2024

Nottinghamshire County Council

Net Zero Framework

NET ZERO

Nottinghamshire County Council

Nottinghamshire County Council's
Net Zero Framework

This framework has been developed for:

Local Authorities and Key Partners

Businesses and Charities

Residents and Communities

Front image - The Mill Adventure Centre (operated by Notts Outdoors Education Service, Nottinghamshire County Council), Sutton in Ashfield

Contents

Sherwood Forest

Foreword

The Net Zero Framework presents our approach for reducing emissions, adapting to climate change and realising our vision for a healthy, prosperous, green and resilient Nottinghamshire for all.

Cllr Neil Clarke MBE

Climate change is with us. It has and will continue to impact the lives of residents in many ways. Nottinghamshire County Council's Net Zero Framework acknowledges this reality and sets out our ambitions for achieving a net zero future for our county. We recognise our role in mitigating global emissions that drive climate change. We will play our part in keeping global temperatures within the Paris Agreement 1.5C limit and supporting the UK in achieving the legislative target of net zero by 2050, detailed within the Climate Change Act 2008. Our statutory obligations and responsibility to residents and businesses underpin this framework, giving impetus to our vision and ambitions.

Storms Ciaran, Babet and Jocelyn are examples of the many weather incidents that have caused unprecedented disruption, damage, and distress to Nottinghamshire's residents and businesses. Due to climate change, the severity and frequency of extreme weather events are expected to increase. Adapting to the effects and impacts of climate change is an important component of our net zero ambition. We can reduce the impact on residents' health and well-being and reduce operational disturbances to businesses through prevention measures. Adaptation will permit us all to continue our lives in a less disruptive and more sustainable manner. Nottinghamshire needs to be a resilient county that can bounce back quickly to the realities of a changing climate. Through this resilience, we will demonstrate why Nottinghamshire is a place people love to live, work and visit.

Our Net Zero Framework recognises the importance of collaborative work in delivering our vision and ambitions. Although our primary aim is to draw the attention of critical partners towards a shared vision, we encourage residents and businesses to join us as we collectively pursue a net zero future. The framework builds upon the success of the County Council and its partnerships within and around Nottinghamshire, whilst laying the foundation for more collaborative work. Furthermore, it acknowledges the funding opportunities through the East Midlands Combined County Authority to support Nottinghamshire's net zero ambitions.

Embarking on the journey to net zero will attract sustainable growth opportunities that will boost our local economy, generate jobs and provide specialist skill development. Nottinghamshire can look to thrive under challenging circumstances while safeguarding the future of our younger generations.

The Net Zero Framework isn't our starting position; we are already on our journey to net zero and will continue through this framework to demonstrate our progress and commitment to addressing the climate emergency.

Why does Nottinghamshire need a Net Zero Framework?

Climate change is a global challenge with local consequences. As a Local Authority, we declared a climate emergency in 2021. As a solution and opportunity for Nottinghamshire, this framework details our vision, ambitions and approach for achieving the co-benefits of net zero collaboratively with our key partners and stakeholders. The framework will form the basis of our action plans to achieve net zero.
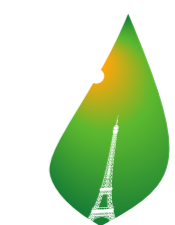
It aligns with our:

- Ambition to become a carbon neutral Council in all our activities by 2030, in line with our Carbon Reduction Plan.[1]

- Local commitment and responsibility to deliver the Nottinghamshire Plan 2021 - 2031.[2]

- Duties and statutory obligations as a Local Authority, particularly regarding our highways, waste management, planning, flood management, social care and public health.

It considers our:

- **Regional responsibility** to work with partners to deliver on our collective and respective net zero ambitions.
  - Deliver upon the net zero priorities of the East Midlands Combined County Authority (EMCCA).[3]
  - Improve capacity and capabilities through engagement with the Midlands Net Zero Hub (MNZH).[4]
  - Collaborate and share best practice with the Nottinghamshire and Derbyshire Local Authorities Energy Partnership (LAEP.)[5]
  - Deliver upon the focus areas detailed within the Midlands Engine Ten Point Plan for Green Growth.[6]

- **National responsibility** to align our strategic vision to the UK Government's net zero 2050 strategy[7] and the legal targets detailed in the Climate Change Act 2008.[8]

- **Global responsibility** to play our part in tackling climate change by aligning with the UK's commitment to the United Nations Sustainable Development Goals (UNSDGs)[9] and the 1.5-degree limit outlined in the 2015 legally binding international treaty, the Paris Agreement. [10]

What is net zero?

Net zero as a solution.

The term 'net zero' refers to the equal balance between the amount of greenhouse gases released and the amount removed from the atmosphere. Therefore, to become net zero, the UK must reduce its emissions by as much as possible, with any remaining emissions reabsorbed from the atmosphere, either by using nature-based solutions or new technology. Nottinghamshire has been making significant strides in reducing emissions, and we must continue this momentum to stay within our carbon budget. We acknowledge our role in achieving the UK's 2050 net zero target and keeping global warming below 1.5C, as detailed in the Paris Agreement. We are making progress, but we need to go further to catch up and surpass the national average (See Appendix One for Nottinghamshire's carbon budget and progress in reducing emissions).

Nottinghamshire is already experiencing the consequences of climate change, which has caused widespread disruption, devastation to residents and businesses, damage to our natural and built environment, and a negative impact on our local economy (see Appendix Two for further details on climate change impacts). The impact of climate change on individuals will vary, with disadvantaged and vulnerable populations being the most affected, further widening health and social inequalities. To reduce the impacts of climate change, we must also include adaptation measures within our net zero ambitions. Such measures will boost community resilience and mitigate the risks to residents, businesses and our shared natural and built environment.

