



Northumberland County Council

COMMUNITIES AND PLACE OVERVIEW AND SCRUTINY COMMITTEE - 6TH OCTOBER 2021

NORTHUMBERLAND CLIMATE CHANGE UPDATE

Report of: Matt Baker, Service Director for Climate Change, Business Intelligence and Corporate Performance

Cabinet Member: Cllr Glen Sanderson, Leader of the Council

Purpose of report

To provide an update on progress against the Climate Change Action Plan 2021-23, published in January 2021.

Including progress against the two key pledges of reducing Northumberland County Council carbon emissions by 50% by 2025 and of reducing Northumberland's entire carbon emissions to net-zero by 2030.

Recommendations

1. Note governance arrangements and grants of over £8m awarded to date in FY 2021/22 with a further £6m identified.
2. Note the progress made to date, including achieving the 50% reduction in County Council emissions, ahead of the 2025 target, and the 8% reduction in County emissions.
3. Note and support the strategic changes implemented to embed Climate Change into everyday ways of working, which may result in recommendations to change or adjust key decisions (Policy, Planning, Procurement, Performance).
4. Pro-actively engage with the Climate Change team to enable even more engagement with residents, communities, and local businesses.
5. Continue to engage directly with the Climate Change service, to scrutinise and support key decisions, but also to be active in considering the Climate Change impact when providing scrutiny across all areas of the Council.

Executive Summary

1. Robust governance of the Climate Change programme has been established including:
 - a. A steering group made up of external representatives of climate action groups, business, agriculture and the third sector which meets quarterly.
 - b. A cross-party working group made up of elected members representing Conservatives, Labour, Independent Group and Green Party which meets quarterly.
2. The following progress has been made following the commitment to make Climate Change a key priority for the Council.
 - a. Following the analysis of CO2 emissions produced by Northumberland County Council in the financial year 2020-21, the target of reducing emissions by 50% against 2010 levels has now been achieved 4 years ahead of the 2025 deadline. This result is sensitive to the impact of a fall in business miles as a result of the COVID-19 pandemic.
 - b. Following the release of the most recent emissions data for Local Authorities (2019), Northumberland now needs to reduce annual emissions by 681 kt CO2 in order to reach net-zero emissions by 2030, a reduction of 8%.
3. In 2021/22, we have so far been successful in attracting over £8m and bids are in progress to access an additional £6m.
4. It should be noted that our target to be net zero by 2030 is sensitive to a number of key national policy decisions and solutions. In particular:
 - a. Decarbonisation of and access to the national grid at the required scale.
 - b. The Hydrogen strategy.
 - c. The Environment Bill.
 - d. Ban on internal combustion engine cars.
 - e. Revisions to the 'National Policy Framework'.
 - f. Affordability, especially for residents, to adopt and run green solutions.
5. To make Climate Change part of everything we do at the Council four strategic changes to ways of working have been introduced to Policy, Planning, Procurement, Performance and People:
 - a. All key policy decisions will be subject to a Carbon Impact Assessment. Outliers will be escalated through governance channels as required.
 - b. The Climate Change Team now act as consultees to all planning applications that could have a positive or negative impact on emissions.
 - c. Working in partnership with the procurement team a specific focus on Net Zero is included in the procurement / commissioning process for all new contracts.
 - d. The activities undertaken to deliver net zero are monitored through the Corporate Performance Cycle.
 - e. We are implementing Carbon Literacy training across the Council to support the culture change required to deliver net zero.
6. We are consulting and engaging with our residents in a number of ways:
 - a. 10 Climate Change community groups participated in the pilot Community Climate Champion Scheme.
 - b. Extending the Climate Champion Scheme to another 15 communities, before we scale the approach across all Wards, Town and Parish Councils.
 - c. Live town hall events have been held online to engage with the public through the Pandemic.

