

Carbon Management plan 2022

A plan to be carbon
neutral by 2030



North
Northamptonshire
Council

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**Cllr Harriet Pentland**

Executive Member for Climate
and the Green Environment

Foreword

In July 2021, and at the earliest opportunity for doing so, a Climate and Environment Emergency was declared by the full council. As part of this, we committed to the authority becoming carbon neutral and I was pleased to announce that this would be by 2030.

Right from the get-go, The Council has been clear that climate change and looking after the environment must be the 'green thread' running through the organisation. In line with this, £1 million has been committed as part of the budget for this thus far.

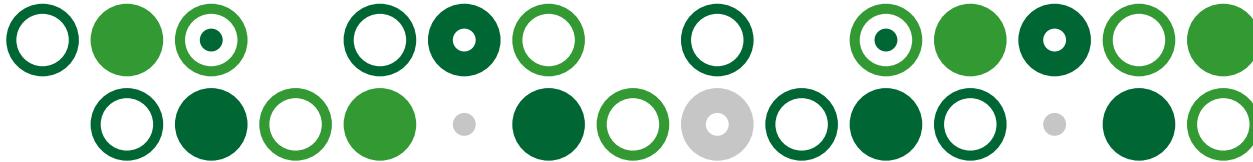
The allocation of the £1 million will be further informed by the Carbon Management Plan, which sets out a series of actions including the development of a 10-year Climate and Environment Strategy.

This has been developed with the assistance of the Climate Change, Environment and Growth Executive Advisory Panel; a cross-party meeting of councillors that I chair. Meeting monthly, the panel helps shape various work and policy in areas such as active travel, air quality management and environmental improvements, such as our own Pollinator Strategy. The Management Plan, which is a living document, details the wide-reaching work to be undertaken across all departments and at all levels to ensure the most meaningful impact.

In looking at the work the council has undertaken in its 1st year, there has been notable progress. For example, over 4000 trees have been planted, with more going in every year following a successful bid for Treescape funding. North Northamptonshire Council is also very proud to have an internationally recognised pollinator project – 'Pardon the weeds, we're feeding the bees', which was highlighted as part of our online climate conference: NNClimate21.

Looking to sustainable transport, a number of on-street electric vehicle charging points have been installed across North Northamptonshire as part of the VPach project, working alongside Liberty Charge. This is in recognition of the significant infrastructure roll out that will be needed to support residents in transitioning to electric vehicles over the coming years. In the same vein, the area has been taking part in an e-scooter trial with Voi. This sustainable mode of travel has been rolled out in the larger towns of the county and already millions of journeys have been undertaken where a car may have been used previously. Another notable action that the council took early on was to include a section in every report which focuses on the climate impact of what is being proposed. This is another example of the green thread being embedded and ensuring climate change and looking after the environment is not tackled in isolation.

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



Introduction

At North Northamptonshire Council, we take our responsibility of reducing emissions in the local area seriously, and we take care to ensure our impact on the environment is as little as possible. We understand that we have a direct responsibility to address climate change, and we know that each small change we make adds up. Everyone within the council is held accountable for helping to achieve carbon neutrality, from personal steps like how they travel to work, to wider actions that can be taken, such as factoring in carbon reduction into service planning and project development. In taking action on climate change, we intend to guide the wider community on proactive steps they can also take, safeguarding our environment for future generations.

The Government's drive to reduce carbon emissions has led to increased regulations in areas such as planning policy, building regulations and energy performance standards. These regulations form a framework for the Council to work within in order to identify the priority areas and means by which it will achieve the target of being Carbon Neutral by 2030.





Why Carbon Neutral

Carbon neutrality, as a term, is used frequently, but do you know what it means? Carbon neutrality refers to the practice of reducing the greenhouse gas emissions that are responsible for global warming to zero.

In order to achieve this, the Council must reduce as much climate damaging carbon emissions as possible. However, no action is without carbon emissions, so it is crucial that any residual carbon emissions that cannot be removed are offset by absorbing an equivalent amount from the atmosphere, for example through carbon capture and reforestation.

Becoming carbon neutral, sometimes referred to as 'climate neutrality', provides an opportunity for the planet to heal, and ensures we are protecting our future for the long term. But the effects of being carbon neutral can be felt close to home as well. Taking measures to operate as carbon neutral will result in wider environmental and economic benefits for our local area, such as reduced emissions locally, investment opportunities in our estate and local infrastructure, and reduced cost from renewable energy sources. Carbon offsetting initiatives also ensure we have naturally beautiful spaces within North Northamptonshire for years to come.



North Northamptonshire Council's Carbon Emissions

The Green House Gas (GHG) Protocol is an internationally accepted and standardised method for calculating greenhouse gas emissions arising from organisations activities. The GHG Protocol breaks emissions sources down into three scopes:

Scope 1 emissions are direct greenhouse gas emissions that occur from sources that are controlled or owned by the reporting organisation. For example, emissions associated with fuel combustion in boilers, or diesel in vehicles operated by the Council.

Scope 2 emissions are indirect greenhouse gas emissions associated with the purchase of electricity, steam, heat, or cooling. They are accounted for by the reporting organisation as they are a result of the organisation's energy use.

Scope 3 emissions include all sources not within an organisation's scope 1 and 2 boundaries. Scope 3 emissions often represent the majority of an organisation's total greenhouse gas emissions. Scope 3 emissions fall within 15 categories, though organisations may not incur emissions in all categories and include emissions both upstream and downstream of the organisation's activities.



