

Draft – January 2026

York and North Yorkshire's Strategy for a Sustainable Future Executive Summary

Our regional strategy for leading the way in tackling climate change, striving to create a truly sustainable future that benefits communities and businesses across York and North Yorkshire.

New, green jobs | Affordable energy | Cleaner air | Comfortable buildings | Better, safer, more affordable transport



Thriving communities | More competitive businesses | Fresher, local food | Greener, more resilient landscapes

What is included in the Strategy?

Introduction

This section provides background to the York and North Yorkshire region and the development of our carbon negative ambition, as well as setting out the new strategic framework and mapping out what success looks like.

Our Ambition

This section outlines the key principles underpinning our ambition to lead the way in tackling climate change.

Our Strategic Pillars

This section details our three strategic pillars – securing energy independence, moving towards a circular economy, and enhancing our environment – which will be used to unlock our ambition of creating a truly sustainable future.

Our High Impact Sectors: Sector Plans

The Sector Plans set out the co-created vision and principles for our highest impact sectors. The Plans include a summary of progress made to date, key strategic priorities, the scale of transformation required (non-prescriptive indicators of the level of change) and actions to overcome critical barriers and unlock the benefits of becoming England’s first carbon negative region. The sector plans covering the following high impact areas:

- Clean, Affordable & Reliable Power
- Warm, Comfortable Buildings
- Accessible, Convenient Transport
- Innovative, Sustainable Businesses
- Resilient Landscapes, Sustainable Food & Farming
- Healthy Marine & Coastal Environment
- Empowered Community Action

Our Strategic Enablers: Levers to Catalyse Change

This section provides an outline of the key “levers” we have to enable systems change, developing the right conditions to make it easy, convenient, affordable and desirable for people and businesses to make sustainable choices, from data and digital innovation to influencing national policy change.

Our Big Goals

This section details our big “end goals” for creating a sustainable future – healthy & thriving communities, carbon negative, and economic transformation – including the benefits that achieving these goals will unlock for the region, and how we will measure our progress towards them.

Next Steps

Summary of next steps – including a proposed public consultation, developing detailed implementation plans, and establishing effective governance and performance monitoring processes.

Strategy Purpose. Aims & Objectives

We want York and North Yorkshire to lead the way in tackling climate change and drive a transformative approach that unlocks benefits for businesses and communities.

Strategy Aim & Objectives

The overarching aim of York & North Yorkshire's Strategy for a Sustainable Future is:

To deliver a step-change in climate action that transforms the economy and supports healthy, thriving communities, ensuring York and North Yorkshire leads the way to become England's first carbon negative region by 2040.

This is a regional strategy covering the whole of York and North Yorkshire. Whilst led by the Combined Authority, it has been co-designed and co-developed by regional partners. It identifies opportunities for the region to deliver on climate action, with a range of responsible organisations across the public, private and voluntary sectors, enabling a joined-up and collaborative approach to securing investment, developing infrastructure, building green skills, and influencing national policy change.

The specific objectives of the Strategy are:

- 1) To maximise local and regional benefits through providing **strategic direction and a coordinated approach** to create a sustainable future, setting out clear strategic priorities and areas of influence to **enable ambitious, collaborative action at pace and scale**;
- 2) To make it **easy, convenient, affordable** and desirable for people and organisations to make more sustainable choices;
- 3) To **build public confidence** that tackling climate change is feasible, **equipping communities** to embrace climate action as a means of improving living standards, quality of life, health, and wellbeing;
- 4) To **harness the economic opportunities** of climate mitigation and adaptation, establishing **York and North Yorkshire as a trailblazing region** for attracting investment, developing skills, and innovating to drive green growth; and
- 5) To position **York and North Yorkshire at the forefront of national climate action** to influence national policy and secure funding, alongside providing innovative solutions and approaches that can be scaled up and replicated across the UK and beyond.

What does a “Sustainable Future” mean to us?

- **Reducing** our greenhouse gas (GHG) emissions by at least 90% relative to baseline reporting (total emissions in 2022).
- **Removing** more than the equivalent amount of our residual GHG emissions (i.e. unavoidable emissions that cannot be reduced further) within the region to become carbon negative.
- **Adapting** to current and future impacts of our changing climate to ensure our communities and businesses are safe and resilient.
- A shift in mindset from simply *reducing harm* to striving to **do more good** (i.e. *rather than only focusing on reducing emissions and minimising environmental damage, we ask how can we have a positive impact on communities and the environment?*)

What does this mean for you?

- More affordable energy bills
- Warmer, more comfortable homes
- Cleaner air & better health
- Safer, more convenient and sustainable travel options
- New, high-quality jobs
- Opportunities to connect with others in your community and drive forward climate action projects together.

Ultimately, creating healthier, thriving communities and a more resilient economy.

Strategic Framework. Overview

1

Our Ambition

Our ambition is to lead the way in tackling climate change, creating a truly **sustainable future** that benefits communities and businesses.

