

Climate and Ecological Emergency Action Plan

2025





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Foreword

Climate change and biodiversity loss is one of the greatest challenges of our time. The scientific evidence of its ongoing and future impacts on the environment, public health, and economy are clear, beckoning immediate attention and action to protect both the natural world and the wellbeing of future generations. This was recognised in May 2019 when the Council unanimously declared a climate and ecological emergency with some of the most ambitious net-zero targets in the nation and the writing of an action plan was necessitated.



*Left: Councillor Tim Gibson, Leader of the Council.
Right: Cllr Rich Lehmann, Chair of Climate Change
and Environment Committee*

This led to the creation of the 2020 Climate and Ecological Emergency Action Plan, which has now run the course of its lifespan. Despite good progress, it has become evident that the Council must reassess our targets and develop a renewed strategy.

Swale Borough Council produces just 0.4% of the Borough's total emissions, and so while we will continue to lead by example, the Council recognises the need to turn our view outwards towards the community and work collaboratively to incur wider decarbonisation. This document is fronted by the requirement for concerted action by all sectors, with the council playing an active role in the bringing together of our businesses, community groups, and residents to incur effective, positive change.

The 2025 Climate and Ecological Emergency Action Plan is structured around seven key focus areas, through which we will work collaboratively to deliver a net-zero Council and Borough. The challenges in achieving this remain significant, but we are confident that doing so presents opportunity for a positive transformation of Swale. Stronger communities, the development of a green economy and the creation of new jobs, reduced inequality, improvements in public health, and an overall enhancement in the quality of life for our residents, these are just some of the benefits the successful delivery of net-zero presents.

We would like to invite every individual and organisation that is part of our community to join us in achieving this by taking meaningful action now for a future that is both sustainable and prosperous



1 Introduction

1.1 What is Climate Change?

The Framework convention on Climate Change (UNFCCC), in its article 1, defines climate change as ‘a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global temperature and which is in addition to natural climate variability observed over comparable time periods.’ This is known as anthropogenic (human caused) climate change.

1.2 What causes climate change?

Greenhouse gases are a naturally occurring component of our atmosphere and are critical to the survival of life on earth. In the right proportions, key greenhouse gases (GHG) such as Carbon Dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (NO₂) and Ozone (O₃) ensure stable planetary conditions by balancing the amount of solar radiation that the atmosphere reflects or absorbs.

At the onset of the industrial revolution, atmospheric levels of CO₂ were estimated to have been stabilised around 280 parts per million (ppm). Since then, human activities produced by nearly every aspect of modern life have led to a sharp increase in greenhouse gases in the atmosphere. In 2024 atmospheric levels of CO₂ reached 423.6 ppm – not just the highest level since the industrial revolution but higher than at any point in the last two million years. This means that the potential for the atmosphere to absorb solar radiation outstrips its ability to reflect into space. Over an extended period, radiation builds up, resulting in rising global temperatures.

According to the World Meteorological Organisation (WMO), the eight consecutive years to 2023 were the eight hottest on record, while the IPCC estimates that global temperatures in 2024 are 1.04 °C above the pre-industrial baseline.

The changes in global temperature as the result of anthropogenic climate change were well illustrated by the Carbon Copy's warming stripes. Each stripe represents a year, while colouring dictates whether temperatures were cooler, or warmer than average. Figure 1 shows how temperatures have changed in Swale in the period 1884-2024.

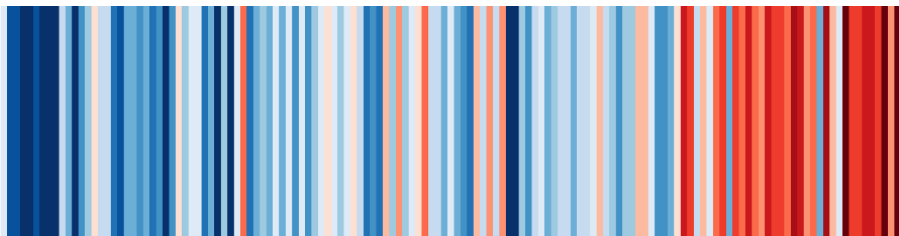


Figure1 Years represented 1884-2023 (Source: Carbon Copy).



2 Climate Risks

2.1 National Risks

Climate Change may feel like an issue far removed from our individual lives, but the impacts of a 1.04°C rise in global temperatures are already being felt. To highlight the threat of climate change and the risks it poses to the United Kingdom, the 2008 Climate Change Act necessitated the production of five-year Climate Change Risk Assessments (CCRA), which are informed by statutory advice by the Climate Change Committee (CCC).

The CCRA outlines eight high priority areas that intersect multiple sectors that climate change may have a serious impact on:

- risks to the viability and diversity of terrestrial and freshwater habitats and species from multiple hazards
- risks to soil health from increased flooding and drought
- risks to natural carbon stores and sequestration from multiple hazards
- risks to crops, livestock, and commercial trees from multiple climate hazards
- risks to supply of food, goods, and vital services due to climate-related collapse of supply chains and distribution networks.
- risks to people and the economy from climate-related failure of the power system
- risks to human health, wellbeing, and productivity from increased exposure to heat in homes and other buildings
- multiple risks to the UK from climate change impacts overseas

2.2 Local Climate Risk



Figure 2: Likelihood of risk increasing over time, Source: CCRIA.

The Climate Change Risk and Impact Assessment (CCRIA) for Kent and Medway was produced to support local authorities in their understanding of the risks that climate change poses to health, economy, infrastructure, and the natural environment. It extrapolates the urgency and scoring method from the national Climate Change Risk Assessment (CCRA) through which key threats, opportunities,



and potential adaptations are measured. Risks and impacts are placed into three categories: high magnitude, medium magnitude, and low magnitude.

The CCRIA demonstrates how different emissions reduction pathways increase the likelihood and impact severity of climate risks and relates these to localised areas.

The Met Office's UK Climate Projections (UKCP) produced more localised modelling of the impacts of climate change, and have predicted that for the southeast by 2080:

- Summers are likely to be hotter by around 5°C to 6°C
- Winters are likely to be warmer by around 3°C to 4°C
- Summer rainfall is likely to decrease by 30% to 50%
- Winter rainfall is likely to increase by 20% to 30%
- Sea level rise is likely to increase by 0.8m

Combined, these resources paint a comprehensive image of potential threats that Swale will face if swift action is not taken. Some of the key risks and impacts are highlighted below (sections 2.3 to 2.7).

2.3 Heatwaves

Met Office UK Climate Projects (UKCP) estimated that by 2080 summers are likely to be hotter by around 5°C. An increase in the frequency and intensities of heatwaves poses a significant risk to public health, particularly vulnerable populations such as the elderly, young children, and those with chronic health conditions.

In 2022 the UK experienced its first day where temperature surpassed 40°C, with five separate heat periods between June and August estimated to cost the UK economy between £260-300 million through losses in the agricultural, tourism, transport, and education sectors. An estimated 2,985 excess deaths also occurred.



Figure 3- Source, Nasa Worldview

It is predicted that by 2050, deaths from heat could triple.

2.4 Droughts and Water Stress

Met Office UK Climate Projects (UKCP) estimated that by 2080 summer rainfall will decrease by between 30% and 40%.

Kent has experienced numerous instances of drought since the 1970s and in 2007 the County was officially classed by Defra as being seriously water stressed, meaning demand for water makes up a high percentage of expected rainfall.

It is estimated that by 2080, water demand in the Southeast could rise by as much as 2.6 billion litres a day.

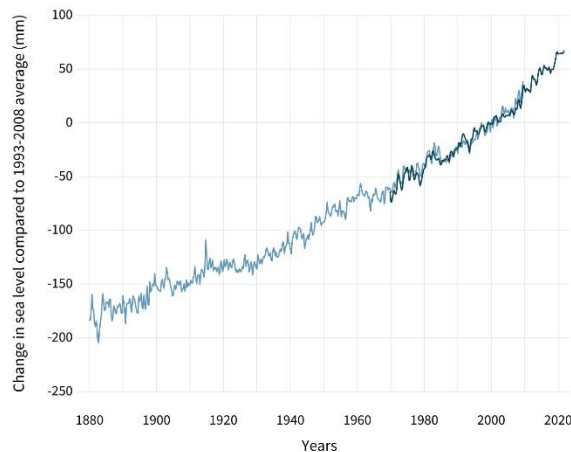


This will have significant implications on high consuming sectors such as agriculture, manufacturing industries, energy producers, and could mean chronic water shortages for household purposes.

2.5 Sea Levels Rise, River, and Surface Water Flooding

Met Office UK Climate Projects (UKCP) estimates that by 2080 winter rainfall is likely to increase by between 20% - 30%, while sea levels could rise by as much as 0.8m.

GLOBAL SEA LEVEL



Many areas of Swale are already susceptible to flooding, with in 2020 the Environment Agency reporting that 14,082 homes were at chronic risk. With the longest coastline of any Kent district at 111km, a rise in sea levels poses an imminent risk to many homes, businesses, and infrastructure. Swale is also home to a wealth of intertidal habitats which are vulnerable to rising sea levels, and which could be irrevocably damaged if levels rise.

Figure 4: Source, NOAA Climate.Gov

2.6 Pests and Diseases

Changing weather patterns can lead to shifts in the ranges of habitats and biodiversity, resulting in the spread of pests and diseases. Swale's proximity to major ports, such as those in Dover and Sheerness, along with connections to passenger and freight crossings, mean that Kent may become at risk of being on the front line against non-native invasive species (INNS).

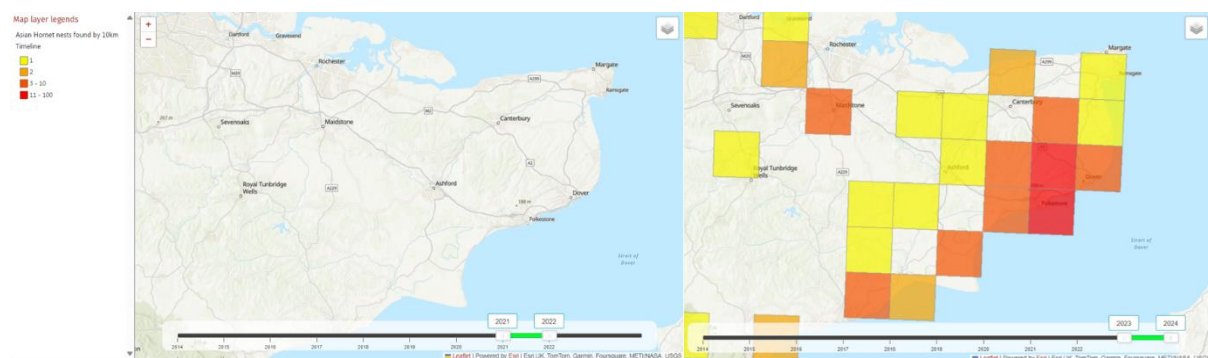


Figure 5: Left: Distribution of *Vespa velutina*, 2021. Right: distribution of *Vespa velutina* in 2023.

Milder winters can increase the potential for pathogens to overwinter in the UK, while earlier springs may favour the growth of other species. Recent years have seen this already happening, with Asian Hornets (*Vespa velutina*) and Killer Shrimp (*Dikerogammarus villosus*) populations growing, threatening honeybee populations and wetland habitats, respectively.



