

Bassetlaw District Council Climate Change Strategy

This document was first published: 10/01/2024

The document revision information is below:

Version	Amendment Date	Amendment Details
0.1	10/01/2024	First Draft

Contents

1. Introduction.....	3
2. Rationale	3
2.1 Political	3
2.2 Economic.....	4
2.3 Societal and Public Health	4
2.4 Legislative.....	5
2.4.1 International	5
2.4.2 National.....	5
2.4.3 Local	5
2.5 Environmental.....	5
3. Current Status	6
3.1 District Carbon Footprint.....	8
4. Vision.....	8
5. Role of the District Council	9
5.1 Asset Decarbonisation Strategy	9
5.2 Electric Vehicle Strategy.....	10
5.3 Retrofit Strategy.....	10
5.4 Local Area Energy Plan.....	11
5.5 Carbon Sequestration Strategy	12
6. Next Steps.....	12
7. Appendices.....	13
7.1 Appendix 1: UK100 Pledge:	13
7.2 Appendix 2: Climate Change Vision for Bassetlaw	14
7.3 Appendix 3: Equality Impact Assessment Screening (accompanying document).....	15
8. References	16

1. Introduction

Climate change is the long-term shift in the planet's average temperatures and weather patterns, of which human activities are the primary driver. This is principally the result of greenhouse gas (GHG) emissions via the combustion of fossil fuels e.g., coal, oil, and gas. This strategy considers the rationale for taking action against climate change, the current status of Bassetlaw, what the vision for the future is, the local authority's role and what the next steps will be.

For Bassetlaw District Council (BDC), the principal goal of this strategy is to decarbonise the Council's operations and District-wide emissions by 2030 and 2045, respectively. This is driven by the Council's net zero targets.

2. Rationale

2.1 Political

In June 2019 Bassetlaw's Full Council resolved to call on the UK Government to provide local authorities with the powers, resources and help with funding to achieve carbon neutrality. As well as made a commitment to achieve carbon neutrality within the Council Plan and as part of this commitment, to recruit a Climate Change Officer to lead on this agenda.

In June 2020 a report was brought forward detailing the work undertaken by the Carbon Trust to determine the baseline Carbon footprint of Council activities. In response to this work Cabinet resolved to undertake a series of initiatives to make ongoing and realistic reductions in the Council's carbon footprint. This included supporting local tree planting schemes, the installation of solar photovoltaic (PV) panels on Council buildings (where there is a clear business case) and making a long-term commitment to transfer the Council's fleet to electric/non-carbon fuel wherever practicable. Shortly after this report, in October 2020, the Council recruited for a Climate Change Officer to oversee this agenda.

The first report from the appointed Climate Change Officer in March 2021, outlined the first Bassetlaw Carbon Strategy and a series of subsequent actions for the Climate Change Officer to carry through. The aim of these actions was to build upon the previously outlined reports and bring a wider approved remit to the Council's Climate Change Officer. They included: continuous carbon monitoring, creation of heat decarbonisation plans for key assets, facilitation of fleet decarbonisation, expansion of the scope for renewable energy initiatives and increase waste and water management.

In December 2021, the Council declared a Climate Emergency and resolved to create a Local Area Energy Plan for the District. Most recently, on Thursday 21st September 2023 the Council unanimously committed to reducing operations to Net Zero by 2030 and meet Net Zero areawide emissions by 2045. Details of this commitment and the aims of the Council are detailed in section 4, Vision.

In addition to this, BDC as part of the Bassetlaw Vision 2040 the Council aims for:

“Bassetlaw to become the greenest, most sustainable district in which to live and work, building on its legacy of energy production, manufacturing and logistics to power the new zero economy”.

As part of this vision, *“we will mitigate the impacts of climate change through green energy planning, improving building efficiency and enhancing natural environments”.*

This vision was approved for development in December 2022, and sets the long-term aims for the Council up to 2040. It sets out six strategic pillars of which to build and will be incorporated into this Climate Change Strategy to provide further congruency. The Vision's principal aims to be supported throughout this Climate Change Strategy are as follows:

- Implement a green Local Area Energy Plan for Bassetlaw
- Secure Biodiversity net gain, management and maintenance
- Implement an emissions strategy reach net zero operational emissions by 2030
- Increase recycling rates at the kerbside
- Secure funding for a 'one stop shop' for advice and grants for decarbonisation in SMEs
- Improve quality and efficiency of the Council's housing and supporting the wider domestic sector

While the Council does not have all the levers required to achieve net zero on their own, clear intentions are a first step to facilitating the green transition for the wider area. These ambitions will be further supported by this strategy and supporting strategies and reports that the Council can have significant influence over and are detailed in section 5, Role of the District Council.