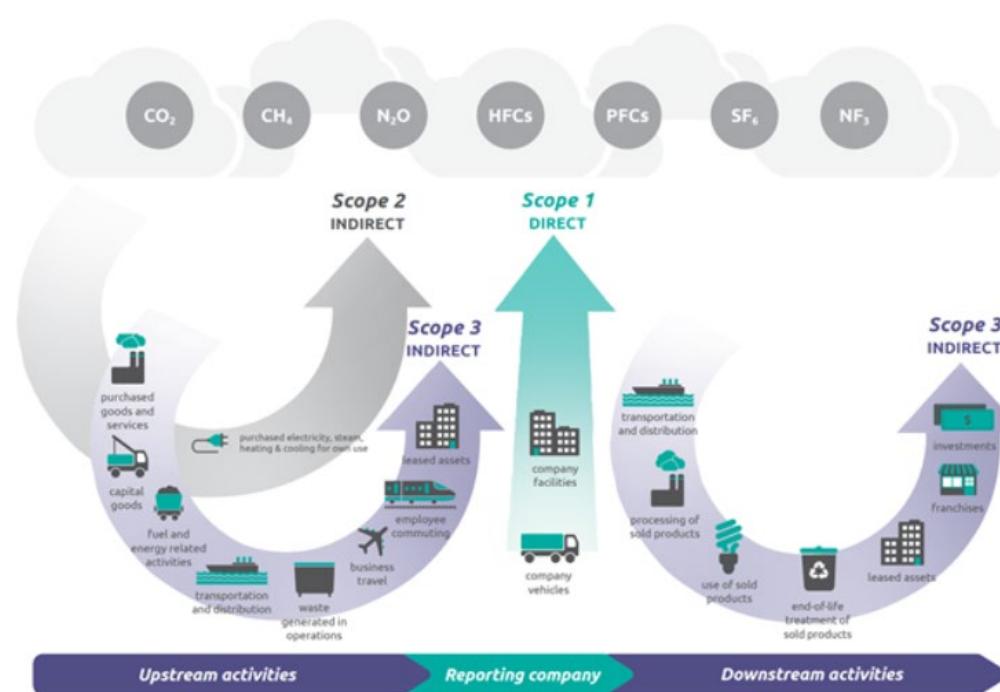


Figure 1. Source: Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard

Figure 1 illustrates the different scopes and activities that feed into an organisation's carbon emissions. Typically, scope 1 and 2 are either directly or indirectly in an organisation's control and so can influence the reduction in carbon emissions more effectively. Scope 3, by their nature are more challenging to measure and control, as they arise as a consequence of an organisation's operations and are not generally responsible for how the carbon is produced or mitigated.

As North Northamptonshire Council is a new organisation, we do not have a historic baseline of carbon emissions from which to work from, which means that it is difficult to get an accurate representation of changes in emissions over time. Therefore, in producing the council's emissions, our focus has been on scope 1 and 2 emissions, and part of our scope 3 emissions.

To date, the Council's carbon emissions have been calculated at 13,607.56 tonnes CO₂e, with the breakdown of 2021/22 emissions shown in figure 2. We know that the top three biggest sources of carbon emissions of the Council are former land fill sites, electricity, and gas.

These calculations have been based on utility use across the Council property estate, street lighting and signage, fuel consumed by fleet operated by the Council, business travel and emissions from closed landfill sites. Areas that are outside of the scope of this calculation include:

- Academies and the school estate where the school pays for utility bills directly, and so is in control of the emissions.
- Leased commercial estate, as the tenant is responsible for emissions by way of use and maintenance.
- The Council's social housing estate that is leased to tenants.

However, we recognise the importance of investment in the above assets to improve environmental sustainability, and we will produce separate decarbonisation plans within the responsible directorates and consider how these assets are considered by the Council's scope 3 reporting in the future.

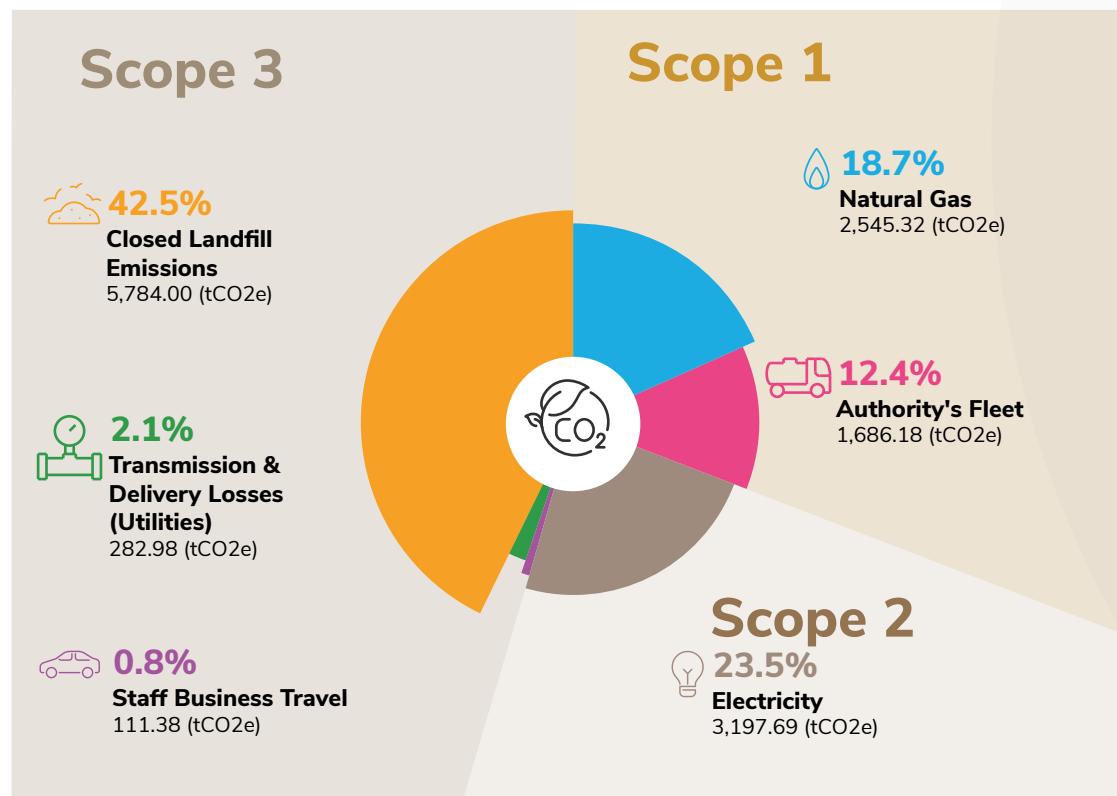


Figure 2: NNC 2021/22 CO₂e Emissions.

As the Council builds on the quality of the emissions data in the coming years, and expands the scope 3 reporting to consider the wider impact of our operations, it is anticipated that our reported CO₂e emissions will rise, requiring a revised baseline. However, the range of activities detailed within the plan, in particular our procurement supply chain, will help us to plan for how we influence and tackle these emissions.



Our Approach

This plan is the first step on the Council's journey to being carbon neutral and has been formed with input from services across the Council, recognising that a cross-directorate approach must be taken to ensure the Council's ambition is achieved.

