3 Energy Efficiency**

Domestic and Industrial energy consumption including electricity, gas and other fuels, is one of the largest primary source of greenhouse gas emissions from local authorities. There are three ways of reducing emissions from energy: reducing consumption, improving efficiency of use and moving to renewable sources. The first and foremost thing to do from a climate change point of view is to reduce its consumption and minimise waste, thereby improving efficiency.

#### **Domestic Electricity**

In 2018, the average annual household consumption of electricity in Hertsmere was 4,382 KWh. This usage is 63<sup>rd</sup> highest of 317 local authorities in England<sup>3</sup>.

The electricity use in a UK household is primarily used by cold appliances (refrigerator and freezer), cooking, lighting, ICT, washing/drying, water heating, and other uses as presented in Table 2 below<sup>4</sup>.

Table 2 Breakdown on electricity consumption by product for all households (%)

	Without electric	With additional	With primary
	heating	electric heating	electric heating
Cold appliances	16.2	13.4	4.7

<sup>2</sup> 

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/812139/Local\_authority\_2017\_greenhouse\_gas\_emissions\_statistical\_release.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/208097/10043\_R66141HouseholdElectricitySurveyFinalReportissue4.pdf

<sup>&</sup>lt;sup>3</sup> https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumptionstatistics

Cooking	13.8	11.7	7.2
Lighting	15.4	10.0	5.8
Audiovisual	14.4	10.4	3.4
ICT	6.1	3.6	2.6
Washing/drying	13.6	10.7	3.1
Heating	-	22.5	64.2
Water heating	7.1	4.0	6.3
Other	3.7	5.8	1.5
Not known	9.7	7.9	1.2

#### **Domestic Gas**

The primary uses of gas in households are space heating via a boiler and cooking. Most other domestic appliances use electricity to generate heat.

Average annual consumption of natural gas by households in Hertsmere is 17<sup>th</sup> highest in 317 local authorities in England, at 16,200 KWh<sup>5</sup>. While average use of gas per household depends on the size of houses, management of heating systems and the quality of insulation of the households, there are a number of initiatives that Hertsmere Borough Council can take in order to reduce the consumption and hence emissions.

#### **Action Points Identified**

 Policy: Improve domestic, commercial and industrial energy efficiency in the Borough

## **Domestic Energy**

- Scheme: Facilitate replacement of all domestic light bulbs with LED lights
- **Scheme:** Facilitate implementation of energy efficiency measures across the board in public sector including council owned buildings via mechanisms such as energy performance contracts<sup>6</sup>
- **Scheme:** For homeowners, implement grants/incentives/schemes linked to EPC ratings to improve insulation by providing support for double glazing doors and windows, loft, cavity wall and underfloor insulation, central heating systems and other such measures
- Scheme: Raise awareness and if possible, facilitate the roll out of smart metres
- Action: Identify fuel poor and vulnerable houses to energy companies as a part of their ECO3 obligations<sup>7</sup>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/776540/energy-company-obligation-3-LA-flexible-eligibility-guidance\_.pdf

<sup>&</sup>lt;sup>5</sup> <u>https://www.gov.uk/government/statistical-data-sets/gas-sales-and-numbers-of-customers-by-region-and-local-authority</u>

<sup>&</sup>lt;sup>6</sup> https://www.gov.uk/government/publications/energy-performance-contract-epc

- Facilitate: Work with landlords to implement Domestic Minimum Energy Efficiency Standard in the Council<sup>8</sup>
- Advocacy: Lobby the Government to bring legislation on energy efficiency of appliances
- Communication Strategy: Encourage residents to replace old appliances, such as boilers and washing machines, with energy efficient alternatives when the time comes
- Communication Strategy: Engage with residents and schools to increase awareness on saving energy, such as switching off lights, energy saving mode on appliances, stand-by power consumption, drying clothes on a line outside in summers and other such energy saving methods
- Local Plan: All future domestic new developments to be built to high energy
  efficiency standards including more natural lighting, reduced reliance on
  mechanical ventilation, and passive measures such as building orientation,
  natural shading, fittings for clothes drying, leading up to zero carbon
  standards.

## **Industrial and Commercial Energy**

Energy consumption in the industrial and commercial sectors may be reduced by:

- Scheme: Facilitate replacement of industrial and commercial lighting with LED lights
- Scheme: Implement business energy efficiency programmes<sup>9</sup>
- Promotion: Promoting the display of EPC ratings at all commercial establishments
- Facilitate: Working with landlords to implement Non-Domestic Minimum Energy Efficiency Standard
- Local Plan: All future non-domestic developments to be built to high energy
  efficiency standards including energy efficiency measures, leading up to zero
  carbon standards.