2

Our Strategic Pillars

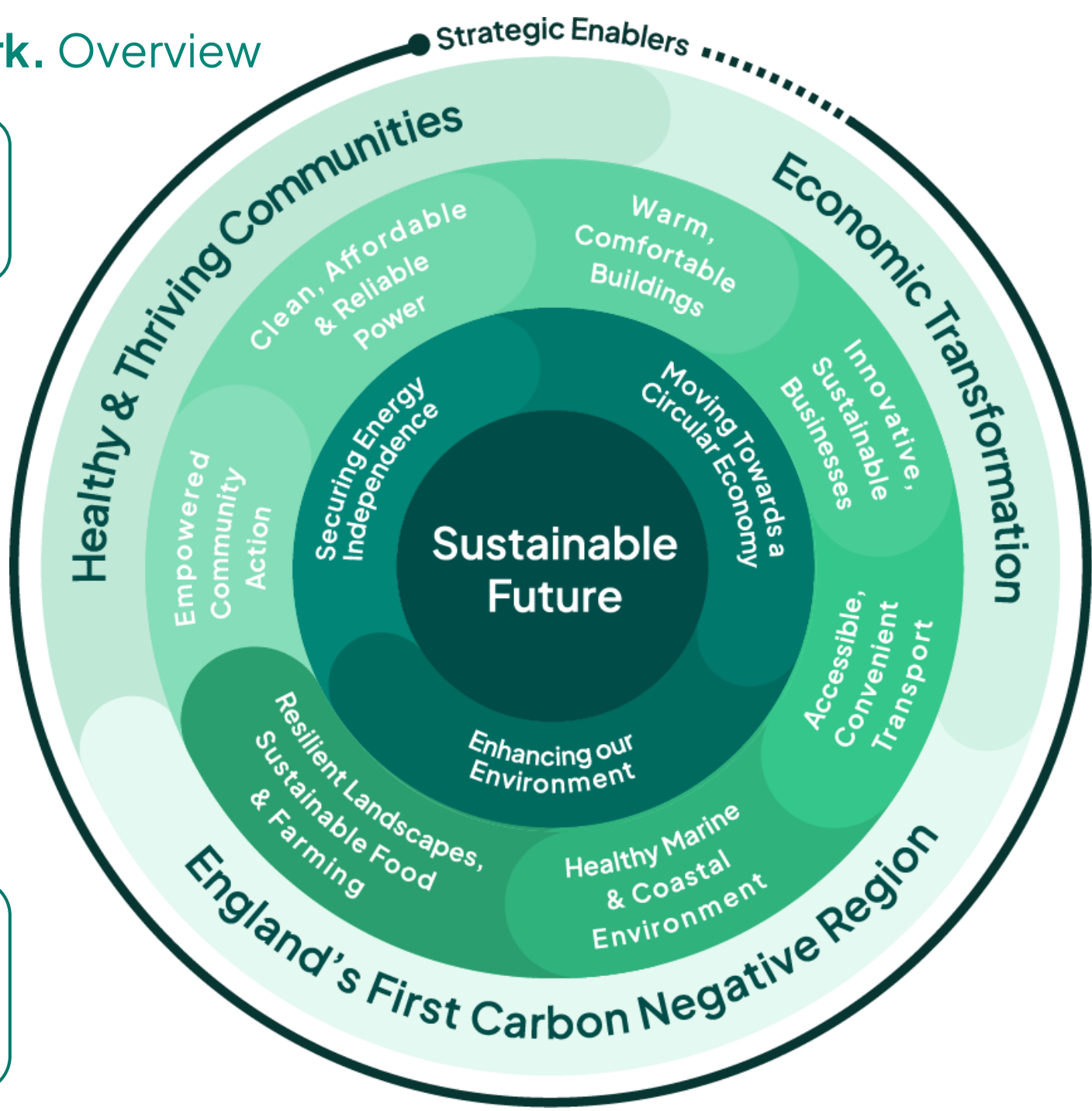
Our ambition will be unlocked through our strategic pillars of:

- **Securing Energy Independence** – providing locally-owned, affordable energy;
- **Moving towards a Circular Economy** – a thriving economy that keeps products and materials in use, whilst eliminating waste and pollution; and
- **Enhancing our Environment** – restoring, preserving, and harnessing the power of nature to improve biodiversity, capture carbon, and support climate resilience.

3

Our High Impact Sectors

These strategic pillars will be delivered across our high impact sectors. The Consultation Draft of the Strategy includes “sector plans”, which will set out co-created visions statements, strategic priorities and strategic interventions.



Appendix A

5

Our Strategic Enablers

These are our levers to make it easy, convenient, affordable and desirable for people and organisations to make more sustainable choices, from influencing national policy change to unlocking funding and investment.

Our Big Goals

1. **Economic Transformation** – new, high-quality jobs, business growth, more competitive businesses.
2. **Healthy & Thriving Communities** – more affordable energy, warmer homes, better living standards and opportunities for community wealth building, supporting the YNYCA Mayor’s Vision.
3. **England’s first Carbon Negative region** – over 90% reduction in our GHG emissions, sequestering more carbon than we emit.

1 Our Ambition. Creating a Sustainable Future

The Case for Ambitious Action

As floods, droughts, storms, and wildfires intensify across the world and in our own region, **now is the time for York and North Yorkshire to show true leadership** in climate action; **creating a better future for all** by trailblazing a path to become England's first carbon negative region.

By leading the charge and acting swiftly, we will **strengthen our economy; creating new, high-quality jobs, attracting investment, and future-proofing our businesses**. Lower energy costs, new opportunities for innovation, and making it easy for businesses to be sustainable within our region will **provide our businesses with a competitive advantage**.

The transformation will also provide **our residents with warmer homes, more affordable energy bills, cleaner air, and better transport, resulting in improved health, wellbeing, and living standards**.