The Plan is broken down into priority areas, that will enable the Council to explore multiple actions that will yield a reduction in carbon emissions, with particular focus on our biggest emissions. These actions vary from simple behavioural changes, improving the energy efficiency of our buildings, switching to green energy suppliers, to large scale investment decisions in carbon reducing technology, all of which will make a difference in the Council's carbon emissions.

These actions will also inform how the Council allocates funding to achieve its carbon neutral goal. The Council has already set aside £1m of funding to support climate change, however further investment will be required, and it is vital this funding is prioritised to have the greatest effect on reducing and offsetting emissions.

The actions detailed within this plan will require new ways of thinking and operating, and the Council is up to this challenge.

However, it is also crucial that the Council is held to account to its commitment. That is why we have recently become a member of Investors in the Environment, an independent body that will provide guidance, share the learning of others, and audit the Council's progress as part of its accreditation scheme.

We aim to achieve greater levels of accreditation over the coming years, as we refine our carbon reporting, including developing our scope 3 reporting and measure our progress through our annual review of our carbon management plan.

This ongoing process of review and learning will help ensure we continue to embed our climate change ambitions throughout the Council and achieve our carbon neutral goal by 2030.



Buildings

The Council owns a number of buildings which are used for a range of functions, including service delivery, heritage, community and civic. These buildings all require energy, and we want to use energy efficiently and effectively throughout our buildings.

Our initial focus is on property that we own and operate, where we are directly able to influence improvements.

To find the best ways to reduce our carbon emissions, we are collecting energy data from the buildings where we control the supply as part of an ongoing review. This data will be used to assist the Council in emission reduction measures which have the greatest impact.

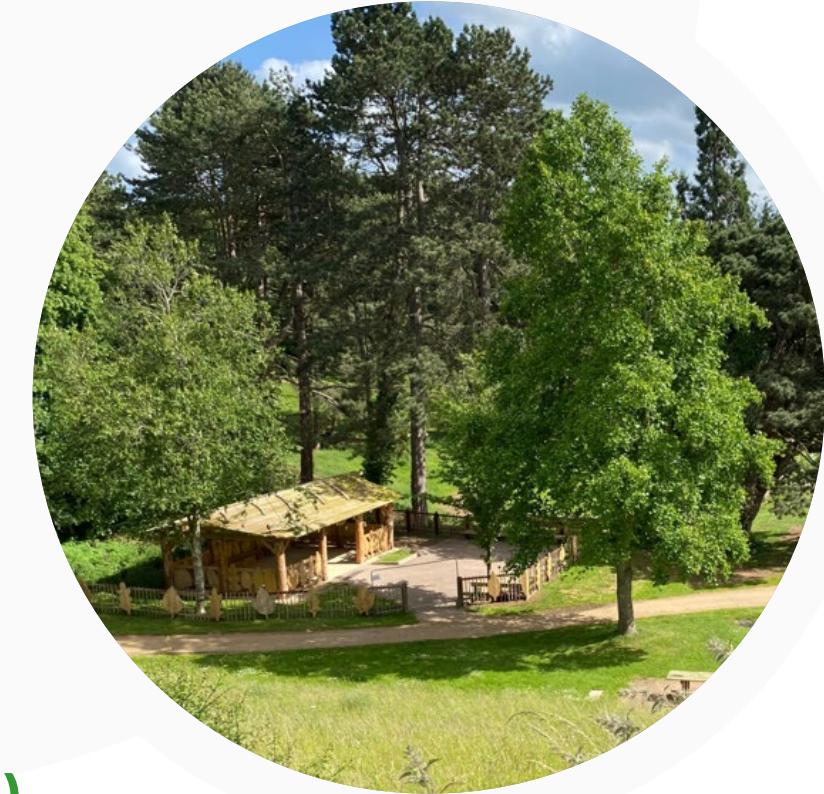
When purchasing energy, the Council buys collectively with other authorities and public bodies to reduce the risks of changing energy costs. This collective purchasing power is focused on increasing the supply of green energy, a very important step in our mission to reduce the property carbon emission quota, and there are opportunities for the Council to explore receiving all its electricity from green suppliers.



Non-Domestic Energy Performance Certificates (EPCs)

Non-Domestic EPCs are a practical way of measuring a building's energy efficiency. Rated on a scale from A-G, with A being very efficient and G being very inefficient, these certificates help to reliably compare the energy efficiency of buildings. This also means that potential buyers, tenants, owners and occupiers can easily see and compare the information about a particular building. Essentially, EPCs help to inform investment decisions in terms of energy efficiency, and as a result, fuel costs.

For non-dwellings, two ratings are shown, the current rating and the potential rating. The actual energy efficiency rating is a measure of the building's overall efficiency. The higher the rating, the more energy efficient the building is. From the 1st April 2023, there will be changes to EPC



regulations for commercial properties, meaning all let commercial properties will need to have an EPC rating of E or above. Landlords will be unable to let commercial properties with a rating lower than E.

The energy efficiency rating is based on the performance of the building itself, which includes things like heating and lighting. The certificate also lists the potential rating, and this indicates what can be achieved if all the recommended cost-effective measures are to be installed. Energy efficiency ratings will vary according to the age, location, size and condition of the building. The potential rating on the certificate will take these factors into account, and the suggested measures will be tailored so that they are realistic for each building.



Evaluating Buildings

An important step to take to help reduce our carbon emissions is to evaluate buildings controlled by the Council. This means thinking about the need for boiler replacements and the upgrading of lighting to LEDs. Additionally, thinking about the need for re-roofing, roof and wall insulation means that we can find places to save energy when it comes to reducing heat loss. Similarly, we will look for places where the installation of solar panel systems might be helpful.

There are a range of different interventions the Council could consider appropriate for each building's individual requirements, but the below provide the key methods for reducing emissions:

- Led Lighting
- Wall and roof insulation
- Replacement windows where possible
- Move away from fossil fuel boilers, including air / ground source heat pumps
- Improved heating system controls
- Renewable installations (e.g. solar PV panels)
- Heat recovery from mechanical ventilation systems.

Building management systems (BMS) might also be installed, where a building's electrical and mechanical equipment can be controlled and regulated. This includes lighting control, heating, and ventilation, for example. Similarly, an evaluation of buildings might also include building rationalisation, where we look into ways to simplify buildings in order to improve energy efficiency.