#### **Chapter 4 Renewable Energy**

A major aspect of reducing emissions from energy consumption is to shift the source of energy consumed from fossil fuels to renewable sources, such as wind and solar.

#### **Renewable Electricity**

There are a total of 608 renewable electricity projects operating in Hertsmere, of which one is an anaerobic digester and the remaining 607 are photovoltaic or solar

6

<sup>&</sup>lt;sup>8</sup> https://www.gov.uk/environment/climate-change-energy-energy-efficiency

http://www.business-central.co.uk/beep/

panels. These have an installed capacity of 3MW and 11.9MW, respectively and generated 16.5 GWh and 8.3 GWh in 2018, respectively 10.

Of the renewable electricity projects in Hertsmere, there are 3 large scale projects with a total installed capacity of 13 MW:

- 1 Anaerobic digestion plant -North London AD Facility. The facility anaerobically digests food waste and has an installed capacity of 3MW.
- 2 Solar Farms
  - Land at Swanland Road. Installed capacity 5 MW
  - Potters Bar Solar Farm. Installed capacity 5 MW

The total renewable electricity generated in Hertsmere in 2018 was reported to be 24.74GWh<sup>11</sup>. The total electricity consumption of Hertsmere in 2018 was 455GWh<sup>12</sup>. Thus, renewable energy produced within Hertsmere meets approximately 5.4% of the electricity consumed, which is significantly below the national levels. Nationally, 33% of electricity generated comes from renewable sources of energy including wind, solar, bioenergy, hydro, tidal and others<sup>13</sup>.

In the next 15 years, the energy demand of the country is expected to be the same or marginally decrease<sup>14</sup>. In order to meet the energy needs and our net zero emissions commitment before 2050, a significant amount of renewable electricity capacity will need to be deployed within Hertsmere.

In 2010, a Hertfordshire wide study was conducted which identified areas suitable for deployment of renewable and low carbon technologies<sup>15</sup>. An update on the study is recommended in order to take into account advancement in technology that may have resulted in more renewable energy technologies to become feasible and additional areas suitable for deployment of wind or other energy projects.

#### **Renewable Heat**

In Hertsmere, there are currently 12 operating non-domestic renewable heat projects with installed capacity of 6MW and 41 domestic installations registered for the Renewable Heat Incentive<sup>16</sup>. There are currently no renewable natural gas projects in Hertsmere.

<sup>14</sup> https://www.gov.uk/government/<u>publications/updated-energy-and-emissions-projections-2018</u>

cms/files/NHE14%20Hertfordshire%20Renewable%20and%20Low%20Carbon%20Study%202010.pdf

<sup>&</sup>lt;sup>10</sup> https://www.gov.uk/government/statistics/regional-renewable-statistics

<sup>11</sup>https://www.gov.uk/government/statistics/regional-renewable-statistics

<sup>12</sup> https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumptionstatistics
13 DUKES 2019

<sup>15</sup> https://www.north-herts.gov.uk/sites/northherts-

https://www.gov.uk/government/statistics/rhi-monthly-deployment-data-january-2020

The total consumption of natural gas in Hertsmere was 906 GWh in 2018<sup>17</sup>. A very small proportion, less than 1%, of the current heat consumption in Hertsmere is from renewable sources of energy.

While there are multiple forms of renewable electricity that are now widely implemented, the uptake for renewable heat technologies has been relatively slower. The technologies currently available include biomass, heat pumps (ground, water and air source), deep geothermal, solar thermal collectors, biomethane and biogas, and Combined Heat and Power (CHP) systems.

#### **Action Points Identified**

- **Policy:** Transition to renewable energy
- **Scheme:** Encourage the deployment of roof top solar collectors, heat pumps, and other technologies for renewable heating
- **Scheme:** Invest in separate food waste collections from households and businesses to decarbonise the gas grid via biomethane injection
- **Facilitate:** For larger projects, facilitate deployment of renewable energy (electricity and heat) by creating platform/forum for landlords, developers and financial institutions to interact and develop ideas
- Facilitate: Identify industries in the Borough that are heat intensive, generate waste heat and produce organic waste to facilitate renewable heat installations
- Facilitate: Facilitate the development of local heat/energy distribution networks
- **Community projects:** Facilitate community projects by offering Public and Council owned buildings for deployment of renewable energy (heat and electricity) or sign up to existing platforms
- **Communication strategy:** For smaller renewable energy projects that do not require planning permission, introduce an awareness campaign that engages with residents
- Local Plan: Identify areas suitable for the deployment of renewable energy projects in the Local Plan, including within strategic housing allocations, to ease and facilitate the planning process for large projects.
- Local Plan: Sustainable and zero carbon new developments with compensatory improvements to the green belt
- Local Plan: Require onsite or offsite deployment of renewable energy for all new developments in line with the energy hierarchy.

