CARBON NEUTRAL 2030

North Northamptonshire
Climate Change Strategy

North Northamptonshire Council

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Foreword

In July 2021, and at the earliest opportunity for doing so, a Climate and Environment Emergency was declared by North Northamptonshire Council. As part of this, we committed to the authority becoming carbon neutral by 2030, and the area by 2050 or sooner.

Right from the get-go, the Council has been clear that climate change and looking after the environment must be the 'green thread' running through the organisation. Further to this, one of the council's corporate priorities is to create a greener, sustainable environment for North Northamptonshire as a whole.

In addressing the issues climate change presents to the Council and the functions it carries out, a Carbon Management Plan (CMP) was developed and published in 2022. This sets out the key actions that need to be taken on a department-by-department basis to achieve carbon neutrality, as per the council's declaration.

A key commitment as part of the CMP was to work with our communities to develop a strategy for reducing carbon emissions and protecting the environment across our area, the North Northamptonshire Climate Change Strategy.

This has been developed with widespread consultation of local organisations, businesses, community groups, schools, and others. It has been reviewed and informed by the Council's Sustainable Communities Executive Advisory Panel and Place and Environment Scrutiny Committee.

In looking at the work the Council has undertaken in its first few years, there has been notable progress. For example, over 20,000 trees have been planted, with more going in every year following multiple successful bids for Treescape funding. North Northamptonshire Council is also very proud to have an internationally recognised pollinator project – 'Pardon the weeds, we're feeding the bees', which was highlighted as part of our online climate conference.

Looking to sustainable transport, more than 200 on-street electric vehicle charging points have been installed across North Northants with steps being taken to broaden coverage and increase the number of public charging points to over 500 by 2027. This is in recognition of the significant infrastructure roll out that will be needed to support residents in transitioning to electric vehicles over the coming years. In the same vein, the area has been taking part in an e-scooter trial with Voi. This sustainable mode of travel has been rolled out in larger towns in the area, with over 50,000 people undertaking at least one ride, which has resulted in almost a million saved car journeys.

Another notable action that the Council took early on was to adopt a tool to assess the climate impact of our decisions and procurement activities, the output of which is included in the climate section of every report. This is another example of the green thread being embedded in the organisation, helping to ensure climate change, and looking after the environment are not tackled in isolation.

North Northamptonshire Council has started the way it means to go on in doing our bit to tackle this great challenge. The steps we have taken so far are welcome and it will be important to work closely with our communities as we make further progress over the coming years.

Looking ahead, I would like North Northants to be viewed as a front-runner in Net Zero living and seen as a place that embraces innovation in green technologies and clean energy. I hope that the Strategy helps to provide a springboard to make this happen building on our successes to date.

Cllr Helen Harrison, Executive Member for Climate and the Green Environment

Executive Summary

We are already experiencing the impacts of climate change, including increased flooding[1], sewage spills[2], drought[3], heatwaves[4], biodiversity loss[5], and deteriorating infrastructure[6]. Recognising the urgency of these challenges, North Northamptonshire Council commissioned the production of this Climate Change Strategy for North Northants.

The purpose of this Climate Change Strategy (the Strategy) is to outline the key climate related risks for the area and to shape a pathway to building a more resilient, sustainable, and equitable future for North Northants. This strategy looks to 2050, but with a detailed focus on the period to 2030. It outlines our vision for North Northants, while placing an emphasis on the importance of a Just Transition. Our aim is to build a thriving green economy, resilient infrastructure, and a healthy, sustainable environment for everyone who lives and works in the area, where the benefits of climate action are equitably distributed.

Our ambitions will be delivered through strong leadership and good governance, finance from both public and private sectors, and working in partnership with residents and businesses. This strategy, and the recommendations made within, will play a guiding role in shaping the development of our roadmap to Net Zero, a robust action plan to help enable the delivery of our vision for North Northants – a fairer, greener community, having fully transitioned to Net Zero emissions by 2050. The Council will champion this strategy across North Northants and seek to lead by example. We will also serve as the facilitator to bring together different stakeholders from business (via the Big 50 and other local business networks), community groups, partner organisations, and residents to inform and develop a roadmap to Net Zero for North Northants.

This is important as, while the Council can influence a significant portion of emissions, achieving the remaining goals requires active participation from the community, businesses, central government, national infrastructure suppliers, the wider public sector, and others. Delivery of the roadmap will require collective action, no one person or organisation will be responsible for ensuring the goals are achieved.

The Strategy focuses on six key areas: Homes and the Built Environment, Energy, Transport, Nature, Food and Farming, the Green Economy, and Waste. These are the key sectors that contribute to emissions locally, and where resilience needs to be developed. For each sector, specific actions are outlined for reducing greenhouse gas (GHG) emissions, building resilience to climate impacts, and promoting sustainable practices. Key policy documents have been consulted and used to inform the six key areas of focus. The Strategy will help to inform other important policy documents developed by the Council including the Local Plan, Local Area Energy Plan, and Local Transport Plan as well future priorities and investment decisions.

This strategy is the result of extensive consultation with stakeholders, including community groups, schools, town and parish councils, businesses, infrastructure providers, and council departments. An emphasis was placed on the importance of engagement, recognising that collective action is essential to achieving our vision. Each section of the Strategy outlines actionable steps, alongside recommendations for residents, businesses, and organisations, to include the Council, ensuring a collective approach to achieving the region's climate goals.

[1]Met Office, UK and Global Extreme Events – Heavy Rainfall and Floods.
[2]The Rivers Trust, Raw Sewage in Our Rivers, 2023.
[3]Met Office, Official Blog, Climate change, Drought and Water Security, 2 Feb 2023.
[4]North Northamptonshire Council Climate Change Adaptation Risks & Impacts Report, 2023, prepared by LUC
[5]UK Centre for Ecology and Hydrology, Landmark Report Shows UK's Terrestrial Wildlife is Continuing to Decline, 27 Sept 2023.
[6]Dawson, R.J. et al, (2016) UK Climate Change Risk Assessment Evidence Report: Chapter 4, Infrastructure. Report prepared for the Adaptation Sub-Committee of the Committee on Climate Change, London.

Background

Climate change represents one of the most profound challenges of our time, reshaping the environment, economies, and communities worldwide with increasingly severe impacts. As global temperatures rise, the frequency and intensity of weather events will continue to escalate, posing significant risks that demand urgent action. The main global trends include:

- **Rising Temperatures:** The planet's average temperature has increased, leading to more frequent and intense weather conditions.
- **Extreme Weather:** Storms, floods, and droughts are becoming more severe and unpredictable.
- **Melting Ice and Rising Seas:** Polar ice caps and ice sheets are melting, causing sea levels to rise, and threatening coastal areas.

In North Northants, we are already experiencing the risks associated with climate change:

- **Increased Flooding:** More intense rainfall and river overflows, endangers people, property, businesses, and infrastructure.
- **Heatwaves:** Higher temperatures pose health risks, particularly to vulnerable populations such as the elderly and young children.
- **Water Supply Issues:** Changes in rainfall patterns create water shortages, affecting agriculture and daily life.
- **Biodiversity Loss:** Local wildlife and plant species are in decline due to shifting climate conditions, impacting our natural heritage[7].
- **Infrastructure Deterioration:** Increased prevalence of potholes and power cuts hinders local infrastructure.

[7]Doctor Pete Brotherton, State of Nature, Natural England, 29 September 2023.

Global and National Context

The global scientific community unequivocally recognises climate change as an urgent challenge demanding immediate and coordinated action[8]. To tackle this crisis, international and national frameworks have been established, guiding efforts to mitigate impacts and foster resilience.

Key Global Frameworks:

- **Paris Agreement:** Adopted in 2015, this landmark international treaty represents a historic commitment, by countries worldwide, to limit global warming to well below 2°C above pre-industrial levels, with a concerted effort to cap temperature rise at 1.5°C. It emphasises reducing GHG emissions and enhancing adaptive capacities to climate impacts.
- **Intergovernmental Panel on Climate Change (IPCC):** The IPCC provides authoritative assessments of climate science, highlighting the severe risks of inaction. Their reports serve as a critical foundation for policymaking, emphasising the need for substantial emission reductions to prevent catastrophic climate consequences.

UK's Legislative Framework for Climate Action:

The UK has implemented robust legislation and set ambitious targets to transition towards a low-carbon economy:

- **Net Zero by 2050:** The Government committed to achieving Net Zero GHG emissions by 2050. The strategy covers energy, transport, industry, and agriculture to drive a sustainable transformation.
- **Climate Change Act 2008:** This legislation established the world's first legally binding climate change target. It introduced carbon budgets to systematically reduce emissions and ensure steady progress towards long-term climate goals.
- **The Ten Point Plan for a Green Industrial Revolution:** Launched in 2020, this strategic initiative outlines the Government's approach to fostering a green economy through investments in clean energy, sustainable transport, nature preservation, and technological innovation. It aims to create jobs, attract investment, and facilitate the transition to a sustainable future.
- **The UK Climate Change Risk Assessment 2022:** Indicates that the UK government considers climate change a significant risk to human health, food supply, and biodiversity.

[8]IPCC, Climate Change: A Threat to Human Wellbeing and Health of the Planet, 28 February 2022.

Local Context

In 2022, the total emissions estimate for all sectors in North Northants was 1,695.6 kilotonnes of carbon dioxide equivalent ($ktCO_2e$)[9]. This estimate is defined as the grand total of emissions from industry, commercial, public sector, domestic, transport, land use, land use change and forestry (LULUCF), agriculture, and waste management. Of this carbon footprint, 25% came from domestic properties, 46% from transport, and 16% from industry. These three sectors alone contribute 87% of total emissions in the North Northants area.

North Northants emissions have decreased by 37% since 2005. Much of this reduction can be attributed to large scale decarbonisation of the national grid, as the UK has reduced its reliance on coal and oil. General building and car efficiencies have also contributed to this reduction, albeit to a lesser extent. The COVID-19 pandemic resulted in a significant annual reduction of 13%, the largest annual reduction observed in the area. Emissions rebounded by 3.8% in 2021 before falling by 5.1% in 2022.

Whilst our emissions trend is going in the right direction, this data does not provide the full picture. The methodology used to calculate these emissions focuses largely on energy and fuel consumption, omitting the fact that there are significant emissions sources for which we are all responsible, such as aviation, the food we eat and the goods we purchase. Consequently, total emissions for the area are likely to be substantially higher than officially reported. This means we must account for these limitations to adequately determine the best course of action to reduce local emissions.

This strategy has considered the emissions data for North Northants and combined with a science-based approach has determined that a number of interventions are required across all eight sectors to help ensure the area is able to achieve Net Zero by 2050. Throughout this strategy proposed interventions are highlighted.

[9]Department for Energy Security and Net Zero (DESNZ), UK local authority and regional greenhouse gas emissions statistics, 2005 to 2022, 27 Jun 2024.

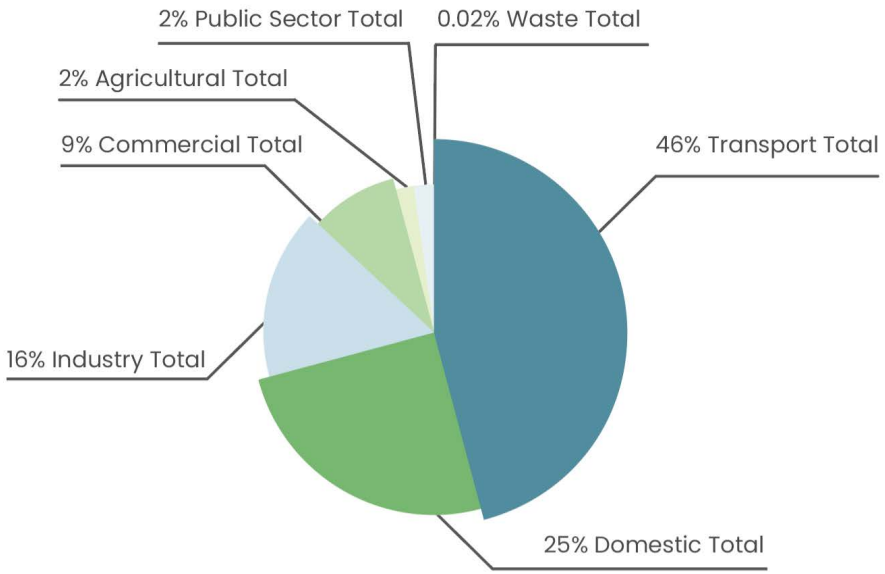


Figure 1: 2022 North Northants emissions data for seven main sectors, DESNZ, 2024

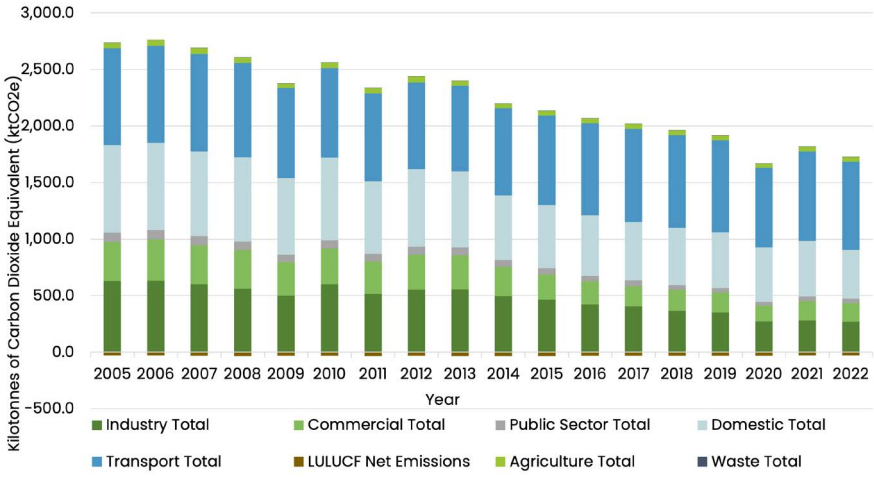


Figure 2: North Northants emissions, broken down into eight sectors, from 2005 to 2022, DESNZ, 2024.