- d. Over 5000 residents have signed up to be part of the Council's resident network for climate change.
- e. We are engaging with schools to integrate Climate Change into the core curriculum.
- 7. We are consulting, engaging and training all our staff through rolling out Carbon Literacy Training across the entire Council.
- 8. Projects are underway across the 5 direct action areas identified in the climate change action plan 2021-23 namely Heat, Transport, Renewable Energy, Sequestration and Waste. When delivered these projects will deliver a 31.5 ktCO₂ reduction.
- 9. Working across a number of service areas we are actively exploring opportunities to deliver innovations and improvements to existing resident facing services where there is a net zero opportunity, examples include:
 - a. With Planning as part of day-to-day planning work (application by application) alongside more strategic work to change how organisations offset emissions to have a more immediate impact on local communities.
 - b. With Housing to explore opportunities to connect traditional maintenance activities to innovations, like solar roof tiles and local 'smart-grids', that may help residents save money and carbon.
 - c. With Neighbourhood Services to explore a more radical approach to decarbonisation of the fleet through a mixture of transport technologies.
 - d. With Children's and Adults' services to connect some of our most vulnerable residents to grants that target fuel poverty and climate change.
 - e. With Estates to accelerate the decarbonisation of the Council's estate.
 - f. A significant increase in the scale of our interventions (number and impact) is required to deliver net zero by 2030. Work is underway to create year on year targets for decarbonisation across the priority action areas. This data will inform and shape project priorities beyond 2023 and funding requirements to achieve net zero (Revenue and Capital).
- 10. Key to delivering Net Zero will be local, national and global behavioural change alongside specific actions we can take to attract Private Sector investment and create effective delivery partnerships. To help Northumberland residents benefit as much as possible from the growth in the green economy a number of activities are underway:
 - a. Working with Economy & Regen and Advance, a Net-zero Investment Strategy is being developed to put Northumberland at the forefront of the green job revolution and help to create a supply chain that works for rural counties.
 - b. We are building relationships with key partners including Borderlands and the North of Tyne Combined Authority. We will use the Climate Change evidence base to inform our work with these partners, to inform decision making and help our residents get fair representation and value for money from these devolution deals.
 - c. We are building relationships with the government departments who are crucial to delivering net zero, like BEIS and government delivery partners, like the Northern Powergrid. We also have a small amount of ministerial engagement on a key project for 'off grid' communities.
 - d. We are also building delivery partnerships with organisations, like the National Park Authority, the Forestry Commission and the business community.
 - e. Where the market cannot offer affordable solutions for our residents and communities, we are considering the viability of delivering more services to residents: in-house, using not for profit organisations and potentially through a new arm's length Council-owned Green Company.

Link to Corporate Plan

The Climate Change programme contributes to all the priorities included in the Northumberland County Council Corporate Plan 2018-2021:

- How - efficient, open and work for everyone: We will listen to and consider public views as we develop and implement our plan and we will empower local communities to do their part to tackle climate change.
- Living - living, safe, healthy and cared for: We will work to reduce the impact of fuel poverty and climate change on community wellbeing.
- Enjoying - love where you live: We will conserve and protect our exceptional natural environment assets.
- Connecting - access to the things you need: We will promote resident access to sustainable transport options and renewable energy sources.
- Learning - achieve and realise your potential: We will encourage the uptake of science, technology, engineering and maths (STEM) skills to support the development of our green economy.
- Thriving - attract more and better jobs: We will position the county as a national exemplar location for renewable and low carbon energy generation and other green industry.

Introduction

Having declared a Climate Emergency in summer 2019, Northumberland County Council made the following two pledges:

- Reduce Northumberland County Council's own carbon emissions by 50% by 2025 against a 2010 baseline.
- Work with national government to reduce the county of Northumberland's total carbon emissions to net-zero by 2030.

Since making the declaration, a programme of work has been set up and a dedicated team established to support work towards these ambitious targets. The first detailed Climate Change Action Plan (2021-23) was published in January 2021 and set out projects scheduled for the next two years together with a modelled route to net-zero. This modelling set out for the first time, the scale of the net-zero challenge in terms of the number of residents whose homes would need to decarbonise, the number of vehicles which would need to be replaced by zero tailpipe emissions and the number of trees and other land use changes which would need to be implemented to bring emissions down to net-zero.

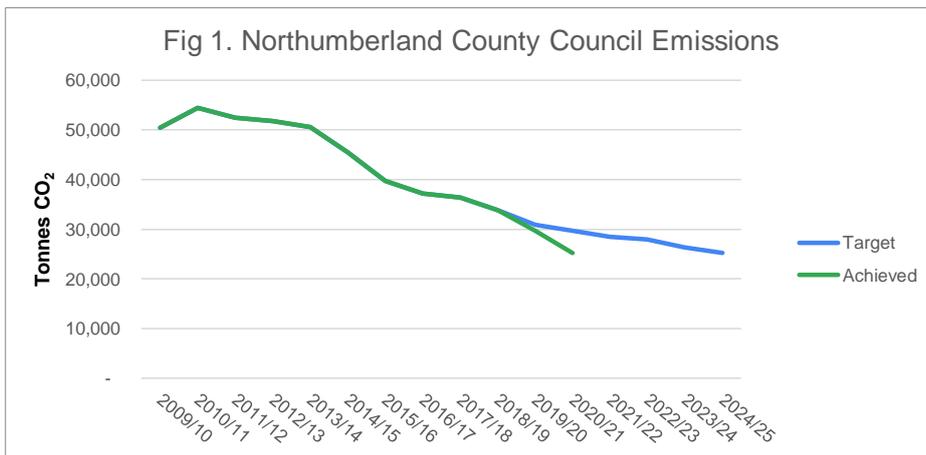
Since the publication of the Climate Change Action Plan 2021-23, the Council has been making progress against the various projects and targets set out within. This report outlines that progress.

1. Northumberland County Council Carbon Emissions

In its statement of intent, published upon the declaration of a Climate Emergency in June 2019, the Council set out a Carbon Management Reduction Commitment which would take the Council's total carbon emissions from 50.46kt CO₂ in 2010 to 26.96kt CO₂ in 2025, a reduction of 50%.