2.2 Economic

An opportunity for the Council to play a role in catalysing the growth of the local green economy through investments that reduce carbon emissions within Council operations. Additionally, position the Council to be able to influence the growth of skills within the sector for the people of Bassetlaw, as well as forming partnerships with stakeholders.

2.3 Societal and Public Health

Air pollution is now the largest environmental risk to public health in the UK and is recognised as being responsible for between 28,000 and 36,000 death each year. Between 2017 and 2025, it is estimated that the cost of air pollutants to the NHS and social care system will be £1.6 billion¹. Air pollutants can originate from sources including transport, industry, farming, energy generation and domestic heat. Efforts to tackle climate change will have co-benefits for air quality, including reducing particulate matter.

Additional co-benefits of actions against climate change on society and their health include a reduction in the costs of energy and improved comfort through better insulated homes. Warm and dry households with low carbon heating systems are

better for the health of our population through improved comfort and improved indoor air quality.

2.4 Legislative

2.4.1 International

The Paris Agreement, the world's legally binding international treaty on climate change, was signed by 196 parties at the 21st UN Conference Of Parties (COP) in 2015. The overarching goal of this agreement is to limit the increase of average global temperatures to well below 2 degrees Celsius. The Agreement is operated by a series of Nationally Determined Contributions (NDCs) which places the onus of each Country's climate action upon themselves. There were additional statements during the 21st COP that targets should be set for a 1.5-degree limit and was further strengthened by the Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C (IPCC SR1.5) report released in 2018.

2.4.2 National

The UK Committee on Climate Change (UKCCC) released their report in 2019 titled 'Net Zero: The UK's contribution to stopping global warming' following the IPCC's SR1.5. The report called for immediate action from the UK to align their targets with limiting global warming to a 1.5 degree increase and commit to achieving Net Zero carbon emissions by 2050.

In June 2019, the UK became the first major economy in the world to commit to a legally binding target to reduce GHG emissions to net zero by 2050. This was an increase on the previous commitment under the Climate Change Act (2008) to an 80% reduction by 2050 from 1990 levels, which the UK was already working towards.

2.4.3 Local

Supporting the national policies, Nottinghamshire County Council declared a climate emergency in May 2021 with commitments to achieve carbon neutral operations by 2030. While their target for the wider County is to be announced, they have incorporated many environmental aspects in The Nottinghamshire Plan that will have subsequent impacts for all localities.

Bassetlaw declared their climate emergency in December 2021, with commitments to create a LAEP for the District to build upon their previous Council Plan climate related goals. Furthering these commitments, the Council will aim to achieve net zero operations by 2030 and support the district transition carbon neutrality by 2045.

2.5 Environmental

Action against climate change is an essential part of Bassetlaw's role in environmental targets. This is largely driven by the effects on the environment climate change is already having and will have in the future if action is not taken. Climate change is principally as a result of the increase in greenhouse gas (GHG) emissions in the Earth's atmosphere. These GHG trap heat radiated from sun, causing rising temperatures. However, rising temperatures are not the only consequence of climate change as the interconnectivity of the Earth's systems means that changes in one-area influences changes in others. Consequences can

include, but are not limited to, droughts, increased storm intensity and declining biodiversity². The effects of these changes affect people and areas in different ways and are already being seen in the UK.