Home to two National Parks, three National Landscapes, and extensive agricultural land, along with distinctive marine and coastal assets, the **region has an unparalleled ability to harness our natural environment to sequester carbon and improve our resilience to climate change**. With world-class innovation assets, pioneering businesses, and passionate communities, **York and North Yorkshire can be a trailblazing region providing innovative solutions that other places can learn from and replicate**.

What does a “Sustainable Future” mean to us?

To create a sustainable future for York and North Yorkshire, we are committing to:

- **Reducing our emissions by at least 90%**. We have modelled a deliverable carbon reduction pathway, which underpins the proposed strategic priorities to ensure we have an evidence-based approach.
- **Removing more than the equivalent amount of our residual emissions within the region**. This will ensure York and North Yorkshire goes beyond net zero and becomes carbon negative by 2040. Nature-based solutions, such as tree planting, regenerative agriculture and seaweed farming, will be prioritised. To meet the pace and scale required we will aim to take an innovative approach to carbon removal, including the exploration of technological solutions and transition technologies.
- **Adapting to the future and ongoing impacts of climate change to ensure our communities and businesses are resilient**. We have commissioned a study to assess the potential impacts of climate change, and to better understand how we can best adapt. The Adaptation Study is due to be finalised by early 2026 and will help to inform the interventions of this Strategy. We have incorporated some of the initial study outputs into the priorities of this Strategy draft.
- **A shift in mindset from reducing harm to doing more good**. The Strategy sets out our approach to have a positive impact on people and the environment – supporting nature to thrive, fostering healthy and thriving communities and economic transformation.

Scope of Emissions

Our goal to be carbon negative by 2040 is for Scope 1 and Scope 2 emissions. It is currently not possible to produce an accurate baseline of the region's Scope 3 emissions due to data limitations. However, we expect emissions that occur outside of York and North Yorkshire's boundary, as a result of activities taking place within the region, to be substantial. Therefore, this Strategy strives to tackle the region's scope 3 emissions wherever possible, such as through promoting responsible supply chains and reducing waste.

Reducing scope 3 emissions is fundamentally about reducing consumption and in today's economic model, this would have a knock-on impact on economic growth. This is why we are championing the circular economy to help reduce emissions throughout supply chains by minimising waste and designing materials and products to stay circulating within the economy.

What are emission scopes?

Scope 1: Direct Emissions within the Region

These are emissions released directly from sources located in York and North Yorkshire e.g. emissions from petrol and diesel vehicles, oil and gas heating systems.

Scope 2: Indirect Emissions from Purchased Energy

Emissions generated elsewhere to produce the electricity, heating, or cooling used within the region.

Scope 3: Wider Indirect Emissions Across Supply Chains

These include emissions linked to goods and services used in the region but produced elsewhere. For example, imported construction materials for new houses, electronic goods, or clothing.

2 Our Strategic Pillars. Overview



Securing Energy Independence

Providing locally-owned, affordable energy for all

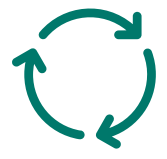
York and North Yorkshire has a strong history of powering the nation; from Selby’s pioneering “super mine” in the 1980s to hosting the nation’s final deep coal mine at Kellingley Colliery, and continuing to fuel the grid through the Drax Power Station. This legacy can continue through our transition to a carbon negative region.

Our Local Area Energy Plans tell us that we can produce enough renewable energy to power the region and beyond, achieving energy independence. This will minimise vulnerability to global energy markets and help lower energy bills for both households and businesses. This will also contribute to supporting national energy security.

Furthermore, through prioritising locally owned renewable energy schemes, i.e. projects owned by local communities, businesses, and other organisations, we can help ensure that benefits are maximised within the region, guaranteeing lower energy bills.

What does this mean for me?

- Lower energy bills for homes and businesses.
- New renewable energy projects (e.g., solar farms) are in the right place and directly benefit local people.
- The opportunity to lead in the development and even own local energy projects.



Moving towards a Circular Economy

A thriving economy that keeps products and materials in use, whilst eliminating waste and pollution

Research shows that half of global GHG emissions and 90% of biodiversity loss are driven by how we currently use resources¹ – our “take-make-dispose” extractive industrial model. Moving towards a circular economy means decoupling economic activity from the consumption of finite resources and greenhouse gas emissions, ensuring that materials stay circulating within our economy. In practical terms, this means reducing waste throughout supply chains, designing products to last longer (e.g. making it easy to repair, reuse and remanufacture products) and switching to using more sustainable materials.

What does this mean for me?

- Easier and cheaper to repair and reuse products.
- More options to access sharing and rental models (e.g. car clubs, tool libraries) – enabling you to access products and resources without the ownership costs.
- Less waste and pollution leads to cleaner air and water, reducing health risks.
- Local repair shops, sharing schemes, and community recycling centres foster social connections and resilience and encourage community-led innovation (e.g. upcycling hubs and zero-waste markets).



Enhancing our Environment

Restoring, preserving, and harnessing the power of nature to improve biodiversity, capture carbon, and support climate resilience

York and North Yorkshire can be a trailblazer in nature-positive growth – going beyond minimising harm and instead focusing on actively restoring and enriching our natural systems. At the heart of this vision lies the principle of regeneration: putting more back into the earth than we take out.

With pockets of best practice within the region, research underway, new funding models being tested, and growing interest from both food manufacturers and farmers around regenerative agriculture, York and North Yorkshire have an opportunity to develop a USP in regenerative agriculture. From rotational grazing and agroforestry to cover cropping and low-impact livestock systems, these approaches not only reduce emissions but also improve productivity and resilience for farmers.

What does this mean for me?