1.1. County Council Emissions

Using information available up and to including the 31st March 2021 the Council is now reporting emissions of 25.21kt CO₂ compared to 50.5kt CO₂ in 2010 and therefore has achieved a 50% reduction in emissions - see figure 1.



The reduction in emissions in 2020/21 exceeded both our target and our most ambitious forecast, the main drivers for the reduction in emissions were:

1. A reduction in business travel and fleet mileage.
2. The completion of the LED roll out to UMS street lighting.
3. An increasing number of Council buildings are having their electricity supplied, in part, by solar technology.
4. The fleet replacement programme.

Important Note:

- A number of Council controlled schools have become academies; these have been removed from both the baseline and reported position.
- The Covid-19 pandemic forced a rapid change in the way our employees work and move around the county. This has resulted in a significant drop in emissions from areas such as business mileage. While we don't expect these emissions to return to pre-pandemic levels, they could rise as the pandemic fades and we move to a hybrid way of working.

Next Steps

The Council must not be complacent in continuing to tackle its emissions both in order to maintain its performance against its stated target and also to continue to build its reputation as an exemplar of good practice.

To ensure that the Council's carbon emissions continue to fall, a number of key projects are underway.

Fleet Replacement Programme

The Council is in the process of replacing its small van fleet with electric vehicles (EVs) as internal combustion engine (ICE) vans reach the end of their lifespan. A target of replacing 70 vans by 2023 a total of 56 vans are in the pipeline this financial year. This will lead to a CO₂ reduction of 200 tonnes per year.

We have now moved on to looking at the next class of vans (transit size) and whether these could be replaced by EVs. Currently, there is nothing on the market which meets service needs. The market is however, changing rapidly so ICE vans are currently being repaired and maintained beyond their normal lifespan as we await electric alternatives.

In addition to vehicles, replacement of handheld equipment such as brush cutters and hedge trimmers with electric alternatives has also been underway.

Public Sector Decarbonisation Fund

The Council has been successfully awarded £3m in grant funding towards decarbonisation of its estate. This project is installing Ground Source Heat Pumps (GSHPs) in the following 6 locations:

Willowburn Leisure Centre
Swarland Primary School
Stamfordham Primary School
Stannington Primary School
Belford Fire Station
Lindisfarne Centre

This will lead to a CO₂ reduction of 333 tonnes CO₂ per year and will be completed this financial year.

Solar Car Port

The Council is in the process of building a solar car port over its County Hall car park. In conjunction with the already installed roof mounted solar, once complete, this will supply 50% of County Hall's energy demand and save 269 tonnes CO₂ per year. This project was delayed due to procurement issues and is now scheduled for completion by summer 2022.

Business Miles

In the financial year 2020-21, business mileage reduced by 63.7% compared to the previous year. This was driven by the Covid-19 pandemic and the ensuing rapid change to virtual meetings in place of physical.

As the WorkSmart programme begins to push an era of hybrid working, the Council's business mileage claims are likely to rise again.

In order to reduce the risk of business mileage rising to pre-Covid levels, each service area will be asked to agree KPIs which balance service need against a business mileage reduction target. These KPIs will be monitored through the corporate performance system.

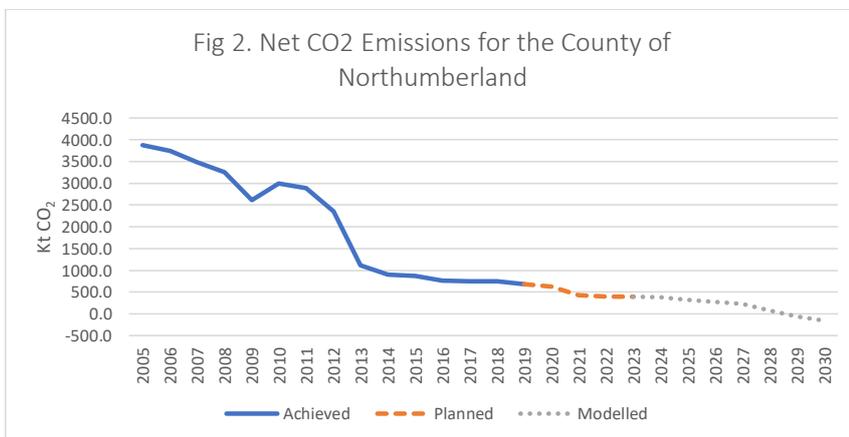
Detailed baseline

Alongside these activities we are building a detailed baseline position of all the Council's sequestration and carbon saving opportunities to inform future projects.

1.2. Net-Zero Northumberland

In our statement of intent, published upon the declaration of a Climate Emergency in June 2019, the Council set out our ambition to 'work with the Government to achieve carbon neutrality for the county of Northumberland by 2030.' In our Climate Action Plan 2021-23, the Council set out the known projects it would lead until 2023 and set out a model for reaching carbon neutrality, also known as 'net-zero' by 2030.