3. Current Status

The Council's carbon footprint, originally outsourced to the Carbon Trust in 2019, was calculated to be 2,382 tCO₂eⁱ. A larger and more in-depth review found a more representative dataset and was used to calculate subsequent Financial Years 2020 to 2023 as seen below. The past and most up to date Carbon Footprint for the Council is 4,372.63 tCO₂e for financial year 2022/23 as seen below in Figure 1. Further detail to the methodology behind carbon footprinting and data collection will be found in Bassetlaw District Council Carbon Footprint Report 2023. The carbon footprints displayed in Figure 1 include sources of emissions outside of scope 1 and 2. These scope 3 emissions are still essential to consider for decarbonisation pathways but are not included in the 2030 net zero objectivesⁱⁱ. Council operational emissions that are related to the 2030 commitment are 2,827.14 tCO₂e, or 64.7% of the total emissions for financial year 2022/23. Further breakdown shows, 10.9%, 8.5%, and 45.2% are attributed to Council electricity, gas, and fleet fuel consumption, respectively. Gas emissions were the smallest portion of the emission spread (8.5%), but 80% is concentrated in just 5 buildings. The previously largest gas emitting building, Queen's Buildings (the Council's primary office building) was fully decarbonised in financial year 2022/23 and is expected to reduce the gas related emissions by >40%.

ⁱ tCO₂e – tonnes of carbon dioxide equivalent

ⁱⁱ Scope 1: direct GHG emissions from those activities owned or controlled by the Council

Scope 2: GHG emissions from the generation of electricity purchased by the Council

Scope 3: indirect emissions from activities from sources that are not owned or controlled by the Council