2.7 Natural Environment

All the above pose a serious risk to biodiversity and could result in habitat loss and alterations in species range.

Swale is lucky to have a wealth of important habitats, including wetlands such as Elmley National Nature Reserve and Oare Marshes Nature Reserve, ancient woodlands such as Cromers Woods and the Blean. These are important not just for biodiversity but are also vital resources in adapting and mitigating against climate change.

The impacts on the natural environment would have wider implications for Kent in terms of economy and society, with the county's natural assets being a key draw for tourism, as well as an important resource in residents' health and wellbeing.



3 Policy Framework

In the last thirty years, a consensus has formed amongst the global scientific community that the sustained changes in global temperature experienced since the industrial revolution are directly caused by human activities. This consensus has been the catalyst for the formation of a plethora of international climate change policy. Often, these stress the responsibility of everyone; from international political unions, states, local governments, to individuals in effectively tackling climate change.

3.1 International

World leaders first recognised the seriousness of climate change and the need for action through the Rio Earth Summit in 1992. This set the ground for the establishment of the United Nations Framework Convention on Climate Change (UNFCCC), an institution whose primary aim is to promote international action around the issue. Meetings of the UNFCCC have led to numerous international agreements, among which the most notable are the 1977 Kyoto Protocol and the 2015 Paris Agreement.

The [Kyoto Protocol](#) was adopted on 11 December 1997 and entered into force in February 2005. This committed 37 industrialised states and economies, including the United Kingdom, into adopting legally binding emission reduction targets. While this was an important step for international climate change legislation, the Protocol was criticised for not going far enough, with reduction targets amounting to only a 5.2% decrease in the period 2005 – 2012.

The [2015 Paris Agreement](#) is another legally binding international treaty on climate change which was adopted by 196 states during the Paris United Nation Climate Change Conference (COP21). Signatories to this committed to limiting temperature increases in line with IPCC recommendations; no more than 2°C above preindustrial levels, while pursuing all reasonable measures to keep the increase below 1.5°C.

3.2 National

In 2008, the UK Government passed the [Climate Change Act](#) which committed the country to reducing its emissions by 80% by 2050 against a 1990 baseline. In 2019, the government amended the Act to become the first major economy to commit to net-zero. This was to be achieved by 2050. The new target requires the government to set legally binding limits on the UK's greenhouse gases each five years, today these are known as carbon budgets, and have become a standard way for local authorities to strategise their own paths to net-zero.

In 2021, the UK Government also legislated biodiversity targets through the Environment Act. These require a halt in the decline of species populations by 2030, and an increase by a minimum of 10% by 2042, with subsequent recovery of water bodies, the increase in national woodland cover to 16.5% and the restoration of 70% of designated features in Marine Protected Areas by 2042. This also set into place mandatory Biodiversity Net Gain for most developments.



3.3 Regional

Kent County Council has also developed its own targets, which are laid out in the [Kent and Medway Energy and Low Emissions Strategy](#) (ELES). This was published in 2017 and formally adopted in 2020. Similarly to the national targets, ELES sets five-year carbon budgets and emission reduction pathways to 2050, aiming for an 80% reduction by 2030.

The County Council has also recognised the important role a healthy natural environment plays in achieving net-zero, publishing the [Kent Nature Partnership Biodiversity Strategy 2020 to 2045](#). This sets out the how nature throughout Kent will be protected and restored.

3.4 Local

In June 2019 Swale Borough Council declared a [Climate and Ecological Emergency](#), recognising the threat Climate Change posed locally, nationally, and globally. The declaration included the commitment to:

- take all measures within our control to make Swale Borough Council's own operations carbon neutral by 2025.
- engage with businesses, organisations, and residents to facilitate the action required to make the Borough of Swale carbon neutral by 2030.
- make space for nature as a key priority, and safeguard our wild places, ancient woodlands, and hedgerows.

In April 2020, Swale Borough Council published the [Climate and Ecological Emergency Action Plan](#), which strategised how the council was to achieve the commitments made within the declaration. The scope covered by these commitments includes both the production and consumption emissions (scope 1, 2, and 3).

The Action Plan provided 81 actions across a range of focus areas, forming what was at the time among the most ambitious action plans in the country.

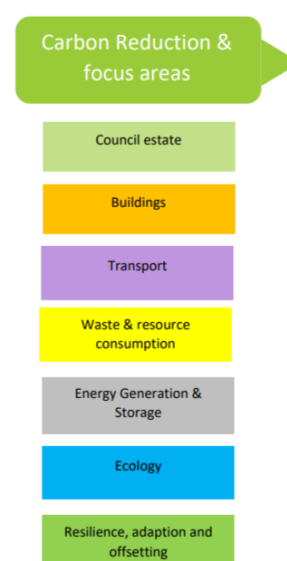


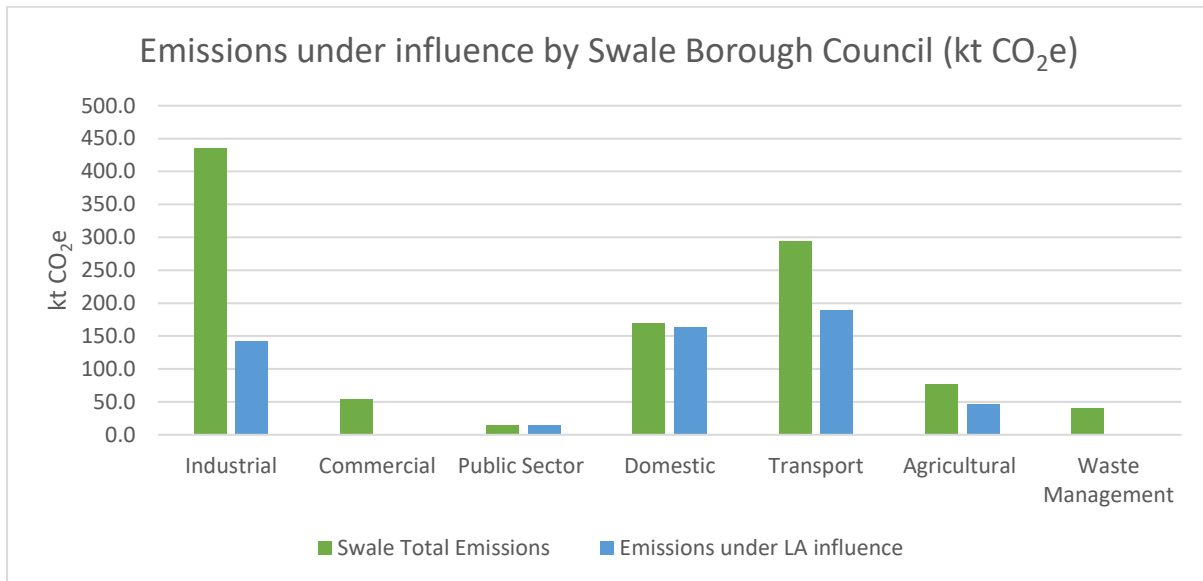
Figure 6: Key focus areas from the 2020 Climate and Ecological Emergency Action Plan



4 Strategy, Purpose and Scope

A 2024 review into Swale Borough Council's emissions by the Carbon Trust found the authority was responsible for 3,318 tCO₂e across scope 1, 2 and 3. This means that the Council is responsible for 0.31% of the Borough's total emissions.

The Department of Energy Security and Net Zero (DESNZ) release annual greenhouse gas statistics which include the proportion of the Borough's emissions that are influenceable by the authority. Graph 1 shows that 607.6 kt CO₂e, or 56.8% of the Borough's emissions could be influenced by Swale Borough Council.



Graph 1: Source, DESNZ

This demonstrates that while international governing bodies and national governments have an unwavering responsibility to address the climate crisis, that it is also of paramount importance for local authorities such as Swale to take the lead and develop robust climate strategies that make the most of our relationships with local institutions, businesses, and residents.

This 2025 Climate and Ecological Emergency Action Plan outlines how Swale Borough Council will continue to lead by example, achieving net-zero in our own operations, while pursuing all means to influence wider action across the borough through our policies, services, and partnerships.

The scope of the Climate and Ecological Emergency Action Plan incorporates all greenhouse gases (GHGs) and uses carbon dioxide equivalents (CO₂e) as the unit of measure. For ease throughout this report, we use the term 'carbon'.

The globally accepted carbon accounting standard known as the World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol defines direct and indirect organisational emissions as follows:

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity.



- Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity.

The GHG protocol further categorises these direct and indirect organisational emissions into three broad scopes:

Scope 1: all direct GHG emissions

Scope 2: indirect GHG emissions from consumption of purchased electricity, heat, or steam.

Scope 3: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. transmission and distribution losses) not covered by scope 2, outsources activities, waste disposal, etc.

As demonstrated in graph 1, much of the resulting carbon emission are derived from sources beyond the council, and as such, it is vital our strategy is centred around working with others to tackle the climate emergency.

To meet our targets, 36 actions have been designated into seven key focus areas:

SEVEN KEY FOCUS AREAS:



**COUNCIL
OPERATIONS**



**AIR QUALITY &
SUSTAINABLE TRANSPORT**



**LOW CARBON BUSINESS
& INDUSTRY**



**LOW CARBON BUILDINGS &
ENERGY EFFICIENCY**



**WASTE & RESOURCE
CONSUMPTION**



**BIODIVERSITY NET
GAIN & ECOLOGY**

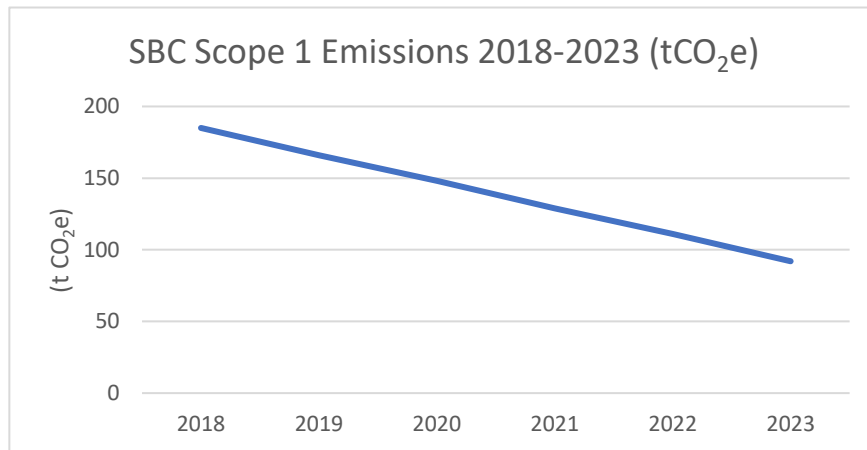


**RESILIENT COMMUNITIES
& ENGAGEMENT**



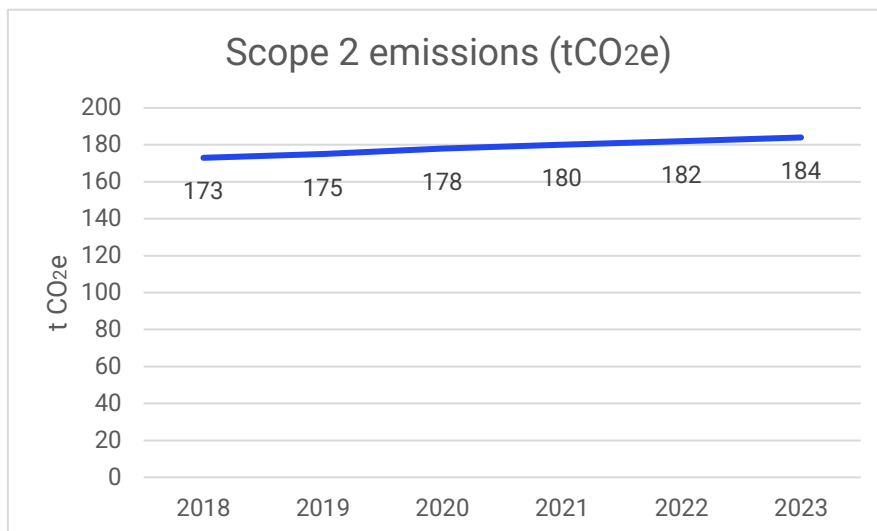
5 Baseline – Council Operations

An audit of the Council's services was undertaken throughout 2024, giving the Council an understanding of how our emissions have changed since the 2019 Climate and Ecological Emergency Declaration. The results of this have been disaggregated by scope, helping to build a better picture of the activities which produce the highest emissions.