Ways to Save Energy



There are lots of simple ways that we can save energy and it's one of the easiest ways to reduce emissions. Even making small changes to the way that buildings use energy can mean big cost and carbon savings. To save our buildings' energy usage, we need to:

Involve staff

The most effective energy saving programmes involve everybody within a business. Savings of 5-10% are common when all members of staff implement the measures detailed below:

Control heating

In the winter, reducing heating temperatures by 1°C can cut heating bills by up to 8%. On the other hand, in summer, increasing the set point for air conditioning also saves the amount of energy being used. It's also important to make sure that thermostats are as accurate as possible. This can be done by simply positioning them away from drafts and direct sunlight.

Avoid wasting heat

Doors and windows should be kept closed when heating or air conditioning is running. Fitting draught excluders and making sure premises are well insulated should be very cost effective, with short payback times.

Minimise artificial lighting

Electricity bills and carbon usage can be cut by keeping windows and skylights clean, meaning that lighting will not have to be switched on throughout the entire day. Similarly, if only working in one part of a room, lights should be on in that area only. Making sure that light switches are labelled, so staff only turn on the lights they need, can also help reduce the amount of artificial lighting used. Furthermore, presence and daylight sensors are another effective way to reduce energy consumption, as they switch lights on and off automatically according to when people are in the room.

Switch off office equipment

A single computer and monitor left on 24 hours a day can cost over £50 a year. Switching it off out of hours and enabling standby features can reduce this to £15 a year. Fitting a seven-day timer will also make sure that equipment like printers, copiers and water chillers are turned off overnight and at weekends.



Compressed air costs

Compressed air is often generated at maximum pressure. Reducing pressure by 10% can lead to 5% savings in energy. We will start by making small, incremental reductions, checking that operations aren't affected. Also, it's important to regularly test for and fix leaks - even a tiny leak could cost more than £700 a year in wasted energy.

Don't forget about motors

Because motors are hidden within machinery, they are often forgotten and left running when not in use. We can save energy by turning off motors during breaks or job changes. To make further savings, motors driving pumps and fans can often be controlled with 'variable speed drives'.

Maintain Equipment

One common thing across all the measures above is the need to maintain equipment to make sure it's operating effectively and efficiently. This can range from cleaning light fittings and windows, to keeping ventilation and compressed air filters clean, to checking door seals and repairing holes and leaks.

Of course, we need to think about any health and safety issues before creating any changes. For example, reducing lighting in an area of a building can make it difficult for employees to move around safely. We will balance our energy saving measures with full risk assessments.



Other considerations

The demolition and replacement of buildings plays a large part in fuelling the ongoing climate emergency.

In the UK, we lose more than 50,000 buildings a year through demolition, contributing to almost two thirds of the 200,000 tonnes of material waste the country produces each year. The construction industry alone is responsible for an estimated 20% of the UK's annual carbon emissions, which demonstrates just how seriously we need to change tactics.

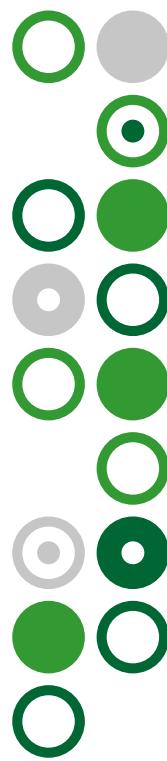


Repurposing existing structures for modern purposes

The shell of a building typically contains half of the carbon within a structure. Therefore, repurposing existing structures is key to creating a more sustainable culture. Instead of replacing existing buildings with new builds, we should first consider how to make better use of what already exists. This will help to reduce energy and resource wastage.

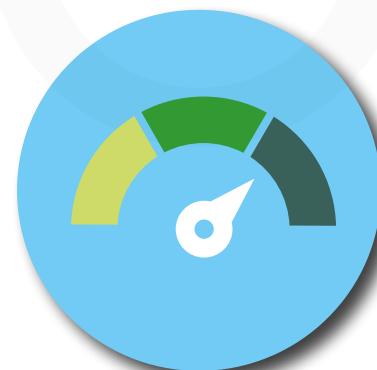
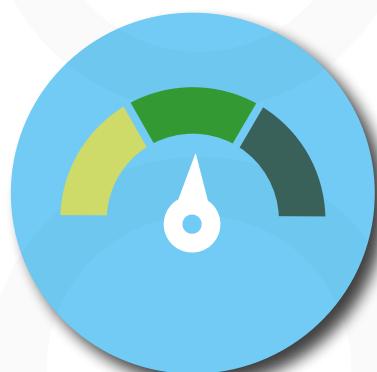
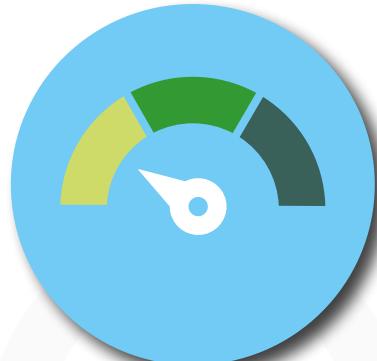
This focus on reusing and converting existing buildings can support the Council's wider strategic objectives, such as seeing council owned town centre buildings brought back into use for carbon neutral uses whilst also supporting the ongoing regeneration of our town centres.

As part of this consideration the Council will consider the cost benefit analysis with respect to sustainability derived from alternative uses for buildings. Either by direct intervention by the Council or a disposal of the asset for private redevelopment or community investment.



Plans

We have set a number of goals as part of our carbon reduction plan in council owned buildings. We will measure our success by calculating how much electricity and gas is used each year.



Short term (1-2 years)

- Set up a new energy management system. This will improve our knowledge of how our buildings use energy and how we go about reducing carbon emissions.
- Review energy supply contracts, and seek to rationalise those into single source supply contracts.
- Include carbon reduction measures in our building re-designing programme.
- Form an estate decarbonisation working group to prioritise high energy use buildings for energy reduction projects, and funding bids.
- Install SMART meters on all council controlled sites for electricity and gas.
- Obtain Energy Performance Certificates (EPCs)

for all Council buildings where required to inform investment decisions.

- Introduce an incremental estate energy improvement programme, using the existing planned maintenance programme to replace defective equipment with low emission alternatives e.g. LED lighting and efficient boilers.
- Review building operating times to reduce energy use, with a view to reducing times subject to business need.
- Ensure energy saving initiatives are incorporated as part of the implementation to the Council's Future Way of Working strategy for the use of its corporate estate.