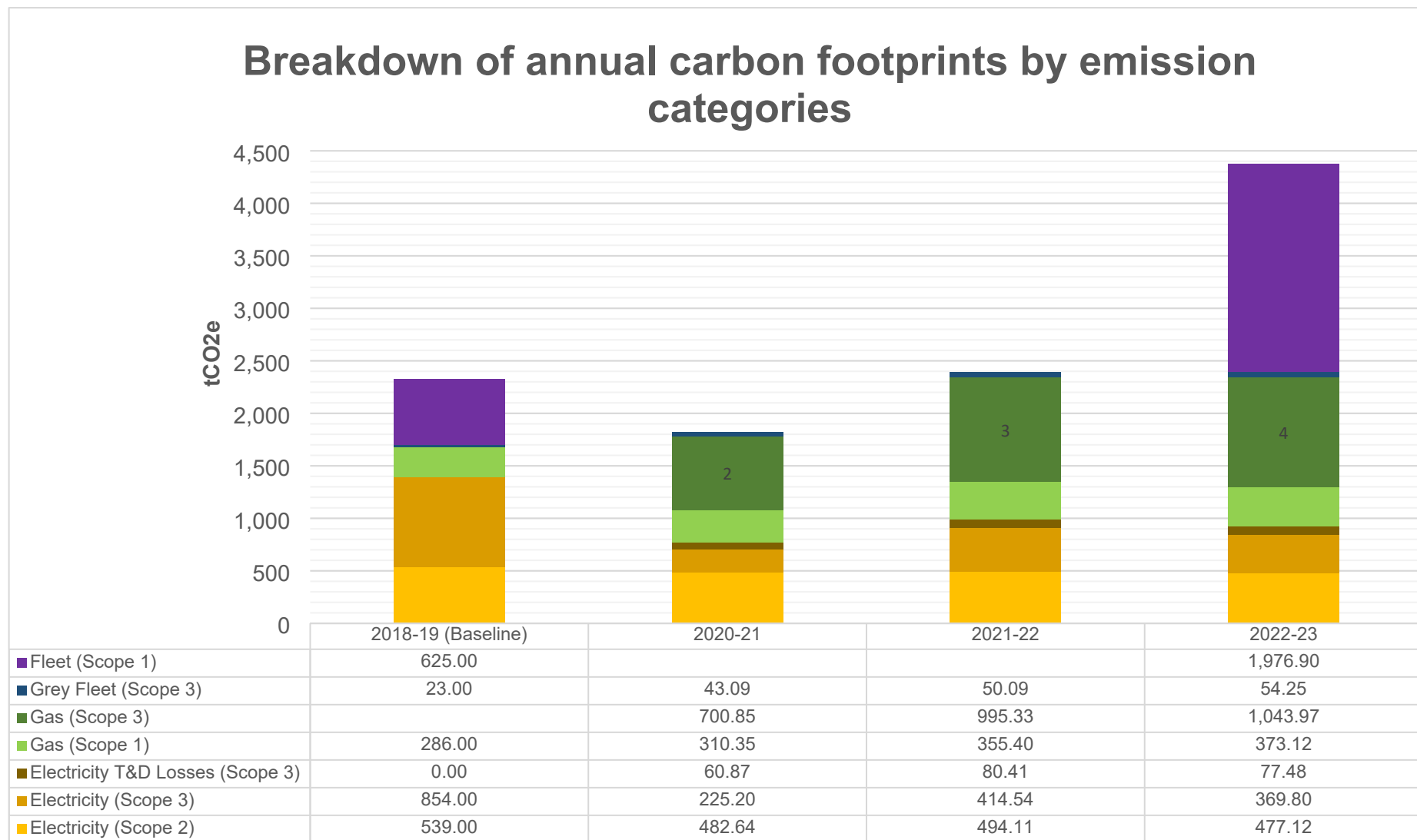


Figure 1: Bassetlaw District Council Carbon Footprint Financial Years 2018-23, break down by source and scope of emissions. FY 2019/20 omitted due to lost data through change in suppliers and management systems.

3.1 District Carbon Footprint

Emissions from the District have been decreasing steadily since 2005 (see Figure 2), largely due to the decarbonisation in the electrical grid but also from a reduction in commercial and industrial related emissions. Through the strategies to be employed by the Council, a core aim will be to address and support the hard to decarbonise sectors as well as bringing local communities and businesses along the journey to a net zero district in 2045. As seen in Figure 2, Transport, Domestic, and Industry were the sectors responsible for the largest contributions to District’s emissions from 2021.

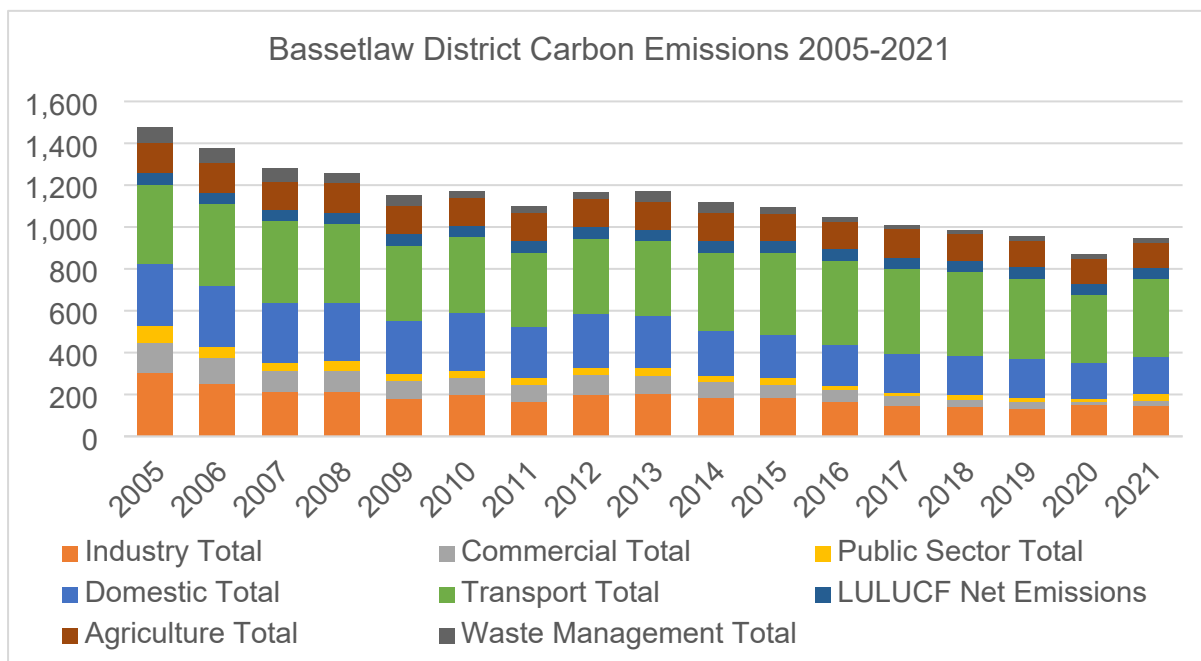


Figure 2: Bassetlaw District wide emissions, calculated from carbon data supplied by O&S on behalf of BEIS. Units reported in Kilotonnes, ktCO₂, or 1,000 tCO₂.