#### **Chapter 5 Sustainable Transport**

The South West Hertfordshire Joint Strategic Plan<sup>18</sup>, the Local Transport Plan 4<sup>19</sup>, and the recently published Decarbonising Transport: Setting the Challenge report, all

<sup>&</sup>lt;sup>17</sup>https://www.gov.uk/government/statistics/digest-of-uk-energy-statistics-dukes-2019

prioritise walking, cycling and public transport as modes of transportation over passenger cars in order to reduce emissions, improve air quality in urban areas and well-being of residents<sup>20</sup>.

Below is a graph showing the share of different modes of transportation in all the journeys made in Hertfordshire over last 2 decades<sup>21</sup>.

■ 2005 **2009** ■2012 ■2015 70 60 50 40 % 30 20 10 Car Driver Bus Train\* Bicycle Walk Other\*\* Car Passenger

Figure 1 Mode share trends for all journeys

A number of trends can be seen in the use of transport in Hertfordshire:

- 1. There is an overall increase in journeys made by walking since 2015.
- 2. Trips made on bicycle are low. 1.9% trips under 3 miles are made by cycling in Hertfordshire and 0.5% in Hertsmere. The target is to increase this rate to 11% by 2031.

Mode

3. The use of buses as mode of transportation in Hertfordshire has fallen. In 2011, the use of bus for work journeys was 3.5% which is well below the

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/876251/decarbonising-transport-setting-the-challenge.pdf

<sup>&</sup>lt;sup>18</sup> https://www.hertsmere.gov.uk/Planning--Building-Control/Planning-Policy/SW-Herts-Joint-Strategic-Plan/South-West-Herts-Joint-Strategic-Plan.aspx

<sup>&</sup>lt;sup>19</sup> https://www.hertfordshire.gov.uk/media-library/documents/about-the-council/consultations/ltp4-2018.pdf

https://www.hertfordshire.gov.uk/media-library/documents/highways/transport-planning/transport-and-accident-data/ttdr/traffic-and-transport-data-report-2019.pdf

national rate of 8.2% and it has since fallen further to 2.5%. In absolute terms, the local bus journeys in Hertfordshire are pretty much flat lined as shown in the following graph.

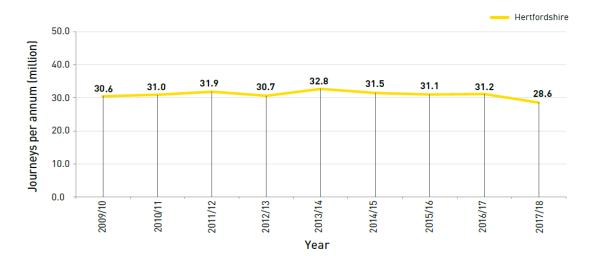


Figure 2 Passenger journeys on Hertfordshire bus services

- 4. Car journeys account for over 70% of all journeys made. There is a decrease in car journey made as a driver and increase in those made as a passenger. This indicates more shared car journeys.
- 5. Road traffic is expected to increase in Hertsmere by 4.3%, 14.5% and 18% by 2021, 2031 and 2036, respectively, over 2018 numbers.

Road transport infrastructure in Hertsmere is partly under the remit of Hertfordshire County Council (A, B, C and most unclassified roads) and partly under Highways England (Trunk roads including Motorways). Walking and cycling lanes and parking are under the remit of Hertsmere Borough Council.

There are no primary urban destinations in Hertsmere. The main urban towns are (Bushey, Borehamwood and Potters Bar and important rural settlements are Radlett and Shenley. The primary urban destinations in the vicinity in Hertfordshire are Watford, St Albans and Hemel Hempstead. London is a major travel destination outside of Hertfordshire.

Locally in Hertsmere, eight Air Quality Management Areas (AQMAs) have been identified due to levels of nitrogen dioxide exceeding the air quality objectives. These are in towns of Potters Bar and Borehamwood, villages of Radlett and Elstree, and close to major roads of M1 and M25. The elevated levels of nitrogen dioxide are mainly attributed to transport. While air quality action plan is in place to address these areas of concern, a wider transport strategy is required to improve air quality, mitigate climate change and improve the health and well-being of the residents.