Net zero as an opportunity.

The sooner we move towards net zero, the sooner we can deliver the co-benefits for our people, places and environment.

The net zero economy is estimated to be worth over £70 billion to the UK economy[11]. The transition to net zero could potentially create up to 1.7 million 'green collar' jobs[12], and Nottinghamshire could benefit by attracting green business and investment, readying ourselves to seize such opportunities.

The journey to net zero allows us to improve our buildings, assets and places by making them greener, cleaner, resilient and sustainable. We can enhance our spaces to benefit communities, adding aesthetic value while protecting our landscapes and regional wildlife. All interventions should avoid the introduction of new risks and negative impacts to our environment.

The benefits of net zero include significant improvements to our residents' health and well-being. The opportunities for a healthier lifestyle are abundant, from thermally efficient and cost-effective homes, to cleaner air and increased local access to green and community spaces.

We must ensure all net zero interventions empower our residents and businesses to access the equal opportunities they provide.

The co-benefits of net zero

Achieving net zero emissions offers a wide range of co-benefits that extend beyond reducing the direct effects of climate change, contributing to a more sustainable, resilient and equitable future.

A healthier Nottinghamshire

✔ Cleaner air and water.
✔ Safer and thermal efficient homes.
✔ Enhanced food security and nutrition.
✔ Healthier lifestyles through active travel.
✔ Reduced noise pollution and stress.
✔ Enhanced mental health and wellbeing.
✔ Reduction in other climate-related health illnesses and deaths.
✔ Reduction in health inequalities.
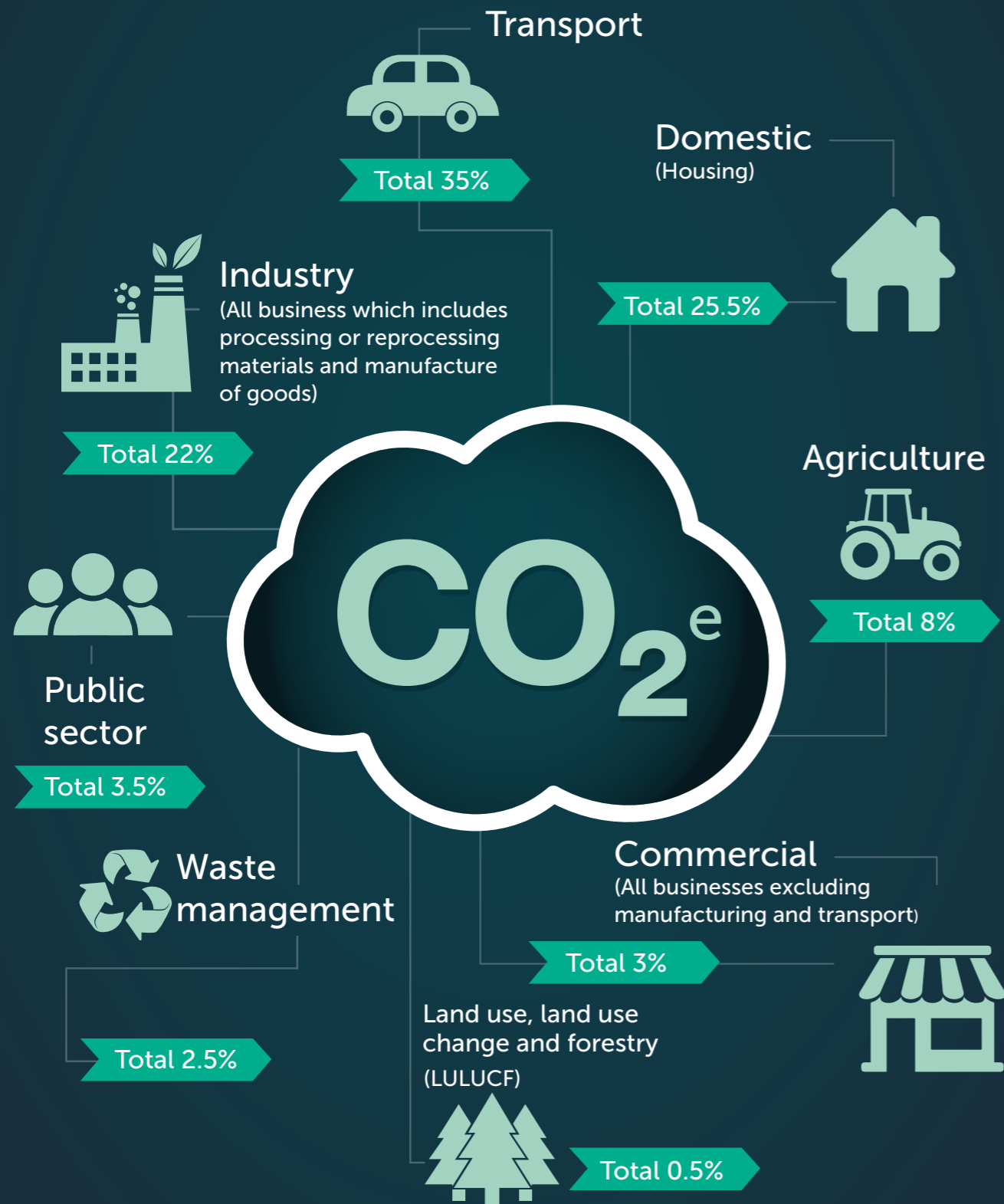
A more prosperous Nottinghamshire

✔ Increased inward investment.
✔ New technologies, industries, skills and jobs.
✔ Growth in GDP and productivity.
✔ Enhanced competitiveness, expanding export opportunities and establishing new markets.
✔ Efficient practices that lower bills for households and businesses.
✔ A self-sufficient circular economy that encourages localism.
✔ Reduction in social and economic inequalities.