4. Vision

Bassetlaw District Council’s climate change vision is centred by the Council’s net zero commitments and the Council’s Vision 2040. To embody the net zero commitment, the Council have resolved to:

- Become a member of the UK100 network of local leaders pledging to lead a rapid transition to Net Zero
- Agree to the UK100 Net Zero Pledgeⁱⁱⁱ
- To meet Net Zero council operations by 2030
- To meet Net Zero areawide emissions by 2045
- To report carbon emissions annually for both council emissions and areawide emissions

ⁱⁱⁱ The UK100 pledge will place BDC among the most ambitious authorities in the country, exceeding the national target and becoming a trailblazing organisation for the rest of the District, details of the UK100 are included in Appendix 1.

- Limit the use of carbon offsets, and if they are used, then these must be as local as possible.

A flow chart outlining the vision is included in Appendix 2: Climate Change Vision for Bassetlaw and shows how strategies and supporting actions plan can work together support Bassetlaw's net zero commitments.

5. Role of the District Council

The District Council's role in achieving net zero operations by 2030 will require the active preparation of strategic oversight to underpin the specific aims of the Council to achieve net zero. Furthermore, detailing how the Council we meet these aims within complimentary action plans for the strategies.

Whereas it will be necessary for the Council to take an active role in the reduction of District-wide emissions to net zero by 2045, there will be limitations to the influence of the Council. Therefore, there will be a greater requirement for partnerships and collaborative projects. To have the greatest impact, the Council will need to think creatively and capitalise on other sources of innovation or funding, such as leveraging private domestic retrofit schemes from Central Government.

Strategies and commitments set out will be the foundation of Climate Change action and those that will underpin the ambitious vision for Bassetlaw are:

- Asset Decarbonisation Strategy (Scope 1, 2 & 3)
- Electric Vehicle Strategy (Scope 1, 2 & 3)
- Retrofit Strategy (Scope 3)
- Local Area Energy Planning (Scope 3)
- Carbon Sequestration (Scope 1, 2 & 3)

Details of these strategies are outlined below.

5.1 Asset Decarbonisation Strategy

Asset decarbonisation is the reduction or the elimination of carbon dioxide emissions from the Council owned and/or operated commercial buildings. The most immediate and pressing target for the Council to meet is the 2030 commitment to have net zero operations. Therefore, the preparation of an asset decarbonisation strategy to establish the current status of the contribution of Council buildings to the carbon footprint and the next steps required to achieve net zero. The next steps outlined in the strategy are:

- Establish clear energy & building management plans to reduce operations costs.
- Review of Council's estates internal asset's i.e., heating systems, lighting etc.
- Site audits and decarbonisation works.

Specifics of these aspirations, how they are to be implemented and consideration of the potential barriers to the Council's actions will be outlined in a subsequent action plan.

5.2 Electric Vehicle Strategy

Transportation is a large emitting sector within Bassetlaw, which will need several solutions utilised to meet net zero commitments. Specifically for the Council, Fleet operations should be fully decarbonised by 2030. Council vehicles work across the District and will demand consideration of a variety of charging methods such as overnight and rapid charging at council depots, charging facilities at employees' personal residences, and charging options while working across sites in the District. Wherever possible, charging installations in public areas should encourage access from the wider public, which will not only catalyse opportunities for the wider community but also strengthen the business case for this work.

Decarbonisation of transport for the District will require more support beyond electric vehicle (EV) charging infrastructure, which includes public and active transport considerations as well as future planning actively working to minimise the need for motorised travel. While all these fields of work need progress, a core tenant of the EV Charging strategy will be to support the wider rollout and adoption of EVs for residents in the district wherever possible as it will be an essential pillar of the wider area's decarbonisation.

The objectives from the Electric Vehicle Strategy to facilitate the decarbonisation of the Council's fleet and support district wide decarbonisation of the transportation sector are:

To achieve the aims of the EV Charging strategy the following work streams will be progressed:

- Refuse electrification feasibility studies conducted, with rapid charging investment identified.
- Charging studies and methodology for an electric council fleet to operate without disruption to services.
- Support and facilitate a planned phase out of ICE replacement vehicles through cross-department collaboration.
- Business case opportunities identified for shared publicly accessible charging points.