#### **Action Points Identified**

- Policy: Encourage walking, cycling, car sharing and public transport network
- Policy: Transition to renewable fuels for transport
- Policy: Ensure strategic housing allocations in new Local Plan are within walking (or cycling) distance of key supporting facilities
- Local Plan: Plan the transition of transport infrastructure for use of renewable fuels such as hydrogen and electricity

## Cycling

- **Action:** Map out the existing cycling pathways in Hertsmere and improve their quality, safety and connectivity to local travel centres
- Action: Prioritise building of greenways and where possible upgrade them to be cycling friendly
- Action: Secure and CCTV monitored cycle stands at grocery stores, shopping centres and other key areas/buildings
- Action: Borough wide cycle registration schemes for cycle safety
- Action: Implement ride and go cycle hire scheme
- Facilitate: Engage with schools and non-profits to conduct safe cycling trainings for children and adults
- Communication strategy: Undertake awareness and marketing campaigns
   such as cycle to work days, cycle to school days, cycle under 3 miles
- Local plan: All new developments to make provision for secure, accessible cycle parking, showering facilities and be connected to local travel centres.

#### Public transport

• **Action**: Implement express bus service between main urban town, important rural settlements and primary urban destinations

• Action: Improve public transport frequency and speed, specifically buses

- **Scheme:** Explore creation of bus lanes within the Borough to reduce bus journey times
- **Scheme:** Develop Public Transport Hubs within existing settlements to encourage use of sustainable transport
- **Action:** Facilitate transition of public transport vehicles to those run on renewable fuels such as green hydrogen or electricity
- **Action:** Electronic public information for travel services i.e. electronic bus stop information and phone apps

#### Walking

• Communication strategy: Encourage under 1 mile journeys on foot

• Communication strategy: Increase awareness of recreational walking routes in Hertsmere such as Watling Chase Timber trail, Borehamwood Woodland Walk and Hertsmere Way.

#### Cars

- Scheme: Develop and encourage car-pooling schemes and related infrastructure
- Scheme: Develop and encourage car clubs
- Scheme: Variable parking fee for electric and fossil fuel cars
- **Scheme:** Explore creation of low emission zones in the town centres
- Scheme: Encourage taxi drivers to use electric or hybrid vehicles
- Action: Review parking standards to discourage car use and encourage other forms of transport
- Action: Implement anti-idling policy
- **Facilitate:** Partner with providers to develop a network of electric car charging points and increase awareness
- Local Plan: All new developments to provide vehicle charging points as part of their overall parking and access strategies
- Local Plan: Reduced off-street parking standards for new development subject to car clubs/pools and/or availability of alternative transport modes

#### Air Quality

- **Monitoring:** Monitor and review air quality across the borough to determine whether national air quality objectives are being met.
- Action: Implement the air quality action plan

#### **Chapter 6 Waste and Resource**

The preferred methods of waste management in the order of preference are defined in the Resource and Waste strategy as prevent, reuse, recycle, recover and finally dispose<sup>22</sup>. Management of waste is done on a county level via the Hertfordshire Waste Partnership. Hertsmere Borough Council collects garden and food waste from households in a combined bin which is sent to a composting facility. The recyclable waste such as cardboard and plastics are sent to Pearce recycling facility. Residual waste is disposed in a landfill. The aim of waste management is to keep resources in circulation and minimise the residual waste being disposed in a landfill or via incineration.

The residual waste generated per household in Hertsmere has dropped and the recycling rates have increased since 2013/14. But in absolute terms, at 44.3%

<sup>22</sup> 

recycling rate in 2018/2019, Hertsmere is well below the County average of 57.5%<sup>23</sup>. Conventional plastics are made from fossil fuels and also cause damage to wildlife and habitats when not managed properly. It is therefore, best to minimise use of plastics where possible, especially single-use plastics. The plastic use that currently cannot be avoided should be collected and recycled.

The composting volumes in Hertsmere have fallen 2 years in a row, which is an unfavourable trend. Resource and Waste strategy published in 2018 will require separate food waste collections by 2023, subject to consultation and work towards zero food waste to landfill by 2030. Of the 10 local authorities in the Hertfordshire Waste Partnership, 5 have already implemented separate food waste collections and anaerobic digestion, 2 others are scheduled to do so before end of 2020. Hertsmere is one of the remaining three. Anaerobic digestion is preferred to composting of food waste as it results in the recovery of energy as well as nutrients.