Graph 2: Source, Carbon Trust

Scope 1 emissions- those directly within the council's control- have decreased by 50.2% in the years 2018-2023, representing a fall of 93 tCO₂e. This can be attributed to a 41% decrease in the use of natural gas, while business mileage halved, and diesel vehicles have been swapped out for an electric fleet.



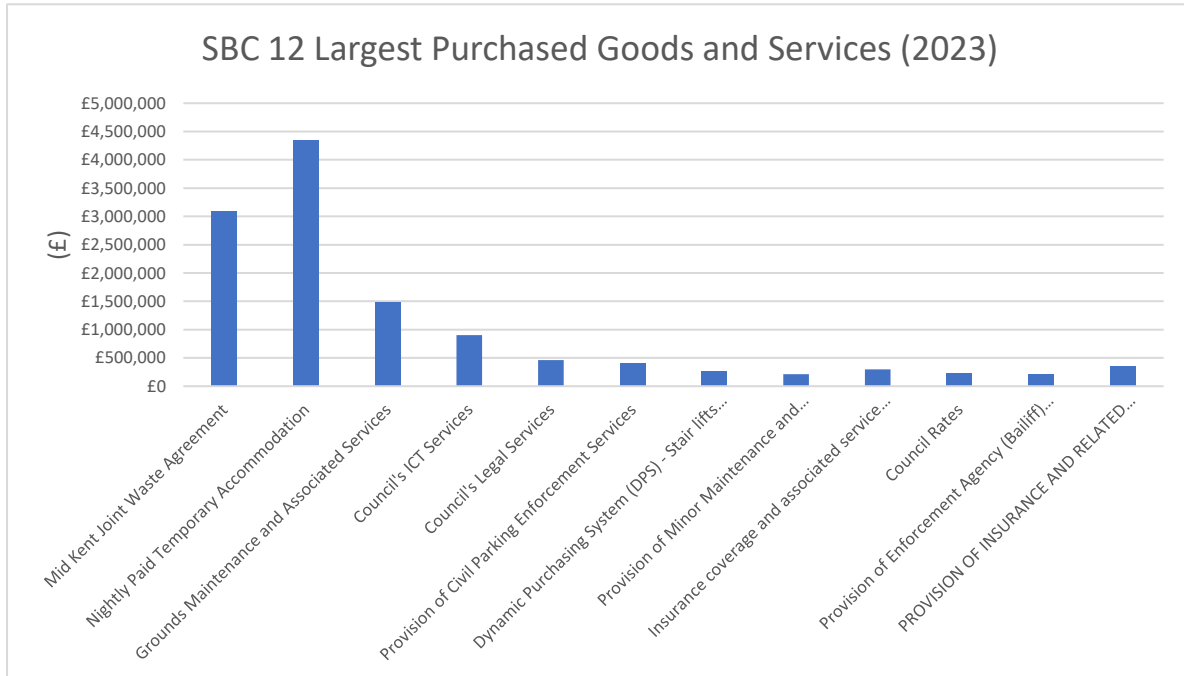
Graph 3: Source, Carbon Trust

Scope 2 emissions have seen a 6% increase. Investigations are underway to understand exactly why this has happened, however it may be caused in part by the requirement to charge electric vehicles. Scope 2 emissions are likely to decrease dramatically in the next decade as the Council installs solar PV on the roof of Swale House and the wider grid decarbonises.

2025 Climate and Ecological Emergency Action Plan

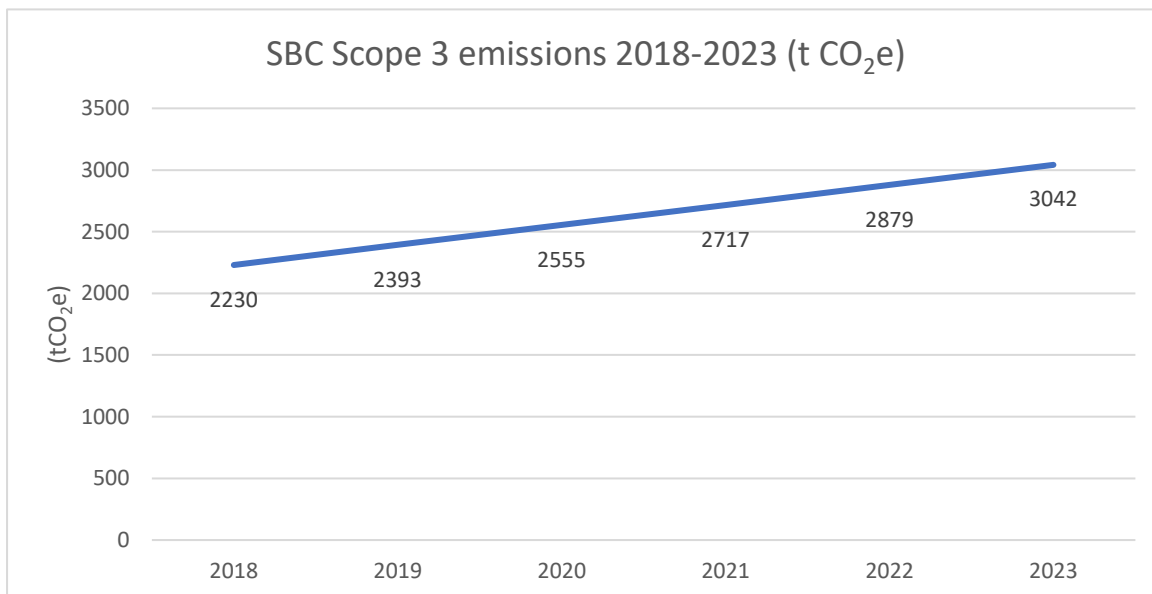


Scope 3 emissions arise from our supply chain and so were calculated by incorporating monetary values of our largest purchased goods and services into the GHG factor standard. The 12 largest purchased goods and services are illustrated in graph 4.



Graph 4: Source, Procurement and Commissioning Manager.

The two most carbon intensive goods and services are the Mid Kent Joint Waste Agreement and the Nightly Paid Temporary Accommodation. Scope 3 emissions have increased by 36% since 2018.



Graph 5: Source, Carbon Trust

Despite positive progress in Scope 1 emissions, the Council will not achieve its targets to be net zero by 2025.



6 Targeting- Council Operations

The past five and a half years have been extremely unusual and challenging and have certainly contributed to the hampering of the transition to net-zero. Despite this, the time since the 2019 Climate and Ecological Emergency Declaration has been marked by strong ambition and achievements.

It is critical however, that this new Climate and Ecological Emergency Action Plan considers the barriers the Council faces in our transition to net-zero and sets out targets balanced carefully between ambition and realism (setting clear our, and our residents, reliance on an ambitious national policy landscape).

As demonstrated by the baselining, it is clear that net-zero will be more achievable in the short-term for some scopes than others.

6.1 Scope 1 Targets

Swale's scope 1 emissions have halved in the past six years, demonstrating a short-term achievability if a high level of ambition is maintained.

This is why a target of 2035 is being set for the Council's scope 1 emissions.



6.2 Scope 2 Targets

The Council's scope 2 emissions largely stem from the purchase of electricity.

While these emissions have risen by 6%, the Council is in the process of installing solar panels on Swale House, which will offset 50% of the building's current electricity consumption, thereby reducing the Council's scope 2 emissions.

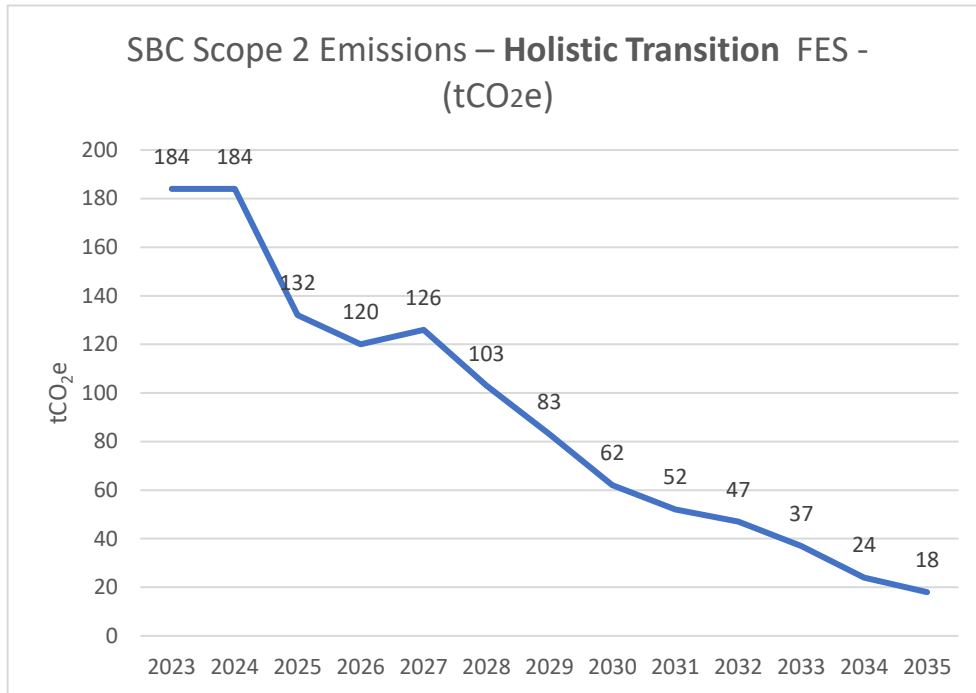
It is worth noting that scope 2 emissions will decrease significantly as the national grid decarbonises, as demonstrated by the National Grid's Future Energy Scenarios (FES). FES are models used to predict the future of the UK energy system and understand how it must transform to meet the UK's 2050 net-zero target. Each scenario factors in varying levels of change in infrastructure, technology, innovation, and consumer behaviour.