5.3 Retrofit Strategy

Domestic emissions are a significant portion of the District's carbon footprint and are particularly difficult to reduce as each property is unique. Barriers to rollout retrofit range from cost and knowledge barriers, interest and prioritisation of renovation works (i.e., kitchens and bathrooms). Furthermore, retrofit has historically brought few benefits as energy has been plentiful and cheap. Unfortunately, contributing to the UK housing being the least efficient compared with our European counterparts. This has left many UK residents particularly vulnerable to the utility price spikes within recent years, further crippling our ability to progress to a greener future.

Looking ahead, utility prices will likely settle after their volatile reaction from COVID, the Ukrainian War and the cost-of-living Crisis. Through this period the UK government will need to establish a more consistent and increasing energy price that aligns with their national net zero commitments. Specifically, the UK's target is to be

carbon neutral by 2050 and will rely on a steadily increasing carbon tax on gas along with a decoupling of gas and electricity prices to move the market towards renewable sources of energy. With adequate forward planning, UK residents will be able to capitalise on these changes, phasing out gas boilers, electrifying their heating systems and reaping the benefits of a decarbonised energy grid. To fully realise these benefits, we need to ensure that retrofit becomes affordable, achievable and desirable.

The aims from the Retrofit Strategy will be to facilitate the decarbonisation of the domestic sector are:

- Facilitate government grants where possible for those most in need or deemed likely to be in fuel poverty.
- Create a strategic methodology to reduce barriers to retrofit within the able to pay market.
- Scope feasibility for government backed financing methods for retrofit.
- Collaborate with private sector partners for innovative solutions to retrofit.
- Support the local retrofit sector expand and encourage local green jobs.

5.4 Local Area Energy Plan

The Local Area Energy Plan (LAEP) is a D2N2 wide strategy that will support the surrounding region to progress towards a net zero future. The LAEP focuses on energy generation, transmission, and consumption, and will heavily rely on a centralised process from the D2N2 Mayoral Combined Authority. While this top-down approach unfolds through 2024 onwards, Bassetlaw District Council will be a trailblazing partner for the LAEP and incorporate it as a core strategy for its own use. This will ensure high level findings from the counties realise tangible benefits for the District's residents and businesses.

Historically, Bassetlaw has been a significant energy exporter for the UK, accommodating 3 large coal power plants, 2 of which were in the country's top 10 largest coal power stations, along with other combined cycle power plants (CCGTs) that are still operational. The infrastructure from these power stations leaves a legacy for the District that is tangible in grid connection and capacity that is a clean energy lever for the green transition. Part of this capacity will be utilised by the STEP programme, but is also capable of support a wide variety of other projects ranging from Nuclear SMRs, solar and wind in the district.

Beyond energy production planning, the LAEP will also form and identify key plans, projects and initiatives to support the district to wards sustainable consumption as well. Consumption of energy by significant sectors will be scrutinised with supportive alternatives to the business as usual pathway that will redefine these sectors. As a whole, the LAEP will help design the net zero transition for Bassetlaw that will directly support the Bassetlaw Vision 2040 and our carbon neutral district targets by 2045.

The aims from the LAEP to facilitate decarbonisation of the District energy are:

- Identify clean energy opportunities

- Collaborate and strategically plan investment with the DNO
- Support SME and industrial clusters to decarbonise
- Initiate and mobilise community energy projects throughout the district
- Rollout sustainable transportation tool through electric vehicle charging as well as support public and active transport options as well.

5.5 Carbon Sequestration Strategy

Carbon sequestration is the “capturing, removal and storage of carbon dioxide (CO₂) from the earth’s atmosphere”. This will be necessary for achieving net zero as following efforts to achieve net zero, there will be residual emissions from the Council’s and the District’s operations that will need to be offset. The carbon sequestration strategy and the subsequent action plan will aim to support and expand upon the emerging Local Nature Recovery Strategy led by the County Council as well as BDC’s internal Biodiversity Net Gain plan.

The aims of the strategy and action plan will include:

- Identify and survey suitable BDC Land for carbon sequestration.
- Establish working partnership for tree planting, utilising the UK Woodland Carbon Code for financing.
- Mobilise tree planting, with the intent for wider roll out with private sector partners and landowners.
- Feasibility study for large scale low-grade agricultural land and riparian areas for tree planting, achieve carbon sequestration and bolstering local flood defences.