At the time of its publication, the most recent figure for Northumberland's net emissions as published by the Department for Business, Energy and Industrial Strategy (BEIS), was 731kt CO₂ (2018). Since then, the data for 2019 has been published which puts this figure at 681 kt CO₂. This is a reduction of 60 kt (8%) against the emissions reported in 2018. Compared to the national average for Local Authorities, which saw a reduction of 34 kt (3.6%) against the emissions reported in 2018. Figure 2 below shows the trajectory of carbon emissions in Northumberland since 2005 up to the most recent report in 2019.



2. Key dependencies

The planned and modelled emissions to 2030 are dependent both on central government policy and on our local action.

2.1. Grid Decarbonisation

The use of renewables to power national electricity demand is the single biggest external influencing factor on our ability to reach net-zero as a county.

Current projections indicate that by 2030, the electricity grid will have decarbonised substantially. We estimate this will reduce emissions from electricity use in Northumberland by 298 kt CO₂. The Council does not have direct control on this trajectory and must keep a watching brief in order to assess the local implications if national targets are not met.

2.2. Hydrogen

According to the UK Hydrogen strategy policy paper, hydrogen will play a key role in meeting the 2050 net-zero goal targeted by the UK.

As a first step, the UK has set an ambitious production of 5GW of energy by 2030 using what is known as low carbon hydrogen. Within the North East, the key areas for hydrogen have been identified as transportation, distributed generation and power-to-gas, where intermittent renewables are integrated into the grid by producing hydrogen at times of high generation but low demand.

Due to the immaturity of the technology, hydrogen is not currently part of our plans to reach net-zero by 2030. However, if the government strategy comes quickly to fruition, hydrogen could become a source of low-carbon energy within our net-zero target timeframe.

2.3. Environment Bill

The new Environment Bill has now proceeded to the House of Lords and is likely to become law imminently. The main aims of the Bill are to:

- Transform our environmental governance once we leave the EU by putting environmental principles into law, introducing legally binding targets, and establishing a new Office for Environmental Protection.
- Increase local powers to tackle sources of air pollution.
- Protect nature and improve biodiversity by working with developers.
- Extend producer responsibility, ensure a consistent approach to recycling, introduce deposit return schemes, and introduce charges for specified single use plastic items.
- Secure long-term, resilient water and wastewater services, including through powers to direct water companies to work together to meet current and future demand.

Work is underway across relevant parts of the Council to prepare for the changes the new Environment Bill will introduce. This includes the pilot Local Nature Recovery Strategy which will in due course detail a local plan to protect nature and improve biodiversity. In addition, work in Neighbourhood Services is underway to plan for the increase in waste collections which will be required through the new consistent approach to recycling.

2.4. Environmental Land Management Schemes (ELMS)

New Environmental Land Management Schemes are being designed by DEFRA that will reward environmental land management across:

- Sustainable Farming Incentive
- Local Nature Recovery
- Landscape Recovery

These schemes are intended to support the rural economy while achieving the goals of the 25 Year Environment Plan and a commitment to national net zero emissions by 2050. Through these schemes, farmers and other land managers may enter into agreements to be paid for delivering the following:

- Clean and plentiful water
- Clean air
- Thriving plants and wildlife
- Protection from environmental hazards
- Reduction of and adaptation to climate change
- Beauty, heritage and engagement with the environment

These schemes will be relevant to the Climate Change Programme, in particular the LNRS and the Great Northumberland Forest.

2.5. UN Climate Change Conference COP26

COP26 will be held in Glasgow from 31st October to 12th November 2021. The run up to this year's summit in Glasgow is the moment (delayed by a year due to the pandemic) when countries update their plans for reducing emissions. The commitments laid out at COP21 in Paris did not come close to limiting global warming to 1.5 degrees, and the window for achieving this is closing. COP26 is aiming to be a decisive summit where countries agree to much more significant measures to reduce global warming than at Paris.

With COP26 taking place in the UK, there will be global focus on the UK's response to Climate Change. A bid has been made to showcase the work of the Borderlands Energy Masterplan in the UN Pavilion for which we are awaiting the outcome. We will also look to harness the awareness raised by COP26 for climate change by running a range of communications and engagement activities which are currently being designed.

2.6. Internal Combustion Engine Ban

Government have brought forward the proposed ban on the purchase of new internal combustion engine (ICE) cars to 2030. This legislation will drive a shift towards zero tailpipe emissions vehicles which we are factoring into our modelling. Any changes to this legislation will affect the reduction of emissions from private vehicles.

2.7. National Planning Policy Framework

The revised National Planning Policy Framework sets out government's planning policies for England and how these are expected to be applied. Changes to national planning policies such as building regulations can impact our ability as a Council to reach net-zero emissions.

2.8. Affordability of Green Solutions

Whilst many of the technologies exist to reach net-zero, there are still many barriers to applying them in the homes and businesses across our county. Not least amongst these is

affordability. Many solutions such as air or ground source heat pumps are expensive to install and can be expensive to run.

3. Changes to how the Council works to support climate change

Through enhancing the processes at key decision points across the Council and ensuring the highest levels of carbon and climate literacy across the entire workforce we are starting to put climate change at the centre of what we do as a Council.