2025 Climate and Ecological Emergency Action Plan



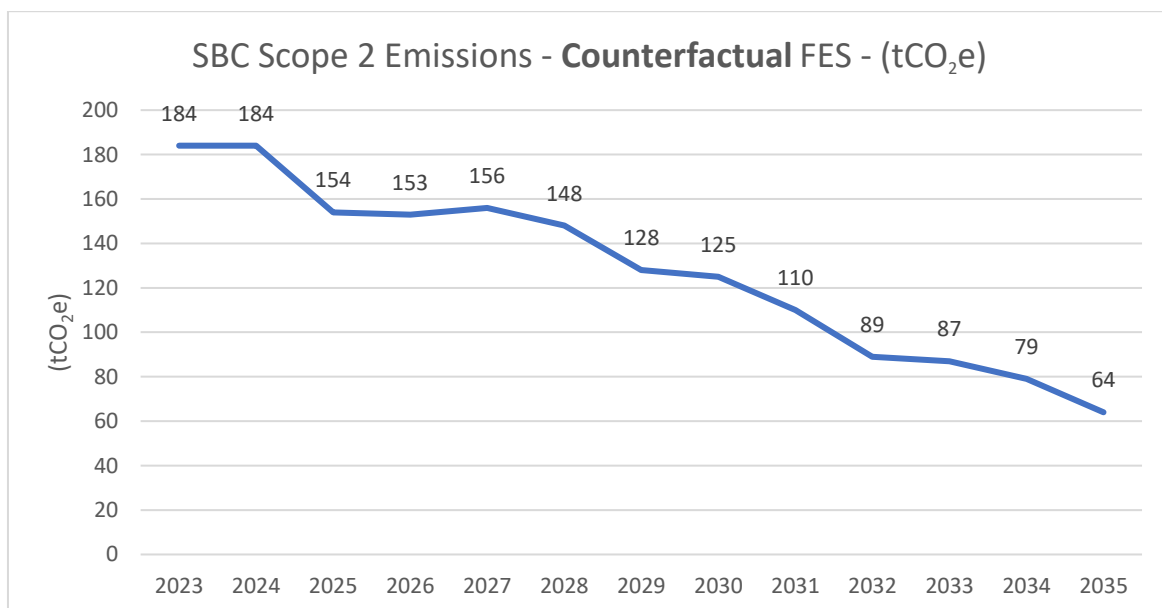
The Carbon Trust, in their review of Council operations, produced two models showing how different levels of ambition for national grid decarbonisation would affect the councils' own emissions.

The Holistic Transition FES (see graph 6) shows a high ambition scenario, with rapid decreases in the Council's scope 2 emissions.



Graph 6: Source, Future Energy Scenarios (FES)

The second modelled FES shows the counterfactual scenario, marked by stagnating efforts to decarbonise the national grid. Even in this scenario, the scope 2 emissions of the Council decrease significantly (65.2%) in the years leading up to 2035.



Graph 7: Source, Future Energy Scenarios (FES)



This is why we are setting a 2035 target for the Council's scope 2 emissions.



6.3 Scope Three Targets

Scope 3 emissions will be the hardest for the Council to address.

These emissions are derived from our supply chain through our purchased goods and services, many of which relate to statutory services. Thus, while the Council still has a degree of influence through our procurement processes and contract reviews, achieving net-zero within our scope three emissions will rely largely on wider decarbonisation. This will require strong support from central government for the industrial, commercial, domestic, and transport sectors in the form of comprehensive policy and funding.

With this reliance on external and often unpredictable factors, the Council has set a target date for scope 3 emissions to be net-zero by 2045.

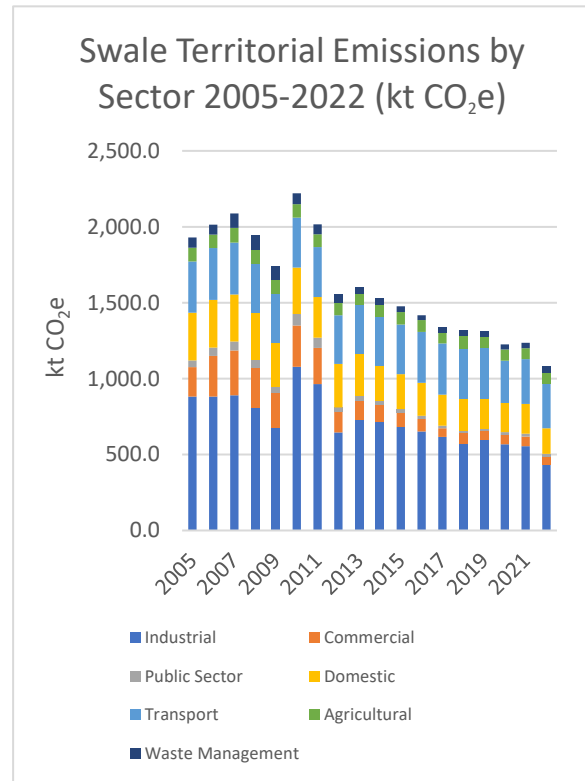




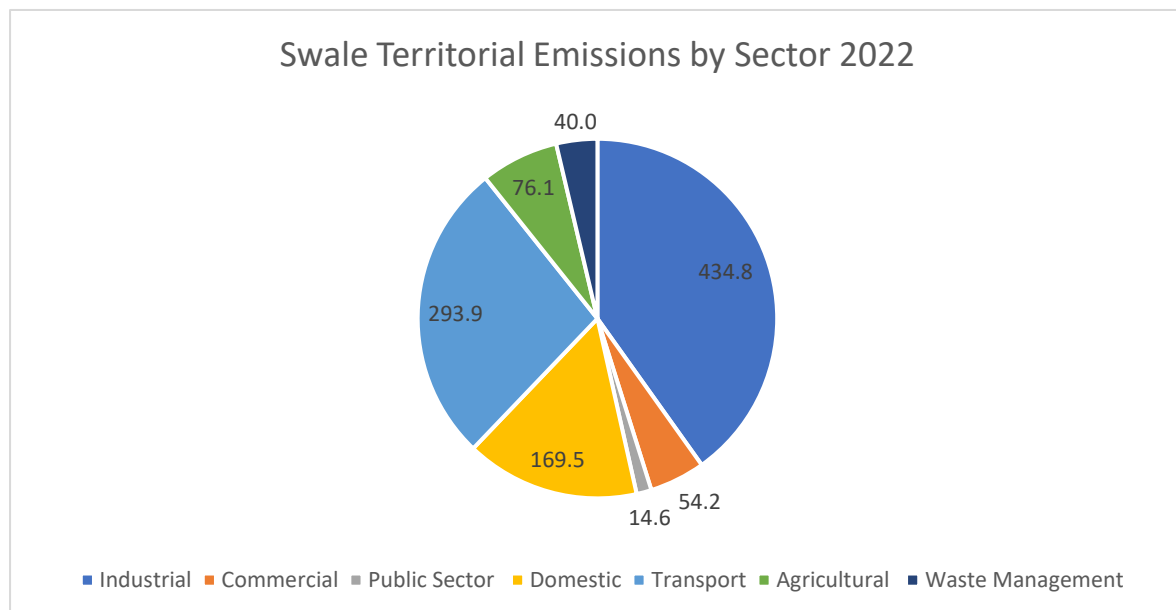
7 Baseline – Borough Wide Emissions

To establish the activities required to achieve our targets, we need to understand the existing situation not just within our own operations, but the whole Borough.

Data on local and regional GHG emissions is provided annually by the Department for Energy Security and Net Zero (DESNZ), formerly the Department for Business, Energy, and Industrial Strategy (BEIS). To allow for robust reporting, there is a two-year lag in the data provided meaning that the most recent emissions are reported from the 2022 calendar year. If we look at levels of emissions over the past 17 years, we can see a clear downward trend across the Borough. Despite this, the Borough has the highest emissions of any Kent authority, followed by Gravesham. In 2022, the Borough emitted a total of 1068.9 kt CO₂e, representing a decrease of 44.3% since 2005.

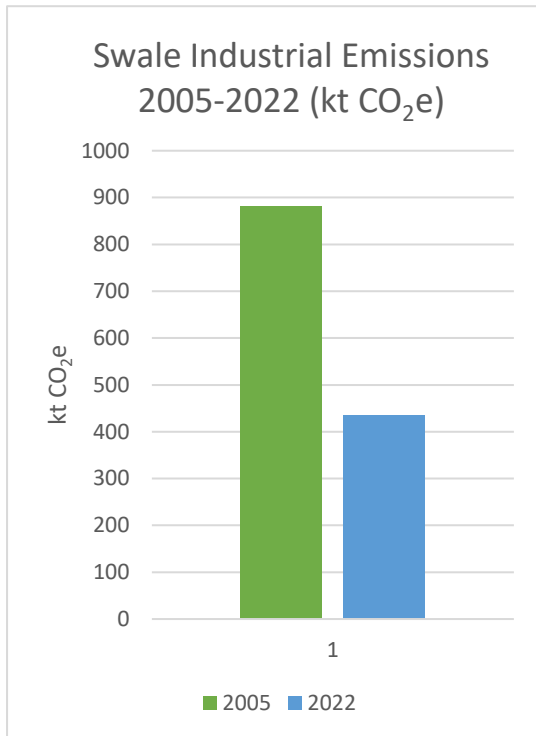


Graph 7 - Source DESNZ



Graph 8 - Source, DESNZ

The industrial and transport sectors are Swale's two largest emitters of greenhouse gases (40% and 27% respectively) followed by the domestic sector (16%), agricultural (7%), commercial (5%), waste management (4%), and public sector (1%).



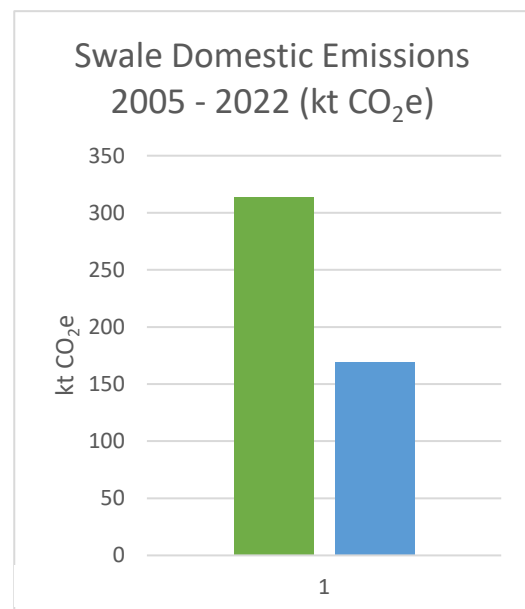
Due to the nature of business within the Borough, Swale has always had a large energy consumption and high industrial emissions, although these have declined substantially. In 2022, non-domestic gas consumption was 481.5 GWh, while non-domestic electricity consumption in the borough was 453.1 GWh. Industrial emissions peaked in 2010, and from this peak have fallen by 59.7% to 434.8 kt CO₂e. In 2022 emissions produced by the industrial sector accounts for 40.7% of the Borough's total emissions.