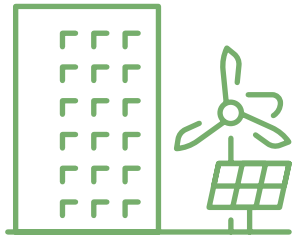
Climate Emergency & Targets

The Council declared a climate and environment emergency in 2021 and adopted a **set of recommendations** to:

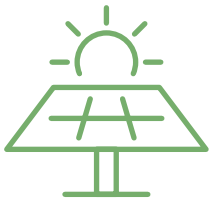
- Reduce emissions to mitigate the causes of climate change
- Adapt to the current and future impacts of climate change
- Raise awareness in communities about the causes and impacts of climate change

These goals align with our **Corporate Plan**, **climate change route map**, **Carbon Management Plan**, and the **Local Nature Recovery Strategy**. Our aim is to meet the national legal requirement of achieving Net Zero emissions by 2050 or sooner, for the North Northants area. We have also committed to becoming a carbon neutral Council by 2030.

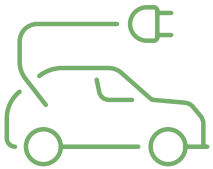
Some of the Council's carbon management goals include:



Decarbonising Buildings and Assets: there are a range of interventions being explored such as boiler replacements, air or ground source heat pumps, building insulation, and upgrading to LED lighting. Work is underway to decarbonise our fleet vehicles by introducing EVs and a low-carbon alternative for our bunkered fuel supply. We are also working to implement behavioural changes that involve staff adopting to new ways of working and energy reduction practices. Street-lighting across the area is being upgraded, with a switch from traditional halogen lamps to energy-efficient LED lights, which is expected to yield a 75% energy saving.



Transition to Renewable Energy: transition to renewable energy sources, where feasible, for our operations.



Expansion of Electric Vehicle Infrastructure: active expansion of electric vehicle (EV) charging infrastructure, increasing the number of EV chargers installed across the area. Currently, there are over 200 public charge-points in North Northants, of which almost half have been installed on-street by the Council's intervention through the VPACH project.[10]

Sustainable Procurement Practices: we have integrated a carbon reduction and sustainability criteria into our procurement processes, particularly for contracts valued at £100,000 or more, which helps to ensure that suppliers align with the Council's carbon neutrality goals.

Carbon Sequestration & Biodiversity Initiatives: there is a significant focus on increasing carbon sequestration through tree planting and enhancing biodiversity. Over 20,000 trees have been planted, with plans to continue expanding urban green spaces to capture and store carbon.

[10] National Chargepoint Registry UK.

We recently undertook a large piece of research, called **North Northamptonshire to Net Zero** (NN2NZ), which analysed over 8000 different projects and interventions to arrive at a plan and roadmap for how best our area can reach Net Zero emissions. The project recommended several key actions aimed at enabling us to close the gap and reach Net Zero by 2050. Of the potential interventions, those forecast to be most impactful, considering their individual CO_2 mitigation potential, scalability, and anticipated adoption, are:

- **Local solar and wind energy generation on roofs & carparks**
- **Green the grid – 100% renewable energy from the grid**
- **Every home to be properly insulated to modern building regulation standards**
- **Switching from oil, coal, and gas to electric heating and cooking**
- **Every car and van to switch to electric**
- **People eating less meat and more local, seasonal, organic vegetarian diets**
- **Eliminating waste and improving recycling across industry and commerce**

This strategy takes these recommendations into account, ensuring we follow the science and pursue the best actions to achieve a Net Zero future by 2050 or sooner.

Climate Change Forecast for North Northamptonshire

The climate for North Northants is forecast to change in a similar way to the rest of the East Midlands. Our region will continue to get hotter and drier, more so than many other parts of the UK, the weather will also become increasingly unsettled. The area will face an increase in storms, resulting in storm damage, extreme downpours, and flooding, which combined with dry spells and heat will result in less fertile soil, decreased biodiversity, and low crop yields.

For North Northants, the yearly average temperature is forecast to increase by 2.93°C by 2070[11], from the current local annual average of 14°C.

The hottest summer day in the last 30-year period was on 19th July 2022[12], with temperatures reaching 38.2°C in Northamptonshire[13]. Within the past 30 summers, on average there were 4 days above 25°C per month; if, as predicted, global warming temperatures rise by 2°C, this would double to 8 days a month on average. With a 4°C rise, there could be up to 17 days above 25°C per month during the summer – it would be significantly hotter.

Independent guidance, adopted by the UK government, for **Climate Change Risk Assessment** (CCRA) recommends preparing for a 2°C rise in global temperatures, while assessing risks for 4°C.

The table (figure 3) illustrates temperature and rainfall projections for the area based on localised projection models[14].

	Past 30 years	2°C increase	4°C increase
Average days above 25°C per summer month	15	36	69
Average rainy days per month in summer	9	8	6
Wettest day/mm	41	47	53

Figure 3: Table showing North Northamptonshire's past and future-forecasted temperature and rainfall records.

[11]Data source: The climate data used is from CHESS-SCAPE/. Existing policies point to a 2.8C temperature rise by 2100, in line with RCP6.0.
[12]Met Office, A Milestone in UK Climate History, 22 July 2022.
[13]BBC News, Pitsford and Santon Downham Record Hottest UK Temperatures, 19 July 2022.
[14]BBC News, What Will Climate Change Look Like Near Me?, 12 August 2022.

What this is likely to mean for us

Understanding the risks that climate change poses to the area is the first step to climate action. The risks we face from climate change, and the potential impacts, depend on three factors[15]:

Hazard: the occurrence and duration of weather and climate events, which may have adverse effects.

Exposure: the location of people, property, and other resources relative to a hazard.

Vulnerability: the likelihood of exposed people, property, or resources suffering adversely due to the hazard.

For North Northants, climate and weather-related risks will increase significantly. These will include:

Flooding: damaging our homes, communities, businesses, cars, transport links, electricity infrastructure, and telecoms with higher costs for insurance, repairs etc.

Well-being: more days of extreme heat will lead to increased illness, particularly for the elderly and those living in poorly insulated and ventilated buildings.

Social care: services will be put under increasing pressure affecting our treatment and health.

Water supply: even though there will be increased flooding and extreme downpours, water will be increasingly turbid, resulting in decreased water quality and scarcity.

Nature: biodiversity will suffer, our gardens and plant life will wither, loss of species will increase, and soil health will suffer from soil erosion, flood, and drought.

Disease: a warmer, wetter climate will lead to outbreaks of invasive species, pests, and new diseases, endangering humans, livestock, food supplies, and biodiversity.

Food: high levels of CO_2 will dilute nutritional content of crops. Soil erosion and reduced crop yields will lead to supply shortages, causing food prices to rise. As crop yields suffer or fail and less imports are available, food insecurity will increase.

Cultural heritage: our landscape will change, and listed buildings will deteriorate quicker, meaning historic assets and sites will need more attention to ensure preservation.

The above risks are from a local climate risk analysis the Council commissioned to assess the risks for North Northants. This builds on the National Risk Register[18], which assesses risks that would have a substantial impact on the UK's safety, security, and critical systems at a national level.

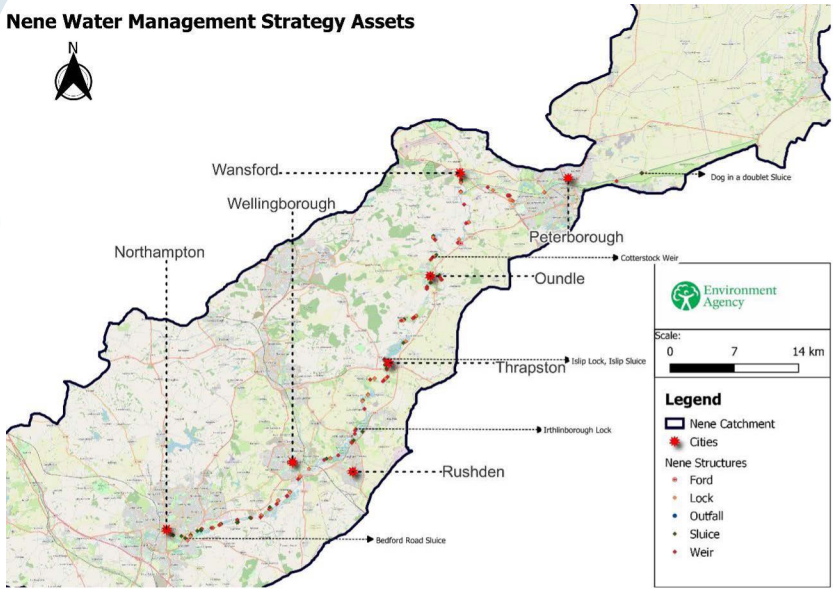


Figure 4: Illustrates key risk of flooding in North Northants, around the River Nene which could affect up to 62,000 people[16], and the Environment Agency's strategy[17] to improve the management of its water levels.

[15]Met Office, Local Authority Climate Explorer, Climate Report for North Northamptonshire, 2024.
[16]UK Government, Policy Paper: Anglian river basin district flood risk management plan, 18 April 2023.
[17]Environment Agency Briefing Paper, Nene Water Management Strategy, 2024.
[18]UK Government, National Risk Register 2023.

Methodology, Vision, & Approach

Methodology

We have followed a rigorous methodology to develop this strategy. Firstly, we reviewed the earlier Strategy (2020-23), as well as the latest climate change research, which helped to develop a strong evidence base. Secondly, we interviewed 50 local stakeholders across business, communities, environmental volunteer groups, infrastructure experts such as the National Grid and Anglian Water, and officers across the public sector who have responsibility for looking after our local environment, highways, housing estates, planning, and public support services.

A robust public consultation, in which over 350 respondents participated, took place from 16th September – 20th October 2024. Feedback and recommendations put forth by groups and individuals has been used to inform this strategy.

Our Vision

By 2050, the area will be a fairer, greener community, having fully transitioned to Net Zero emissions. Our energy will be sourced entirely from renewables, our buildings will be energy-efficient, and our transport system will be clean and sustainable. Every resident, business, and organisation will contribute to reducing the area's carbon footprint and enhancing climate resilience, securing a healthier environment for future generations.

This aligns with the emerging **Big50** vision of securing the best life for all in North Northants, which has sustainability as the green thread running through it.

Our commitment to equity ensures that the benefits of this transition are universally accessible. We aim to provide opportunities for all to engage in the green economy. This includes working to remove barriers to green jobs, clean energy, and healthier living conditions.

North Northants will be climate resilient and thriving. Our infrastructure will effectively manage extreme weather events like floods and heatwaves, supported by natural solutions such as restored wetlands and increased tree cover. This will not only mitigate climate risks but also offer beautiful, green spaces for everyone.

Economically, the area will flourish with a dynamic green economy that fosters innovation and sustainable development. Local businesses will spearhead advancements in green technologies, attracting investment, creating jobs, and driving growth. Socially, from school age onwards our communities will be cohesive and engaged, united by shared sustainability goals.

Goals for a Fairer, Greener Community:

- **Integration of Sustainability:** Sustainability will be embedded in everyday life, from energy-efficient homes and green public transport to local food production and waste reduction. Every decision, from urban planning to individual lifestyle choices, will reflect our commitment to protecting the environment.
- **Equitable Distribution of Benefits:** Our aim is to ensure that all members of the community benefit from the green transition. Programmes will be designed to support low-income and disadvantaged groups, improving opportunities to access to renewable energy, efficiency upgrades, and green jobs. Health disparities, caused by environmental factors, will also be addressed, promoting healthier lives for everyone.

Our Approach

We must all focus on reducing carbon emissions to stop global temperatures rising. In 2024, global average temperatures began exceeding the 1.5°C limit set out in the Paris Agreement[19], as a result it is crucial that we plan to manage the impacts of climate change associated with a 2°C rise in temperature, while pursuing efforts to maintain the 1.5°C limit. The Council will focus on becoming carbon neutral (meaning reducing emissions to a minimum, and then offsetting the rest) by 2030, and will work to support businesses, communities, and individuals to do the same. Beyond 2030, we will focus on reaching Net Zero – ahead of the UK government target of 2050.

Our approach will be to:

- Create the right environment to enable and support North Northants becoming carbon neutral, 2°C resilient, and then Net Zero,
- Set the right policy framework locally to support successful climate action plans,
- Lead by example – demonstrate that we can do it by showcasing what the Council is achieving,
- Push for green growth to make sure we make the most of related economic opportunities,
- Embed climate considerations in all our decision-making, and
- Seek cooperative benefits

In so doing, our delivery plans will be:

- Inclusive – ensuring the transition is accessible to all
- Evidence-led – using the best scientific research, data, and intelligence
- Collaborative – engaging a wide range of relevant stakeholders

Our vision cannot be delivered by the Council alone. We must rely on other individuals and organisations across the area, and beyond, to help deliver the vision for North Northants.

[19] BBC News, This year set to be first to breach 1.5C global warming limit, November 2024.

The UK Climate Change Committee estimates that local authorities influence one third of emissions in their area[20]. This makes public engagement and buy-in from organisations critical to tackling the other two thirds. The diagram (figure 5) explains the varying degrees that the Council can extend its influence, in terms of driving climate change action. The central sphere represents areas directly under the Council's control, such as local operations and infrastructure. Moving outward, the Council can enable change through contracts, funding, policy, and local influence. The degree of influence, and therefore certainty of success, decreases as we move from areas within council control to those where individuals have more freedom of choice. In these areas, we must rely on the wider interest to act, goodwill, logical argument, and the desire to leave the world a better place.