- Communities able to come together to improve and enjoy nature, through access to greener, healthier, more beautiful spaces, and the creation of wild-flower meadows, community woodlands, and more.
- Communities and businesses that are more resilient to flooding, droughts, and other extreme weather events.
- Better quality, fresher, locally-produced food.

¹UN Global Resource Outlook, 2024

3 Our High Impact Sectors. Vision & Strategic Priorities

This section provides a summary of the co-created vision statements for each sector, and the strategic priorities that are designed to deliver rapid decarbonisation whilst unlocking the social and economic benefits of becoming England's first carbon negative region:

Clean, Affordable & Reliable Power

Vision: A resilient power system that provides clean, affordable energy to all.

Strategic Priorities:

- 1. Deliver energy independence and community wealth** by rapidly scaling renewable generation with inclusive ownership models that reduce bills and foster local pride;
- 2. Unlock investment for energy infrastructure upgrades** by pioneering green finance, to support jobs, innovation, and business competitiveness;
3. Accelerate the adoption of new technologies and demand-side solutions to **create a flexible, affordable energy system** that meets rising needs while cutting emissions; and
- 4. Strengthen the reliability and resilience of our energy system** by supporting our partners to adapt our infrastructure networks.

Warm, Comfortable Buildings

Vision: Every building in York and North Yorkshire is comfortable, healthy, efficient and affordable to heat.

Strategic Priorities:

- 1. Increase the Comfort, Cost and Climate benefits of retrofit** by increasing the pace and scale of delivery;
- 2. Reduce energy bills, improve air quality and create a more resilient energy system** by moving to sustainable heating;
- 3. Unlock opportunities, create local economic growth and champion our iconic buildings** by leveraging our heritage buildings and biobased materials; and
- 4. Create better places to live, work and visit** by future-proofing our places.

Accessible, Convenient Transport

Vision: A clean, integrated, accessible and affordable transport system that helps communities to thrive, connecting people to better opportunities for work and leisure across the diverse landscapes of York and North Yorkshire.

Strategic Priorities:

- 1. Create healthier, more inclusive communities** by making it easy, safe and affordable for people to walk, wheel, use wheelchairs, cycle, and use public transport - helping everyone access opportunities that matter most;
- 2. Reduce travel costs** through accelerating the transition to clean, shared and electrified mobility and innovative and integrated ticketing initiatives;
- 3. Increase business productivity and improve connectivity** through enabling cleaner logistics, using intelligent network management and low carbon business travel*; and
- 4. Ensure our transport network is resilient against the impacts of climate change** through investment in adaptation and planning.

Innovative, Sustainable Businesses

Vision: York and North Yorkshire will be a UK exemplar in supporting its businesses to reduce GHG emissions, enabling a thriving, innovative and sustainable economy.

Strategic Priorities:

- 1. Boost business resilience and reduce costs** through enabling the shift to reliable, affordable, clean & locally-owned energy;
- 2. Provide the region's businesses with a competitive advantage and new opportunities** through improving energy and resource efficiency, alongside enabling innovation;
- 3. Increase business productivity and improve connectivity** through enabling cleaner logistics and low carbon business travel*; and
- 4. Support businesses resilience and security** through climate adaptation measures and advice.

3 Our High Impact Sectors. Vision & Strategic Priorities

Resilient Landscapes, Sustainable Food & Farming

Vision: York and North Yorkshire will lead the way in partnership working to enable a healthy natural landscape that supports food and water security and utilises nature-based solutions for carbon capture and climate change resilience.

Strategic Priorities:

- 1. Support the health of our natural landscapes and climate resilience** through restoring peatland, planting trees, improving hedgerows and enhancing soil quality;
- 2. Improve the profitability and sustainability of farms** through increasing the adoption of regenerative and precision agriculture practices, alongside improving energy efficiency and switching to renewable energy sources;
- 3. Support health, wellbeing and a thriving economy** by improving access to local, sustainable food and reducing food waste; and
- 4. Improve the quality and resilience of our rivers, lakes, and water courses** through partnership working and sustainable land management.

Healthy Marine & Coastal Environments

Vision: York and North Yorkshire will be a national demonstrator in nature-based marine and coastal innovation, harnessing solutions for carbon sequestration, flourishing ecosystems, and healthy communities.

Strategic Priorities:

- 1. Better understand the contribution of the marine economy and environment to carbon capture and mitigation;**
- 2. Protect the health, wellbeing, and climate benefits of the marine and coastal environment** through robust management and promoting nature recovery; and
- 3. Improve climate adaptation** through strengthening natural marine and coastal defences.

Empowered Community Action

Vision: Community groups and their work within communities are at the heart of the carbon negative transition, working collaboratively with the public and private sector to realise new low carbon opportunities that help local communities to thrive.

Strategic Priorities:

- 1. Create healthier and more connected communities** through the uptake of community-focused sustainable transport initiatives;
- 2. Champion the pathway to more comfortable, affordably heated homes** by supporting community groups to deliver retrofit demonstrator projects;
- 3. Support communities in becoming energy self-sufficient and build community wealth** through the acceleration of community energy schemes;
- 4. Shape greener and cleaner local landscapes and improve wellbeing** through community biodiversity, food, and land use initiatives;
- 5. Strengthen local economies and supply chains** through community and local business uptake of circular economy principles; and
- 6. Future-proof our communities against the impacts of climate change** through supporting practical adaptation measures.