Graph 9 – Source, DESNZ

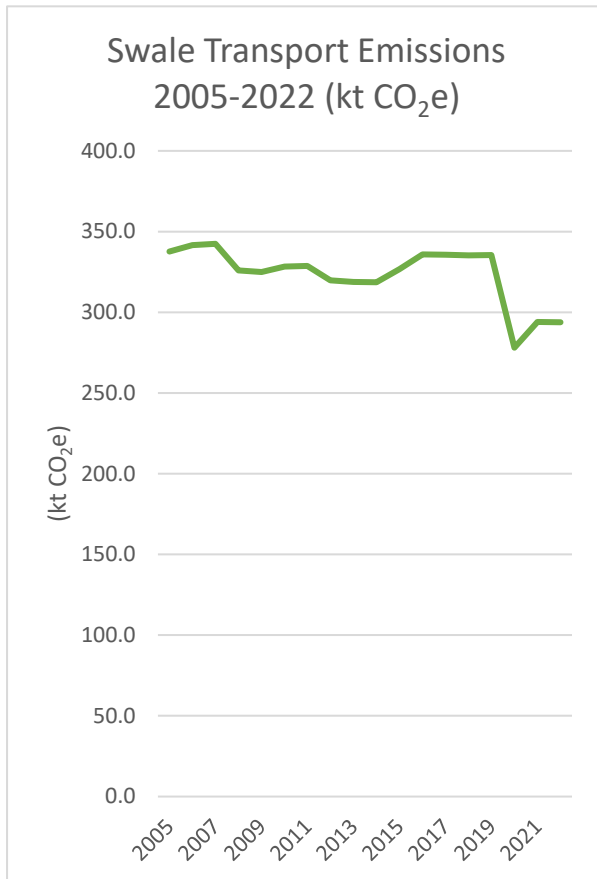
In 2022, domestic emissions account for 16% of the Borough's total emissions, with 65% of these emissions being produced from the use of domestic gas.

Total domestic gas consumption in the Borough during 2022 was 575.7 GWh with the average household consuming 9,915 kWh, a decrease of 43.4% since 2005. Total domestic electricity consumption in 2022 was 209.1 GWh, with the mean consumption per household at 3,258 kWh. This represents a decrease of 29.0% since 2005.

Between the years 2005 and 2022, domestic emissions decreased by 46% to 169.5 kt CO₂e.

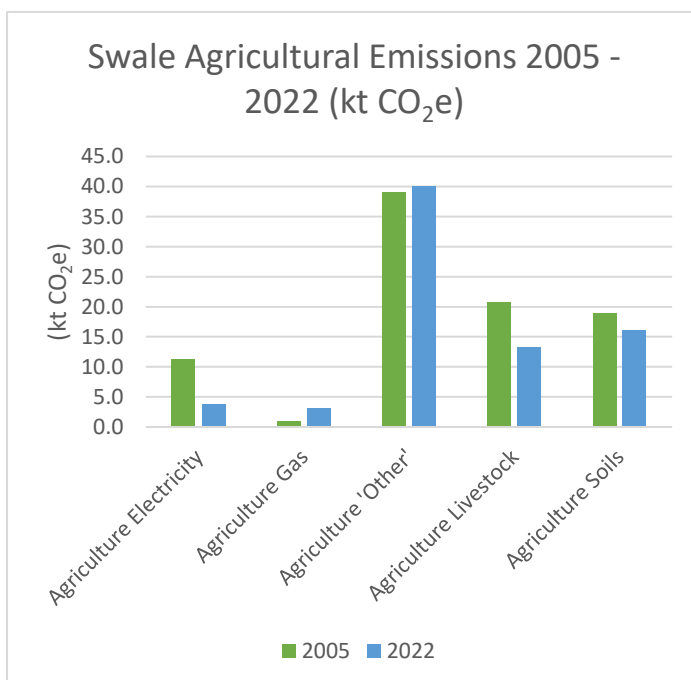


Graph 10 – Source, DESNZ



Transport sector emissions have remained relatively stable throughout the 2005-2022 reporting period. Emissions from the sector declined by 17.1% in 2020 as the result of reduced movement during the COVID-19 emergency, and although they have increased since restrictions were lifted, emissions remain 12.8% below pre-pandemic levels. In 2022, the sector emitted 293.9 kt CO₂e, or 27% of the year's total emissions. It is worth noting that a significant proportion (34.9%) of transport emissions arise from the use of motorways that run through Swale and will be hard for the authority to influence.

Graph 11 – Source, DESNZ



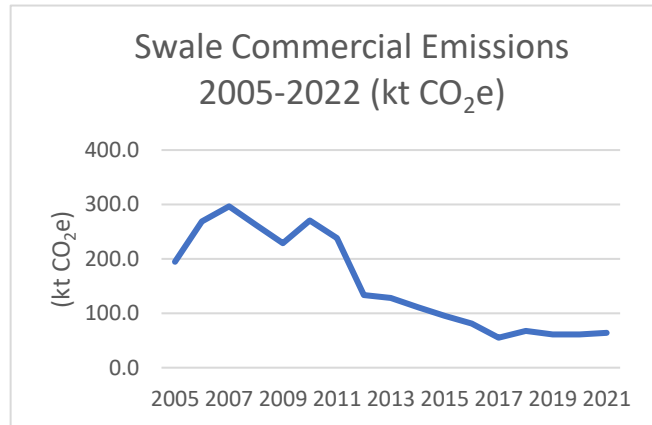
Agricultural sector emissions have remained stable between 2005 and 2022, dropping by 16%. Although there have been decreases in emissions derived from agricultural electricity use and livestock, emissions from the use of gas and 'other' have risen. In 2022, the agricultural sector contributed 7% of the Borough's total emissions at 67.1 kt CO₂e.

Graph 12- Source, DESNZ

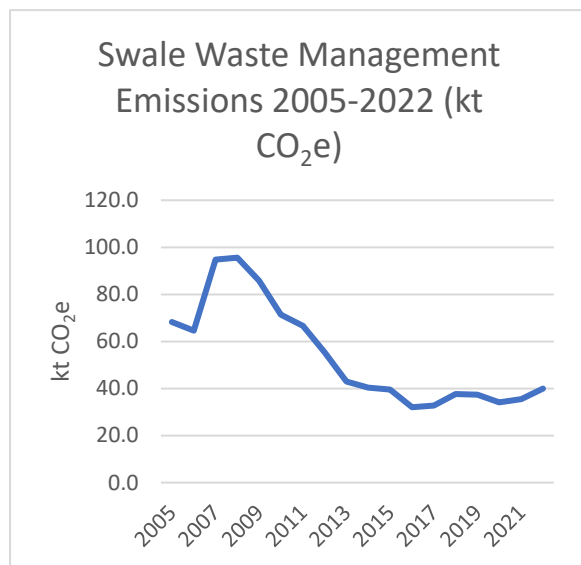
2025 Climate and Ecological Emergency Action Plan



Commercial emissions have seen the largest proportional decrease since 2005. In 2022, emissions from the sector had fallen by 72.2% to 54.2 kt CO₂e. Of this, 71.9% of emissions can be attributed to the use of electricity, and so emissions from the sector will continue to fall as the national grid decarbonises.



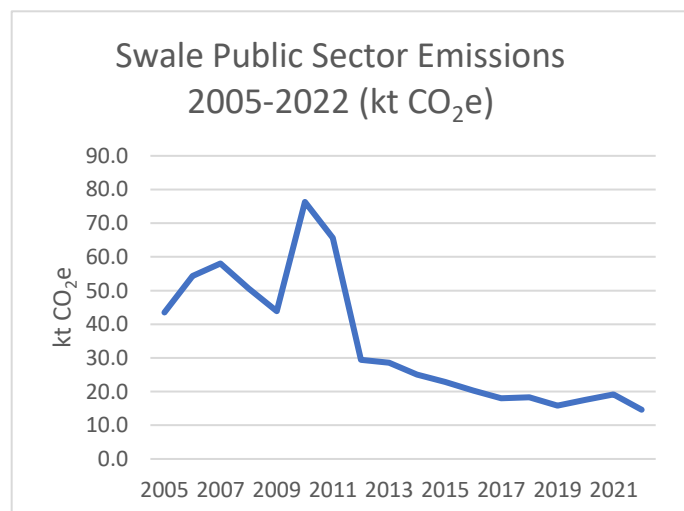
Graph 13- Source, DESNZ



Graph 14- Source, DESNZ

In 2022, waste management contributed to 4% of the Borough's total emissions, producing 40t of emissions. This represents a 41.3% decrease in the period 2005 to 2022.

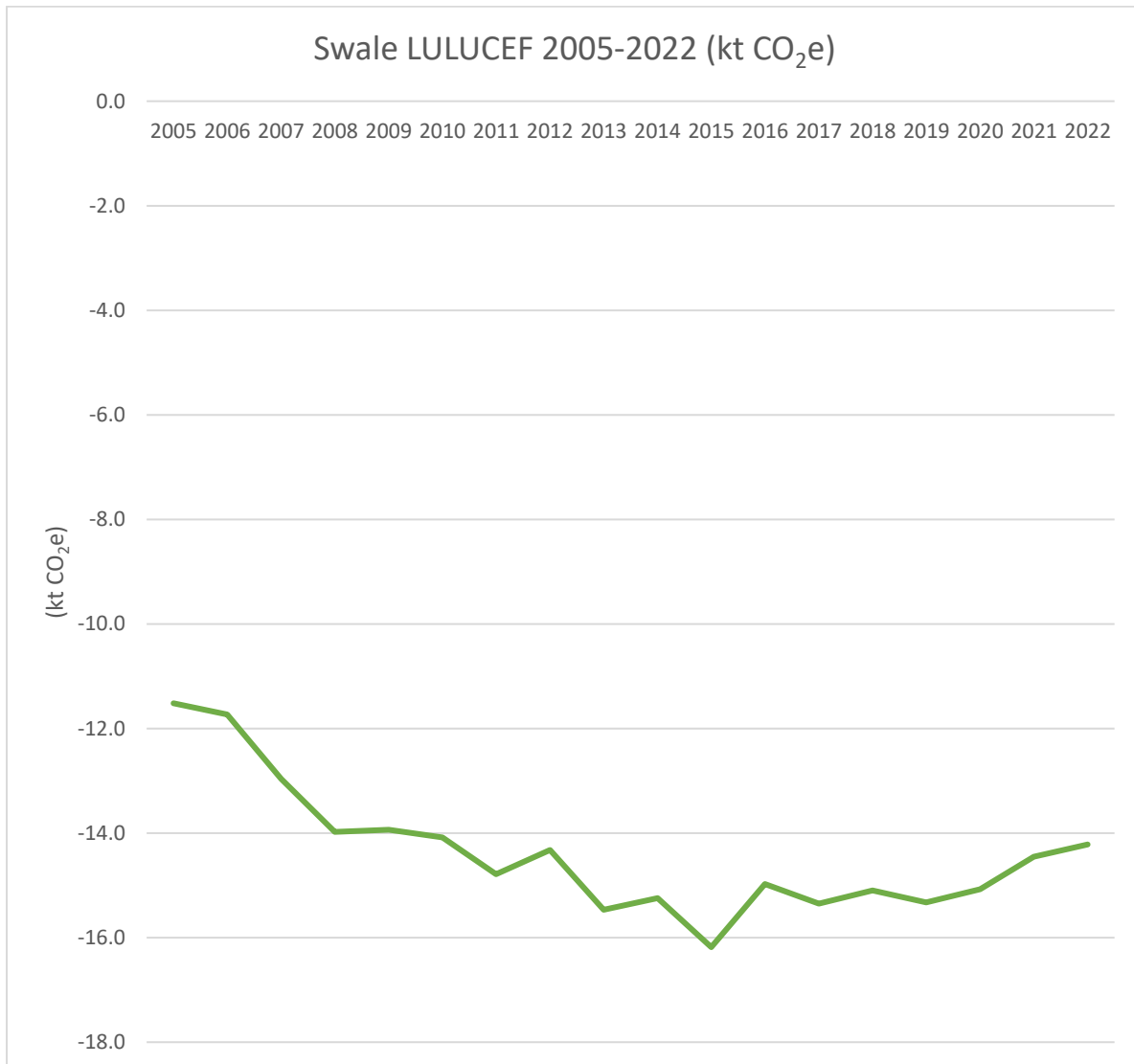
Public sector emissions have decreased by 66.4% between the years 2005 and 2022. The most up to date DESNZ data shows that emissions from the sector now constitutes just 1% of the Borough's total emissions (14.6 kt CO₂e).