3.1. Policy and Carbon Impact Assessments

To ensure that carbon emissions are considered in all key projects and policy decisions, a Carbon Impact Assessment has been designed which will be used by officers to calculate a carbon score against their proposals. This can then be considered by both executive and elected decision makers. A separate paper has recently gone to Execs and Informal Cabinet detailing this process. Carbon Impact Assessments will begin to be carried out across key parts of the organisation from September 2021, this will cover Member's Priorities, Service Strategies and Service Delivery activities. The output from the carbon impact assessment will be used as a tool to flag and resolve policy conflicts.

3.2. Planning

As the Northumberland Local Plan nears adoption, the Climate Change team are working closely with colleagues in Planning to support the additional implementation of supplementary planning documents which will support the net-zero target. These will encourage developers to adopt renewable technologies to reduce the carbon impact of developments.

The Climate Change Team are now appointed consultees in the planning process and are receiving relevant planning applications in order to review and comment from a climate change perspective.

3.3. Procurement

The Council now has in place a Procurement Corporate Social Responsibility (CSR) policy which aims to address sustainability in our supply chain.

The Procurement CSR policy seeks to minimise or eliminate carbon emissions, waste and other negative environmental impacts within the Council's commissioned services and wider supply chain. The policy includes six strategic commitments for mandatory consideration at the early stages of every procurement and commission of external goods, works and services over £50,000.

- Waste Reduction
- Improve Social Value
- Improve Health & Wellbeing
- Reduce CO₂ & Green House Emissions
- Combat Modern Slavery
- Increased use of SME and local suppliers

This policy recognises that, whilst wider supply chain issues are outside the scope of the Council's 2030 net zero target, the Council has an ethical and moral responsibility to reduce global emissions and environmental degradation in any way that it can.

3.4. Performance

From Q1 2021, progress of the Climate Change programme will be monitored through the quarterly corporate performance report. Climate Change will report against a number of agreed performance indicators relating back to member priorities. These are:

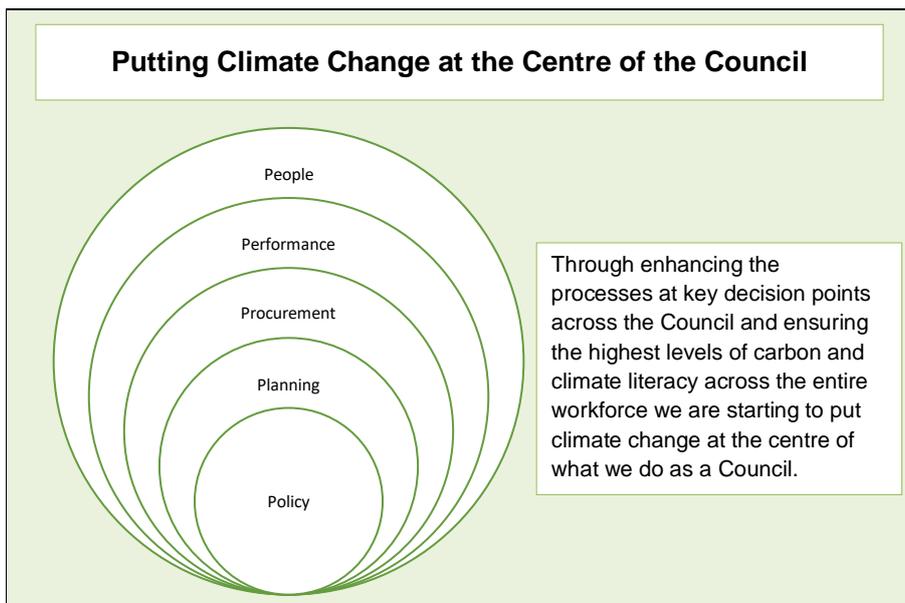
1. Council owned carbon emissions
2. Fleet replacement
3. Tree planting
4. Recycling
5. EV Charge Points
6. County owned carbon emissions

Key external factors such as grid decarbonisation and electric vehicle take up will also be tracked. Associated risks will be flagged to the Climate Change team in order to make key strategic decisions in good time.

Individual projects will report through the agreed governance mechanisms to the Programme Manager and Service Director. A monthly programme status report is compiled for the Service Director and can be provided on request. This report will also be presented at quarterly meetings of Steering Group and cross-party Working Group.

3.5. People and Carbon Literacy Training

The Council has begun offering a carbon literacy training programme to its workforce in order to ensure the impacts of climate change and the means of mitigating them are understood across the organisation. This training has received positive feedback and so far, a total of 39 members of staff have completed the training.



4. Engaging with our residents and communities

Delivering net zero is fundamentally a massive behavioural change programme, not just for Northumberland but for the world. To help deliver this for the county we are placing a significant focus on partnerships and engagement with our residents, businesses, visitors and partner organisations.

4.1. Community Climate Champions

The Community Climate Champion scheme was set up to give residents and community groups the opportunity to educate their communities and empower them with their own community climate Action Plans at a local level.