4 Our Strategic Enablers. Overview

Creating the conditions to make it easy, convenient, affordable and desirable for people and businesses to make the “sustainable” choice

To create a Sustainable Future, we must develop the right conditions to make it easy, convenient, affordable and desirable for people and businesses to make “sustainable” choices. This requires a fundamental shift in how systems operate - bringing together policy, investment, infrastructure, skills, and community engagement in a joined-up approach that enables lasting change.

Our “strategic enablers” are the “levers” we have to create systems change:

Developing ambitious strategies, plans and research

Whilst the draft Strategy itself provides a shared vision and clear pathway to a sustainable future, there will be a need for more detailed sector-specific strategies and plans, alongside further research. Examples of these include:

- Retrofit Strategy
- Local Transport Plan
- Refreshing our Local Area Energy Plans
- Skills Strategy
- Investment Strategy
- Get York and North Yorkshire Working Plan
- Developing the Spatial Development Strategy

The Strategy will initiate and respond to new research and innovation, utilising the world-class academic and scientific assets of the region. This includes working in partnership with the University of York, York St John and other academic institutions within the region.

Resonating with Motivations & Priorities

Climate action decisions such as getting a heat pump, getting the bus rather than driving, or buying second hand clothes, are all interconnected, and impacted by the context of people’s lives. In policy, these decisions are often only viewed as related to considerations such as infrastructure and cost, which are covered in the other parts of this section.

This ignores the emotional aspects of decision making, which can mean that climate policy only supports the ‘early adopters’ who are already more engaged. To enable a step change in climate action, we need to ensure making sustainable choices aligns with people’s values and fits with their existing priorities, by including this way of thinking across programmes, projects and strategies.

Securing funding and investment

We know from our Local Area Energy Plans that over £21billion of investment is required to decarbonise our energy system alone. The Strategy will set out how we can effectively fund and invest in climate action, ensuring we are maximising the impact of public funding and leveraging commercial investment. The Strategy will also ensure that we follow a cost-effective pathway, and that sustainable solutions are affordable to all.

Developing green skills and supply chains

As the pace and scale of decarbonisation grows, we must ensure that we have the necessary skills within our workforce to drive this - from building retrofit and installing EV chargers, to restoring peatland and engineering new local carbon technologies. This will create new, high-quality jobs, and provide the opportunities for businesses to grow in an emerging green economy.

Catalysing demonstrators and programmes

We need demonstrator projects to showcase the art of the possible and to catalyse wider action. For example, Askham Bryan College’s “Electric cow project”, funded through the CA’s Net Zero Fund, produces energy from slurry, demonstrating the benefits of a micro-anaerobic digestion facility. The Strategy will identify where demonstrator projects are needed, and where we need new programmes to deliver climate action at scale.

Innovating with data and digital

Developing data and digital solutions will enable more effective planning, monitoring and feedback in real-time. The Strategy will identify opportunities for data and digital innovations that will support decarbonisation at pace.

Establishing infrastructure

Across sectors, there is a significant need for infrastructure improvement to enable decarbonisation. This could be improving the electricity grid to enable businesses to generate renewable energy on-site, or improving active travel routes to ensure people feel safer to walk, wheel, use wheelchairs, and cycle.

Influencing national policy change

York and North Yorkshire’s economy operates within a wider context of national policy and regulation. Some changes, such as phasing out oil boiler use or high sustainability standards for new homes, require national policy change. The Strategy will identify areas where we are reliant on national policy change to deliver rapid climate action.



5 Our Big Goals. Delivering tangible benefits for communities & businesses Appendix A

Our approach to create a sustainable future will deliver benefits for communities, businesses, and the environment – now and in the future.

Healthy & Thriving Communities

People are at the heart of our approach, and our first goal is to ensure climate action improves people’s living standards, supporting the YNYCA Mayor’s Vision for healthy and thriving communities:

More affordable energy bills: Locally owned renewable energy projects will help reduce energy costs, saving people money and helping to tackle the cost-of-living crisis.

Warmer, more comfortable homes: Improving energy efficiency and moving towards low carbon heating solutions will ensure that every person in York and North Yorkshire is comfortable and can afford to heat and cool their home. With over 50,000 households in York and North Yorkshire in fuel poverty, home upgrades are critical to improving living standards.

Strengthening communities: Grassroots community climate action encourages people to come together to develop projects, share resources, and help to improve their local environment. This will reduce loneliness and provide opportunities for community wealth building. For example, community-led energy projects can generate profit that can be invested back into the community.

Cleaner air, improved health & wellbeing: Cleaner air and reduced pollution, alongside warmer homes and more options for active travel, will support people’s physical and mental health.

More convenient, safer and sustainable travel options: Service needs are met more locally. More convenient, accessible and affordable public transport options, alongside improving cycling, wheeling and walking infrastructure, will provide people with greater choices, making daily travel easier and more accessible. With fewer cars on the roads, when you do need to drive, your journey can be smoother, faster and less stressful.

Economic Transformation

We want to ensure the journey to a “sustainable future” creates new economic opportunities and enables our economy to be more resilient to the impacts of climate change:

New, high-quality jobs: As green industries grow, there will be new, high-quality jobs created, from heat pump engineers to seaweed farmers.

More affordable energy bills: Reducing energy use and switching to renewables can reduce energy bills, making businesses in our region more competitive.

Lower operational costs: More efficient processes and minimising waste (e.g. via lean manufacturing processes) can reduce operational costs.

Future-proofing: Shifting to more sustainable operating models can help businesses to comply with future regulations and changing customer preferences.