Medium term (2-5 years)

- Create an Energy Procurement Risk Management Strategy and potentially buy 100% green energy for our buildings, where technological advancements make this possible.
- Set up an ongoing programme of energy reduction projects across our estate, like insulation, lighting, boiler replacements, renewables etc.
- Install SMART meters in council controlled buildings for water supplies.
- Access grant funding to invest in estate decarbonisation, such as the Public Sector Decarbonisation Fund.

Long term (5 years +)

- If the Council leases a privately owned property for service delivery, it will only consider a minimum EPC rating of A or B.
- Consider large scale renewable energy options, such as wind energy.
- Linking with potential district energy schemes will be reviewed.

Leisure Decarbonisation



Within North Northamptonshire, we are fortunate with the range and number of leisure facilities at our disposal, however they represent a large proportion of the Council's carbon footprint and will be a priority for the council. North Northamptonshire Council manages a total of 17 leisure facilities, with some managed in house and some via contractors. These sites are often over 20 years old, and so are not running in an efficient manner. Our aim, as set out in our corporate plan, is always to create modern and useful spaces for the community, and leisure centres are no different.

Leisure centres have a unique carbon footprint when compared to other council properties, especially those with swimming pools. Pools take a lot of energy to run, and with long opening hours, the cost of energy for facilities like this is intense. The current economic climate means local authorities are spending more and more to keep such facilities open.

Our Carbon Management Plan will focus on identifying those high energy sites as a priority and undertake a variety of energy audits in order to recognise energy saving opportunities. By making innovative changes to the way these buildings are operated ensures we reduce our carbon footprint.

Making changes to these leisure facilities will support the goal of becoming carbon neutral by 2030 for North Northamptonshire Council. Ensuring daily operation is run in a way that is efficient, and optimal, is key to creating a positive change. The plan and equipment must be checked regularly to ensure this and understanding the energy consumption seen will result in more action to be taken. New systems could be put in place to also support this, such as heat pumps, solar energy sources, LED lighting, and much more.

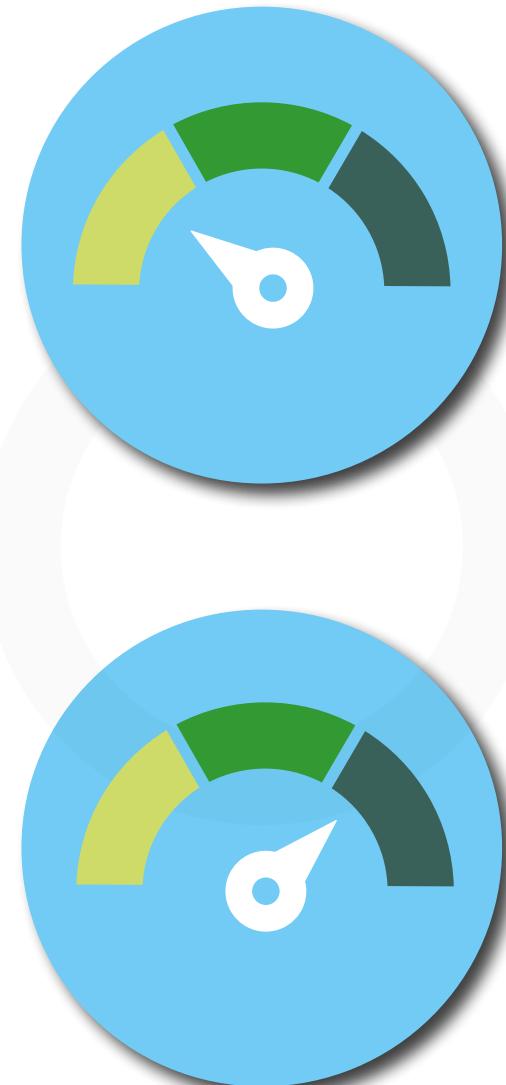
Making the most of the opportunities this sector presents is key to decreasing our carbon emissions for the future and creating prosperous communities within the county.



Highways

Highway carbon emissions come from the electricity consumed by street lighting, street furniture, and pedestrian crossings and from the fuel consumed by the fleet and machinery used for maintenance operations. The Council buys green energy for the majority of its street lighting and street furniture. However, this infrastructure still uses a large quantity of electricity. Reducing this use of energy and improving energy efficiency is an important goal for the Council, and its long-term highways contractor.

The Council's highways street-lighting is maintained through a Private Finance Initiative (PFI). We will continue to work with our PFI partner to invest in the streetlights to make them more efficient and reduce their energy demand and associated carbon emissions. Projects are also being conducted by the Council that have a broader environmental impact, such as on-street vehicle charging, electric scooters and bike hire, which enable residents to make sustainable travel choices.



Short term (1-2 years)

- Use modern technology to reduce the energy consumption of our streetlights, including upgrades to LED lighting
- Remove unnecessary assets from portfolio to reduce our energy consumption
- Switch vehicles less than 3.5t within the Council's highways maintenance contract to electric or ultra-low emissions
- Utilise hydrotreated vegetable oil (HVO) as an alternative to diesel in the Council's winter gritting fleet
- Replace petrol driven hand-tools and plant with electric powered tools

Long term plan (5 years +)

- Decarbonise the plant and fleet used by our highways contractor by 2027

Waste and Recycling

North Northamptonshire Council supports and promotes the established concept of reduce, reuse and recycle which seeks to reduce waste arisings and promote recycling. The reduction of waste, particularly of single-use products, reduces the carbon emissions associated with their initial creation as well as their transportation and ultimate disposal. Recycling materials reduces the amount of energy used in their creation, as well as reducing the natural materials required in their production.

The Council will continue to promote waste minimisation and waste reduction to avoid the creation of waste. This will be achieved through behaviour change activity and raising awareness amongst our residents. Our waste collection services will be designed to encourage recycling and reducing the amount of waste disposed through our general waste stream.

The Council offers residents a comprehensive range of recycling options to facilitate the recycling of as many materials as possible. This is achieved through kerbside collections as well as our network of Household Waste and Recycling Centres (HWRCs).