Graph 15- Source, DESNZ



Land use, Land- use Change and Forestry (LULUCEF) are considered as separately to the energy CO₂e budget and refers to the human activities that allow the accumulation of greenhouse gases - predominantly CO₂ - to accumulate in terrestrial ecosystems. These terrestrial carbon sinks can be woodland, grassland or wetlands. In 2022 14.2 kt CO₂e was sequestered in Swale.



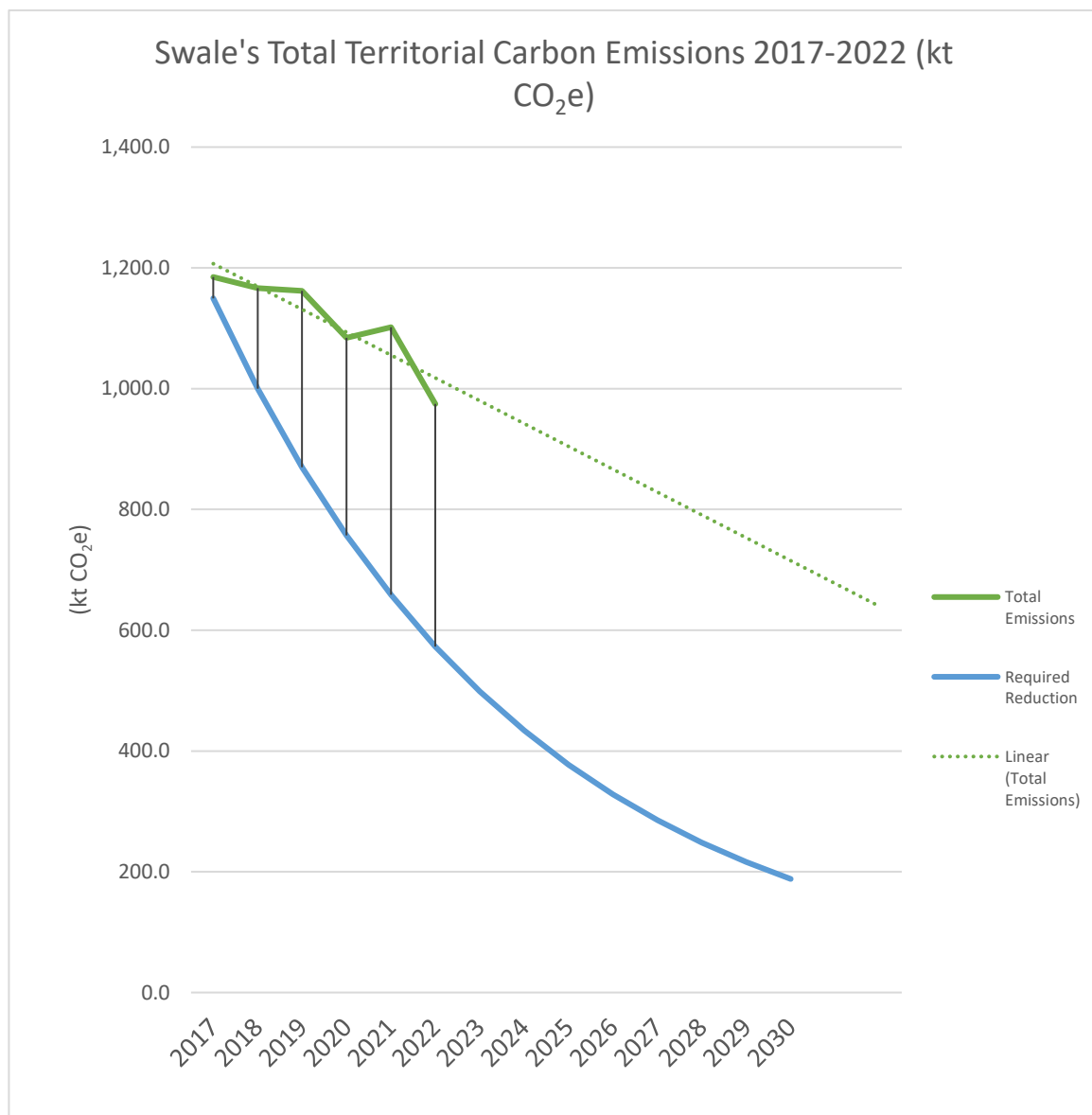
Graph 16 – Source, DESNZ



8 Targeting – Borough Wide Emissions

Despite a high level of ambition, it has become evident that emissions are not falling quickly enough to achieve our Borough wide net-zero target of 2030. The previous five years since the Climate and Ecological Emergency Declaration have been strenuous for everyone, and this has dampened the progress that needed to be felt across every sector.

Graph 21 highlights the reduction that would be necessary to achieve the original targets, as well as the actual progress that has been made towards our 2019 targets.



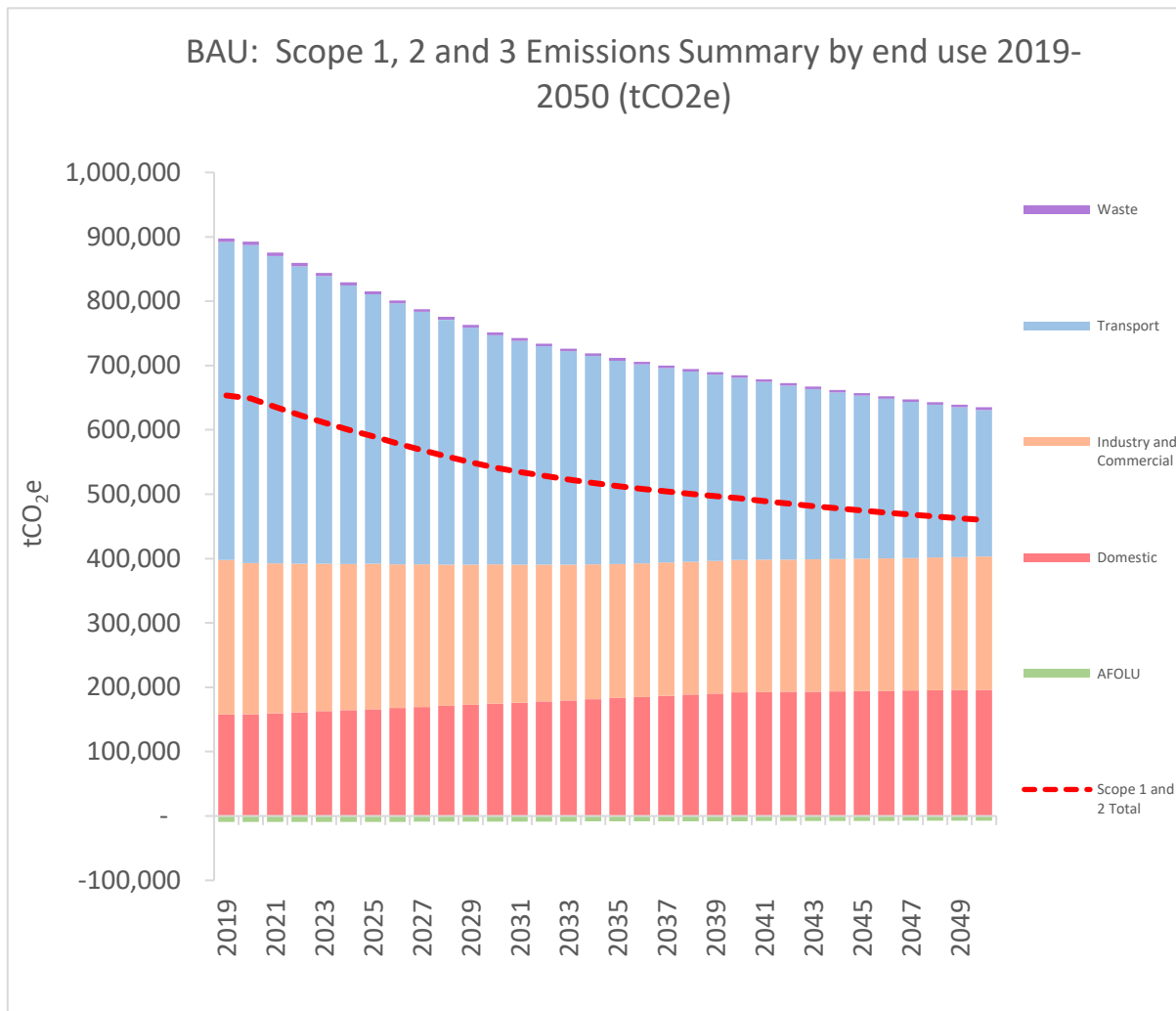
Graph 17: Source, DESNZ and the Carbon Trust Ltd

2025 Climate and Ecological Emergency Action Plan



SCATTER is a tool used by local authorities to visualize emissions reductions pathways for their jurisdictions. Developed by Anthesis and funded by the Department for Energy Security and Net-Zero, the tool draws in a wide base of national and local public data, enabling authorities to forecast their emissions under a range of scenarios. To inform targeting for Borough wide emissions two SCATTER scenarios have been modelled.