A greener Nottinghamshire

✔ Reduced air and water pollution.
✔ Preservation of natural landscapes.
✔ Enhanced green spaces and parks.
✔ Protection of wildlife.
✔ Restoration and enhancement of healthy biodiversity levels.
✔ Improved community engagement and environmental awareness.
✔ Improved aesthetics of cities, towns and villages.

Greenhouse gas emissions in Nottinghamshire

2021 data (published June 2023) from the Department for Energy Security and Net Zero informs the County Council's focus by highlighting the priorities for reducing greenhouse gas emissions across Nottinghamshire.[13]

Transport

Total 35%

Domestic (Housing)

Total 25.5%

Industry (All business which includes processing or reprocessing materials and manufacture of goods)

Total 22%

Agriculture

Total 8%

CO_2e

Public sector

Total 3.5%

Waste management

Total 2.5%

Commercial (All businesses excluding manufacturing and transport)

Total 3%

Land use, land use change and forestry (LULUCF)

Total 0.5%

Our vision

Healthy, prosperous, green and resilient

The framework does not provide a new or radical approach to climate action, nor is it a repeat or replacement of existing Council policy. It consolidates our success whilst laying the foundation for new action plans that will build upon our progress and deliver the co-benefits of net zero. The framework is our first step towards an outward-facing, county-wide approach.

Complementing the Nottinghamshire Plan

In 2021, the Nottinghamshire Plan set out the vision of a "healthy, prosperous and green" future for the people of Nottinghamshire. The responses of residents, businesses and partners to the Big Notts Survey informed the plan. The Net Zero Framework will contribute to fulfilling this vision, positively impacting each of the nine ambitions, while building a more resilient Nottinghamshire.

"Protect the environment and reducing our carbon footprint".

"Keep children, vulnerable adults and communities safe".

"Attract investment in infrastructure, the economy and green growth".

"Build skills that help people get good jobs".

"Help our people live healthier and more independent lives".

"Strengthen businesses and creating more good-quality jobs".

"Make Nottinghamshire somewhere people love to live, work and visit".

"Improve transport and digital connections".

"Support communities and families".

Devolution and Nottinghamshire

Net zero is a key priority for the East Midlands Combined County Authority (EMCCA). In March 2024, the EMCCA agreed the vision of **"making our region more prosperous, sustainable and fairer, helping our people and businesses to create and seize opportunities".**[14] This framework will function within the Combined Authority's remit and aligns with its vision. With devolved powers and funding granted, the EMCCA will offer more opportunities to secure financing for Nottinghamshire's net zero projects and initiatives, contributing to broader regional aspirations.

East Midlands Combined County Authority

Our approach

Only through the active participation of our partners, businesses, residents and other key stakeholders can we significantly reduce emissions and adapt to climate change.

Our council assets and activities contribute two to five per cent of Nottinghamshire's overall greenhouse gas emissions.[15] As a Local Authority, we are steadfast in our commitment to leading the transition to net zero. We aim to unite our key partners and stakeholders and work collaboratively towards a shared vision.

Our sphere of influence demonstrates the County Council's potential reach, which includes:
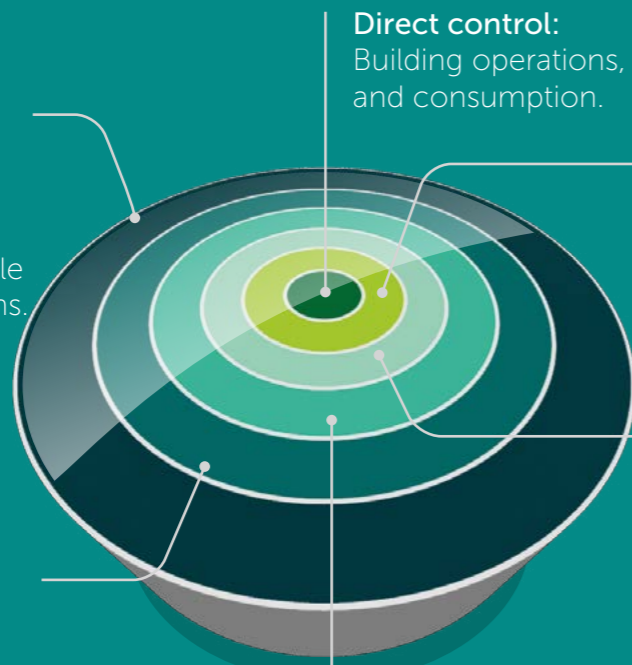
- Managing our buildings, consumption, and other assets under our direct control.

- Being a positive agent of climate impact through our procurement and commissioning.

- Using our regulatory powers to steer development and facilitate sustainable place-shaping.

- Promoting best practices and learning through innovation, demonstration and replication.

- Providing collaborative leadership by co-ordinating with and supporting other organisations.

- Involving, engaging and communicating with stakeholders on key climate policy aims.

82% Of all UK emissions are within the scope of influence of local authorities.[16]

Sphere of influence

Engaging and communicating: Translating global and national climate change targets for local relevance with stakeholders to raise awareness, involving people and ideas for local solutions.

Direct control: Building operations, travel and consumption.

Procurement and commissioning: Support procured and commissioned suppliers to provide net zero services and products.

Partnerships: Leading, bringing people and organisations together, co-ordinating and supporting others, joining other partnerships.

Place shaping: Steer development and enable prosperous, safer, attractive, sustainable places.

Showcasing: Innovating, piloting, demonstrating and sharing good practice, scaling and replicating.