North Northamptonshire Council has standardised most recycling collections across the former boroughs and districts and will continue this work so all residents can benefit from the full range of recycling services we offer. This will include the introduction of food waste collections across North Northamptonshire. This will help reduce the amount of food going into landfill, which releases methane (a potent greenhouse gas) during composition.

We will seek to reduce the carbon emissions associated with our collection services by switching to alternative fuels in our vehicles as new technologies emerge and develop.



Fleet

Switching from internal combustion engine vehicles to electric vehicles will be a tough task, but one we are ready to take on.

Technology is advancing quickly in the automotive industry, and it is vital that any large scale investment in alternative technology represents value for money, reliability of operation and delivers the emission reductions forecast over the life of operations.

Therefore, the transition of the councils c.400 vehicles to non-fossil fuel alternatives will be a managed one, in order to be ensure we are offering the same reliable service to residents 100% of the time and as contractual leasing arrangements expire. We will need to follow the Governments delivery plan for transitioning to zero emission cars and vans, with the expectation that from 2030 the sale of new petrol and diesel cars and vans will be phased out, with larger or specialist vehicles following later.

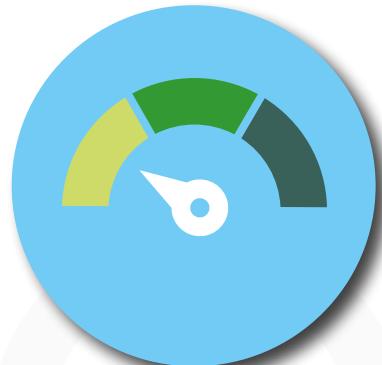
Therefore, our focus will be informed by a report currently being produced by the Energy Saving Trust, which will consider how best the Council decarbonise its fleet. It is expected this will focus on transitioning to electric vehicles for all vehicles where feasible. Exceptions will

only be where towing or load constraints, or new technology is cost prohibitive. In addition, any hired vehicles needed to support our fleet will not rely on fossil fuels, unless it is requirement of the service being delivered.

Whilst technology for heavy good vehicles (HGV) is still evolving, there are opportunities for the Council to pilot new and developing technology, especially for refuse vehicles and tippers. Where low emission vehicles are not suitable due to operational requirements, alternative low carbon fuel sources will also be considered, such as Hydrotreated vegetable oil (HVO), which offer significant carbon reductions. Switching to low carbon fuels will require consideration of the cost benefit of doing so, including supply chain risks, vehicle warranty, and maintenance.

The inclusion of our staff will be vital in making this transition a success, and full training to operate new vehicles will be provided. Sessions to combat anxiety over electric vehicles will also be undertaken, to address range anxiety, charging protocol etiquette, and driving automatic vehicles. The success of this plan will be measured by calculating the total diesel or petrol usage per annum.





Short term (1-2 years)

- Energy Savings Trust – Fleet De-carbonisation Report
- New fleet replacements consider zero emission vehicles and non-fossil fuel alternatives where practicable
- Conduct pilots of electric HGV vehicles for refuse collection rounds.
- Introduce staff awareness as part of driver trainer and assessment courses
- Review the cost benefit analysis of introducing alternative low carbon fuels supplies for the council's bunkered fuel supply
- Review and fit charging infrastructure on key sites



Medium term (2-5 years)

- Replace leased vehicles with carbon neutral alternatives where possible. This will likely be possible from 2027 onwards due to contractual commitments
- Ensure all hired cars and vans are carbon neutral
- Explore replacing/improving the carbon efficiency of specialist vehicles, such as gritters and refuse collectors
- Infrastructure ready and in place for carbon neutral fleet
- Driver training operating & maintaining new technology



Long term (5 years +)

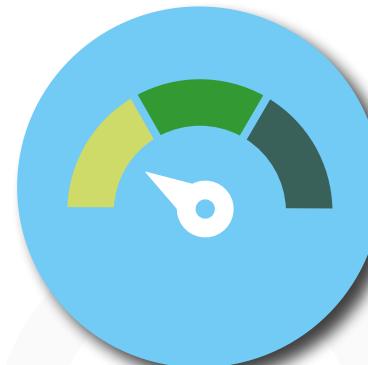
- Carbon neutral fleet
- Consider alternatives where practical for specialist vehicles – based on new technology availability

Travel

Within North Northamptonshire Council, travel is one of the largest sources of carbon emissions. The work we do requires frequent travel around North Northants, in order to provide the local community with a high-quality service. Visiting locations is vital in our line of work, but as we look to reduce emissions across the county, this source of emissions will also be addressed.

In order to achieve our goal of being carbon neutral by 2030, we will challenge ourselves on the need, frequency, and mode of travel. In order to reduce the carbon emissions, we must reduce our journeys, and find ways of working that are less carbon intensive.

North Northamptonshire Council will address unnecessary journeys, and will work towards more innovative methods of planning the travel we must accommodate. Departments within the council will look to revise their current working patterns, with the aim to become less vehicle focused. With this at the forefront of what we do, we are looking forward to seeing what kind of new technologies we can implement in order to improve the way we work, and therefore, lower the carbon emissions occurring from travel. In order to measure our success towards this goal, we will be tracking the total mileage claims in the financial year.



Short term (1-2 years)

- New ways of working through Future Ways of Working Strategy – adopting a hybrid model of working
- Look to enhance management responsibilities through appraisal process and monitoring
- Commission a grey fleet review to produce recommendations on reducing business travel emissions
- Review and update of related Council policies for business travel
- Low carbon courses available for driving, electric scooter and bicycles

Medium term (2-5 years)

- Support for cycling to work scheme and other low carbon salary sacrifice schemes to be reviewed and new approaches to encourage use will be trialled
- Local infrastructure for staff travel introduced (e.g. EV charging points)
- Commuting – staff and members actively encouraged to low carbon commute
- Action(s) for Grey Fleet Review
- A sustainable travel plan for all work locations will be in place

Long term (5 years +)

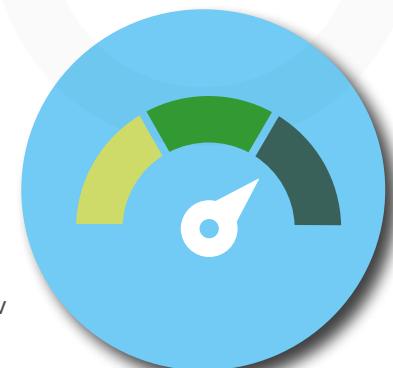
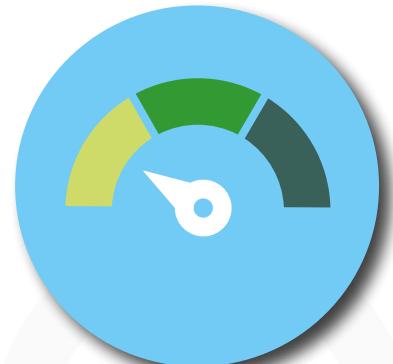
- No grey fleet emissions – approach and policy to be established

Procurement and Supply Chains

To ensure the Council secures value for money, we must follow appropriate procurement legislation and guidance. But we also need to ensure that how and what is procured reflects the Council's values and priorities, one of which is the reduction of carbon emissions.