This approach has now been piloted and was largely successful. 9 action plans were developed through the pilot and feedback was positive. The action plans were developed by champions in the following locations:

- Ashington
- Felton
- Alnwick
- Corbridge
- Haltwhistle
- Humshaugh
- Rothbury
- Slaley
- Newbrough, Fourstones and Warden

The pilot process is currently being reviewed and phase 2 will be launched at the end of September, inviting a further tranche of up to 15 community climate champions to join.

In the longer term, we will be developing a toolkit to allow community groups to develop action plans based on relevant local datasets without the need to go through an involved process with the Council. This will allow the model to be scaled up significantly and is expected to be available from early 2022, including with Town and Parish Councils.

4.2. Additional Community Engagement

In addition, where groups including Town and Parish Councils have proactively sought support, we have with members and communities on case-by-case basis to help develop their plans.

The Climate Change Team is building a database of which Town and Parish Councils have declared a climate emergency or wish to take action against climate change. Following this process, we will pursue a coordinated engagement approach to all Town and Parish Councils.

In addition to the Community Climate Champions Scheme we have a number of other ways of engaging with residents. A monthly newsletter goes out to 5331 subscribers. We have

held 3 virtual events for residents and have a 4th scheduled on 29th September. In addition, we have attended 9 community based or national events to share the County's plan for climate change.

4.3. Climate Change Steering Group

The membership of the Climate Change Steering Group has been increased to ensure that the interests of business, farming and the third sector are included alongside the climate action groups which already attend.

4.4. Schools and Education

As part of the school's outreach scheme pilot the Climate Change Team and a local climate champion visited Bothal Primary School in Ashington. The creation and launch of a programme within the school was discussed, with the next action being a meeting with the head of curriculum teachers and the Climate Change Team to begin creating the programme for Bothal School. The plan is to extend the pilot from here into other schools in the county.

Community Partnerships in action

We are actively supporting the community in Humshaugh to support their local ambition to be net zero by 2030.

Humshaugh Parish has an area of 1,200 ha and in 2011 had a population of 622 living in 290 households. With subsequent developments households now number approximately 350. In 2020 Humshaugh Net Zero (HNZ) was established. HNZ is a Community Interest Company set up with support from Humshaugh Community Ventures Ltd. HNZ will evaluate how Humshaugh could achieve net zero carbon emissions by 2030 and develop and implement plans for so doing.

A household carbon footprint survey was undertaken by HNZ, in association with Newcastle University, which estimated total Parish emissions at 5,300 tonnes of CO₂ per annum.

Plans include projects to decarbonise Humshaugh First School, the Village Shop, Village Hall and Church together with other commercial enterprises in the parish.

To evaluate low carbon electricity generation and heating options HNZ secured a £37,000 grant from the Rural Communities Energy Fund (RCEF). A wide range of technologies have been investigated by independent consultants.

4.5. Free Tree Scheme

To help increase tree planting across the county, and further increase negative emissions, the Council aims to giveaway thousands of young tree saplings to residents, community groups and schools to plant on their land every year until 2030. The Council's ultimate ambition is to give away a free tree for every household in the county.

Whilst this scheme will not have a significant impact on emissions, it has proved an excellent way of engaging residents around climate change and disseminating information.

In 2020, 7,000 of the allocated 15,000 trees were distributed to residents and groups. This was due to the impact of local and national lockdowns through the late autumn and early winter distribution period. The surplus trees were planted by the Council on Council-owned land.

In 2021 we are aiming once again to give away 15,000 free trees. Booking has just opened with 6612 trees being claimed as of 13/09/21.

5. Council Led Projects

The total reduction in emissions up to 2023 from Council-led projects is estimated at 31.5kt CO₂. A summary of the projects underway is provided below.

5.1. Heating New and Existing Buildings

Green Homes Grant

The Council has been successful in receiving an award of £3m in grant funding towards improving energy efficiency in some of the County's most inefficient and low-income homes.

This project is in the process of installing external wall insulation, air source heat pumps and solar PV onto a target of 340 homes (140 social, 200 private). This will have an anticipated carbon saving of 197 tonnes CO₂ per year.

Funding for the next round of this programme has already been awarded which will allow measures to be introduced to a further 200 private homes.

Additional future funding has been signposted by BEIS and the Council will be bidding for this as it becomes available.

Local Authority Delivery (LAD) Grant



Up to £10,000 worth of funding available for your home¹

Northumberland e-on

Improve your home with the Green Homes Grant

Launched by the Government, the Green Homes Grant is a scheme to help homeowners pay for energy saving improvements to their homes, helping to reduce energy bills and improve home warmth. We're delivering this scheme in partnership with Northumberland County Council.

Turnover to find out what you could benefit from and how to apply.

Through this grant we are able to use funding made available through central government to help some of our most vulnerable residents save money on their fuel bills and at the same time reduce the Carbon footprint of both Privately owned and Local Authority owned domestic properties.

This is the first of a pipeline of similar grants being made available through BEIS.