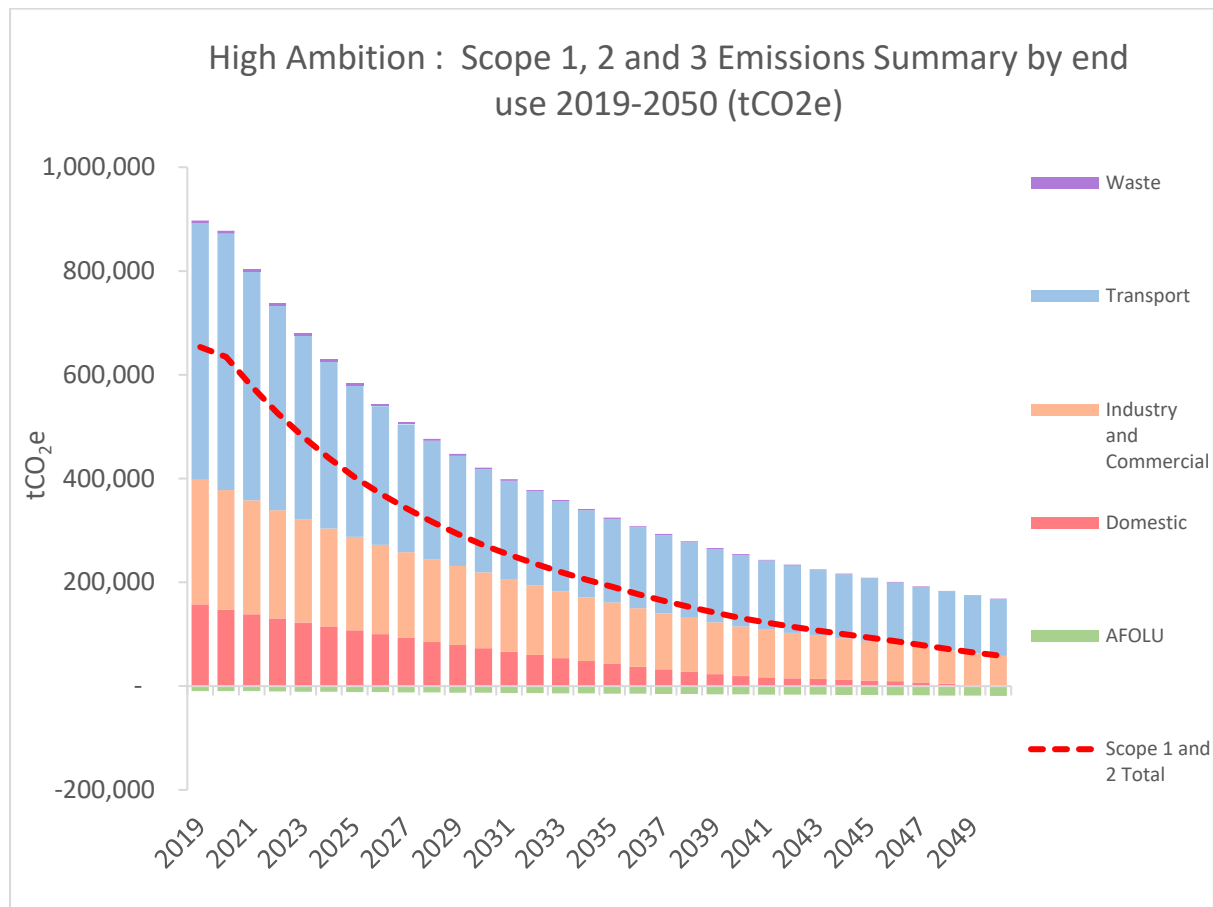
The first model shows a business and usual (BAU) scenario, with efforts to decarbonise stagnating and little overall changes in the Borough's emissions. The industrial and commercial sectors see minimal changes, while domestic sector emissions increase as populations increase. To prevent the worst effects of climate change, this path must be avoided.



Graph 18: Source, SCATTER



Graph 19 shows a high ambition scenario in which rapid decarbonisation is experienced across all sectors. Despite this, SCATTER modelling does not show net-zero being achieved by the nationwide target of 2050.



Graph 19: Source, SCATTER

This means that the Council must take effective action to avoid a situation in which the Borough is not compliant with climate change legislation.

Swale Borough Council remains committed to the principles outlined by the original Climate and Ecological Emergency Declaration, such as leading by example. We aim to stay ahead of the emissions reductions curveball set out by national and regional policy.

Towards this aim we have revised the Borough wide net-zero target to 2045.



9 Actions

9.1 Council Operations

The Council's own estate and operations are the only area where Swale Borough Council has direct control to reduce carbon emissions, for example the council's buildings, parks and greenspaces, and the services that the council provides directly or procures. As demonstrated by the Council operations baselining, most of the Council's carbon footprint comes from procured services, meaning we can only decrease these through more stringent procurement policies.



Action	Department (s)	Outcomes
To bring forward business cases to retrofit Council assets where funding is available, and to identify grant and advocacy opportunities to support the retrofitting of tenanted premises'	<ul style="list-style-type: none"> Property Services 	That where feasible, council buildings are sustainably retrofitted, and standard sustainable clauses are implemented in the new and renewed leases of council owned buildings.
To ensure that the Council's commitments are balanced in all plans, strategies, and decisions as far as practical.	<ul style="list-style-type: none"> All 	That council led development and regeneration projects are compliant with emerging Local Plan policies.
To produce a Sustainable Events Policy	<ul style="list-style-type: none"> Climate Emergency 	To require that events taking place on council land avoid the use of single use plastics and have minimal impact on the local environment.
To provide training for purchasing Officers on procurement and commissioning which includes considerations on the Climate and Ecological Emergency Declaration.	<ul style="list-style-type: none"> Commissioning Human Resources 	That the Climate and Ecological Emergency is embedded further into the Councils procurement procedures, supporting the development of a 'green supply chain.'
To identify opportunities to reduce emissions from the Council's largest contracts through formal and informal agreements.	<ul style="list-style-type: none"> Environmental Services Climate Emergency Housing 	That a downward trend is seen in the council's scope 3 emissions.



9.2 Air Quality and Sustainable Transport

Swale's transport emissions remain 12.2% below pre-pandemic levels, yet still account for 27% of the borough's total emissions.

Currently 67.9% of commuter journeys made in the borough are made by private vehicle, which can have impacts on residents' safety, physical and mental health, and the wider environment.



Through this Action Plan the Council is seeking to promote a wide modal shift towards public transportation and active travel, working with partners such as KCC to develop an integrated transport system.

Action	Department (s)	Outcomes
Review the Electric Vehicle Strategy	<ul style="list-style-type: none"> Climate Emergency Parking Services 	That the Council remains up to date with emerging technologies and are well prepared to deliver electric vehicle infrastructure.
Create and implement a Swale wide Local Cycling and Walking Infrastructure Plan (LCWIP).	<ul style="list-style-type: none"> Climate Emergency 	That the Council takes a strategic approach to identifying improvements to active travel infrastructure.
Prioritise LCWIP routes that require infrastructure enhancements first.	<ul style="list-style-type: none"> Climate Emergency 	That routes which require infrastructure enhancements are supported by targeted funding bids at later stages in the delivery plan.
To work with KCC to deliver 20mph zones in urban centres across the borough.	<ul style="list-style-type: none"> Climate Emergency 	To deliver cost effective improvements in air quality, reductions in health inequalities and carbon footprints, and ensure towns are safe for active travel.
Support the delivery of measures outlined in the Air Quality Action Plan 2023 - 2028.	<ul style="list-style-type: none"> Environmental Health Climate Emergency Planning Policy 	To improve air quality across the borough, delivering improvements to resident's health.
Investigate the potential to install cycle parking facilities in Council owned car parks.	<ul style="list-style-type: none"> Property Services Climate Emergency 	That where feasible, cycle storage is installed in Council owned car parks.



9.3 Low Carbon Business and Industry

While there have been significant reductions in the emissions of the industrial sector, 43% of Swale's territorial emissions are still derived from the sector. The Council cannot directly control these emissions, but it is important that we make the most of our networks to demonstrate long term financial and environmental benefits of transitioning to net-zero.



Action	Department	Outcomes
To include a 'green thread' throughout the next Economic Improvement Plan	<ul style="list-style-type: none"> Economy and Regeneration 	That future Economic Improvement Plan supports the economic sustainability of business by supporting their futureproofing environmentally.
Facilitate the sharing of best practice with publication of local case studies.	<ul style="list-style-type: none"> Economy and Regeneration 	That businesses understand the financial benefits of low-carbon measures/ biodiversity enhancements.
To engage with businesses on a regular basis to understand how the Council can further support industry in the transition to net-zero.	<ul style="list-style-type: none"> Climate Emergency Economy and Regeneration 	That the Council understands what low carbon measures are most feasible for businesses, how the council can support businesses in undertaking these, as well as the barriers that businesses face in the transition to net-zero.
Encourage and support the largest emitters to develop carbon reduction strategies.	<ul style="list-style-type: none"> Economy and Regeneration Climate Emergency Environmental Health 	That the largest emitters in the Borough have developed carbon reduction strategies by 2030.



9.4 Low Carbon Buildings and Energy Efficiency

16% of Swale's territorial emissions are derived from the domestic sector, presenting a major challenge. To achieve our targets, all homes will need to be properly insulated, which will require immediate changes in government policy and large financial support for mass retrofitting programmes to existing homes.



New homes will also need to be built as net-zero. The emerging local plan is pushing for this, although it is unlikely to be adopted until Autumn 2027, and equally there is no guarantee that our ambitious net-zero targets will be agreed by the Planning Inspector.

Action	Department(s)	Outcomes
That the council supports sustainable building practices and development.	<ul style="list-style-type: none"> Planning Policy 	The development of a Local Plan with robust policies which ensures the next generation of homes and businesses are energy efficient and run from renewable technologies.
To understand how to deliver a borough wide net-zero energy system.	<ul style="list-style-type: none"> Climate Emergency 	That by 2030 Swale will have a Local Area Energy Plan (LAEP).
To investigate the feasibility of heat networks in Swale.	<ul style="list-style-type: none"> Climate Emergency Private Sector Housing 	That by 2030 Swale Council understands whether heat networks are feasible within the borough.
That the Council facilitates the creation of an approved list of renewable technology suppliers.	<ul style="list-style-type: none"> Climate Emergency 	That the council adheres to DESNZ recommendations, resulting in an increased uptake of renewable technologies for domestic and commercial purposes.
To support and promote retrofitting projects for Swale businesses and homes.	<ul style="list-style-type: none"> Climate Emergency Communications 	That residents are kept aware of schemes available to reduce their homes carbon footprint.
To run a series of events targeting both landlords and owner occupiers promoting energy efficiency measures.	<ul style="list-style-type: none"> Private Sector Housing Climate Emergency 	To engage residents about the financial and environmental benefits of improving the Energy Performance Certification of their homes.



9.5 Waste and Resource Consumption

The amount of household waste collected has fallen over the previous decade, and while recycling rates have an overall positive trend, they remain lower than the Council's partners in the Mid-Kent Partnership.

To become a carbon neutral borough, residents, organisations, and businesses will need to reduce their total waste, engage with the idea of the circular economy, and recycle more.



Action	Department (s)	Outcomes
To promote overall reductions in waste through the promotion of reduced consumption and a circular economy.	<ul style="list-style-type: none"> Environmental Services Climate Emergency 	That a downward trend is seen in the amount of municipal waste generated.
Reduce contamination of recycling that leads to rejected loads.	<ul style="list-style-type: none"> Environmental Services Climate Emergency Suez Kent County Council 	The development and implementation of a collaborative project which results in a downward trend in the number of loads rejected.
To promote the recycling of domestic and commercial waste.	<ul style="list-style-type: none"> Environmental Services Climate Emergency Suez Kent County Council 	To achieve a 65% recycling rate by 2035.



9. 6 Resilient Communities and Engagement

In the five years since the publication of the first Climate and Ecological Emergency Action Plan, Swale Borough Council has forged strong partnerships with a wide range of organisations, from schools, charities, parish councils and community gardens, to businesses and universities.

With the Council's limited scope, the expansion of this network will be critical to the delivery of a net-zero Swale.