The Council can lead in our own operations, i.e., how we work, how we provide services, and how we manage our buildings. We can also support, inspire, and enforce positive behaviour and change through planning policies and conditions around planning applications, and we can penalise negative behaviour, such as issuing fines for blocking electric vehicle charge points or more severe penalties for fly-tipping and pollution.

We can drive change by setting conditions for organisations and individuals who contract for goods and services. By including Net Zero aims in contract terms, the Council can ensure that suppliers align with environmental goals. Policies can and will be reviewed and developed to guide the public and businesses toward a Net Zero future.

Figure 5: Spheres of Influence

[20]Climate Change Committee, Local Authorities and the Sixth Carbon Budget, Page 34, Dec 2020.

The Council can engage with the public and encourage sustainable practices through several strategic approaches, including:

- **Direct Investment:** Invest in projects or infrastructure that the Council owns, such as renewable energy or public transport.
- **Seed Investment:** Partner with stakeholders in shared ownership projects to influence and promote green initiatives.
- **Grants:** Provide financial incentives to individuals and organisations to encourage sustainable activities, such as energy efficiency upgrades and renewable energy projects.
- **Promotional Policies:** Educate and motivate the public through awareness campaigns and workshops, encouraging eco-friendly practices, and supplying educational resources.
- **Punitive Policies:** Enforce environmental standards by penalising harmful behaviours, such as littering and improper waste disposal.
- **Combination Policies:** Use a mix of incentives and penalties to balance rewards for positive actions with deterrents for negative ones.

By taking the lead and demonstrating commitment, we can inspire and influence the community and stakeholders to take part in achieving a fairer, greener community for North Northants.

As we move towards a greener future, we are committed to ensuring a **Just Transition**. This commitment involves creating pathways for communities to benefit from new green jobs, access affordable renewable energy, and take part in sustainable practices. Achieving a Just Transition means recognising the technological, social, and economic challenges of decarbonisation, while working to identify ways in which we can remedy existing inequalities across communities and prevent new ones from forming. An effective and fair transition needs to be planned and coordinated in a coherent way. Our goal is to ensure that no one is left behind in our efforts to combat climate change and build a more equitable society.

We will achieve a Just Transition through active community engagement, which is essential for the success of our climate initiatives. We are committed to involving residents at every stage of our climate action plans, from planning and decision-making to implementation and monitoring. Our approach will include a range of engagement activities, such as:

- The use of online surveys, webinars, and public consultations to gather feedback and insights from residents.
- Leverage digital channels to maximise reach and minimise costs, ensuring broad community participation.
- Collaborate with community groups, including minorities and disadvantaged groups, to disseminate information and engage broader audiences effectively.

Strategic Overview

The Council's Climate Change Strategy for North Northamptonshire, for the period 2025 to 2030, is focussed on six key areas of strategic importance. Plans for each sector focus on reducing GHG emissions, building resilience to climate change, and ensuring an equitable transition to a low-carbon future.

Homes and the Built Environment

North Northants is one of the fastest growing areas of the UK. Improving energy consumption and efficiency in homes and buildings, new and existing, is a critical factor for addressing climate change locally. Energy efficiency can be improved with better insulation, renewable energy installations (i.e., solar panels), and by adopting low-carbon heating systems. Retrofitting existing buildings as well as ensuring new developments meet high energy efficiency standards are essential steps toward achieving our goals.

Energy

Transitioning to renewable energy is imperative for the North Northants area to meet its carbon reduction targets. The region is already home to two renewable energy parks in Kettering and Chelveston. There is also potential for solar to be added to buildings, car parks, and low-grade farmland. As well as opportunities for wind and green biomass energy generation, all of which would significantly decrease reliance on fossil fuels. The challenge over the next 10 years is to accelerate away from the use of fossil fuels, which could be achieved by investing in renewable energy infrastructure. The Council can help lead the way in creating a sustainable energy future by working with local businesses and community groups and limiting its reliance on fossil-fuels within Council operations.

Transport

Transport is a major contributor to GHG emissions in North Northants. Growth in traffic and reliance on fossil fuelled vehicles poses a significant environmental risk. The adoption of sustainable transport modes, such as electric or alternative fuel vehicles, car sharing clubs, cycling, walking, and green public transportation, are crucial to reducing transport emissions in the area.

Nature, Food, and Farming

As a largely rural area, and major food producer, agriculture has an important role to play in North Northants. Climate change is already impacting agriculture and natural ecosystems in the area. Increased temperatures and altered rainfall patterns affect crop yields and livestock, while biodiversity losses threaten local ecosystems. Sustainable farming practices, reforestation, such as the Rockingham Forest project, and initiatives to protect natural habitats, such as the Nene Valley, are vital for building resilience against the impacts of climate change. Promoting local food production and consumption can also help to reduce our carbon footprints, enhance food security, and support the agricultural sector.

Green Economy

A “green economy” is one that aims for sustainable development without degrading the environment. It involves creating jobs and economic growth through investments that reduce carbon emissions, enhance energy, and resource efficiency, and prevent the loss of biodiversity and ecosystems. In 2023, the green economy grew five times faster than the general economy, and North Northants is well placed to benefit from this. It is essential that we continue to develop green skills locally, and that businesses are supported on their journey to decarbonise operations and create local green technologies and services. For North Northants, new sustainable businesses are key to bolstering sustainable growth in the area. This involves supporting businesses who adopt environmentally friendly practices and encouraging innovation in sustainability. The green economy not only helps reduce emissions, but it also drives economic resilience and competitiveness.

Waste

Reducing waste by increasing recycling and composting rates can significantly lower GHG emissions locally. The Council aims to continue to enforce robust waste reduction strategies, support circular economy initiatives, and educate residents and businesses on sustainable waste practices. In the short term, this includes the continuation of our annual garden waste collection service and the introduction of food waste collection across the whole of North Northants, and in the medium term, ensuring proper waste management contributes to a cleaner, healthier environment, and supports overall climate goals. Several businesses in North Northants have already adopted circular economy practices, whether it is providing a second life for EV batteries for renewable energy storage, by extracting reusable polymers from unwanted carpet, or by providing global leadership in sustainable electronics through innovative processes and materials.

Key Areas of Focus

In this section, we highlight six key sectors of strategic importance. Plans for each area focus on reducing GHG emissions, building resilience to climate change, and ensuring an equitable transition to a low-carbon future, whilst highlighting activities we should be doing to build a fairer, greener community.

Homes & the Built Environment

Significant growth is planned across North Northants through 2030 and beyond, with around 30,000 new houses and associated infrastructure expected by 2031, including seven new Garden Communities (six Garden Communities and one Garden Village)[21] and major global brands investing in the area, to include Nike's new UK Campus, which will achieve Net Zero Carbon in construction and feature a range of wellbeing features such as woodland trails[22]. This necessitates focusing on adaptation and mitigation to address these pressures and reduce climate impacts.

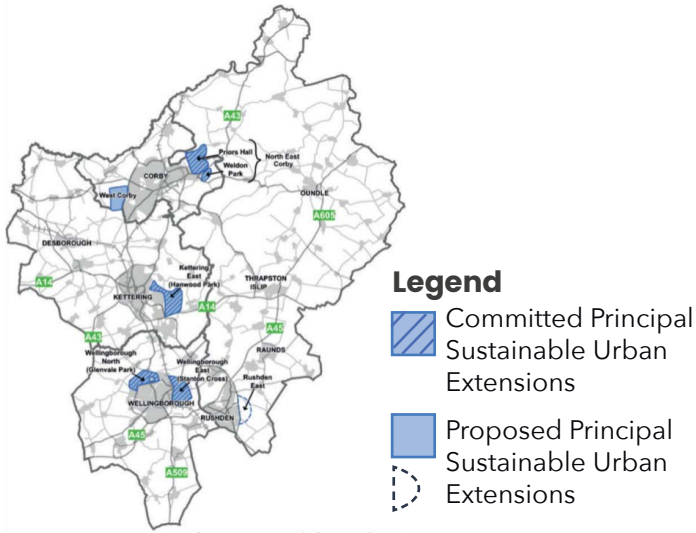


Figure 6: Principal Sustainable Urban Extensions[23]

[21]North Northamptonshire Joint Planning Unit, North Northamptonshire Joint Core Strategy 2011-2031, July 2016.
[22]Business Link East Midlands, Nike to lease new state-of-the-art logistics campus in Corby, 9 May 2024.
[23]North Northamptonshire Joint Planning Unit, North Northamptonshire Joint Core Strategy 2011-2031, Pg. 74, July 2016.

Action in the built environment (buildings and infrastructure) is a key part of ensuring a Just Transition. Our transition to an ecologically conscious development mindset, while also ensuring that the benefits, and the costs, of the shift to Net Zero are equally spread and enjoyed throughout the population.

Our Local Plan is currently being revised and includes climate risk analyses as part of its evidence base. Policies related to climate adaptation will be specific and measurable, particularly for flooding, reducing energy consumption, and changing weather patterns such as extreme temperatures.

The Council can help reduce emissions and promote carbon sequestration and biodiversity, though our influence here is more limited. Supporting renewable energy provision, storage, and transmission is another key area where local planning can provide policies and proposals which can significantly reduce emissions, with benefits extending locally, regionally, and nationally.

What the Council plans to do

The Council will continue to lead by example, delivering activities outlined within our Carbon Management Plan, such as retrofitting our buildings to a minimum Energy Performance Certificate (EPC) B standard and implementing behavioural changes to our operations and working practices. We will aim for all Council homes to have a minimum EPC B standard, not just new builds. Homes will need to be retrofitted to introduce energy savings measures, such as insulation and air source heat pumps. Our biodiversity and nature recovery work will continue to safeguard existing carbon sinks on Council-owned land (e.g., woodlands, grasslands). As part of the review in preparation for the North Northamptonshire Local Plan there is an opportunity to establish low carbon building requirements for new developments and to provide stronger policy on climate adaptation and mitigation. This includes making provision for local energy networks. We will strive, through policy, to ensure that developers go beyond the minimum national requirements and Building Regulations pertaining to development standards. By way of example, requiring the provision of photovoltaic solar panels on large roofs used for employment or warehouse and distribution units. These actions will help to avoid further new developments coming forward without provision for solar panels, storage, or similar measures.

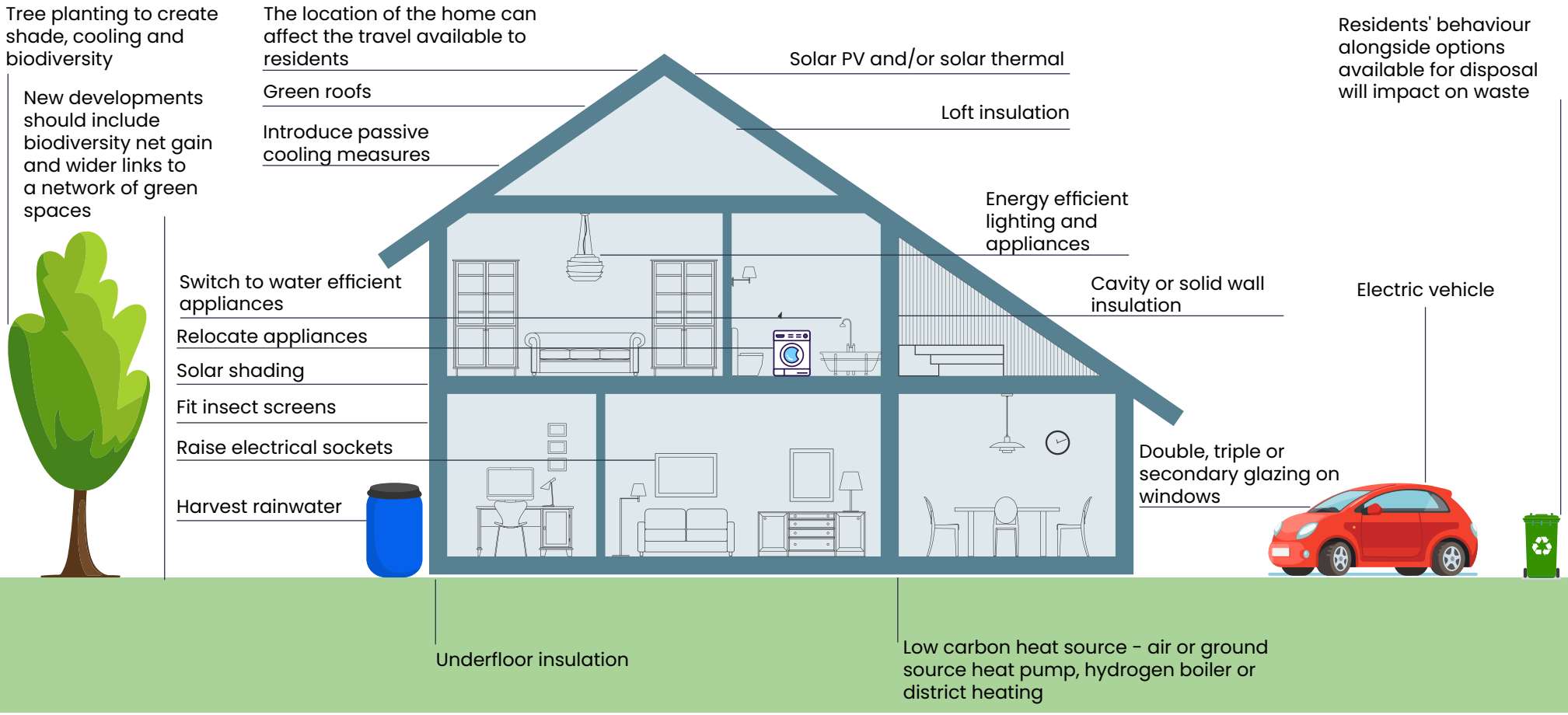
By using our influence and relationships with local partners, we will provide targeted support to help residents understand the importance of improving their home's efficiency and engage in retrofitting. We will actively promote third-party projects and initiatives that aim to achieve this. We will work with local partners to enable the development of an action plan to achieve retrofit across the housing sector. This will include ensuring that residents are aware of any support available through Government schemes or other mechanisms to retrofit their homes. We will continue to work with regional and national partners to disseminate learnings, enhance building standards of housing, schools, and the wider built environment. We will promote inclusive educational campaigns to raise awareness for climate change impacts in the area, as well as the benefits and options for home adaptation. We will empower local leaders and organisations to act as intermediaries and advocates for climate adaptation and resilience within the community.