Increased opportunities for funding and investment: Businesses can take advantage of sustainability grants, as well as investors increasingly favouring businesses with strong sustainability commitments.

Key growth opportunities in our region include:

- **Clean energy** – growing retrofit supply chains, installation and maintenance of energy infrastructure & geothermal opportunities;
- **Food & farming innovation** – including developing innovative solutions and supporting the adoption of regenerative and sustainable agriculture practices;
- **Natural capital investment** – attracting commercial investment for biodiversity net gain, peatland restoration, and other projects that deliver environmental improvements.

England’s First Carbon Negative Region

We want to ensure we are carbon negative by 2040, that nature is thriving, and that our environment supports climate resilience.

Tackling Climate Change: York and North Yorkshire can demonstrate climate leadership by leading the way to decarbonise our economy and places.

Thriving nature: By taking a joined-up approach to tackle climate change and the biodiversity crisis, we can support nature to thrive. Our Strategy will be aligned with the strategic priorities set out in the North Yorkshire and York Local Nature Recovery Strategy.

Resilient Landscapes: Capturing and storing more carbon in our landscapes, such as through peatland restoration, tree planting, regenerative farming, and improved soil management, will strengthen our natural defences against flooding, drought, and extreme weather.

Access to the outdoors: Expanding and protecting access to green and blue spaces that people can access locally, and conserving the natural beauty of the region, will improve public health, support wellbeing, and deepen our connection to nature. A carbon negative region is one where people and planet thrive together.



Clean, Affordable & Reliable Power. Plan on a Page

Vision: A resilient power system that provides clean, affordable energy to all.

Delivery to Date:



Local Area Energy Plans



£7m Net Zero Fund



£2m Local Net Zero Accelerator Pilot



£7m Carbon Negative Challenge Fund



APSE Award for Collaboration



Community Energy Fund



Community Energy Award

Scale of Transformation

Install an additional 2,500 megawatts (MW) of capacity of renewable electricity generation by 2038

Increase installed anaerobic digestion generation capacity by 16 MW by 2038

Increase installed small bioenergy generation capacity by 60 MW by 2038

Deploy energy storage to a scale of 736 MW capacity by 2038

Reduce peak demand by 10% by 2038

Upgrade electricity infrastructure to enable over double existing demand by 2038

Strategic Priorities

Deliver energy independence and community wealth by **rapidly scaling renewable generation with inclusive ownership models** that reduce bills and foster local pride

Unlock investment for energy infrastructure upgrades by pioneering green finance, to support jobs, innovation, and business competitiveness

Accelerate the adoption of new technologies and demand-side solutions to create a flexible, affordable energy system that meets rising needs while cutting emissions

Strengthen the reliability and resilience of our energy system by **supporting our partners to adapt our infrastructure networks**

Barriers

Infrastructure, planning, and regulatory restrictions

Skills for project delivery

Attracting and co-ordinating commercial investment and piecemeal public funding

Poor public perception

Capacity and technical expertise of community energy groups

Technical barriers to smart meter roll-out

Key Interventions

- Local Area Energy Plan (LAEP) update
- Future Energy System Planning
- Champion National Level Policy change
- Addressing the skills gap
- Showcase delivery of Net Zero Fund and Carbon Negative Challenge Fund
- Develop and implement the Energy Generation Accelerator Programme (EGAP)
- Design a delivery model through the Local Net Zero Accelerator (LNZA) programme
- Support for Community Energy

Outcomes

- Energy Independence and resilience
- Unlocking regional investment
- More flexible, affordable power
- Business cost savings
- Optimised energy mix and resource re-use
- Unlocking decarbonisation across sectors
- High quality jobs
- Thriving local green economy
- Community wealth building

Warm, Comfortable Buildings. Plan on a Page

Vision: Every building in York and North Yorkshire is comfortable, healthy, efficient and affordable to heat.

Delivery to Date:  Y&NY Retrofit Strategy  Retrofit One Stop Shop for York  Housing Retrofit Schemes  Geothermal Pilot  £7m net zero fund  Sheepish natural wool insulation

Scale of Transformation

- Install rooftop solar PV on 98,227 homes by 2038 and 1745 business rooftops per year by 2038
- Scale up to deploy decarbonised heating to 249,328 homes and 8800 businesses by 2038
- Retrofit ~1600 public buildings to at least a DEC C rating by 2030
- Scale up to retrofit 24,656 existing business premises to EPC C by 2038
- Scale up to retrofit 249,328 homes to EPC C by 2038
- Scale up the supply chain to deploy biobased construction materials in 1200 new homes and 1100 retrofits by 2038
- No new oil boiler installation by 2030
- Design and build new homes to high standards

Strategic Priorities

- Increase the Comfort, Cost and Climate benefits of retrofit by **increasing the pace and scale of delivery**
- Reduce energy bills, improve air quality and create a more resilient energy system by **moving to sustainable heating**
- Unlock opportunities, create local economic growth and champion our iconic buildings by **leveraging our heritage buildings and biobased materials.**
- Create better places to live, work and visit by **future-proofing our places**

Barriers

- Securing funding and investment**
- Developing green skills and supply chains**
- Data constraints**
- Lack of demand for retrofit**
- New technology and innovation**
- Infrastructure constraints**
- Fragmented collaboration**
- Poor new build standards**

Key Interventions

- Y&NY's Retrofit Strategy
- Local Area Energy Plan Update
- Regional Plan for Geothermal
- Develop a Y&NY One Stop Shop
- Heat Network Feasibility
- Better Buildings Now
- Biobased Construction Materials Accelerator
- Public Sector Decarbonisation
- Pilot financial policy options for Y&NY
- Regional Retrofit Network
- Continue regional relationships
- Retrofit Dashboard

Outcomes

- Improved comfort in buildings
- Mental and physical health improvements
- Lower energy bills
- Supply chain growth and new green jobs
- Reduced emissions from buildings and heating
- More resilient energy system
- Better places to live, work and visit
- Increased investment in the region

Accessible, Convenient Transport. Plan on a Page

Vision: A clean, integrated, accessible and affordable transport system that helps communities to thrive, connecting people to better opportunities for work and leisure across the diverse landscapes of York and North Yorkshire.