Recognising the importance of working collectively, this framework has been created for our key stakeholders.

Local Authorities and key partners

In addition to the County Council, Nottinghamshire has seven district and borough councils and one city council. Each authority is responsible for functions such as housing, planning, waste collections, parks and leisure. Our primary goal is to advance collaboration among Local Authorities and other key partners in sectors such as health and education. Sharing best practice, resources and expertise is essential for achieving our collective ambitions for net zero.

The established EMCCA will support local authorities across Nottinghamshire and Derbyshire in advancing regional progress towards net zero. The EMCCA is set to receive £4 billion of funding to the region alongside new devolved powers for transport, skills and adult education, housing, the environment and economic development.[17]

OVER 50% More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions.[18]

Businesses and charities

Transitioning to a net zero economy requires public and private cooperation to encourage innovation and attract inward investment. Our region's pioneering private sector contributes so much to our collective prosperity. We must continue to work in partnership with our businesses, to reap the economic opportunities of advancements and investments in green technologies and sustainability-focused industries.

Third-sector organisations play a crucial role in our local communities, strengthening the social fabric. They are instrumental in supporting those most detached from the evolving labour market, helping the disadvantaged and most vulnerable in our county and engaging with our hard-to-reach populations.

The input from the private and third sectors is invaluable in shaping County Council policy.

Residents and communities

We recognise the impact climate change has had and will continue to have on our communities and residents. Within this framework, we hope to communicate the co-benefits of net zero to empower our communities to join us on our shared journey and vision, producing solutions together. Nottinghamshire's community groups are fundamental to advancing positive social and environmental change.

What we are doing to achieve net zero?

Reducing our direct emissions

We declared a climate emergency in 2021 and have pledged to become carbon neutral in all our activities by 2030. How we intend to do this is captured through our Carbon Reduction Plan.

Our key priorities include:

- Improving energy efficiencies in our buildings.
- Reducing emissions from energy use in highways assets.
- Reducing emissions from travel in Council fleet vehicles.
- Reducing emissions from staff business travel in private cars.

- Addressing our wider emissions through our procurement activities.
- Working with key partners to agree goals and ambitions for carbon reduction in their services.
- Raising awareness of climate change impacts and driving organisational emission reduction through Carbon Literacy Training.[19]

Delivering net zero for Nottinghamshire

The following sections of the framework outline our focus areas and demonstrate our progress in reducing emissions, adapting to climate change and realising our vision for a healthy, prosperous, green and resilient Nottinghamshire.

Focus areas:

Communities and wellbeing

Infrastructure and energy

Conservation and nature

Transport networks and mobility

Economy and industry

Since 2019 we have reduced our operational greenhouse gas emissions through our highways LED streetlight conversion programme, adopting a hybrid working policy, upgrading our ICT and investments in energy efficiency measures.[20]

39%

Illustration of planned Oak House building

Communities and wellbeing

Nottinghamshire's strength lies in its communities. We must protect and improve the health and wellbeing of our communities by addressing health inequalities and building resilience to climate change.

Improve air quality and health

This will be delivered through the Air and Quality Strategy for Nottingham and Nottinghamshire 2020-2030.[21] The Making Our Move Strategy[22] will also contribute to emission reduction by empowering residents to become more active in a way that works for them, including active travel.

Develop a new Joint Strategic Needs Assessment (JSNA)

The JSNA will help us to further understand the main health protection risks associated with climate change, as well as the likely impact on health inequalities and vulnerable populations within Nottinghamshire.

Sustainable and healthy food practices

We are part of the national Sustainable Food Places programme[23] and have developed the Nottinghamshire Food Charter,[24] which focus on sustainable food practices to address health and social challenges, tackle climate change and support local food systems.

Collaboration with communities to build resilience

We are actively seeking opportunities to collaborate with communities, to encourage behaviour change and promote resilience to climate change. We provide communities with information on grants and available support to drive the transition to net zero.

Supporting homeowners with energy efficiency improvements

We work with District and Borough Councils and the Midlands Net Zero Hub, to deliver government retrofitting housing schemes. We also work closely with the Nottingham Energy Partnership to deliver services, such as the Home Energy Advice Team (HEAT) Hub[25]. The HEAT Hub engages homeowners in hard to heat and hard to reach (e.g. off gas-grid) properties, identifying energy efficiency improvements and trusted traders to deliver the work.

Retrofitted home, Ashfield

Conservation and nature

Our natural and historical treasures are a source of pride. Preserving and enhancing Nottinghamshire's natural environment and historical landmarks will provide spaces to relax, explore, learn and allow nature and people to thrive for generations to come.

Preserving and protecting our history

We maintain the Nottinghamshire Historic Environment Record, a database of information on archaeological sites and finds, historic buildings and historic landscapes in Nottinghamshire. With over 25,000 data entries dating back to the Palaeolithic times, this information is used and will be used when considering planning and development control, advice to owners and developers, agri-environment schemes and the management of monuments and research.

Teaching traditional low-carbon practices

Through projects such as the HEAT Hub events[26] we train historic building owners, building managers and students in new, sustainable techniques, such as biobased retrofit installations and carbon neutral lime technologies for live-site heritage restoration projects.

Implementing flood defences

We are delivering natural flood management projects to reduce the risk of flooding across Nottinghamshire. For example, the Burton Joyce project has installed log-wood barriers and appropriate planting to reduce high water flow during heavy rainfall.[27] These barriers will increase biodiversity by providing new and improved habitat for wildlife.

Increasing woodland and biodiversity

Nottinghamshire's Local Nature Recovery Strategy (LNRS)[28] will form the basis for delivering the Government's legally binding commitments to improve nature across England.