Our continued work with developers will ensure that development sites are resilient to future climate change impacts (e.g., flooding, temperature fluctuations etc), and that they reduce the reliance on private vehicles for occupants and nearby residents/businesses. We will work to mandate for green and blue infrastructure to be included on all major developments such as green roofs, EV charge points, and renewable energy technologies, and heating/cooling networks. We will also seek to obtain increased government funding to offset the cost of home and business upgrades (e.g., through grants, loans, tax breaks, financial incentives etc.). Funds, such as the **NNDecarb business grant scheme** and **energy grant schemes**, are examples of mechanisms the Council has employed to assist small and medium-sized enterprises (SMEs) in investing in low-carbon technologies. We have also supported local SMEs to develop carbon management plans and help realise the benefits of decarbonisation.

One thing you can do

Review your home for **cold spots**, then seal and insulate these areas, as this will help protect you from storm, wind, rain, flooding, help your home stay cool in summer and warm in winter, and save you money on your heating bills. You could also investigate setting up a rain harvesting system for use in your garden to cut down on water usage. The diagram below illustrates a number of different improvements you could undertake to make your home more resilient to climate change and reduce your carbon footprint.

Figure 7: Sustainable Living



One thing organisations and businesses should do

Evaluate the vulnerability of business operations and supply chains to climate-related risks such as flooding, extreme temperatures, and storms, and put in place practical plans to make your business climate resilient. We can help you with further advice.

"Our biggest issue is the high cost of retrofitting old housing stock to make them more energy efficient. Our Live Green strategy aims to get 95% of our 6000 council homes to EPC C standard." Ben Wilesmith, Greatwell Homes.

"We believe that Hanwood Park can play a key part in the delivery of the local climate strategy. We have some 1000 acres available which presents an enormous opportunity to embed a different way of thinking. Our vision of Community, Connectivity and Creativity describes the power of communities and partnerships to effect change around place making, development and housing construction to reflect environmental and climate issues. As a society we have a good understanding of the technical solutions required; but we do need to change mindsets to be bolder and more confident and less afraid to fail fast and try new approaches in order to learn what can work best. This will need collective action and public engagement, and consultation is essential to make the case that things need to change – but there has to be a strong policy lead. Currently we are lagging behind the science in how our systems operate and that has to change - any strategy needs to activate and mobilise communities and corporations to work together to drive policies and influence politics and set out targets that are realistic, deliverable and protect the most vulnerable. At the same time while I think we have to accept that bad outcomes due to climate change are here and are inevitable we have a great deal of power and agency to ensure a flourishing and sustainable future by working together. The climate strategy should be clear enough for businesses to invest in. Define the climate problem fully and think of solutions that drive outcomes, some of which may be unexpected." Chris Langdon, Project Director, Hanwood Park

Energy

Transitioning to renewable energy is imperative for the North Northants area to meet its carbon reduction targets. The region is already home to two renewable energy parks in Kettering and Chelveston, the latter of which is the UK's largest renewable energy park. Chelveston is also home to a hydrogen production facility, which is expected to be operational by late-Spring 2025. Once active, the site will be capable of producing 3 tonnes of green hydrogen a day. Cadent is also working on plans for a Hydrogen Valley, spanning our area, to provide up to 48 terawatt hours (TWh) of clean hydrogen, with Corby positioned as a hub for green steel and clean transport[24]. There is also potential for solar to be added to buildings, car parks, and low-grade farmland. As well as opportunities for onshore wind and green biochar generation, all of which would significantly decrease reliance on fossil fuels. The challenge over the next 10 years is to accelerate away from the use of fossil fuels, which could be achieved by investing in renewable energy infrastructure.

However, North Northants faces several significant barriers to integrating renewable energy and achieving Net Zero targets. The region's electricity network is constrained, particularly at the Grendon Grid Supply Point (GSP), which serves as the primary hub for local energy distribution[25]. This, along with its associated four bulk supply points and 19 primary substations, means the network is currently at capacity, limiting the ability to connect new renewable sources, especially large-scale solar or wind generation, which currently means our energy security is hindered.

In 2022, the carbon footprint of the electricity supply system in North Northants was estimated at 188.29 $ktCO_2e$, with grid imports responsible for 91% of this total, and biofuels and waste contributing the remaining 9%. The area's total electricity consumption was estimated at 1,588 gigawatt hours (GWh). Local generation was 353 GWh, meeting only 22% of total demand, whereas 303 GWh came from renewable sources (19% of total demand). Biofuels and waste contributed 3%, while non-renewable generation from the Corby gas fired combined-cycle gas turbine (CCGT) power station accounted for 0.1%. To meet the remaining demand, North Northants was forced to import 1,235 GWh, or 78% of the total demand, from the National Grid Electricity Distribution (NGED)[26].

Additionally, the Active Network Management (ANM) system, crucial for managing grid constraints, requires an upgrade. Although NGED is developing an upgraded ANM system, there is currently no timeline for when it will be ready for customer connections. The connection of larger scale renewables will typically not be possible until the ANM system has been fully developed, installed, and commissioned. This is a major issue we must address.

This network congestion, combined with potential curtailment due to the Corby Power Station's operational patterns, complicates the business case for renewable projects, by creating unpredictable risks due to grid disconnection. High grid connection costs and the need for network reinforcements further exacerbate the issue, with substantial contributions from developers making projects economically challenging.

Through the **Distribution Future Energy Scenarios (DFES)**, NGED is working to forecast future energy demand and supply, to better plan for future network constraints. By modelling various energy scenarios, the intention is to enable local areas plan for resilience, identify risks, and align their energy needs with national goals for Net Zero emissions. The DFES evidence-base supports informed decision-making on energy infrastructure, which will help ensure a secure, sustainable energy future.

[24]Opergy Group, Hydrogen Valley could be transformational for West Midlands and East of England, 25 Mar 2024.
[25]National Grid, Grendon – Corby.
[26]North Northamptonshire to Net Zero (NN2NZ) Project.

"Tier council business rates according to how green businesses are – for example where businesses are operating in efficient EPC rated buildings and have solar on their roofs, they pay substantially less in rates." Consultation recommendation

"With the new government lifting the ban on wind turbines, encourage people to build them as they provide power when the sun is not shining all year round, and it is windy a lot round here." Consultation recommendation

"Consider district heating networks for homes close to new data centres and other industrial heat-producing sites." Consultation recommendation

What the Council plans to do

Despite these challenges, the Council remains committed to driving renewable energy generation across the area. To tackle long-term energy issues, we will collaborate closely with the NGED to accelerate the construction of a new GSP and encourage the upgrade the existing ANM system. These upgrades are essential to alleviate congestion and support large-scale renewable energy projects. To advance these goals, the Council supports the establishment of community groups that will collaborate with NGED on progressing new GSP and ANM systems. We will also advocate for the creation of local micro-grids that can generate and consume green energy off-grid.

The Council will develop a **Local Area Energy Plan** (LAEP) for North Northants. The LAEP will be a spatial plan that identifies the change needed to the local energy system and built environment, detailing 'what, where, when and by whom'. It will also set out the total costs and changes in energy use and emissions, over incremental time periods to achieve Net Zero by 2050 or sooner.

Promoting awareness of energy efficiency and renewable energy remains a priority. We will focus on informing residents by developing helpful resources and supporting renewable energy projects on council-owned land. The upcoming Local Plan review will also serve as an opportunity to identify priority areas for renewable energy infrastructure projects, encouraging developers to invest and bring these projects to fruition.

We will continue to provide support, including grants and other programmes that assist individuals and businesses in electrifying fossil fuel-intensive processes, transitioning to renewable energy, and improving energy efficiency, and continue working with partners to promote and support smart grid technologies and community energy projects, ensuring a balanced distribution of renewable energy benefits. An example of this is the Funded Energy Redress Scheme **project CLEAR**, which aims to match local solar generation with domestic consumption, providing financial benefits to both generators and consumers[27].

Finally, we are committed to supporting the maximum production of renewable energy across the area, along with initiatives aimed at reducing renewable energy costs below those of fossil fuels, to include supporting clean energy communities, heat networks, and micro-grids. Our continued engagement with key stakeholders in the energy sector, community groups, and residents will help enable the transition from fossil fuels to renewable energy, further solidifying our commitment to a sustainable future.

One thing you can do

Turn down the thermostat, particularly when you are not at home or at night, only boil the water you need, and switch to a green renewable energy supplier.

[27]Although not a formal partner of project CLEAR, the Council supported the grant funding bid by writing a letter of support to assist Electric Corby Community Interest Company and its partners in securing the grant. Additionally, the Council has helped promote the project to North Northamptonshire residents.

One thing organisations and businesses should do

Regularly conduct energy audits to identify areas for improvement and implement changes to optimise energy use.

"Chelveston Renewable Energy & Innovation Park is the largest combined renewable energy park in the UK, currently generating up to 200GWh from wind & solar, saving some 40,000 tonnes of carbon being discharged into the atmosphere a year. This energy is exported to the National Grid as well as supplying the on-site Innovation Park through a direct wire feed (initial phase of circa 350,000 sq. ft of employment space under construction and built to occupier requirements). The first building on the Innovation Park has an EPC rating of minus 92 making it carbon negative (not just zero). All buildings have siphonic systems to catch, clean and store rainwater. Chelveston has an exclusive Joint Venture with Jaguar Land Rover using second life i-Pace batteries in large scale energy storage from the solar arrays, either discharging to the grid as required / appropriate or providing redundancy to the Innovation Park occupiers. Work has also recently completed on the construction of a new solar array dedicated to green hydrogen production with a capacity of up to 3 tonnes per day. We believe Chelveston Renewable Energy & Innovation Park to be an exemplar development, leading climate change strategy within the UK and remain committed to continued innovation in the delivery of large scale, sustainable energy generation, storage and application." Simon Toseland, Chelveston Renewable Energy Park / Prop-Search Commercial Property Solutions.

"Cadent manages the gas distribution network across North Northants. We are upgrading our vital network of pipes to plastic to ensure a long-term safe network as well as remain on track to replace fossil gas with greener alternatives, such as biomethane and hydrogen. This change is essential to achieve local plans for meeting energy demands in ways that better protect the planet. We recognise that many industrial processes cannot be electrified, and we are looking at the switch to low carbon hydrogen for heavy industry, power generation and transport. In addition, the exciting role that hydrogen may play in supporting the growth of heat networks to deliver a low carbon solution for commercial and residential heating." Dr Kelly Manders, Cadent

"One of the biggest challenges we face from the National Grid Electricity Distribution perspective through to 2050 and beyond is from heat. We have invested in flood defences significantly improving asset resilience to flood events – following the 2007 flood. The risks faced from both extreme temperature events and average temperature increases present new emerging risks, not just from overheating assets but the risk of changes in customer behaviours such as needing more electricity for air-conditioning and uptake of low carbon technologies, we are already seeing heatwaves records set close to us in the east of England. We should encourage nature-based solutions like shading and tree canopies." Scott Ball, NGED

"We plan to convert our steel tube mill at Corby from natural gas to electric furnaces, which would halve our site's scope 1+2 emissions. However, our decarbonisation plans are being hindered by electricity pricing; electricity prices are three times higher per unit of energy in comparison to natural gas and are inherently linked to natural gas prices. This makes it challenging to make a financial case for decarbonisation. Similarly, there are subsidies for hydrogen but not the same level of support for electricity despite the energy efficiency for electrically powered assets is generally better than hydrogen combustion. Tata Steel intend to work with partners, locally and nationally, to overcome these hurdles and promote faster decarbonisation." Rob Sandercock, Tata Steel UK.

Transport

North Northants is well connected to the surrounding East Midlands region and beyond. We have excellent road connections with the rest of the UK, including London, Birmingham, and Manchester via the M1, M6 and A14.

The Council has over 1,100 miles of roads, over 1,200 miles of foot and cycleways, and 700 miles of public rights of way to manage and maintain. In addition, there are approximately 724 highway structures and 557 public right of way structures to maintain.

The Midland Main Line railway, which is now electrified though North Northants, runs in a broadly north-south direction connecting with London and Eurostar services at London St Pancras. The area has three main train stations, in Corby, Kettering, and Wellingborough, which are owned by Network Rail and operated by East Midlands Railway.

The commercial core of North Northant's bus network is represented by the inter-urban routes, including services that cross local authority boundaries to Bedford, Northampton, Milton Keynes, Market Harborough, and Peterborough. This reflects both the multi-centre nature of the area, and the heritage of urbanised small towns and villages along the A6 corridor, which were the historic home of the boot and shoe industry.

While the area has fast transport links much of our rural areas lack sufficient public transport, which prevents residents from accessing jobs, education, and services without the use of a private car.

Current infrastructure priorities, to deliver planned growth to 2031, identified pressures and pinch points as factors affecting delivery, most notably, congestion and capacity issues along key strategic highways networks such as the A14, A43, and A45 corridor.

Why people travel

In 2022, the most common trip purpose in England was for shopping, followed by commuting. Cars are the most popular mode of personal travel, comprising 58% of trips and 78% of distances travelled in England. In 2023, the average car journey was 6.5 miles in urban areas, and about 10 miles in rural areas[28].

Census data found the majority of people drove, or were passengers in a car or van, to work (63%), followed by working from home (23.6%), on foot (7.6%), by bike (1.6%), by bus (1.4%) and by train (0.9%).