#### **Action Points Identified**

In order to implement circular economy principles and to minimise emissions from waste, the following measure may be taken:

- Policy: Implement separate food waste collections for households by 2023
- Policy: Ban/restrict the disposal of organic waste to landfills via residual waste collection or on its own
- Action: Identify sites for sewage, industrial or crop residue based biogas plants
- Action: Recycle points for batteries, printer cartridges, textiles
- Action: Install water fountains in parks and other parts of the Borough
- Partnership: Partner with biogas plants for anaerobic digestion of food waste
- Partnership: Partner with companies for separate food waste collections for businesses
- Partnership: Partner with organisations to recycle difficult to recycle materials such as crisp packets
- Partnership: Partner with organisations to publicise the water filling points
- Partnership: Partner with organisations to hold repair clinics
- Communication strategy: Introduce targeted campaign to reduce the use of plastics, especially single use plastics
- **Communication strategy:** Introduce targeted campaigns to improve recycling rates and quality of materials collected, including plastics, cardboard and paper, food waste, green waste and others
- **Communication strategy:** An annual food waste prevention campaign
- Local Plan: All new developments to use construction materials that comply
  with defined sustainability standards, such as sustainable material, recyclable
  content and low embodied carbon.

https://www.hertfordshire.gov.uk/media-library/documents/environment-and-planning/waste-and-recycling/hwp-annual-report-2018-19.pdf

## **Chapter 7 Carbon Offsetting and Climate Resilience**

Much of the borough is open countryside and the scope exists for net biodiversity gains and compensatory improvements to the green belt, as part of any strategic allocations in the new Local Plan. Such improvements can help to offset greenhouse gas emissions, improve biodiversity and build climate resilience while bringing sustainable development to Hertsmere.

While every effort is made to reduce emissions and minimise the impacts of climate change, the Council must also build resilience to deal with the inevitable consequences such as more extreme weather events, heatwaves and flooding.

Woodland, wetland, grassland and other ecological features offset carbon, reduces erosion, reduce temperature locally, act as barriers to flooding, improve biodiversity and hence climate resilience. The Committee for Climate Change has identified that a significant increase in tree planting is essential in order to achieve greenhouse gas removal rates required to reach carbon neutrality by 2050. The National Planning Policy Framework requires that all new developments must demonstrate biodiversity net gain.

Hertsmere Borough Council can include landscape and ecological measures against climate change into its current operations and future plans as well as engage with the residents and community groups to build their resilience.

#### **Action Points Identified**

- Policy: Set annual and five year targets for tree planting
- Action: Replace every tree removed for development with two or more as deemed appropriate
- Action: Partner with organisations for woodland creation in the greenbelt
- **Action:** Partner with organisations to plant trees in urban areas
- Partnership: Share data between agencies, both public and voluntary sectors to identify and monitor local vulnerable residents – i.e. property flood/storm victims
- **Partnership**: Work with partner organisations to ensure resilience of services to extreme weather and disruption sharing best practice
- Partnership: Engage with farmers, schools, residents, voluntary organisations, businesses and other community groups to create action groups
- Community engagement: Engage with local schools to plant trees on their land
- Community engagement: Plant fruit trees in community areas such as council housing, residential complexes

- **Planning:** As partner organisation, promote NHS England (and Met office) Heatwave Plan and Cold weather plans across district
- **Planning**: Mitigate against climate change impacts (flooding, extreme weather events, storms, high winds and heat waves) by safeguarding and enhancing greenbelt and other open spaces
- Planning: Ensure business continuity planning at the Council is resilient to climate impacts
- **Planning**: Prepare detailed carbon offset guidance for developers
- Local Plan: Establish a carbon offset fund to collect payments from developments to meet any carbon shortfall from new development, to be used towards carbon offset projects
- Local Plan: Implement mandatory biodiversity net gain for all new developments
- Local Plan: Identify areas for sustainable drainage, woodland and other biodiversity sites in the Local Plan
- Local Plan: Install grey water recycling on new builds.
- Communication strategy: Encourage grass areas or flower beds in residents' homes, not paved driveways, to reduce flooding.

## **Chapter 8 Local food**

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

### **Action points identified**

To increase the production and consumption of local produce in Hertsmere, the following measures may be taken:

- **Policy:** Encourage local food production and consumption
- Scheme: Engage with schools and local communities to promote urban gardening
- Action: Reintroduce the Hertsmere/Hertfordshire farmer's market
- Action: Engage with local supermarkets on creating a locally produced section
- Action: Create a Hertsmere/Hertfordshire local produce/products sale/promotion platform
- Local Plan: Encourage local food production by making land available for allotments in urban areas, schools, care homes and new developments.