District Heat Networks

Work continues to develop the proposals for low carbon district heat networks in our main towns. Funding has been awarded for the first stage of investigation (heat mapping) in Alnwick, Ashington, Berwick, Hexham and Morpeth which is about to go to procurement. Completion of this process is expected in December 2021

Funding has also been awarded for the second stage of design (technoeconomic feasibility) in Blyth and Cramlington. This is also going to procurement and completion of this process is expected in February 2022. Providing the network is proven to be viable, this will lead to a programme of capital works in 2022.

5.2. Transport

Electric Vehicle Charging Points

The Council continues to improve the EV charging network in Northumberland. In Financial Year 2020/21 an additional 12 charging points were installed in Council-owned car parks. 22 new charging bays will be installed in public car parks in 2021/22. In addition, £130,000 of funding was awarded through the Office for Zero Emissions Vehicles (OZEV) On Street Residential Chargepoint Scheme (ORCS) for the installation of 30 'on-street' charge points targeted at residents without off-street parking. These will be installed by December 2021. This means that an additional 52 charge points will be installed this financial year.

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Furthermore, the solar car port at County Hall will include 120 charge points for Council staff by summer 2022.

We anticipate a growing demand for charging infrastructure for residents without off-street parking as the deadline for the sale of new ICE vehicles approaches (2030). It is therefore anticipated that the Council will continue to bid for funding from OZEV towards this in future years.

5.3. Renewable Energy

The solar car port reported under section 2 is the main project being delivered towards renewable energy provision.

5.4. Carbon Sequestration

Since the Council made the facilitation of large-scale woodland creation and tree planting a priority in 2019, over 767 hectares of woodland have been created with an additional 240,000 trees planted elsewhere. It is estimated that this additional woodland has the potential to sequester up to 59.75 ktCO₂ by 2030.

A programme manager and environment analyst have been recruited to the Great Northumberland Forest programme and a formal launch event is scheduled for this autumn.

The programme continues to engage with landowners and to identify land which may be appropriate for woodland creation and will henceforth report its progress against these targets through the corporate performance system.

5.5. Waste

Developing the Council's circular economy strategy will be at the centre of our approach to Waste. This will link closely to the Net Zero Investment Strategy. Our circular economy strategy will set out the Council's role in shifting the Council and the County from today's take-make-dispose mindset, to a restorative—using and reusing as efficiently as possible culture.

A paper has also been drafted for Cabinet regarding the glass recycling pilot undertaken in 2020/21. Funding has been requested to extend this for an additional year which would see a further 250 tonnes of glass collected from the kerbside in pilot areas. Currently, the carbon impact of this process is not fully understood, and work is ongoing to address this.

In the longer term, the Government's national waste strategy is likely to impose a statutory requirement to collect both glass and food waste from the kerbside. Work is ongoing to assess both the financial and carbon impact of providing this service.

6. Service Innovations and the Pipeline after 2023

A significant increase in the scale of our interventions (number and impact) is required to deliver net zero by 2030. Work is underway to create year on year targets for decarbonisation across the priority action areas. This evidence base will inform and shape project priorities beyond 2023 and funding requirements to achieve net zero (Revenue and Capital).

Whilst we are building the complete picture, a number of activities are underway to enhance existing ways of working to integrate climate change into key decision-making points for services that can have a significant impact on achieving net zero, including:

- With Planning as part of day-to-day planning work (application by application) and more strategically to influence how organisations offset emissions to have a more immediate impact on local communities.
- With Housing to explore opportunities to connect traditional maintenance activities to innovations, like solar roof tiles and local 'smart-grids', that may help residents save money and carbon.
- With Neighbourhood Services to explore a more radical approach to decarbonisation of the fleet through a mixture of transport technologies, including alternative fuels as a steppingstone to full decarbonisation.
- With Children's and Adults' services to connect some of our most vulnerable residents to grants that target fuel poverty and climate change.
- With Estates to accelerate the decarbonisation of the Council's estate.

Beyond 2023, there are a number of projects we are already planning for, alongside work that is underway to determine a detailed evidence base for the targets these projects need to achieve in order to deliver net zero by 2030. Projects in the pipeline include:

6.1. District Heat Networks

The projects set out previously will take several years to reach their full potential. Beyond the initial stages of feasibility and phase 1 capital build, we intend to develop and grow these networks to serve many more customers in our towns with low-carbon heat.

6.2. Off Electricity Grid Properties

The Council is part of a working group seeking ways to provide properties not currently connected to the Electricity Grid with low carbon electricity generation solutions.

6.3. Electric Vehicle Charging at Scale

As we approach the 2030 ban on Internal Combustion Engine (ICE) vehicles, it is anticipated that between 600-1000 charging points will need to be made available to residents who park on the street. The Council is investigating how the current pilot of on-street charge points can be scaled up to meet this demand. Alongside which the Council is exploring how to encourage the behavioural shift needed at the scale required to reduce the county's transport emissions.