How people travel

Active Travel, particularly walking, plays a key role in how people travel for all journey purposes. Whether it be walking to a bus stop, train station, or walking to a destination from a car parking spot. In England, walking made up 26% of all trips, whilst cycling made up just to 3%. 11% of adults were found to cycle at least once per week.

In North Northants, 16% of households have no access to a car or van, 40% have one car or van, and 44% have two or more vehicles. In 2020, the Council launched the use of Voi e-scooters, which, as of September 2024, have saved 925,000 car journeys and 337 tonnes of CO_2 in the area.

Census data on distance travelled to work shows that while there is a higher proportion of shorter commutes in larger towns, such as Corby and Kettering, there is still a good proportion of commutes (approximately 30.6% in rural areas, compared to 45.9% in urban areas) in the 1–3-mile range in the more rural parts of North Northants that could be walked or cycled were it safe to do so[29].

[28]UK Government, Official Statistics, National Travel Survey: 2022, 30 August 2023.
[29]Department for [29]Transport, Official Statistics, Walking and Cycling Statistics, England: Local Area Walking and Cycling Rates, 30 August 2023.

Transport, Climate Change, and Air Quality

Transport is the largest emitting sector of UK GHG emissions, producing 26% of total emission in 2021[30]. Within this, passenger cars account for 55% of road transport emissions[31]. The sector also emits gases, and other substances, which have significant health consequences, such as nitrogen oxides (NOX) and particulate matter (PM)[32]. Air pollution is recognised as a contributing factor in the onset of heart disease and cancer, and can cause a range of other health impacts, such as effects on lung function, exacerbation of asthma, increases in hospital admissions and mortality[33].

In 2021, transport accounted for 819.3 $ktCO_2e$ in North Northants[34]. Between 2005 and 2017, CO_2 emissions in North Northants reduced by 27%; however, emissions from transport only saw a 3% reduction. Locally, transport accounts for 19% of CO_2 emissions in the Corby area, 48% in Kettering, 43% in Wellingborough, and 53% for East Northamptonshire[35]. Given how and why people travel, there is clear potential to improve.

"Look at variable licensing rates for taxis – if electric much cheaper than diesel." Consultation recommendation

"Make it easier for residents to leave their cars at homes – more parking on existing developments – and more cycling and walking infrastructure with segregated and secure bike storage in destinations." Consultation recommendation

"Look at variable car park tariff – like in Bath – much cheaper to park a small electric car than a big diesel SUV." Consultation recommendation

"Consider clean air car free zones around schools." Consultation recommendation

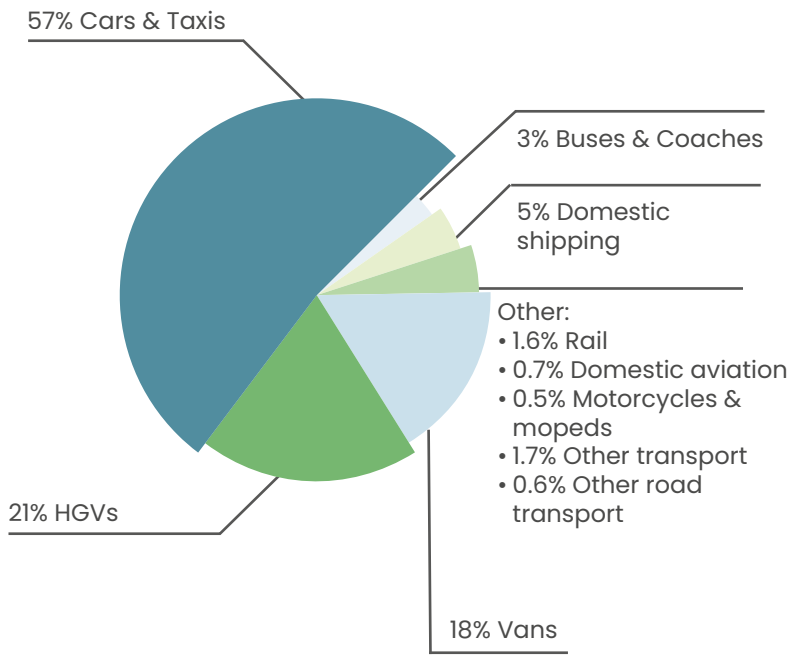


Figure 8: Greenhouse gas (GHG) emissions by transport mode, 2021[36]

[30]Department for Transport, Official Statistics, Transport and Environment Statistics: 2023, 19 October 2023.
[31]Department for Transport, Decarbonising Transport: A Better, Greener Britain, Pg. 87, 2021.
[32]Department for Transport, Official Statistics, Transport and Environment Statistics: 2023, 19 October 2023.
[33]North Northamptonshire Council, Local Air Quality Strategy, July 2024.
[34]Department for Transport, Greenhouse Gas Emissions from Transport by Local Authority, 19 October 2023.
[35]North Northamptonshire Strategic Plan Sustainability Appraisal Scoping Report, Pg. 32, March 2022.
[36]Department for Transport, Official Statistics, Transport and Environment Statistics: 2023, 19 October 2023.

What the Council plans to do

Transport is a significant contributor to GHG emissions in the area, the continued reliance on fossil-fuelled vehicles poses severe health implications and environmental risks. To address this, we are taking steps to promote sustainable transport options, reduce the carbon emissions associated with mobility, and minimise air quality risks locally.

To help minimise impacts on health, we will continue to play a vital role in reviewing the air quality across the area, assessing air quality standards, and ensuring objectives are achieved. We will continue to ensure air quality is considered as part of all planning applications and that developers are completing the required Air Quality Supplementary Planning Document before applying for planning permission. The **Local Air Quality Strategy for North Northamptonshire** outlines the Council's commitments in relation to air quality.

Key initiatives to enhance sustainable transport include the development of our Active Travel Strategy for North Northants and the deployment of **Local Cycling and Walking Infrastructure Plans (LCWIPs).** LCWIPs identify where improvements to local cycling and walking infrastructure will be prioritised to develop attractive town-wide networks.

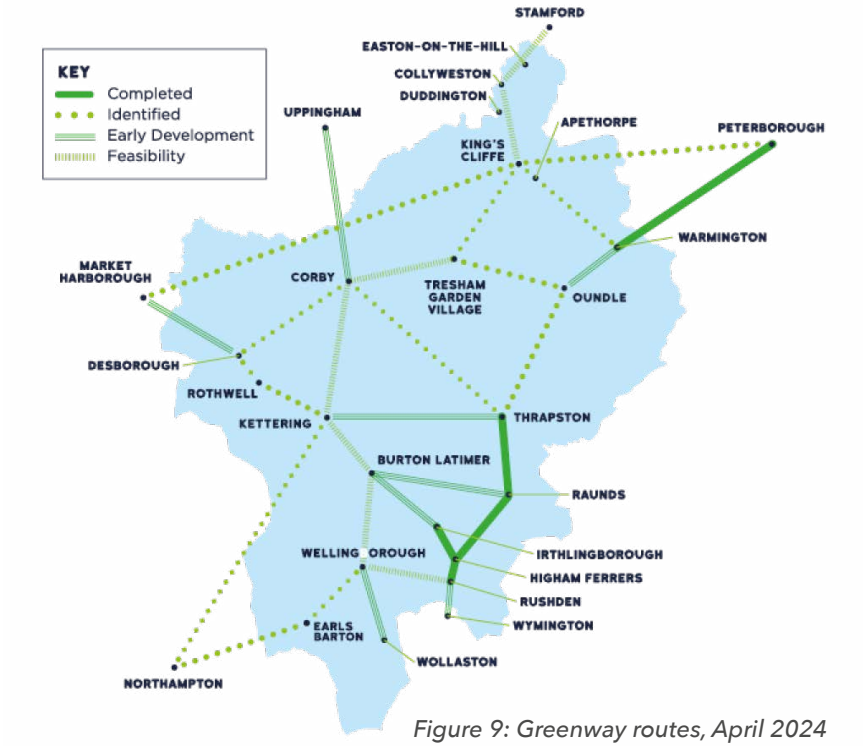


Figure 9: Greenway routes, April 2024

Our recently adopted **Greenway Strategy Masterplan**, aims to develop and connect a 220-mile network of 'greenways' and ensure they are safe off-road routes that connect key locations, designed for cycling, walking, and riding. The North Northants greenway is a largely traffic-free route connecting Rushden, Higham Ferrers, and other places in the local area, with plans to extend further along the Nene Valley, linking Wellingborough to Peterborough. The ambition is that the greenway will join-up the various urban networks. The Council will actively seek funding to implement this wider network and enhance public rights of way accessibility across rural areas. Where feasible, and practical to do so, greenways will be constructed using environmentally sustainable materials such as recycled Flexipave® instead of tarmac and gabion stones rather than concrete. This investment not only supports greener travel but also enhances local biodiversity and flood resilience.

We will continue to work with partners, as set out in our **Bus Service Improvement Plan (BSIP)**, to improve rural and urban bus services and grow bus patronage locally. To support rural communities, innovative solutions like 'hail-a-minibus' demand-driven services could be explored as efficient alternatives to underused large buses, rural bus services have also been expanded to enable more residents to utilise public transport.

Additionally, we will continue to invest in electric vehicle (EV) charging infrastructure, guided by the national strategy '**Taking Charge**'. This includes expanding the public network of EV chargepoints and planning for future demand growth. Our goal is for at least 80% of households without off-street parking to be within 250 metres of a public EV chargepoint by the end of 2029[37]. Alongside these efforts, we will publicise national grants for purchasing bikes, electric cars, and EV chargepoints, as well as mobile phone applications that help residents calculate the true costs and benefits of switching to electric vehicles. The Council is also leading by example by electrifying its fleet, where practical to do so.

Further efforts include working with local partners to ensure that sustainable transport infrastructure is in place at schools, leisure centres, and public spaces. We will continue to promote the creation of car-sharing clubs and mobility hubs. Pothole repairs and road maintenance will be accelerated to ensure safe and reliable networks, using materials and processes that are more resilient to climate change.

In line with the Council's commitment to climate resilience, there will be a focus on encouraging the prioritisation of infrastructure for green transport. When repairing and restoring old infrastructure, we will encourage our highways partners to use climate-resilient materials. To provide safe and sustainable routes for non-motorised transport, we will explore opportunities to accommodate a shift towards cycling and micro-mobility via the construction of segregated cycleways that include green infrastructure, to include incorporating tree canopy shading, greener segregation, and flood-resilient drainage systems, all of which contribute to a sustainable and resilient transport network.

[37] North Northamptonshire Electric Vehicle Infrastructure Strategy 2024-2030.

Figure 10: Example of what a local community mobility hub

What you can do

When you go on short trips, consider walking or cycling to reach your destination. For longer trips, try to carshare or use public transport. Ideally, give up your car as much as possible.

What organisations and businesses should do

Whenever commercially viable, considering supporting flexible working practices such as remote working to reduce transport emissions. Consider incentivising car sharing schemes, promote alternative means of commuting, and support switching to electric cars, leveraging financial incentives where available[38].

"Voi are running e-scooter trials in major towns across the UK, including Corby. Our objective is to get as many people as possible riding e-scooters in a considerate and affordable way to get cars off the road, and our trials are proving popular. We would like to see more facilities for e-scooters and micro-mobility – like more designated infrastructure to support personal travel." Theo Gough, Voi Technology

"At Brightwayz, we run local projects to enable more people to choose more sustainable transport, like community bike rides to show people the best routes. We would like all schools to encourage cycling, and all leisure and sports venues to have good quality cycle racks to support people switching to cycling. We believe that people need good information first before changing their behaviours. Cycling is proven to be a good choice, for example, it reduces absenteeism by 27% and cyclists are 46% less likely to get cancer and heart conditions according to British Heart Foundation research. We would like more trees, shade and shelter for cycle paths, and ideally segregated cycleways next to rain gardens, with wildflowers and shrubs good at absorbing water and taking crud from the road, forming safe barriers between cyclists and roads. We would also like smaller 'on demand' buses that can respond to what people want so they are used more." Alison Holland, Brightwayz

[38]At the time of writing, there are grants towards installing charge-points, zero road tax, and company car tax benefits for electric vehicles, however these are subject to change.

Nature, Food & Farming

Nature

North Northants has diverse wildlife with a range of habitats and species of local, regional, national, and international importance. Natural assets are situated alongside urban settings, including parks, woodlands, private gardens, and green corridors which are all important elements for ecological systems to thrive.

The area is host to several designated sites, including the **Upper Nene Gravel Pits**, which is a Special Protection Area (SPA) due to its importance as a breeding, feeding, and wintering ground for over 20,000 rare and vulnerable bird species, including Gadwell, Bittern, and Golden Plover. The waterways in the valley are also home to a huge range of aquatic plants, fish, worms, and insects.

The area is rich in green infrastructure, featuring the Nene Valley Way and as highlighted in the transport section the North Northants Greenway. The area also benefits from a variety of parks and open spaces, to include five country parks - Barnwell, East Carlton, Fermyn Woods, Irchester, and Sywell, ancient woodlands like the Rockingham Forest, and several nature reserves to include Summer Leys, Ditchford Lakes and Meadows, and King's Wood. The importance of green infrastructure, including parks, to our towns has prompted the Council to invest over £1m in projects designed to enhance spaces in Corby, Desborough, Kettering, Wellingborough, Rushden, and Higham Ferrers.

Despite the area's abundance of open spaces and natural parks, rapid growth in housing and construction put a strain on local biodiversity. Increased land developments, agricultural intensification, and climate change exacerbate habitat loss, fragmentation, methane generation, and degradation. Northamptonshire already has the third highest rate of plant species loss in the country at 0.82 species per year[39]. This needs to be monitored and managed. Our new Local Nature Recovery Strategy sets out plans on how to protect our natural environment[40].