The LNRS is partly informed by the mandatory Biodiversity Net Gains (since February 2024),[29] helping to guide local planning policy for nature recovery. Biodiversity Net Gain is an approach to development, land and marine management that leaves biodiversity in a measurably better state than before the development occurred. In the future, most developments must deliver a minimum of 10% Biodiversity Net Gain. We will implement this through our planning powers and support the local planning authorities to do so.

Through landscape-scale programmes such as the Trees for Climate programme,[30] Miner2Major Landscape Partnership[31] and Countryside Stewardship, we are funding the creation of new woodlands and improving habitats for wildlife. Identifying sites for tree planting and acquiring land for new woodland creation is on-going. Our provision of Historical Environment Record information and advice, support implementing such environmental projects.

Tree Planting Chetwynd Park, Chilwell

Economy and industry

Green growth is necessary for Nottinghamshire's prosperity and sustainability needs. Our partnerships are driven by a commitment to collaborative working, sharing knowledge and best practice for a future of success and growth.

A sustainable visitor economy

We are working with partners to explore ways to make the county's visitor economy as sustainable as possible. This includes creating a sustainable tourism plan and developing bus service and active travel links to key attractions and hotels.

Public, private and third sector collaboration

Through partnerships such as the Midlands Engine, we are collaborating with private, public and third sectors to revitalise our local areas, grow our local businesses, boost our visitor economy, attract and retain local talent and secure funding for sustainable development, digital innovations and infrastructure. All of these are crucial in achieving green growth.

Provide one-to-one business growth support

We provide tailored services, offering business planning, strategy and marketing guidance.[32] This personalised approach ensures that businesses are well-positioned for sustainable innovation and economic green growth. We also assist with funding options to facilitate the implementation of green technologies and eco-friendly practices while signposting and supporting businesses in navigating regulations and compliance.

Green procurement service

Our Sustainable Procurement Strategy[33] will include embedding environmental and climate measures when acquiring goods and services. This will favour organisations who align with our net zero ambitions.
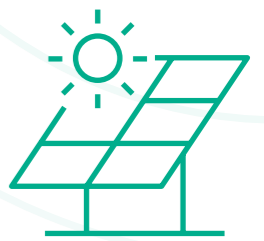
High-speed, low-carbon connectivity

Through the national Project Gigabit rollout,[34] Nottinghamshire will deliver high-speed and reliable connectivity to rural communities and businesses, meeting their needs for decades. The project will reduce carbon emissions by enabling differing industries to benefit from technological innovations and flexible working options.

Skills for a green economy

Together with our education and business partners, we are promoting sustainable, green / low-carbon training and skills development. The primary goal is to strengthen workforce knowledge and understanding of the sector, support the creation of employment within the green economy, and inspire future generations with an array of job opportunities.

Our business advisers providing sustainability support to local business owners

Infrastructure and energy

Nottinghamshire requires sufficient resilience to a changing climate. Investments are required in varied infrastructures to address energy security, decarbonise transport, support sustainable practices and boost resilience.

Updating the spatial planning and health framework

This will ensure that planning and health practitioners consider climate change in built environment assessments and decisions. The framework includes a rapid health impact assessment matrix, which contains indicators such as minimising resource use and utilising sustainable designs.

Decarbonising our energy system

We are working in partnership with the Local Authorities across Nottinghamshire and Derbyshire to develop a Local Area Energy Plan.[35] This collaboratively effort will identify and deliver cost-effective ways to decarbonise our whole energy system, including electricity, gas, heat and transport. The implementation of the plan will reduce carbon emissions across the entire supply chain, from energy generation to distribution and consumption.

Flood resilience for communities

As a lead local flood authority, we are taking action to manage local flood risks and improve the county's resilience in response to the increasing frequency and devastating impact of flooding on communities. This involves collaborating with stakeholders to develop and deliver flood adaptation schemes, which includes identifying greener and sustainable infrastructure solutions.
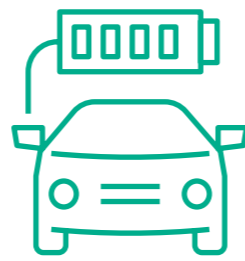
Improvements to residential recycling

We are committed to reducing household waste and increasing recycling. The 'simpler recycling' proposals contained within England's resources and waste strategy[36] aim to make recycling easier for residents and businesses, resulting in more recycling and reuse and less waste disposal. Providing seperate food disposal collections for all households will support energy and fuel generation through waste, while reducing greenhouse gas emissions.

Supporting future national energy generation

The UK Government has chosen the West Burton power station site in the north of Nottinghamshire to be home to the ground-breaking STEP prototype fusion energy plant.[37] Fusion energy has great potential to deliver safe, sustainable, low carbon energy for generations to come. The site is expected to be in operation in the early 2040s.

Gedling Borough Council Solar Farm, Gedling Country Park

Transport networks and mobility

Like the rest of the UK, Nottinghamshire's transport sector contributes significantly to greenhouse gas emissions. Strong transport networks offering logistical choices are crucial for healthy, sustainable, inclusive and low-carbon mobility.

Improving our transport infrastructure and connections

We are expanding and enhancing public transport, walking and cycling networks by delivering our Bus Service Improvement Plans[38] and the Nottinghamshire, Derbyshire, Derby City, and Nottingham City Local Cycling and Walking Infrastructure Plan (LCWIP).[39] These plans will improve local transport connections, make journeys more accessible, improve air quality, and reduce emissions and congestion. Significant schemes to improve roads, such as the A614,[40] aim to reduce emissions and improve air quality by reducing congestion.