This is also key if the Council is going to influence the reduction of its Scope 3 emissions by way of its spending decisions. This includes: purchase of goods and services, capital works and equipment, transportation, waste and disposal, and investments. A number of Council services are delivered by external providers, whose carbon emissions are outside the scope of the Council direct control, however the Council is well placed to incorporate sustainability targets as part of its procurement contracts, as evidenced as part of the recently reprocured Highways contract, which provides for a number contractual arrangements for emission reductions. The Council is also committed to exploring ways in which we can make better use of local suppliers who have a commitment to reduce carbon emissions, promote green practices and reflect our holistic view.

For providers themselves, there could be the potential to support their services and community endeavours while off-setting the Council's own emissions. Such low carbon opportunities could also reduce costs for the Council.



Short term (1-2 years)

- Include low carbon considerations in the Council's purchasing decisions
- Consider low carbon options and proposals as part of the design and procurement of construction projects
- Develop a range of carbon reduction related questions as part of procurement processes
- Review all existing environmental questions asked as part of procurement processes
- Assess government guidance on carbon reduction and the environment to add to our procurement processes
- Develop the Council's scope 3 reporting arrangements

Medium term (2-5 years)

- Low carbon energy contracts for key services introduced as part of contract renewal
- More large contracts for local businesses where possible, based on circular economy principles

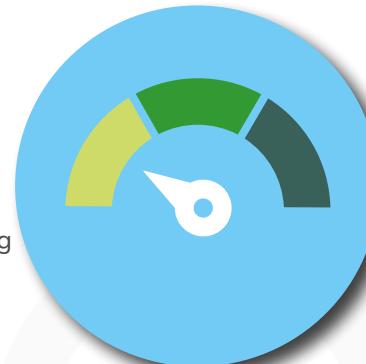
Long term (5 years +)

- Actively support zero carbon supply chains
- Use local, sustainable supply chains

Behaviour

The impact that behaviour change can have on reducing carbon emissions should not be underestimated. The Council is committed to promoting energy saving practices as an organisation and working to remove barriers which prevent staff from reducing carbon emissions. This includes providing resources and training to help embed carbon neutral practices within the Council.

We have a number of goals in place which will help us to change behaviour in a way which supports a low carbon lifestyle. The success of our plans will be based on the percentage of North Northamptonshire Council staff who are formally trained in carbon literacy.



Short term (1-2 years)

- Integrate carbon literacy into staff induction and management
- Develop a new marketing and communication plan, with a focus on social media, to highlight the Council's carbon neutral approach and goals
- Raise awareness of the benefits of reducing carbon emissions.
- Make sure that all service plans consider their carbon impact
- Promote energy saving practices amongst staff, and monitor its adoption

Medium term (2-5 years)

- Review human resource policies
- Review technology and working arrangements

Long term (5 years +)

- Review co-benefits of carbon reduction for staff
- Review opportunities to support staff to reduce carbon emissions
- Review how effective co-operation and partnerships are to achieve a low carbon lifestyle

Carbon Sequestration & Biodiversity

North Northamptonshire has a rich and diverse green environment, much of which is directly managed by the Council. Our Corporate Plan sets out our strategic priority to create a greener, sustainable environment. And our ownership of fantastic green space puts us in an excellent position to deliver on this, through biodiversity improvements, such as the Council's recently adopted Pollinator Strategy and Tree Management & Care Policy.

For North Northamptonshire Council to become carbon neutral, carbon sequestration will be important, as it is currently impossible to eliminate all carbon emissions. Carbon sequestration is the process of capturing, securing and storing carbon dioxide from the atmosphere. The aim is to make this carbon stable by keeping it in solid or dissolved forms so that it doesn't cause the atmosphere to warm up.

North Northamptonshire Council manages 5 former landfill sites that produce carbon emissions. These sites need careful ongoing monitoring to reduce their environmental impact. As the landfill waste decomposes, it produces methane. Methane is a greenhouse gas which is 28 times more potent than carbon dioxide. However, over time these emissions have decreased, and this will continue.

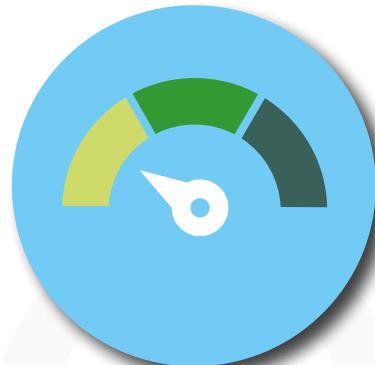
At the moment, it is almost impossible to reduce these methane emissions to zero. This is because, currently, there is no technological development to support this.

However, by 2020, we forecast that emissions from the former landfill sites will be c.4,000 tonnes CO₂e per year. Therefore, it is crucial that the Council explore carbon sequestration options to support meetings its 2030 target.

Biological carbon sequestration involves storing carbon dioxide in vegetation, like grasslands or forests, and our green environment provides the perfect opportunity to both improve our environment, support biodiversity and sequester carbon. Whilst the data behind how much carbon woodland projects can sequester over their lifetime is complex, typically a tree will absorb 1 tonne of carbon dioxide over its lifetime, which would make tree planting to offset all carbon emissions impractical. Carbon sequestration is not the solution, but it is an important element of the Council's goal.

We are already making inroads in this area, through our annual tree planting programme and woodland improvement projects. We are also commencing a Woodland Accelerator project aiming to plant 10,000 trees per year and build on partnerships such as the Local Nature Partnership, Rockingham Forest Vision Group, as well as produce North Northamptonshire's Local Nature Recovery Strategy. All the above will support our ambition of creating and expanding new woodlands, parks and greenspaces to help reduce our carbon impact and support our local environment.