[39]Plantlife, Our Vanishing Flora: How Wildflowers are Disappearing Across Britain, Pg. 18, Mar 2023
[40]North Northamptonshire Local Nature Recovery Strategy. 2024-2030.

As a council we are committed to local nature recovery and conservation. We have a dedicated team of rangers looking after our parks and woodlands, who engage in activities to improve and enhance biodiversity and resilience. This includes fighting pests and diseases that have increased as a result of climate change, such as ash dieback and the oak processionary moth. We also engage in under planting and are introducing a wider variety of native species, and help to provide the right flora for butterflies, to include the great work happening in partnership with Butterfly Conservation in Fermyn Woods Country Park. Our tree planting programme plants 10,000 trees a year and will extend the current canopy cover from 10.5% to 17% by 2050. We also provide advice and guidance on the types of trees people should plant in different locations – the right tree for the right place.

As well as conservation, we see nature as vital to enhancing health and wellbeing, the **Active Parks** project funded by Public Health, frequently host park runs in our country parks, Irchester Country Park is one such example. We also promote the use of our open spaces and parks for active lifestyles, providing gym equipment and running and cycling trails.

We work closely on carbon sequestration projects for enhancement, meadow creation, wildflower planting, and improving carbon storage in waterways. We supported the Rockingham Forest Vision Group on producing ten Parish **Nature Recovery Plans**, and work with landowners on larger projects on land acquisition for sequestration. We also administer Countryside Stewardship Grants to landowners to improve conservation and accessibility, working closely with Forestry Commission.

Food & Farming

Decisions on food and farming have an important role to play in tackling climate change, making adaptations, and mitigating the negative impacts at a local level. Agriculture and food production are also important to the local economy with major brands such as Alpro, Weetabix, and Whitworths based in the area.

The agriculture sector is uniquely placed as both the source of 10% of UK emissions as well as an opportunity for a carbon sink. Farming captures carbon dioxide (CO_2) from the air and turns it into a wide range of foods, fibres, and fuels. By capturing and storing carbon, the sector has the possibility to generate negative emissions – actively removing CO_2 from the atmosphere to balance the CH_4 and N_2O emissions from food production. Farmers also manage substantial carbon reserves already present in soils and vegetation.[41]

The impacts of climate change mean farmers are facing longer periods of drought followed by intense rainfall, which can lead to soil erosion, reduced crop yields, and water scarcity. Additionally, warmer winters are disrupting the lifecycles of pests and diseases, leaving crops and livestock more vulnerable.

In response to these challenges, many farmers in the area are adapting by introducing soil conservation techniques, such as cover cropping and reduced tillage, measures that are intended to improve soil health and water retention. Others are diversifying crops, to include more climate resilient varieties and investing in water management systems to better cope with droughts and floods.

Government schemes like the Rural England Prosperity Fund, the Environmental Land Management Scheme (ELMS) and the Countryside Stewardship Scheme (CSS), play crucial roles in helping farmers make climate change adaptations. The Sustainable Farming Incentive (SFI) under ELMS, for example, rewards farmers for adopting practices that enhance soil health and reduce emissions, while the Local Nature Recovery component supports biodiversity and ecosystem restoration on farmlands. Through CSS, farmers in the area can access grants to create wildlife habitats, improve water quality, and manage woodlands, all of which contribute to making farms more sustainable and climate resilient.

These initiatives not only help farmers adapt to the realities of climate change but also position agriculture in North Northants as a key contributor to the area's broader environmental goals, including reducing GHG emissions and enhancing biodiversity.

Vertical farming offers an innovative solution to reduce emissions associated with food imports, by growing produce locally in controlled environments. These systems have the potential to significantly reduce transportation emissions, land use, and offer the ability to have fresh produce year-round, contributing to local food security. However, to maximise environmental benefits, it is crucial that vertical farming operations are co-located with renewable energy sources. Energy consumption is one of the largest operational costs and contributors to GHG emissions generated by vertical farming. By integrating renewable energy sources, such as solar or wind power, vertical farms can achieve greater commercial viability and a low carbon footprint, aligning with the broader goals of sustainable agriculture and emissions reduction.

[41]National Farmers Union (NFU), Net Zero & Agriculture: A Guide for Local Authorities.

What the Council plans to do

We are committed to embedding a range of strategies and policies that promote sustainability and environmental resilience. One of our key areas of focus is championing sustainable farming practices. We will continue to work closely with partners and farmers to support the local agricultural sector to share best practice and encourage methods that are both environmentally friendly and economically viable. Alongside this, as part of a broader initiative to expand education on healthy and sustainable food choices, there will be efforts to promote interventions aimed at reducing food waste, promoting sustainable food consumption, and encouraging dietary changes that support both personal health and environmental sustainability.

We will continue strategic tree planting to capture carbon, provide shade, and enhance the resilience of green spaces. The development and effective management of hedgerows and arable field margins will also be a focus, alongside efforts to encourage outdoor recreational activities that connect people with nature. Enhancing local biodiversity and supporting nature recovery are key goals, we will continue to work to increase the efficiency of land use and management, including expanding tree and woodland cover in viable locations. Additionally, the management and surveillance of invasive non-native species will be prioritised, and nature-based carbon storage within plants, soils, and waterways will be promoted. Our strategic tree planting will embrace climate resilience opportunities like 'slow the flood' where planting on riverbanks and hillsides can hold back rainwater.

We will explore creating a "Focus on Food" initiative that encourages residents to make more sustainable dietary choices, such as reducing meat consumption and embracing local, organic, and healthy food options. This shift does not require everyone to become fully vegetarian or vegan; rather, it supports varied approaches, such as reducing meat intake by 50% or more, or for some, adopting a fully plant-based diet. This change is among the top ten actions individuals can take, potentially reducing carbon emissions by 0.8 tonnes per person per year[42]. These adjustments not only benefit the environment but also contribute to improved personal health and lower food cost. The Council is also committed to encouraging residents to make healthier dietary choices and to supporting local farmers in cultivating diverse, high-quality produce that contributes to a healthy, sustainable food supply chain. By promoting sustainable farming practices and healthier eating habits, we aim to support both the environment and the community's wellbeing.

Lastly, a "Focus on Nature" programme will lead efforts with all landowners to plant trees and enhance biodiversity on various types of land, including verges, roadsides, schools, hospitals, housing estates, allotments, and unproductive land. We will collaborate with builders, planners, architects, and the construction industry to establish future supply chains for locally grown wood, which can be used in local construction projects as a sustainable alternative to carbon-heavy materials like concrete and bricks.

What you can do

Consider changing your eating habits by trying to eat less meat and processed foods. Where possible, shop locally by visiting farm shops and buy seasonal fruits and vegetables as much as possible. Buy less and waste less. Try your hand at growing your own food, using waste rather than peat for compost and harvested rainwater instead of water from the tap. Examine your outdoor spaces and consider how best the space can be used for planting trees, growing food, and encouraging biodiversity.

[42]Diana Ivanova et al., Centre for Research into Energy Demand Solutions, Top Ten Tips for Reducing Your Carbon Footprint, 01 Dec 2023.

What farmers and other businesses could do

Farmers and businesses will be asked to support council initiatives and programmes, and we intend to make this as easy as possible for them.

Farmers are encouraged to extend their adoption of sustainable practices such as soil conservation, carbon storage, and diversifying crops to include more climate-resilient varieties and introduce alternative break crops such as Hemp into their rotations to help break disease cycles and enhance overall yields in future rotations. This could have the additional benefit of diversify income streams and reducing reliance on traditional arable crops such as Oil Seed Rape (OSR)[43].

Farmers should consider introducing better agronomic practices and targeted agroforestry practices such as re-wilding field edges, using hedgerows and integrating trees on less productive land can provide many biodiversity and environmental benefits without compromising crop yields[44]. These practices can be aligned with existing Environmental Land Management (ELM) schemes designed to reward farmers for providing public goods, such as carbon sequestration and habitat restoration. Every farm should consider developing a farm-wide route map to viably halve fossil fuel-based operations (such as fertiliser and farm machinery fuels), and double field edge biodiversity by 2030. Forming a machine sharing co-ops could help provide a more economically viable means for farmers to transition to new green technology and move away from fossil fuels.

Businesses should support local food initiatives, reduce food waste, and collaborate on projects that integrate sustainable practices into the food supply chain.

Other organisations should adopt tree planting and biodiversity programmes in and around workplaces.

"At Weetabix sustainability is in part of our DNA and we're committed to corporate social responsibility. All of the wheat for our Weetabix Original is grown within 50 miles of our factories in Northamptonshire and we report on our energy and carbon footprint every year as part of our commitment towards managing climate change. We also work with Fareshare and Magic breakfast to help those who may not have access to a tasty nutritious breakfast and have, so far, provided 23 million meals in this way." Lee Orbell, Weetabix

[43]Hayrol Azril Mohamed Shaffril et al. ScienceDirect, Climate Services, Vol 35, Diversification of Agriculture Practices, August 2024.
[44]India Stephenson, British Ecological Society, Making Space for Agriculture and Rewilding in England, April 2023.

Green Economy

Growth in the green economy represents a fantastic opportunity for North Northants. A sustainable economy focuses on creating jobs and fostering business practices that protect and enhance the environment. This approach helps reduce pollution, conserve resources, and promote long-term economic health. In North Northants, developing a sustainable economy means supporting local businesses that adopt planet-friendly practices, encouraging innovation in green technologies, creating jobs, and attracting new businesses in sectors like renewables and energy efficiency. This also includes fostering start-ups and attracting new businesses and jobs to the area.

With the UK's green economy growing by 9% in 2023, compared to 0.1% for the overall economy[45], the area is well placed to seize the opportunity for green growth. Indeed, nationally significant investment in renewable energy at both Chelveston Renewable Energy Park and Kettering Energy Park, and leading circular economy innovators like In2Tec, highlights how North Northants has already started building the skills and spaces for growth in the green jobs sector. Local companies like **Marlec** and **Simplr** are experts in manufacturing and installing wind turbines, electric vehicle chargepoints, heat pumps and solar panels, and both companies are expanding rapidly to seize the new commercial opportunities in the green economy. Other local companies such as **HVSS** have developed expertise to install energy and EV infrastructure and are also benefitting from growth in the green economy.

In 2018, there were 185,000 full-time workers in England's low-carbon and renewable energy economy. In 2030, across England there could be as many as 694,000 direct jobs employed in the low-carbon and renewable energy economy, rising to over 1.18 million by 2050[49].

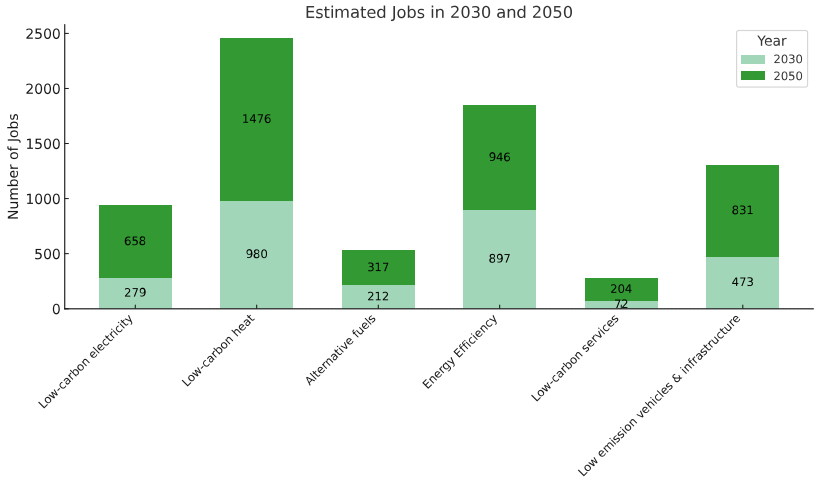


Figure 10: Estimated number of green jobs in North Northamptonshire by 2030 and 2050

[45]CBI Economic, The Energy & Climate Intelligence Unit, The UK's Net Zero Economy, February 2024.
[46]Local Government Association, Local green jobs - accelerating a sustainable economic recovery, 2024.

The creation of more local jobs would help reduce the number of people commuting to jobs outside the area. Data from the Business Register and Employment Survey (BRES) indicated a healthy net increase of 22,000 jobs from 2011 to 2020 across North Northants. The green economy can help enhance this figure, creating more local jobs.

Tresham College, with sites in Corby, Kettering, and Wellingborough, are developing new green skills courses (from Level 3 to 5) with input and support from local employers. This includes training in sustainable construction and renewable energy technologies, demonstrating business interest in preparing the workforce for a green economy.

A task group with local employers is in the process of being established by the Chamber of Commerce to drive the development of green jobs and skills, illustrating a coordinated effort between businesses, education providers, and local authorities to meet future green job needs[47].

What the Council plans to do

The Council is committed to enabling a thriving and successful economy. Further development of the green economy presents a significant opportunity for local growth and innovation. With a robust employment sector, the region is well-positioned to capitalise on green job creation. The Council aims to build on the success of local initiatives, such as the Chelveston Renewable Energy Park and In2Tec's green electronics innovations, to help improve skills and ensure that the local workforce is not left behind by industrial changes. To support this vision, we will collaborate with educational institutions and training providers to increase access to green job training and upskilling initiatives. These programmes will help equip the local workforce with the skills needed to thrive in a green economy.

We will continue working with local business networks, supporting small organisations, such as SMEs and charities, to adopt sustainable business practices. The Council is also preparing a new Inward Investment Prospectus with a strong focus on Green Growth, supported by a network of local ambassadors, to attract new businesses and investment by and for our existing businesses. We will also continue to support local universities and colleges, such as Tresham College, to enable the development of robust green jobs training programmes.

What you can do

Support local green businesses by seeking local traders for installation of renewable energy or heat pumps at your home, choosing them helps create more demand for green jobs locally.