6.4. Opportunities to increase the scale of tree planting

Working with the Great Northumberland Forest team, elected members, landowners and the farming community, we are exploring opportunities to increase the rate and scale of planting 'the right tree'.

6.5. Peat

Peat could help sequester large amounts of carbon within Northumberland if restored and managed correctly.

Work has already been undertaken by the Northumberland National Park Authority to restore 150 hectares of peat on the Cheviot summit with a carbon sequestration potential of -585 tonnes CO₂ per year. Further restoration has taken place outside the NNPA both north of the A69 through the work of the Northumberland Peat Partnership and south of the A69 through the North Pennines AONB.

The Northumberland Peat Partnership has recently bid for funding to undertake more comprehensive conditional surveys of peat across the county in order to understand what restoration work is required and what the CO₂ sequestration potential might be.

6.6. Home Energy Improvements

Additional future funding has been signposted by BEIS for continued energy efficiency improvements of low-income homes. The Council will be bidding for this as it becomes available. This includes future iterations of the Green Homes Grant Local Authority Delivery Scheme (LAD 2 and 3), the Home Upgrade Grant (HUG) and the Social Housing Decarbonisation Fund (SHDF).

7. Benefiting from the Green Economy

Through a range of activities designed to ensure we benefit from the expected surge in the green economy our ambition is to help residents feel valued and connected to their communities and the regional green vision.

7.1. Net Zero Investment Strategy

The NCC Net-zero Investment Strategy will create a robust framework to assist the region in attracting the 1.6bn of investment needed to become net-zero, create 11,000 green jobs and improve the quality of lives (socially and economically) for Northumberland residents.

Allowing Northumberland to be at the forefront of the green job revolution and specifically help to create a supply chain that works for a rural county. Through the strategy we will create the conditions where our economy (jobs, skills and employers) enables a vision for Northumberland in 2030 where we:

- Are known as the greenest county in England, especially through our role as the 'lungs of England'.
- Make the most of all our resources (renewables, sequestration, circular economy).
- Heat and power our homes and communities in the most sustainable way possible, accounting for the complexities of rurality.
- We get around the county in a sustainable way, including through active transport.

We will work closely with the Regeneration and Economy service and with Advance to develop and deliver this strategy.

7.2. Borderlands Inclusive Growth Deal

The Borderlands Inclusive Growth Deal includes a £31m fund for low carbon energy investments, and a £10m fund for natural capital investment across the two Countries. Designed to drive economic growth through new job creation there is a specific aim to decarbonise through emission reductions from businesses and residents, transport and travel and sequestration. There is a strong focus on more community and distributed energy systems to ensure growth is inclusive to the areas that make up Borderlands. A Low Carbon Energy Masterplan will be published by the end of the year to showcase the calculated economic and social opportunities and needed priorities for investment, followed up by costed, community driven Local Area Energy Investment Plans one of which will be set up within Northumberland (by the end of 2022). Working closely with the Climate Change team, this work will support emission reductions, engagement and clean growth investments and has a number of strategic objectives which support climate ambitions of Northumberland.

7.3. North of Tyne Combined Authority

Collaboration with NOTCA exists at a number of levels. Members of the Climate Change Team sit on the NOTCA low carbon working group which shapes the combined authority's approach to climate change initiatives and ensures alignment with County plans. Responses from the NOTCA citizens assembly on climate change have been compiled and responded to by the Climate Change Team. Work is taking place in Northumberland already to address the majority of issues raised.

We are also working with NOTCA to ensure we get the maximum return for residents through the NOTCA Green New Deal Fund.

7.4. Local Enterprise Partnership Energy Hub

The Climate Change Team works closely with the LEP and the LA7, it represents both informally to share best practice, and through the Energy Accelerator. The Accelerator provides funding and support for feasibility work with the aim of bringing projects from concept to capital build as quickly as possible.

Implications

Policy	Proposes Council policies should be aligned to mitigate climate change and support carbon reduction.
Finance and value for money	There are no direct financial implications associated with this report Notes that Climate Change work will be subject to corporate performance reporting in order to monitor success including value for money.
Legal	N/A
Procurement	Refers to corporate social responsibility procurement policy.
Human Resources	Possible implications on business mileage. Training of staff in carbon literacy.
Property	N/A
Equalities (Impact Assessment attached) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Where possible projects and programmes will assist residents in fuel poverty and try to bring about fairer and more equal access to more affordable energy.
Risk Assessment	See corporate risk register
Crime & Disorder	N/A
Customer Consideration	Residents of the council can expect the Council to lead a move to a net zero target by 2030. The Council will work to involve all residents and businesses in this process.
Carbon reduction	Adopting recommendations in this paper will either directly or indirectly lead to significant carbon savings.
Wards	All

Background papers:

Climate Change Action Plan 2021-23

Report sign off.

Authors must ensure that relevant officers and members have agreed the content of the report:

	Full name of officer
Monitoring Officer/Legal	Helen Lancaster
Finance	Andy Stewart
Relevant Executive Director	Rick O'Farrell
Portfolio Holder(s)	Glen Sanderson

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