Delivery to Date:



Mayoral Transport Settlement



Devolved Transport Powers



Mayor's Active Travel Fund launched



Electric Bus Network



York Station Gateway



Horton in Ribblesdale rail freight link



Discounted Bus Travel

Scale of Transformation

Ensure walking, wheeling, and cycling accounts for 35% modal share of all trips by 2030

Increase bus and rail travel to over 20% of modal share by 2030

Roll-out of battery electric buses until they account for 95% of the fleet in 2038

76% of vehicles on the road are battery electric by 2038

10% of freight is shifted from heavy goods vehicles to rail by 2038

Strategic Priorities

Create healthier, more inclusive communities by **making it easy, safe and affordable for people to walk, wheel, use wheelchairs, cycle, and use public transport** - helping everyone access opportunities that matter most

Reduce travel costs through **accelerating the transition to clean, shared and electrified mobility** and innovative and integrated ticketing initiatives

Increase business productivity and improve connectivity through **enabling cleaner logistics, using intelligent network management and low carbon business travel***

Ensure our transport network is resilient against the impacts of climate change through **investment in adaptation and planning**

Barriers

Infrastructure constraints and costs of upgrades

Need for national-level policy change

Coordination across regional strategies and stakeholders

Increased demand through tourism and growth

Perceived lack of safety in active travel

Poor accessibility

Private car dependency

Challenges of network integration with the scale, topography, and rurality of Y&NY

Key Interventions

- Unlock funding and finance
- Data collection
- Targeted policy and legislation
- Innovation in fuel types
- Connection with wider strategies
- Build relationships in the transport and energy sectors
- Work with tourism bodies and regional employers
- Spatial and travel planning
- Scale up School Streets initiative
- Accessibility as a priority
- Public transport investment
- Car and micro-mobility sharing schemes
- Multi-modal approach
- Promote local transport solutions
- Expand EV charging network

Outcomes

Improved air quality.

Connecting communities to the outdoors.

Safety and wellbeing of children and vulnerable adults.

Reduced congestion.

Increased movement and physical activity in daily lives

Connectivity for rural communities.

Access to opportunities for work, and health and wellbeing services.

York and North Yorkshire as an exemplar for sustainable travel.

Innovative & Sustainable Businesses. Plan on a Page Appendix A

Vision: York and North Yorkshire will be a UK exemplar in supporting its businesses to reduce GHG emissions, enabling a thriving, innovative and sustainable economy .

Delivery to Date:  Business Net Zero Action Plan  York Green Business Forum  NYC SPF Business Sustainability Programme  CYC SPF Business Support  SPF Business Sustainability Programme 2.0  Dalton Industrial Site Project

Scale of Transformation

- Install 48GWh of solar PV per year; increase use of sustainable bioenergy by 8% by 2038
- Deploy district heat to 22% of businesses by 2038
- Increase industrial electrification from 32% to 50% by 2030
- Retrofit 62% business premises by 2038 and reduce energy demand by 28% by 2030
- Enable circular economy and resource efficiency opportunities at pace and scale
- Improve freight logistics, doubling the proportion of rail freight by 2034

Strategic Priorities

- Boost business resilience and reduce costs through **enabling the shift to reliable, affordable, clean & locally-owned energy**
- Provide the region's businesses with a competitive advantage and new opportunities through **improving energy and resource efficiency, alongside enabling innovation**
- Increase business productivity and improve connectivity through **enabling cleaner logistics and low carbon business travel.**
- Support businesses resilience and security through **climate adaptation measures and advice**

Barriers

- Limited data to inform policy**
- Limited capacity, knowledge & skills**
- Complex supply chains**
- Challenges scaling innovation**
- Issues securing electricity grid connections**
- Economic viability limiting investment**
- Awareness & uptake of circular economy**
- Need for national government policy**

Key Interventions

- Research business carbon intensity
- New funding models
- Increase support to encourage businesses to decarbonise
- Support regional partnerships and clusters
- Shared business energy solutions
- Y&NY as a Circular Economy testbed
- Champion national level policy change

Outcomes

- Increased business resilience
- Reduced costs
- Targeted and effective delivery
- Carbon literate businesses with a competitive advantage
- High-tech and productive business clusters
- A strong regional economy
- Industrial efficiency
- York & North Yorkshire as a national exemplar

Resilient Landscapes, Sustainable Food & Farming. Plan on a Page Appendix A

Vision: York and North Yorkshire will lead the way in partnership working to enable a healthy natural landscape that supports food and water security and utilises nature-based solutions for carbon capture and climate change resilience.