What organisations and businesses should do

Seize new opportunities in the green economy by investing in new skills, products, and services to support local people adapting to climate change.

"Vet local 'green economy' suppliers to help people find installers they can trust." Consultation recommendation

"Help local people upskill for green jobs – promote local courses." Consultation recommendation

[47]Northamptonshire Chamber of Commerce, Local Skills Improvement Plan (LSIP).

Waste

The waste management sector was responsible for 5% of GHG emissions in the UK in 2022, with methane being by far the most prominent gas (90% of emissions)[48]. In 2023, the Council collected over 148,000 tonnes of kerbside waste, with over 70,000 tonnes (51%) being sent for recycling, composting or reuse. The majority (93%) of general refuse waste collected is sent for treatment: 42% is used to generate energy from waste, 26% is recycled, 23% creates compost through anaerobic digestion, and 2% is reclaimed for reuse, so altogether only 7% of our waste goes to landfill.

Reducing waste by increased reuse, repair, and recycling helps to reduce emissions generated by waste collection and disposal. The circular economy, a system where goods are constantly in circulation, offers many benefits. It reduces the consumption of finite resources, increases the use of renewable materials through reuse, repair, and recycling, and provides a cost-effective means for consumers to purchase like new goods. We already have a good local repair cafe in Wellingborough[49], Jayplas, in Corby, a leading plastic recycling centre, and Eurokey, in Kettering, an international circular economy specialist.

Figure 12: Diagram explaining circular economy[50]

"Install local anaerobic digesters and cockroach composting sites close to where waste is generated." Consultation recommendation

"Set up a library of 'things' in each town to help people share learnings – promoting the circular economy." Consultation ***recommendation***

"Increase fines and penalties for fly-tipping and make recycling centres and bulky item collection free to counter fly-tipping." Consultation recommendation

[48]Department for Energy Security & Net Zero, 2022 UK Greenhouse Gas Emissions, Final Figures, pg.19, 6 February 2024.
[49]Repair Café – Wellingborough Eco Group
[50]Image provided by Freepik

What the Council plans to do

We are committed to promoting sustainable waste management practices to reduce environmental impact. The Council will continue to support a waste management system centred on circular economy principles, which seeks to prioritise the reduction of waste and encourage innovative approaches to waste reutilisation. We will continue to actively use education and best practice to promote sustainable waste management practices to drive behavioural change within the area.

Enforcement will also play a critical role. The Council will be robust in dealing with fly-tippers, adopting a zero-tolerance approach to environmental crime. The Council will also continue to use a full range of powers and sanctions when dealing with offenders, ensuring that consequences of illegal waste disposal are clear and a deterrent. Additionally, we will commit to ensuring our household waste recycling centres offer the widest range of recycling opportunities to residents, while ensuring that the facilities are operated as sustainably as possible.

We also plan to explore opportunities to capture carbon and generate renewable energy from waste collected across the authority area, contributing to both waste reduction and energy sustainability. We will continue to monitor and regulate the disposal of industrial and agricultural chemicals and biocides to ensure that irresponsible waste management practices do not harm the environment.

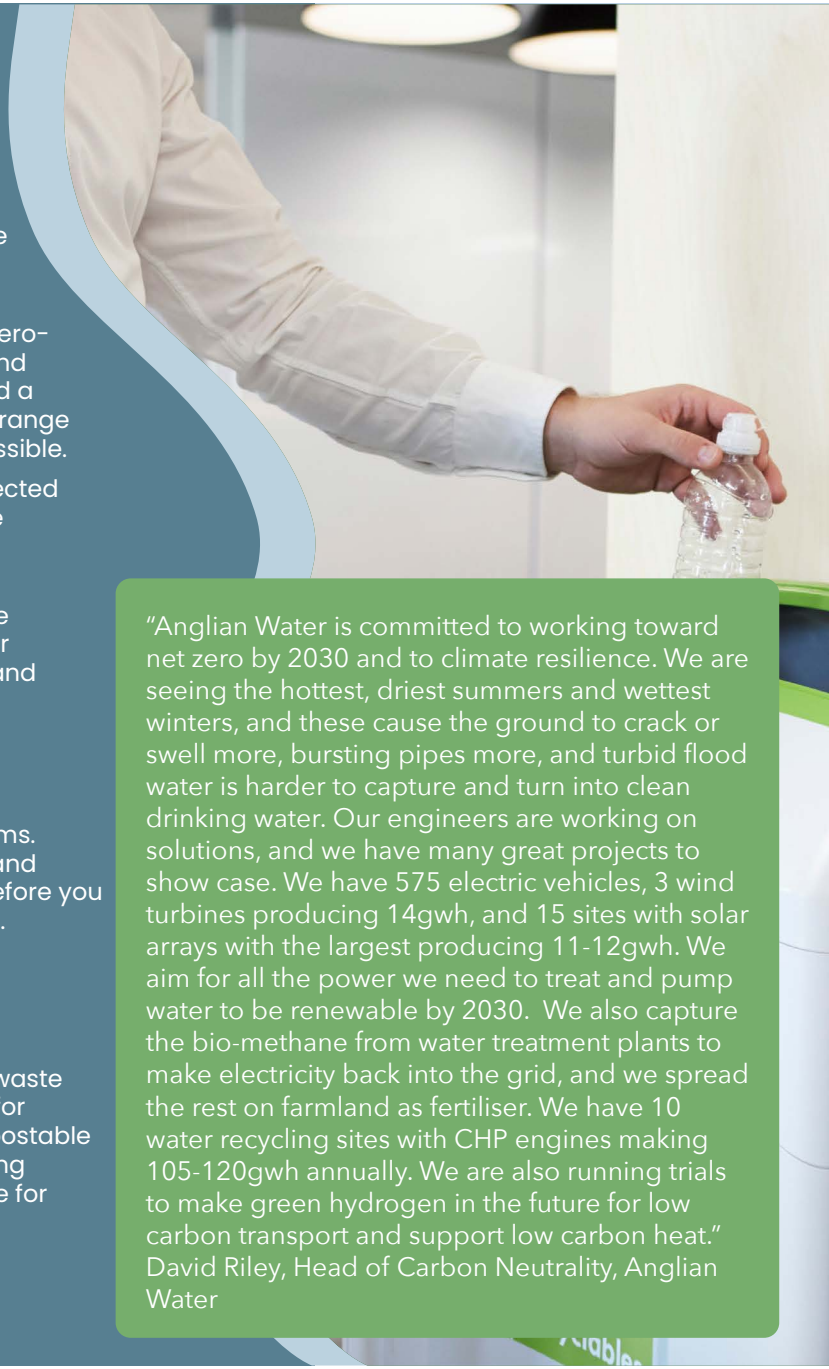
In addition, the Council will provide ongoing advice and information to help people and businesses reduce waste and increase recycling and will aim to provide greater opportunities to residents to reuse and repair items that might usually be disposed of. By focusing on improving supply chains for repairing, recycling, and reuse, we aim to reduce waste and enhance recycling rates with greater precision and effectiveness.

What you can do

Waste less and recycle as much as possible. Think about buying less, and repurposing or repairing old items. Commit to eliminating single-use plastics in everyday life. This could mean using reusable bags, bottles, and containers, or avoiding products with excessive plastic packaging. Consider the disposal of an old item before you buy a new one, thousands of retailers offer free take back services, or in store recycling for electrical items.

What organisations and businesses should do

Get to know what your responsibilities are. All businesses have a **duty of care** to responsibly manage the waste they produce. Take responsibility for reducing your waste and emissions. Implement a Zero-Waste Policy for Packaging: eliminate or drastically reduce packaging waste by switching to reusable, recyclable, or compostable materials. This could include offering products in bulk, using returnable containers, or minimising packaging altogether. By doing this, businesses can significantly reduce their environmental footprint, set an example for others, and potentially cut costs associated with waste disposal.



"Anglian Water is committed to working toward net zero by 2030 and to climate resilience. We are seeing the hottest, driest summers and wettest winters, and these cause the ground to crack or swell more, bursting pipes more, and turbid flood water is harder to capture and turn into clean drinking water. Our engineers are working on solutions, and we have many great projects to show case. We have 575 electric vehicles, 3 wind turbines producing 14gwh, and 15 sites with solar arrays with the largest producing 11-12gwh. We aim for all the power we need to treat and pump water to be renewable by 2030. We also capture the bio-methane from water treatment plants to make electricity back into the grid, and we spread the rest on farmland as fertiliser. We have 10 water recycling sites with CHP engines making 105-120gwh annually. We are also running trials to make green hydrogen in the future for low carbon transport and support low carbon heat."
David Riley, Head of Carbon Neutrality, Anglian Water

Next Steps

We have covered a wide range of approaches. There are a number of ways we could tackle climate change locally by implementing the recommended actions:

- We could pursue all of them as fast as possible, noting this is probably very expensive,
- We could pick the most transformational and initiate a transformation change programme on the biggest ones,
- We could take a risk-based approach where we initiate all of them, not knowing which will work best, and see which work first and best, then focus resources on these, whilst we add new ideas and technologies into the mix for failed areas,
- We take the lowest cost highest risk route and do only what everyone agrees is affordable and easy to do, but risk failing, or
- We could do nothing and pass on the risks.

As it is difficult to predict which initiatives will be most successful, a risk-based approach is recommended, where the full range of initiatives are supported in the early years, allowing the winners and losers to emerge over time, after which we can leverage the learning gained and accelerate growth of the most successful initiatives, whilst also incorporating any new ideas and technologies as they emerge.

Figure 13: Recommended risk-based approach

Where funds are limited, we will seek to prioritise immediate action on 'no regrets' measures, and those supported the most through public consultation. We will continue to track and report council emissions and provide annual updates on our journey to become carbon neutral. We will also share the results of our initiatives to help identify successes and opportunities for improvement.

Where ideas drop out, fail, or lose momentum, we aim to replace them with new ideas – many are emerging.

We will top up the funnel with new ideas and technologies as they emerge, to include re-imaging or improving existing projects. We will proactively support innovation and exploitation of green economy locally.

In this way, we intend to achieve Net Zero and meet our targets.

Embedding the Climate Change Strategy in other policies

This strategy has considered all relevant previous policies and strategies developed by the Council. It has focussed on the latest evidence developed for the, Carbon Management Plan, Local Air Quality Strategy, Electric Vehicle Infrastructure Strategy, Bus Service Improvement Plan, Local Transport Plan, Greenway Strategy, and the Local Nature Recovery Strategy. Moving forward, this strategy must be reflected in forthcoming strategies and policies, to include: the Local Plan, Active Travel Strategy, and the Natural Capital Investment Plan.

Roles & Responsibilities

Climate Change affects all of us, and we all have a role to play to mitigate it.

The Council will champion this strategy across North Northants, and lead by example. We will serve as a facilitator to bring together stakeholders from business (via the Big 50 and other business networks), community groups, partner organisations, and residents to inform and develop the roadmap to Net Zero for North Northants. Our Executive Member for Climate and the Green Environment will work alongside officers to influence and encourage residents, businesses, and organisations to work collaboratively with us to tackle climate change and build a resilient future for North Northants.

What you can do

During the public consultation, 70% of respondents stated they would be willing to engage in a range of sustainable practices. This is positive, and we look forward to working together with residents and businesses to achieve our vision for a fairer, greener community that is fully transitioned to Net Zero emissions by 2050. You can play a part in protecting our planet from the worst impacts of climate change and in adapting our lives to protect against the impacts of climate change. You can help by adopting some of the suggestions made within this strategy, and by encouraging others to do the same within your family and at your place of work. Some additional examples of changes you can make are featured in figure 14.

Monitoring to ensure success

The Council has robust internal governance processes. Our risk management forum will formally add climate risks to the Council's risk register and will use professional expertise to provide the best monitoring and management of these important universal risks.

In the next year, the Council will develop a detailed action plan, or roadmap to Net Zero, to enable the delivery of the Strategy; however, success will be dependent on several factors to include technology, funding, as well as the buy-in and participation of local partners, residents, and suppliers. Whilst cost, feasibility, and benefits will factor into delivery plans, our key priorities will be based on working to ensure climate resilience in each of the six key areas of focus.

Progress on the Strategy, and the action plan, will be measured, beginning in 2027, via a biennial reporting mechanism in which a report will be provided to the Executive and, once approved, published on our website. The Sustainable Communities Executive Advisory Panel (EAP) provides scrutiny for our sustainability work, including the Council's Carbon Management Plan and this strategy.

The Council will continue to deliver against the 94 carbon reduction activities set out within the Carbon Management Plan, while working to become a carbon neutral council by 2030. We will also continue to expand our understanding of indirect emissions associated with our supply chain.

Whilst the Council can influence the strategic aims outlined in this document, delivery requires a collective approach, we are all responsible for ensuring a fairer, greener community is achieved for North Northants.