Action	Department	Outcomes
To develop a Climate Change Communications Plan.	<ul style="list-style-type: none"> Climate Emergency Community Partnerships Economy and Regeneration Communications and Policy 	That our network is mapped, and a comprehensive plan developed which ensures the Council effectively engages with communities about the Climate and Ecological emergency.
To include a dedicated page in future versions of Inside Swale to the climate and ecological emergency.	<ul style="list-style-type: none"> Climate Emergency Communications and Policy Private Sector Housing 	That the council actively promotes measures individuals and communities can take to address the climate and ecological emergency.
To support the development of local green skills.	<ul style="list-style-type: none"> Climate Emergency 	That local colleges offer funded courses for green skills.
To expand the outreach of the Green Schools Forum.	<ul style="list-style-type: none"> Climate Emergency 	That every school in the borough will have a sustainability representative on the forum.
Expand the outreach of the Green Grid Community Forum	<ul style="list-style-type: none"> Climate Emergency Communications and Policy 	That the forum's potential as a comms platform to engage residents is expanded.
To support parish councils in measuring their emissions and developing carbon reduction strategies.	<ul style="list-style-type: none"> Climate Emergency 	That every parish council in the borough has a carbon reduction strategy by 2030
To work with schools, community groups, and businesses to encourage low carbon travel.	<ul style="list-style-type: none"> Climate Emergency 	That engagement events are delivered which specifically highlight the benefits of sustainable travel, and that the percentage of primary schools with travel plans increases.
Work in partnership with schools, businesses, and parish councils to identify land for tree planting.	<ul style="list-style-type: none"> Climate Emergency Greenspaces 	That the council collaborates with local organisations to plant 1000 whips per year.



9. 7 Biodiversity Net Gain and Ecology

Swale is lucky to have a diverse range of landscapes, from internationally important wetlands, ancient woodlands and heritage orchards to wildflower grasslands and award-winning country parks.

The Swale Local Plan contains robust policies on landscape and biodiversity, and the Council has been adapting to changes in government policy and guidance, such as Biodiversity Net Gain (BNG) and Local Nature Recovery Strategies (LNRS). Both offer benefits for people and nature and will be critical to the preservation and recuperation of nature in Swale.



Action	Department	Outcome
To support and align the Council to the Kent Biodiversity Strategy and the Local Nature Recovery Strategy.	<ul style="list-style-type: none"> Planning Policy Climate Emergency 	That Swale Borough Council's policy, guidance, and action contributes towards the overall aims of the Kent Biodiversity Strategy and the LNRS.
To make the most of BNG requirements to improve the state of nature in Swale.	<ul style="list-style-type: none"> Planning Policy Planning Applications 	The development of a robust Local Plan policy which supports the statutory 10% BNG requirement on development, potentially 20%.
To investigate a pilot study for a Swale habitat bank.	<ul style="list-style-type: none"> Planning Policy 	That the council understands whether a habitat bank could be developed for the delivery of off-site BNG.
To investigate the leasing of council owned woodlands to educational institutions for management.	<ul style="list-style-type: none"> Greenspaces Property Services Climate Emergency 	That woodland management maximises opportunities to increase local green skills and boost woodland biodiversity.
To review opportunities to increase tree and hedgerow planting both on SBC and private land.	<ul style="list-style-type: none"> Greenspaces. 	That urban areas within the borough are more resilient against extreme weather events such as flooding and through an increased canopy cover.



10. The opportunity for Swale: Co-Benefits of Climate Action

The Fifth Assessment Report for the IPCC defines co-benefits as the “positive effects that a policy or measure aimed at one objective may have on other objectives.’

In Swale’s 2019 Climate and Ecological Emergency Declaration, the council stated that in delivering projects which contributed towards the fulfilment of our targets we would avoid any adverse impacts on our most vulnerable residents. The transition towards a sustainable Council and Borough would be just, and equitable, and used as a step change for both people and the environment. Many of our activities since the declaration have enacted this, and this action plan will ensure this ethos is continued.



Some of the benefits that effective climate action will incur are illustrated below.

10.1 Strong Economy and Infrastructure

The transition to net-zero brings the opportunity to strengthen the economy and build more resilient infrastructure.

Protected and enhanced biodiversity have the potential to sequester carbon and strengthen local tourism economies.

Improvements in mental and physical health from integrated transport systems that encourage active travel may mean fewer school and workdays being missed due to illness, with decreased demand on health services and improved economic output.

Expanding markets for renewable technologies creates job opportunities. Reduced expenditure on household bills due to improvements in energy efficiency and the installations of domestic renewables would create space for extra spending in the tourism, luxury, and services industries.

Reduced costs for businesses will ensure business continuity and support further economic growth.



10.2 Resilient, Thriving Environment.

Swale is lucky to have a diverse range of landscapes, from internationally important wetlands, ancient woodlands and heritage orchards to wildflower grasslands and award-winning country parks.

When conserved and enhanced, these can have a multitude of benefits.

Healthy ecosystems can function as natural buffers against the worst effects of climate change, protecting communities against flooding and heatwaves, while also providing space for people to exercise and improve their physical and mental health.

10.3 Empowering and Connecting Communities.

Swale is already home to a wealth of community groups who help make the Borough a vibrant place to live and visit.

The collaborative networks required to address climate change can lead to greater recognition of the contributions of community, offering a chance for individuals to foster new connections within their communities.

10.4 Health and Wellbeing

Swale residents face disproportionate health adversities, with 73% of adults classed as overweight, as opposed to the UK average of 64%.

Many of the activities identified to support the transition to net-zero offers a wide range of benefits to health and wellbeing.

Energy efficient homes can help reduce incidences of mould related health issues, while improvements in air quality will benefit the health of residents.

The preservation and enhancement of biodiversity has a wide range of benefits, from improved natural resilience to extreme weather and disasters such as flooding, improved air quality, and the incentivisation of physical activity such as walking and cycling.

10.5 Secure Power and Warm Homes

Swale is the second most deprived district in Kent, with 11.9% of households experiencing fuel poverty in 2022.

The transition to a decarbonised grid, and the uptake of domestic renewables will improve the UK's energy security, shielding taxpayers from external shocks to the market, while improvements to the energy efficiency of homes will significantly reduce expenditure on bills.



Appendix 1 – Swale Borough Council’s Declaration of Climate and Ecological Emergency

A Climate and Ecological Emergency was unanimously declared by Swale Borough Council on 26 June 2019 which committed:

1. To declare a ‘Climate and Ecological Emergency’.
2. To draw up an action plan with improvement in energy efficiency and making space for nature as key priorities in all strategies and plans.
3. Pursue the Swale Strategic Air Quality Action Plan 2018-22 and to actively lobby all responsible authorities to improve air quality within Swale.
4. To provide leadership by taking all measures within our control to make Swale Borough Council’s own operations carbon neutral by 2025, taking into account both production and consumption emissions (scope 1, 2 and 3).
5. To engage with businesses, organisations and residents to facilitate the action required to make the Borough of Swale carbon neutral by 2030, taking into account both production and consumption emissions (scope 1, 2 and 3).
6. To undertake actions including, but not be limited to, spatial and transport planning to make fewer journeys necessary, improvement to the energy efficiency of new and existing housing and buildings, improved public transport especially in rural areas; encouraging active transport, developing the infrastructure for EVs; deploying renewable energy at every opportunity, while continuing to safeguard our wild places, ancient woodlands and hedgerows
7. To call on Westminster to provide the powers and resources to make the 2030 target possible.
8. To call upon the MPs for Sittingbourne & Sheppey and for Faversham & Mid Kent to support this motion.
9. To work with other governments (both within the UK and internationally) to determine and implement best practice methods to limit global warming to less than 1.5°C.
10. To work with partners across the Borough to deliver these new goals through all relevant strategies and plans.
11. To become a ‘Plastic-Free Council’ by eliminating single-use plastics from the Council’s operations, whenever possible, by 2021.
12. To request the Cabinet, working through the Policy Development and Review Committee, to report the actions the Council will take to address this emergency to Full Council by the end of the 2019/20 municipal year.
13. In meeting this pledge, the Council will take steps to avoid any adverse impacts on our most vulnerable residents.
14. This Council pledges to produce in January of each year, between now and 2030, Swale Borough Council Climate and Ecological Emergency an annual report detailing the council’s progress against Swale’s carbon neutral action plan, enabling members, residents, and other stakeholders to hold the council to account for the delivery of this pledge.



Appendix II: Adopted Local Plan and Local Plan Review.

The 2017 adopted Local Plan, Bearing Fruits 2031 number one Core Objective is to 'Adapt to climate change with innovation, reduced use of resources, managed risk to our communities and opportunities for biodiversity to thrive' (p.20). Furthermore, policy ST1, Delivering sustainable development in Swale sets out that 'to deliver sustainable development in Swale, all development proposals will, as appropriate... meet the challenge of climate change, flooding and coastal change through a) the promotion of sustainable design and construction, the expansion of renewable energy, the efficient use of natural resources and the management of emissions b) the management and expansion of green infrastructure and c) applying planning policies to manage flood risk and coastal change. A range of other policies across the plan also seek to mitigate and adapt to the challenges of climate change.

On 12 December 2024 a revised version of the National Planning Policy Framework (NPPF) was published. The NPPF defines the purpose of the planning system as contributing to the achievement of the sustainable development with three overarching objectives – economic, social, and environmental. Within the environmental objective is included mitigation and adaption to climate change, including moving to a low carbon economy. Because of this, climate change is an important element running through the adopted local plan.

The Local Plan is currently being reviewed and is due to be adopted in autumn 2027. The Council is working to ensure that the topic of climate change is properly represented within this, forming a green thread throughout the Local Plan Review.



Appendix III Strategies relevant to our Climate Change and Ecological Emergency Action Plan

Swale Borough Council Strategies and plans

[Bearing Fruits 2031 – Local Plan adopted July 2017](#)

[Electric Vehicle Strategy \(2022-2030\)](#)

[Air Quality Action Plan \(2023-2028\)](#)

[Air Quality and Planning – Technical Guidance \(2024\)](#)

[Swale Economic Improvement Plan \(2020-2023\)](#)

[Tree Maintenance Policy \(2024-2028\)](#)

[Commissioning and Procurement Policy](#)

[Parking Standards SPD](#)

Kent County Council Strategies

[Kent and Medway Energy and Low Emissions Strategy](#)

[Kent Active Travel Strategy \(2018/2019\)](#)

[Kent Nature Partnership Biodiversity Strategy 2020 - 2045](#)

[Kent Local Nature Recovery Strategy](#)

[Kent Downs AONB Management Plan \(2021- 2026\)](#)



Appendix IV: Glossary of Terms

BNG – Biodiversity Net Gain

CCC - Climate Change Committee

CCRA – Climate Change Risk Assessment

CCRIA – Climate Change Risk and Impact Assessment

CO₂ – Carbon Dioxide

COP21 – United Nations Conference of the Parties

CO₂e – Carbon Dioxide Equivalents

Defra – Department for Environment, Food and Rural Affairs

DESNZ – Department for Energy Security and Net-Zero

ELES – Kent and Medway Energy and Low Emissions Strategy

FES – Future Energy Scenarios

GHG – Greenhouse Gases

INNS – Invasive and Non-Native Species

LAEP – Local Area Energy Plan

LCWIP – Local Walking and Cycling Infrastructure Plan

LNRS – Local Nature Recovery Strategy

LULUCEF – Land Use, Land-Use Change and Forestry

CH₄ – Methane

NO₂ – Nitrous Oxide

O₃ – Ozone

PPM- parts per million

UKCP – United Kingdom Climate Projections

UNFCCC – United Nations Convention on Climate Change

WMO – World Meteorological Organisation