Developing a Local Transport Plan

The Local Transport Plan, a collaborative effort with the EMCCA, Derbyshire, Derby City, Nottinghamshire and Nottingham City, will improve and integrate transport options across the region and promote low-emission and active transport solutions

Electric vehicle infrastructure expansion

Nottinghamshire is fully committed to developing public electric vehicle (EV) infrastructure. Nottinghamshire's Electric Vehicle Chargepoint Framework[41] outlines our EV plan, which includes establishing a countywide EV charging network. This will boost EV uptake by removing barriers to ownership for residents who cannot access home charging facilities. We are working with local authorities, government agencies and private entities to deliver inclusive and comprehensive EV charging across local and regional areas.

New, greener bus services

We are enhancing bus services across Nottinghamshire by delivering our Bus Service Improvements Plans. These have been developed in partnership with local bus operators and other stakeholders. Our Nottsbus On Demand provides a flexible service for travel between bus stops and designated points within the travel zone, where there are currently no local bus routes.[42] This approach reduces energy use by operating as and when requested. We are also electrifying buses through our Nottsbus ECOnnect service on several vital routes across Nottinghamshire.[43] Each of these contributes to improving air quality and addressing climate change through emissions reduction.

Nottinghamshire County Council
Nottsbus ECOnnect

Retford Bus Station

Our five ambitions

We will utilise our sphere of influence to deliver five key ambitions for net zero:

Healthy and strong communities

Enhanced nature and heritage

Greener economies

Sustainable energy and infrastructure

Clean transportation

Our focus areas form the basis of our ambitions to reduce emissions, adapt to climate change and realise our vision for a healthy, prosperous, green and resilient Nottinghamshire. The ambitions align with the UK's commitment to the United Nations Sustainable Development Goals (UNSDGs), and goals specific to Nottinghamshire's context. Our ambitions will shape our action plans for achieving net zero.

Healthy and strong communities

Investing in the building blocks of health will support our communities to live longer and happier lives.

We will empower our communities with the tools and knowledge to benefit from sustainable habits. Ensuring the most vulnerable and in-need groups are supported to benefit from net zero and adapt to climate change impacts.

Supporting initiatives which encourage healthy, active and low-carbon lifestyles.

- Encourage and support our communities to make low-carbon and sustainable lifestyle decisions.
- Engage with our communities to identify solutions that deliver net zero co-benefits and increase resilience.
- Continue to identify interventions that prevent the potential to exacerbate existing or generate new inequalities.
- Restore and protect Nottinghamshire's active greenspaces.
- Continue to create safe, accessible and resilient communities for all.
- Make it easier for residents and businesses to reduce, reuse and recycle.
- Continue to implement processes that support our understanding of the health impacts of climate change for residents.

Improve the energy efficiency and year-round thermal comfort of our communities.

- Deliver nature-based and built environment solutions to protect our communities from extreme heat weather events.
- Continue our energy security home retrofitting and fuel poverty programme.
- Engage with communities to promote energy-efficient practices.
- Support the self-delivery of community energy generation.

Improve access to local, sustainable and healthy food options.

- Continue to support the delivery of the Nottinghamshire Food Charter.
- Encourage farmers and landowners to adopt low-carbon practices that produce local, home grown, farm-to-fork produce.

SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

Enhanced nature and heritage

Placing environmental protection and heritage conservation at the forefront of our ambition to address climate change.

We will utilise the power of nature and implement sustainable practices to help us adapt to climate change impacts and reduce emissions.

Restore landscapes, ecosystems, biodiversity and heritage assets, and implement nature recovery networks.

- Prioritise the protection, conservation and reuse of our heritage assets over carbon-intensive new development.
- Drive the adoption of green technologies across our heritage assets.
- Establish an agreed nature-based approach for carbon capture and offsetting with partners, landowners and other key stakeholders.
- Continue schemes such as tree planting and other viable nature-based solutions to support future carbon removal and offsetting.
- Support the delivery of biodiversity net-gains in future developments.
- Deliver Nottinghamshire's Local Nature Recovery Strategy.
- Continue to protect our wildlife habitats, green and blue spaces, and natural landscapes.
- Conserve and enhance Nottinghamshire's historic environment.
- Provide more opportunities for engagement with nature and heritage assets.
- Continue to develop and deliver flood adapation schemes through nature-based solutions.

Greener economies

Driving economic development which protects the natural assets and services that support our well-being, industries, nature, climate and places to thrive.

We will continue to focus on attracting green investment and opportunities to increase prosperity across Nottinghamshire. Working in partnership with the private, public and third sectors will have a tangible impact on our economy, environment, people and places.
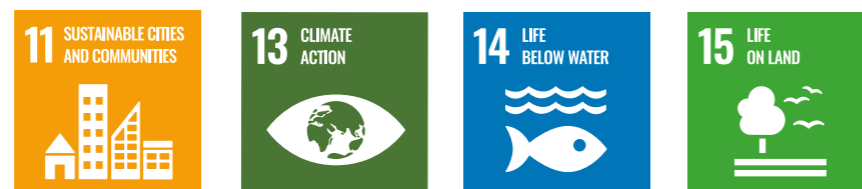
Modernise our economy to be resilient to the impact of climate.

- Develop and deliver a sustainable tourism plan.
- Promote sustainability credentials of local businesses and places to visit.
- Continue to promote jobs and skills that have a substantial positive impact on our environment.
- Prioritise business development focused on climate-positive industries, construction and digital innovations.
- Continue to support businesses across all sectors on their sustainability journey.
- Encourage the adoption of circular economy principles.
- Ensure our economic transition proceeds in a way that is fair and accessible for all.

Explore new and evolving technologies and approaches.

