



## **Climate Emergency**

### **Shared Ambitions for Stratford-on-Avon DC and Warwick DC**

**June 2021**

#### **Statement of Intent**

- In 2019, both Councils declared a climate emergency and in doing so set out ambitions to reduce both organisational and District carbon emissions. Whilst the specific ambitions were slightly different, the overall intent was the same.
- The Councils' have engaged specialists to compile a detailed report (attached as Appendix B) to inform the two Districts about the nature and extent of interventions needed to achieve emissions reductions within South Warwickshire. This report indicates that with a high level of ambition, a 55% reduction in carbon emissions from across South Warwickshire is feasible by 2030;
- Since the declaration of the Climate Emergency, both Councils have taken steps to reduce carbon emissions, the details of which are set out in Appendix A.
- This paper sets out the shared ambitions for South Warwickshire taking account of:
  - a) the advice from the Anthesis report;
  - b) the extent to which cooperation from other organisations is required;
  - c) the availability of funds both from Central Government, other external funds and the limited funds from the Councils' own budgets;
  - d) the many uncertainties of external factors that might either hinder or accelerate our progress;
  - e) the need to fully play our part in achieving the ambitions as clear statements of intent;
  - f) the need to ensure the climate emergency is a consistent priority within each of the Councils' decisions and projects - without that consistent prioritisation, we recognise that these ambitions cannot be achieved;

So, as we set these ambitions, we understand that there are many uncertainties, and we recognise that the path towards net zero will need to change as the context changes. These ambitions therefore need to be understood as aspirations rather than firm commitments. But we do make a commitment to play our part in working to achieve these ambitions and ask others nationally, regionally and locally to join us on that journey.

## 1. Introduction

- 1.1. Both Councils declared a climate emergency in 2019. This document resets the specific ambitions of the two Council in addressing the climate emergency in light of
  - our commitment to work together
  - the Covid Pandemic
  - a stronger understanding of the data
- 1.2. The two Councils are committed to preparing a shared Climate Change Action Programme (CCAP) covering the whole of South Warwickshire. The ambitions set out below provide the overarching framework for that joint CCAP and will be the focus of a shared action plan.

## 2. Our Ambitions

- 2.1. The following three ambitions will provide the focus of our work to address the climate emergency:
  - **Ambition 1 – Net Zero Carbon Council 2025:** ensure the new South Warwickshire Council is net zero carbon within a year of its first elections and that services provided through contractors include carbon reduction targets to deliver net zero by 2030.
  - **Ambition 2 – Low Carbon South Warwickshire 2030:** to reduce net carbon emissions from across South Warwickshire by a minimum of 55% by 2030 and alongside this, plan how to further reduce carbon emissions to net zero by 2050.
  - **Ambition 3 - Adaptation 2050:** by 2050 to enable our environment and communities to have adapted to the potential of at least a 3 degrees rise in global temperatures by 2100.

## 3. Explanation, data and scope for our ambitions

- 3.1. **Ambition 1 – Net Zero Carbon Council 2025:** ensure the new South Warwickshire Council is net zero carbon within a year of its first elections and that services provided through contractors include carbon reduction targets to deliver net zero by 2030
  - 3.1.1. The Councils recognise that in declaring a Climate Emergency we are committing to do all we can to eliminate the cause of climate change as quickly as possible. As part of this we have a responsibility to minimise our own organisations' carbon emissions. The two Councils intend to merge from May 2024 and are committed to using data to focus efforts on reducing carbon emissions. This part of the Action Programme will involve initiatives to be delivered between 2021 and 2025.
  - 3.1.2. In 2019, both Councils collated data relating to their organisational carbon emissions. This showed the following:
    - Stratford District Council: 3,545 tonnes CO<sub>2</sub>e (including leisure centres)
    - Warwick District Council: 2,948 tonnes CO<sub>2</sub>e (excluding leisure centres)
  - 3.1.3. In both cases, the majority of emissions are as a result of energy use in Council buildings with significant amounts relating to the activities of contractors and, (to a lesser degree) travel by staff on Council business. The data is currently being refined to ensure it is consistent across the two organisations and can be used in a combined way. This is likely to result in a change to the total combined emissions.
  - 3.1.4. Impacts of Council contractors will be included within the scope of the organisational emissions. However, it is also recognised that a number of existing contracts will continue beyond 2025. Given the scale of investment required to enable some of these

contracts to be zero carbon, it is accepted that there will be resulting carbon emissions beyond 2025. There are therefore two elements to this ambition:

- a) We will seek to reduce carbon emissions from buildings and vehicles that are directly operated by the Council to net zero by 2025
- b) We will seek to minimise carbon emissions from buildings and vehicles that are operated by our contractors by 2025 and to ensure contracts incorporate carbon reduction plans during their life and that all contracts are net zero by 2030 at the latest.

3.2. **Ambition 2 – Low Carbon South Warwickshire 2030:** to reduce net carbon emissions from across South Warwickshire by a minimum of 55% by 2030 and alongside this, plan how to further reduce carbon emissions to net zero by 2050.

3.2.1. The Scatter Pathways study undertaken by Anthesis on behalf of the Councils shows that local action can make a real difference to carbon emissions in South Warwickshire and that with a high ambition, a 55% carbon reduction by 2030 (against 2017 levels) is achievable, particularly if initiatives to increase carbon capture within South Warwickshire by 2030 to offset some of the residual carbon emissions are also factored in.

3.2.2. The Scatter Pathways report (appendix B) shows the total amount of carbon emissions arising from South Warwickshire in 2017 is 2,744,000 tonnes CO<sub>2</sub>e. The report breaks this total down into different sources and shows the most significant sources of emissions are:

- On road transport (45%)
- Residential Buildings (20%)
- Institutional, Commercial and Industrial Buildings (20%)

3.2.3. The report shows that within the current context it could be possible to achieve a 55% reduction in carbon emissions from South Warwickshire by 2030, if the Councils set a high ambition. The Anthesis study is based on a wide range of assumptions, many of which are beyond the Councils' control (for example national policies, international financing, development of new technology etc). So although the report suggests going beyond 55% will be difficult in the current context, we consider that is possible if the context changes in the coming years. It is therefore proposed to take the 55% reduction as minimum. It should be noted that whilst the proposed minimum reduction of 55% is considerably ahead of the levels of reduction that could be achieved if no action is taken, it is also below the levels that would be required to align with the national Paris Climate Change commitments. This again underlines the need to aim beyond a 55% reduction on the basis that national policy will need to change to achieve the UK's Paris Climate commitments.

3.2.4. Looking beyond 2030, the report indicates that with high ambition and within the current context, it should be possible to achieve a 75% reduction in carbon emissions from South Warwickshire by 2030, if the Councils set a high ambition. However, given the UK Government is committed to achieving net zero carbon for the whole country by 2050, it would be reasonable to expect the national context to improve so as to enable a 75% reduction to be exceeded. The Councils therefore consider that the ambition should be in line with national aims to achieve net zero carbon by 2050.

3.3. **Ambition 3 - Adaptation 2050:** by 2050 to enable our environment and communities to have adapted to the potential of at least a 3 degrees rise in global temperatures by 2100.

3.3.1. The Councils are currently working with the Met Office to better understand the data relating to the likelihood and impacts of different temperature rises. The Councils recognise that, to some extent, climatic change is inevitable and that these changes will have an impact on our local environment, economy and health and wellbeing. It is therefore important that we support local adaptation. This ambition signals an approach whereby the Councils will work to mitigate climate change, whilst recognising that, when viewed globally, there is so much that is beyond the control of organisations based in

South Warwickshire. We therefore consider that a 3 degree rise in global temperatures by 2100 is a possible "landing point" and although we will play our part in full to prevent this, we should also take a responsible approach by putting in place the necessary adaptation measures by 2050. This part of the Action Programme will therefore set out initiatives to be undertaken between 2021 and 2050 to deliver effective adaptation.