Figure 14: Top 10 things you can do to cut your carbon footprint[51]

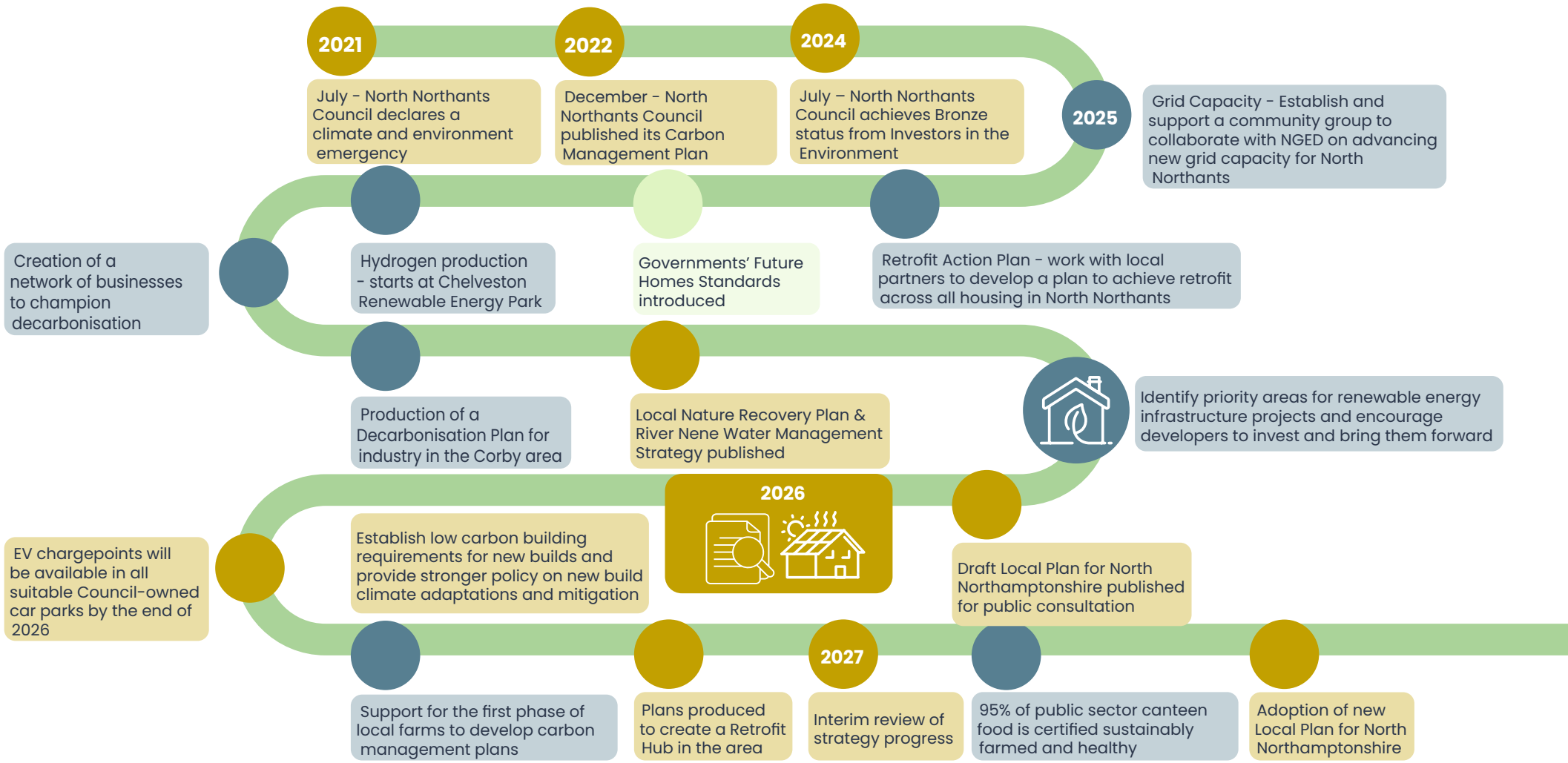
[51]Diana Ivanova et al., Centre for Research into Energy Demand Solutions, Top Ten Tips for Reducing Your Carbon Footprint, 01 Dec 2023.

Milestones & Targets

This roadmap highlights key UK government, council, and local milestones on our road to Net Zero.

Key

- Council Target
- UK Government target
- Local target



At least 500 public EV chargepoints will be available in the area by the end of 2027

2028

Hail minibus on demand rural services trialled

At least 80% of households without off-street parking will be within 250 meters of a public EV charge point by the end of 2029

2030

Government target for four operational carbon capture and storage clusters

CO_2 NEUTRAL

North Northants Council is carbon neutral

50% of households have an EV car and have given up their second car

80% of roadside verges and unused public land planted for biodiversity, carbon sink, and tree canopy shading

80% of council homes retrofitted to EPC B

80% of local business proclaim climate resilience and carbon neutrality

80% of homes are within 10 minutes' walk of an electric vehicle charge point

Establish e-mobility community energy hubs across our rural areas

Fossil fuel fertilisers reduced by 90% and all local farms Net Zero certified

2035

Government target for banning the sale of new petrol and diesel cars

Government target for banning new fossil fuel boilers

All new cars and vans wil l need to be 100% zero e missions

40% of households no longer own a car (up from 20%)

All major settlements linked by segregated cycle and footpaths

2040

80% of properties requiring retrofit in North Northants are completed

50%

Solar and wind installed across 50% of our car parks

50%

50% of buildings in North Northants have roof-top solar

80% of villages have local community renewable energy generation and car sharing schemes in places

NET ZERO

UK government and North Northants target for Net Zero carbon emissions

Appendix A: Climate Change Risks for North Northamptonshire

Category	Risk	General Impact
Fluvial Flooding (Main watercourses)	Rising river floodwater damaging property and infrastructure	Damage to property and infrastructure, huge cost of clear up, health risk etc.
Flash Flooding Pluvial (Rain)	Lack of capacity in the storm/sewer and highway drainage system due to lack of maintenance and cleaning or inadequate size	System unable to cope with increased rainfall and speed of runoff leading to severe localised flooding.
	Road network flooding due to flash storm events	1. Residents unable to use road network 2. Public Sector employees could be unable to deliver key services due to disruption to transport network 3. Disruption to public transport 4. Emergency vehicles unable to reach victims of flooding
	Risk of infection residents/employees where homes/workplaces have been flooded	Workplace/ homes unsuitable for occupancy until thorough clean-up has taken place. The impacts will be very localised but with significant health implications for those affected.
	Floodwaters polluting clean drinking water	No access to clean drinking water. The impacts will be localised but significant for those affected.
Storms/ High winds	Higher wind speeds and storms causing damage to the built environment and urban infrastructure (particular issue for tall buildings with an increase in gust velocity)	Remedial repairs needed and potential to cause injury and/or death (death and injury rates dependent on time-of-day storm occurs, morning and evening commuting time highest no. of injuries and deaths). The impacts will be very localised but significant or catastrophic for those affected.

Category	Risk	General Impact
	Higher and more frequent winds may cause damage to vegetation and trees and subsequently potential injury and death	Mature trees liable to be blown down during storms with potential to cause damage or injury. Higher soil moisture likely to exacerbate this issue. Road traffic accidents, road closures and damages to highways and infrastructure. Very localised but significant or even catastrophic for those in the immediate vicinity.
	High winds make work environments unsafe	Flying debris or unstable work environment has the potential for injury or death. Significant risk to vulnerable work environments causing danger to employees and delay or suspension of services.
	Power lines, phone masts etc damaged during storms	Loss of power and communication, disruption to the transport network and risk of injury or death from falling infrastructure, electrocution, or loss of power in severe weather. Significant risk to the council, residents and business environments causing danger and loss of services.
	Buildings may become uninsurable if deemed too high a risk from climate change driven extreme weather events (flooding)	Assets may decrease in value or become redundant. Likely to affect a very limited number of assets if any.
Heat waves	Damage to highways and transport infrastructure by prolonged high temperatures (melting surfaces and bridge expansion)	1. Transport disruption and road closures as road surfaces need to be repaired after melting. Damage to highway infrastructure likely to be significant. 2. Residents and employees unable to travel to work or delivery essential services.
	Overheating of vehicles	Need to ensure that all vehicles are maintained
	Increase in length of growing season, plants flowering earlier and migration patterns changing	1. Increased maintenance costs of machinery and less time for maintenance as machinery in use for longer periods 2. Increase in volume of grass cuttings and tree waste 3. Health effects of longer allergy season for those suffering from pollen allergies 4. Changes in the makeup and diversity of species All of this will have significant financial and resource implications
	Warmer weather encourages a more outdoor lifestyle	Pressure on existing green/open space.
	Increase in the number of non-native pest species as temperatures increase	1. Threat to native wildlife 2. Productivity falls and mortality increases

Category	Risk	General Impact
	Lower water levels in rivers and waterways	Poorer river water quality due to toxins produced by the algal bloom, affecting aquatic life and human health if in contact with the contaminated water/ algae.
	Algal blooms resulting from warmer temperatures and low river flows	
	Higher building occupancy rates, increases in IT equipment and inadequate cooling systems resulting in higher internal temperatures	Internal temperatures make buildings unsuitable for human comfort. The effects of increasing temperature on building performance and suitability will be significant.
	Future development of the built environment designed to meet future climate predictions ('climate proof') rather than historical trends in weather.	Building life shortened due to unsuitability for future changing climate. There could be a significant economic impact to replace unsuitable buildings.
	Increase and vector and water borne diseases Increase in occurrences of food poisoning due to warmer weather (more BBQ's picnic's etc)	Cases of illness are increasing resulting in the loss of working time through sickness. Popular holiday spots outside the UK, currently Malaria free, may not be so in the future.
	Rubbish decaying more rapidly in the warmer weather encouraging pest species	Risk to health, more pest species, and smells (likely increase in number of rats (Leptospirosis Weil's disease) The impact will be low but will increase if summer temperatures rise.
	Increase in heat stress	Increase in Illness caused by heat (vulnerable, elderly and those with heart and respiratory problems, asthma, and diabetes). There will be a significant or even catastrophic impact of heat related illness.
	Warmer summer weather leading to increase in time spent outdoors (Higher UV exposure)	Predicted increase in skin cancers/ melanomas, sun burn and eye damage (cataracts) This impact will be significant on the health of residents and those employees working outdoors.
	Increase in dust particles and pollutants in air due to hotter summer temperatures (nitrogen dioxide, Ozone and Photochemical smog)	Risk to those who suffer from respiratory diseases from an increase in summer ozone episodes This impact will be significant on the health of the residents.
	Homeless at risk from extreme weather events (heat stroke, flooding etc)	As temperatures increase the number of cases of people having to be taken into care and the mortality rate of homeless may increase.

Category	Risk	General Impact
	Extreme weather disrupting electricity/ telecommunication infrastructure, street lighting and traffic signals	1. Homes, businesses, and public buildings without power 2. Risks to medical and care facilities electrical equipment and their reliance on air conditioning 3. Potential to cause accidents and transport infrastructure disruption There will be a significant impact should the power and telecommunication infrastructure be damaged by extreme weather. Disruption to the transport infrastructure will have significant impacts.
	Extreme summer temps increasing electrical demand for cooling (particularly in urban areas due to urban heat island (UHI) effect)	Potential summer blackouts in urban areas as demand for electricity increases. There will be a significant impact should there be power blackouts.
Low temperatures/ snow	Power lines damaged as a result of heavy snow or extreme cold	Loss of power and communication, disruption to the transport network and risk of injury or death from falling infrastructure, electrocution, or loss of power in cold weather. Significant risk to the council, residents and business environments causing danger and loss of services.
Wildfires	Community wildfire caused by extreme heat or drought	Increased pressure on emergency response coordination for vulnerable and affected residents; disruption to road and highways networks; building closure due to smoke and poor air quality/ visibility. Significant risk to the council, residents and business environments causing danger and loss of services.
	Loss of natural habitat and biodiversity due to wildfire	Damage to land and facilities.
Water Scarcity	Lower rainfall leading to water shortages (Water balance deficits during summer months)	1. Essential services under threat from lack of water 2. Building closure due to lack of water 3. Health risks. Residents unable to access drinking water in their own homes (particular issue for vulnerable people who are cared for or live at home)
	Sites unsuitable for development due to lack of water	Sites throughout North Northamptonshire could be deemed unsuitable for development.
	Reduction of summer rainfall and lowering of summer water table	1. Native flora and fauna may be less productive. Trees, vegetation and grass in parks and open space dying during prolonged periods without rainfall. This reduces shade and cooling potential. The impact of a reduction in rainfall will be significant for parks and open spaces. 2. Reduced water availability weakens the root system of trees putting them at risk from future strong winds. The impact could be severe or catastrophic if a tree were to fall and injure or kill someone.

Category	Risk	General Impact
	Lower rainfall lowering the water table and reducing soil moisture to ground subsidence causing damage to structural integrity of buildings and highway infrastructure	Expensive remedial repairs needed to existing buildings, underground services and/or highway infrastructure likely to result in major disruption to the transport network (worst case scenario roads having to be closed or buildings needing to be demolished). The impact of subsidence of council property and highway infrastructure would be very significant with severe financial implications.
	Damaged to private property through subsidence caused or exacerbated by council owned trees	Considerable financial implications to pay for damage to private property. The impact of damage to private property caused through subsidence linked to council trees would have severe financial implications.
Increased damp/ waterlogged soils	Damp, wet winters affecting those with health problems	Greater risk to vulnerable groups and those with pulmonary diseases. Small but significant or possibly catastrophic effect on a small percentage of the population.
	Damp and increased rainfall intensity affecting the facade of the building	More rain penetration into buildings around openings shortening building life. Small but significant financial impact to repair or replace buildings.
	Soil heave from increase soil moisture	Damage to building fabric and service infrastructure. Small but significant financial impact to repair or replace buildings.
	Higher winter water table	Disruption to work programmes and operational issues caused by waterlogged ground conditions. Serious disruption to winter work and maintenance programmes.
	Waterlogged soils affecting tree roots and tree stability	Trees likely to die or be more prone to fall over during storms. There is likely be a significant impact should tree health suffer on a large scale.
	Wetter soils during winter preventing access for maintenance	Unable to carry out routine operations without causing damage to open space. There is a low impact of maintenance routines being affected.
Climate enforced immigration	Mass immigration from countries worse affected by climate change (large parts of Africa and Asia will be much worse affected by the impacts of climate change)	Need to provide homes and care for large numbers of potential climate change refugees. There would be a significant impact upon the housing and social services of the council should there be a large influx of climate change refugees.
Social Disorder	Increase in crime rates as warmer weather results in windows and doors being left open	Risk to public and privately owned buildings. The threat of crime will increase the need to secure buildings.
	Civil disturbance	Increase in urban temperatures linked to episodes of civil disturbance (Riots and demonstrations). The impact of major civil disturbance on the area could be significant.

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