- Promote improvements to ensure high-quality and reliable digital infrastructure and connectivity.
- Champion Nottinghamshire as a leader in digital technology research and innovation.
- Enable the effective use of the newest technologies for positive climate impacts.
- Continue to improve our procurement of services and goods for climate and social value benefits.
- Explore investment into green finance and related social impact opportunities.

SUSTAINABLE DEVELOPMENT GOALS

11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND

SUSTAINABLE DEVELOPMENT GOALS

8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION

Sustainable energy and infrastructure

Prioritising low-carbon and climate-resilient infrastructure and technologies for the future.

We will explore innovative possibilities that support sustainable practices, boost resilience, and reduce regional greenhouse gas emissions and pollution levels. We will improve our energy security and move away from reliance on non-renewable, high-carbon-emitting fuel sources.

Embed a holistic approach that prioritises sustainable infrastructure.

- Explore opportunities for carbon removal and offsetting through innovative and technological solutions.
- Ensure all planning and infrastructure prioritises climate adaptation and mitgation.
- Adopt a needs-based approach to identify infrastructure investment opportunities across communities.
- Increase the scale and impact of adaptation measures to mitigate local climate change impacts and increase resilience.
- Support local planning authorities, landowners and developers in implementing sustainable development standards at pace and scale.
- Embed the new spatial planning and health framework into built environment assessments and decision-making.
- Minimise contributions to climate change by considering the location, design and operation of mineral and waste developments.

Assist in providing access to affordable, green and clean energy for all.

- Continue to improve the energy efficiency and sustainability of Nottinghamshire assets.
- Support the development and delivery of the Local Area Energy Plans.
- Support the generation and provision of renewable energy across the county.

Clean transportation

Implementing low-carbon methods of transportation for sustainable public and private mobility.

We will improve connectivity and access for those in greatest need, endorsing alternative fuels and advanced technologies to create a more efficient and inclusive transport system.

Improve the impact of our local travel and transport.

- Continue to manage and improve our highway networks to reduce congestion, disruption and emissions.
- Through the East Midlands Combined County Authority, explore opportunities to reopen passenger rail lines to increase public transport options and improve access to jobs, education, and tourism.
- Encourage our local people to adopt active travel through local walking and cycling schemes.
- Continue to promote the use and availability of public transport.
- Continue to deliver the Local Electric Vehicle Infrastructure Framework.
- Continue to deliver the Bus Service Improvement Plan.
- Continue to develop the Local Transport Plan with the EMCCA, Derbyshire, Derby City, and Nottingham City.
- Support projects and initiatives that increase independence and accessible travel.
- Ensure our transport is well-integrated to support behavioural changes for residents, businesses and visitors.
- Continue to improve our low-carbon transport networks within rural and urban communities.

SUSTAINABLE DEVELOPMENT GOALS

| 7 AFFORDABLE AND CLEAN ENERGY | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 13 CLIMATE ACTION |

SUSTAINABLE DEVELOPMENT GOALS

| 3 GOOD HEALTH AND WELL-BEING | 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | 11 SUSTAINABLE CITIES AND COMMUNITIES | 13 CLIMATE ACTION |

Moving forward

The framework lays a foundation for reducing emissions, adapting to climate change and realising our vision for a healthy, prosperous, green and resilient Nottinghamshire. In our influential role as a Local Authority, we will:

- Garner the support of key partners and stakeholders for our ambitions and vision.

- Develop action plans with our key partners and stakeholders to deliver our ambitions and shared vision. Maximise the co-benefits of net zero and contribute to the broader ambitions of the EMCCA.

- Implement mechanisms to monitor and evaluate our action plans. Identifying opportunities for improvement while ensuring expected outcomes are delivered.

- Utilise data to inform and prioritise our action plans. Delivering change that will positively impact Nottinghamshire and have the most significant gains in realising our vision.

- Embed climate and sustainability considerations into processes, to facilitate informed decision-making across the council at all levels.

- Increase the awareness and understanding of climate change and net zero among our Councillors and officers through Carbon Literacy Training.

With our collective knowledge, skills, partnerships, influence and drive, Nottinghamshire can achieve positive health, environmental and economic outcomes for all. We can accomplish these outcomes by placing emissions reduction, adaptation and resilience at the heart of plans and partnership working. The journey to net zero will lead to a cleaner and more sustainable present and future. Together, we can make a significant impact.