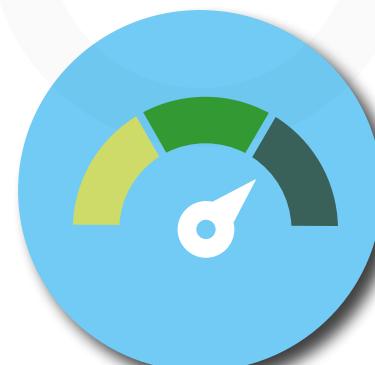
Short term (1-2 years)

- Establish a project team responsible for delivering carbon sequestration
- Identify local authority assets suitable for biodiversity and carbon sequestration
- Work with partners to identify funding opportunities for large scale sequestration projects
- Identify total number of trees that could be planted on suitable sites



Medium term (2-5 years)

- Plant pilot site(s)
- Encourage local private and public funded initiatives, which would need to be certified, e.g. housing developers and local charities



Long term (5 years +)

- Create new, certified, sustainable woodlands
- Continue programme of tree planting to maximise ongoing carbon sequestration



Carbon Offsetting

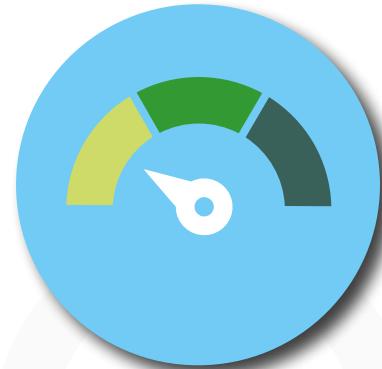
In order to support our goal of being carbon neutral by 2030, we must look at how we offset our carbon use. North Northamptonshire Council's strategy relies on the Council generating some of its own energy, in order to meet this aim. More specifically, we will be supporting and finding energy systems for key services of the Council, and the Council's supply chain.

This would include employing renewable energy sources in our estate, as detailed in the buildings section of the plan, or large-scale renewable energy sites. This strategy would allow the Council to offset a large proportion of the carbon we are producing and provides the opportunity for the Council to sell the energy produced to organisation locally.

There are a number of risks associated with such schemes, such as capital investment, sign up to the private wire or grid access agreements, however it does present an opportunity for the Council to mitigate other risks such as the ever-changing energy prices we are seeing in the current economic climate.

Therefore, subject to financial appraisal and approval, the Council will investigate running pilot schemes which will provide the basis and reasoning for a large-scale roll-out of these systems. Such test programmes will form the basis and design of the scheme for contractual requirements.





Short term (1-2 years)

- Establish a project team and officer responsible for delivering carbon offsetting
- Pilot Solar PV technology at sites to demonstrate payback and impact
- Review potential for wider benefit for community and business sector energy schemes



Medium term (2-5 years)

- Implement Large scale renewable energy schemes, subject to appraisal and approval
 - Phase 1- Solar photovoltaic panels
 - Phase 2- Heat generation
 - Phase 3- District energy scheme in Corby



Long term (5 years +)

- New renewable energy funding model available for Council partners

Implementing the Plan

North Northamptonshire Council has provided £1m of new funding over 3 years to progress the plans detailed in this plan. Significant work towards achieving our Carbon Neutral goal by 2030 has already occurred within North Northamptonshire:

- Delivering Carbon Literacy training for Councillors and Senior Officers and establishing a train the trainer model for the organisation.
- Developed a Carbon Impact Assessment which will consider the benefit and risks associated with proposals for use of the £1m funding.
- Working through the Investors in the Environment accreditation scheme to externally audit and improve our performance annually.
- Since April 1st 2021 we have planted 4,010 trees on land we manage to improve landscape, wildlife habitats, recreation and offset carbon emissions.
- A further 1,200 trees are due to be planted in urban greenspaces by the end of March 2023 through the Local Authorities Treescapes Fund and other schemes by our ground's maintenance service, and through the commitment in our Tree Management & Care Policy to plant at least one new tree for each one that must be felled.
- The Voi e-scooter and e-bike hire scheme has seen 517,472 trips locally of 1,064,853 km, saving 87,200 kg of CO₂e.
- Through the Starship Delivery Robots project, providing local delivery of groceries in Wellingborough, Rushden and Higham

Ferrers, 11,000 vehicle miles travelled have been avoided and saved almost 4,500kg of CO₂.

- Secured £150,000 from the Woodland Creation Accelerator Grant, aimed at maximising tree planting. The grant will fund two officers to work both internally and externally with local communities and partners on identifying opportunities and delivering projects to maximise tree planting over the 2023/24 and 2024/25 planting seasons.
- As part of our Pollinator Strategy work, 20 urban parks and greenspaces in Wellingborough and 10 in Kettering and Corby have been identified for improvements to grassland habitat for pollinators from 2023.
- Received Green Flag awards for Coronation Park in Corby, East Carlton Countryside Park, Hazel and Thoroughsale Woods and Rockingham Road Pleasure Park in Kettering. The award is the international quality mark for parks and green spaces.
- Received an International Green Apple award for Environmental Best Practices for Desborough Green Space (The Plens).
- Over the last 6 months our grounds maintenance operations in Corby/Kettering have collected 155,000 Kg of green waste, saving an estimated 12,000 kg of CO₂e.
- Undertaken Climate21 and Climate22 – a Climate Change Conference ran over the last two years in November to coincide with COP26 and COP27 respectively. The most recent conference attracted nearly 2000 views on YouTube.



But there is still more to do, and once approved, our next step is to prioritise the £1m funding to support the delivery of our short-term actions as outlined in the plan under each heading.

It is anticipated that working groups will be formed for each Priority Area, with work and requests for use of the funds administered by the senior leadership of the Place & Economy Directorate, with approval from the Executive Member for Climate and the Green Environment.

As projects progress it is anticipated that further capital funding bids will be required for projects or built into existing capital projects approved for works.

To ensure oversight and monitoring of the implementation of the Carbon Management Plan, updates on specific projects will be brought to the Climate Change Environment & Growth Executive Advisory Panel, along with an annual update on the Plan and Council's carbon emissions.

Investors in the Environment will also provide independent review of the work we undertake on an annual basis, with the Council able to progress through their accreditation programme which recognises organisations sustainability work and projects..



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