6. Next Steps

The Council will aim to publish the aforementioned supporting strategies and action plans to outline and detail the actions required to achieve their respective visions and the overall vision outlined in this strategy.

In addition, in order to be able to monitor the Council’s progress to net zero 2030, the Council’s carbon footprint report will be updated annually.

Consideration will be given to the need to address other elements of response, for example adaptation, with reference to climate action that is not considered within this strategy to ensure a comprehensive approach.

7. Appendices

7.1 Appendix 1: UK100 Pledge:

- We will continue to lead the UK's response to climate change, acting sooner than the government's goal by making substantial progress within the next decade to deliver Net Zero.
- We commit to do everything within our power and influence to rapidly reduce our greenhouse gas emissions and work with our residents and businesses to bring our wider communities' emissions in line with Net Zero as soon as possible.
- We pledge to understand our impact on climate change, prioritise where action needs to be taken and monitor progress towards our goals. We will reduce our emissions at source and limit the use of carbon offsets as part of the global effort to avoid the worst impacts of climate change.
- We are closer to the people who live and work in our communities, so we have a better understanding of their needs. This means we can collaborate with them to build consensus for the solutions we need to transition to a Net Zero society that delivers multiple benefits and is fair, just and works for everyone.

7.2 Appendix 2: Climate Change Vision for Bassetlaw

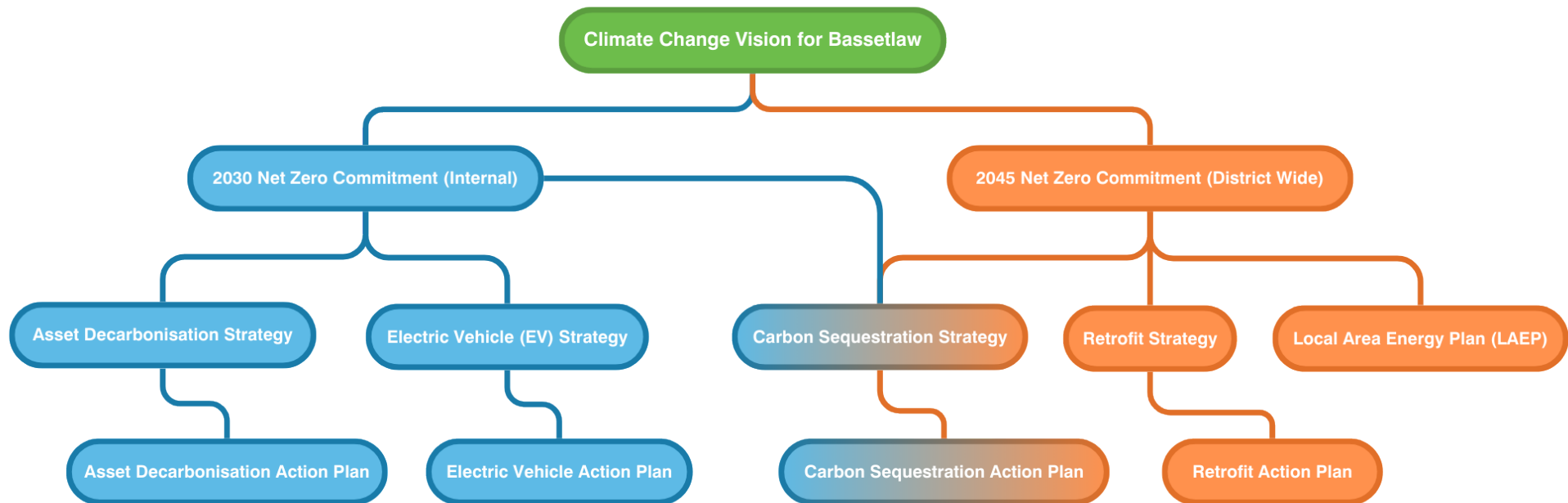


Figure 3: Climate Change Vision for Bassetlaw Flow Chart of Strategies and Actions Plans in relation to the Council's Net Zero Commitments.

7.3 Appendix 3: Equality Impact Assessment Screening (accompanying document)

8. References

¹ [Office for Health Improvements and Disparities, *Air pollution: applying All Our Health*](#), accessed 15th December 2022

² [United Nations, *What Is Climate Change?* n.d.](#), accessed 10th May 2023