We are dedicated to achieving net zero for Nottinghamshire and call upon our partners and stakeholders to join us in this endeavor.
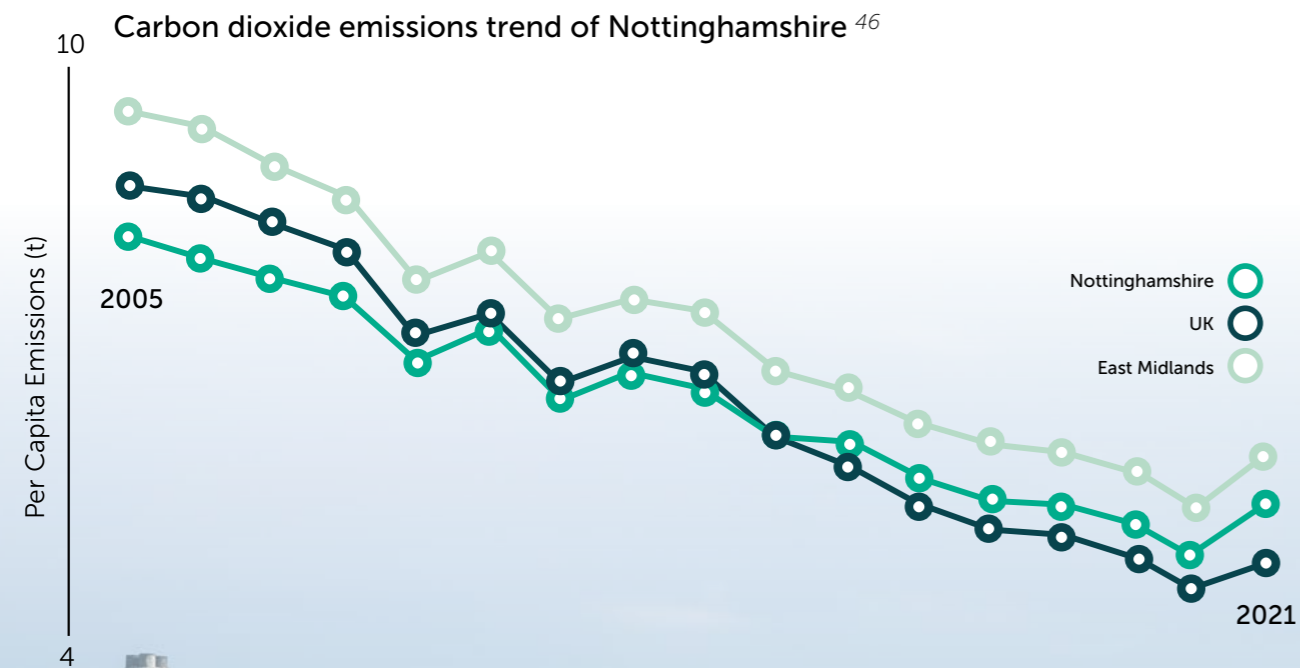
Illustration of the STEP fusion energy plant proposed at West Burton

Appendix 1 – Nottinghamshire's carbon budget

The carbon budget is used within climate change policy to help set emission reductions, ensuring fairness and effectiveness. To make our fair contribution towards pursuing the 1.5^C global limit within the Paris Agreement, Nottinghamshire needs to reduce its carbon emissions by 13.8% per year.[44]

Emissions are falling: CO_2 emissions per capita have improved in Nottinghamshire by 34% from 2005 to 2021 compared to the UK-wide performance of 45%. This is on average a reduction of 2% per year.[45] Quick and significant reductions are needed to achieve the 13.8% annual target.

Carbon dioxide emissions trend of Nottinghamshire [46]

Per Capita Emissions (t)

10

4

2005

2021

Nottinghamshire
UK
East Midlands

Appendix 2 - Climate change impacts

Socioeconomic impacts[47]

- **Reduced growth prospects:** Economic harm to our homes, businesses, assets and places, along with disruptions to travel and supply chains, can result in a loss of income and a reduction in productivity, which could negatively impact the ability to attract investment and grow the economy.

- **Worsening personal economic security:** The over-dependency on fossil fuels and the international market have contributed to inflationary pressures on fuel, food and energy costs. These pressures affect our residents and businesses by making the cost-of-living crisis more profound and challenging to recover from. Likewise, disruption and damage to our economy and places may affect the labour market through unemployment and displacement.

- **Pressure on the state:** Economic pressures add to the significant burden already facing our public services, including health and social care. The less prepared we are to mitigate and adapt to climate change, the higher the financial burden will be.

Health and wellbeing impacts[48]

- **The physical and mental health of residents:** This includes injuries, trauma, cold and heat-related deaths, infectious and vector-borne diseases. Infants and children are particularly vulnerable to the health impacts of poor air quality related to fossil fuels.

- **Services and supplies:** Impacts on water and food availability will disrupt supply chains and lead to cost inflation. Climate change will also add new pressures on our health and care services.

- **Poverty and inequality:** Climate change will amplify existing poverty and inequality levels. Those belonging to more vulnerable groups are less likely to have the resources (finance, home adaptations, social networks, etc.) to adapt and be resilient to changing circumstances. Such groups often have lower carbon footprints but are worst affected by the emissions of others.

Environment impacts[49]

- **Widespread flooding:** Resulting in disruption and degradation to natural landscapes and built environment. For example, through damage to infrastructure and places, to the polluting of our land and rivers.

- **Heatwaves, wildfires and drought:** These can add to existing strains on wildlife and people through soil and crop damage, to subsequent food and water shortages.

- **Reduced resilience:** Environmental impacts harm the potential for ecosystems to recover by affecting the natural regulatory systems that would otherwise provide protection against extreme weather conditions and support biodiversity.

Information sources

Why does Nottinghamshire need a Net Zero framework?

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Our Vision

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Our Approach

15. Council assets two to five percent of emissions (Climate Change Committee): https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/

16. Of all UK emissions, 82% are within the scope of influence of local authorities: https://assets.publishing.service.gov.uk/media/6194dfa4d3b-f7f0555071b1b/net-zero-strategy-beis.pdf

17. EMCCA £4 billion funding: https://www.eastmidlandsdevolution.co.uk/news/councils-give-green-light-to-4-billion-east-midlands-devolution-deal/

18. Over 50% of emissions rely on people and businesses (Climate Change Commitee): https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/

What is Nottinghamshire doing to achieve net zero?

19. Carbon Literacy Training: https://carbonliteracy.com/about-us/

20. 39% reduction in the council's operational emissions: https://www.nottinghamshire.gov.uk/media/ncpl2h3u/greenhouse-gas-report-2022-2023.pdf

Communities and wellbeing

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36. Resources and Waste Strategy for England: https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england/resources-and-waste-strategy-at-a-glance

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Appendix 1

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Appendix 2

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We want Nottinghamshire to be **resilient** to climate change impacts, becoming **healthier**, **prosperous** and **green**, and contribute to national and global commitments to a net zero future.

Nottinghamshire County Council