Delivery to Date:



SPF Farm Sustainability Programme



SPF Business Sustainability Programme



YNYCA Farm Study



White Rose Forest tree planting



Peat restoration



Farming in Protected Landscapes scheme

Scale of Transformation

Plant 37,000 hectares of trees by 2038

Restoration is initiated on 100% of upland and lowland peat by 2038

Increase the amount of hedgerows in the region by 20% by 2038, alongside improvements to hedgerow width and health

Decarbonisation of on-farm machinery; focused on electrification, biofuels and hydrogen by 2038

Increase high carbon-capture crops by up to 5,000 hectares by 2038

Undertake baselining of soil carbon potential in farmland soils, 80% of farms by 2030

Strategic Priorities

Support the health of our natural landscapes and climate resilience through **restoring peatland, planting trees, improving hedgerows and enhancing soil quality**

Improve the profitability and sustainability of farms through **increasing the adoption of regenerative and precision agriculture practices**, alongside **improving energy efficiency and switching to renewable energy sources**

Support health, wellbeing and a thriving economy by **improving access to local, sustainable food and reducing food waste.**

Improve the quality and resilience of our rivers, lakes, and water courses through partnership working and sustainable land management.

Barriers

Lack of secure, strategic, long-term funding

Lack of coordinated data

Need for skills & knowledge in sustainable delivery

Strengthening research & innovation

Competing land use pressures

Reliance on national policy change

Lack of national policy on investment markets

Key Interventions

- Delivery of key regional natural capital programmes

- New food, fibre and nature market development.

- Farm carbon baselining

- Skills and regenerative expertise development

- On-farm energy development programme

- Coordination of regional tree planting

Outcomes

Healthy and resilient natural landscapes

Improved farm profitability

Increased flood and drought resilience

Coordinated and effective natural capital delivery

Improvements to on-farm resource use and emissions.

Skilled and innovative workforce

York & North Yorkshire as a national exemplar

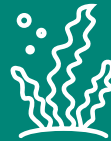
Healthy Marine & Coastal Environment. Plan on a Page

Vision: York and North Yorkshire will be a national demonstrator in nature-based marine and coastal innovation, harnessing solutions for carbon sequestration, flourishing ecosystems, and healthy communities.

Delivery to Date:



Kelp forest surveyed



Seaweed farming established



Marine workshop held

Scale of Transformation

Undertake mapping of sediment carbon storage and marine habitats.

Integrate marine emissions and sequestration into regional carbon abatement inventory

Retrofit or replace inshore fishing and coastal vessels with low-emission alternatives.

Decarbonise coastal public infrastructure (e.g., harbours, sea walls).

Increase hectares of low-trophic seaweed farming

Increase nature-based coastal projects

Strategic Priorities

Better understand the contribution of the marine economy and environment to carbon capture and mitigation

Protect the health, wellbeing, and climate benefits of the marine and coastal environment through robust management and promoting nature recovery.

Improve climate adaptation through strengthening natural marine and coastal defences.

Barriers

Lack of data

Unclear boundaries and regional influence

Limited resources and expertise

Fragmented governance and delivery landscape

Need for long-term funding and investment

Limits to national government policy

Key Interventions

- Develop a regional marine carbon baseline.

- Enable pilot projects and investment in seaweed farming.

- Assess feasibility of retrofitting marine fleets and coastal assets.

- Include marine systems in GHG accounting and scenario modelling.

- Fund and coordinate nature-based coastal protection projects.

- Champion national level policy change.

Outcomes

Improved data to inform delivery

Innovative and regenerated marine and coastal economy hubs

Community engagement and co-benefit delivery

Healthy natural marine ecosystems

National policy influence on marine carbon and coastal nature management

Empowered Community Action. Plan on a Page

Vision: Community groups and their work within communities are at the heart of the carbon negative transition, working collaboratively with the public and private sector to realise new low carbon opportunities that help local communities to thrive.

Key principles:  Resources to equip communities  Clear roles and responsibilities  Community organisations embedded across strategies

Scale of Transformation

Enable the increased use of active travel and public transport, and encourage the shift to low carbon technology e.g. electric cars and bikes.

Improve energy efficiency of buildings by retrofitting to EPC C or above, using sustainable materials and low carbon technology. Install innovative heat solutions.

Increase renewable energy installations, including solar, wind, hydropower, with a minimum 10% community owned, whilst also reducing peak demand.

Increase tree planting and hedgerow coverage; reduce food waste and increase recycling

Retrofit local business premises and adopt circular economy principles in processes.

Strategic Priorities

Increase community-focused sustainable transport initiatives

Support community groups to deliver retrofit demonstrator projects

Accelerate community energy schemes

Increase support for local biodiversity, food, and land use initiatives

Support community and business uptake of circular economy principles

Future-proof our communities against the impacts of climate change through supporting practical adaptation measures

Barriers

Poor availability and consistency of funding
 Capacity constraints
 Access to knowledge and advice
 Lack of clear regional governance
 Ensuring effective communication
 Variety of group motivations
 Funding and support to deliver key projects
 Challenges communicating circular economy and active travel benefits
 Wider support required
 Disconnect between regional and local delivery

Key Interventions

- Work to secure funding for community groups
- Skills and Business support
- Regional knowledge hubs
- Framework for collaboration
- Community Champions
- Support a regional network
- Support community biodiversity initiatives
- Build on the circular economy movement
- Funding and support for community energy
- Community focused transport campaigns
- Champion working with communities
- Develop stronger communication channels

Outcomes

Benefits of carbon negative felt locally

A strong, well-resourced network of community organisations

Skilled community leaders

Clean, locally owned energy

Greener, more connected neighbourhoods

Healthy and thriving communities