- 3.3.2. National and regional data from the Met Office indicates that it is likely that South Warwickshire will see:
- Wetter winters
  - More intense storms
  - Drier summers
  - Prolonged heat waves
- 3.3.3. At present we do not have data specifically at a more granular level relating to South Warwickshire or areas within South Warwickshire. However, further data on the impacts of climate change is being prepared by the Met Office and will be available later in 2021. This will provide the catalyst for focused work to explore how to respond to specific impacts.

## 4. Action Planning

- 4.1. Once the shared ambitions are adopted, a resourced action plan will be brought forward, informed by the data to ensure that those actions that can make the biggest difference are prioritised. It is intended this action plan will be adopted in quarter 3 of 2021/22. This action plan will draw on the existing work already established by both Councils, as well as the Anthesis Carbon Reduction Pathways report. In the case of Warwick District, the People's Inquiry in to Climate Change will also be a major factor in drawing up the action plan – and lessons from this may also be applied to Stratford District where they are relevant.
- 4.2. It is proposed that an action plan is prepared for each of the three ambitions as follows:
- 4.2.1. **Ambition 1 – Net Zero Carbon Council 2025:** explore actions in the following areas:
- Identify energy usage and carbon emission for each of SDC's and WDC's buildings and develop a building by building carbon reduction plan (replacing fossil heating systems and installing energy efficiency measures)
  - Switch all Council fleet vehicle to low or zero emission fuels
  - Include carbon reduction requirements for all new Council contracts so that carbon emissions are minimised by 2025 and are reduced to net zero by 2030 at the latest
  - Develop the infrastructure to ensure a reliable supply of low carbon fuelling for fleet and contractor vehicles is available
  - Encourage staff to use active or low emission transport for Council business
  - Ensure new buildings and infrastructure brought forward by the Councils are zero carbon in operation
- 4.2.2. **Ambition 2 – Low Carbon South Warwickshire 2030:** working with partners and communities, explore actions in the following areas:
- Transport
    - Encourage less travelling (fewer journeys, shorter distances) through planning
    - Support active modes of travel (walking, cycling)
    - Support public transport
    - Switch to electric vehicles (cars, buses, taxis, HGVs)
    - Reduce freight and delivery emissions
    - Consider whether we can influence emissions from aviation
  - Domestic buildings
    - Shift off natural gas heating and cooking systems to renewable and low carbon alternatives
    - Improve appliance and lighting energy efficiency

- Improve thermal efficiency of homes
- Non domestic buildings
  - More energy efficient heating
  - Shift off natural gas heating and cooking systems to renewable and low carbon alternatives
  - Improve appliance and lighting energy efficiency
- Energy supply
  - Develop a local strategy to decarbonise heat provision across south Warwickshire (identify role of heat pumps, district heating, hydrogen)
  - Increase renewable energy across South Warwickshire, including exploring direct investment by the Councils
  - Explore the provision of hydrogen hub to support low emission transport and potentially for domestic use
  - Encourage PV panels on commercial and domestic buildings
- Other areas
  - Carbon sequestration and offsetting through tree planting and protection/enhancement of natural assets, noting that offsetting should generally be a last resort and should be achieved as locally as possible
  - Encourage lower carbon land and livestock management
  - Encourage more reuse and less waste
  - Increase recycling rates

4.2.3. **Ambition 3 - Adaptation 2050:** Work with partners and communities to explore actions in the following areas:

- establish key vulnerabilities across South Warwickshire (these may be geographical vulnerabilities such as flood risk or vulnerabilities relating to sectors of our communities – such as health risks)
- Local plan development site selection
- Local plan selection of areas for protection
- Address vulnerabilities of key settlements through improved infrastructure
- Retrofitting buildings (especially institutional and housing) to building resilience to over-heating, storm damage, etc
- Adapting Council services and strategies – such as leisure centres, parks and gardens, housing, fuel poverty, buildings control, environmental health
- Opportunities to invest in renewable energy
- Consider support to sector of the economy that could be impacted by a changing climate (for instance agriculture, tourism)
- Work with partners to respond to the health impacts of a changing climate
- investment in physical infrastructure to prevent flooding, enable cooling, and adapt to other extreme weather events such as storms etc
- investment in green infrastructure and natural assets to maintain and enhance biodiversity and to provide for natural means to adapt to climate changes
- Identify areas where there may be water supply issues

4.2.4. **Cross cutting initiatives:** To support the action plan we will need to develop strategies for the following:

- **Communications:** recognising we will have a role in influencing and informing our residents about climate change
- **Partners, community and stakeholder engagement:** recognising that we cannot deliver our ambitions on our own, we need to be clear about who we need to work with and ensure effective engagement with those organisations and communities
- **Funding and Resources:** recognising that we will not have enough funding to deliver all our actions and ambitions, particularly for actions beyond the first year or two, a funding strategy will need to be developed exploring options for:

- Direct funding from the Council
- Housing Investment Programme
- Government grants
- Infrastructure Funding (Community Infrastructure Levy; Section 106)
- Developing a carbon offsetting fund
- Community Municipal Investment Bonds
- Business sponsorship and investments
- Supporting local residents and businesses to spend money on carbon reduction measures

In addition, the proposals will need to explore how existing staffing resources will need to be supplemented to deliver the range of projects and initiatives in the Action Plan.

- **Measuring and monitoring progress:** recognising that it is important to keep track of progress towards the shared ambitions, monitoring systems will be put in place whereby annual, and where possible, six monthly updates will be provided and reported. In addition, as far as possible, estimates will be made of the carbon savings that could be delivered from course of action that are agreed to deliver progress. This will allow the forecasts of carbon reduction required for Ambitions 1 and 2 to be made and variances that then arise to be understood

## Appendices

- A Progress to date
- B The Anthesis Report – Executive Summary

**Climate Change in Warwick and Stratford-on-Avon District Councils****Progress to date****July 2021****1 Introduction**

The climate change and carbon reduction achievements of the two Councils is extensive. Although the declaration of climate emergencies in 2019 gave this area a renewed focus, both Councils have been engaged with activities over a number of years. The list below picks out some of the more recent activities since 2019. It is not an exhaustive list, not least because some climate change work is implicitly incorporated into everyday activities.

The list has been pulled together to demonstrate that, even July 2021 marks a moment where the two Councils' have chosen to reset their climate change ambitions, this is not a starting point and there is extensive work already in place which can be built on.

**2 Achievements and activities****2.1 Energy in Buildings: retrofitting works**

- Switch to 100% renewable electricity for all WDC electricity supply (saving approx. 1,260tCO<sub>2</sub>e)
- £909,000 (including £744,000 from the Public Sector Decarbonisation Fund being spent on replacing gas boilers with heat pumps, plus associated thermal efficiency measures in 3 WDC buildings (saving approx. 138tCO<sub>2</sub>e).
- £1,350,000 awarded from the Social Housing Decarbonisation Fund Demonstrator programme for 50 Council homes with current low energy ratings undergo whole house energy retrofits using some of the latest technology available. Examples of the kind of works included are the replacement of windows with high-performance triple glazing, under floor and loft insulation and mechanical ventilation with heat recovery to reduce the risk of damp and mould, and provide fresh filtered air.
- WDC £400,000 for retrofitting private and Council housing properties including a grant of £264,000 from the LAD 1B. SDC have been successful in obtaining a grant under the same scheme for affordable warmth measures in private sector housing
- Plans to spend a further £1,250,000 (including an expression of interest submitted by WDC for LAD Phase 2 for £721,000) on thermal efficiency and low carbon energy supply for 163 social housing units. Works include solar PV, air source heat pumps, loft insulation and cavity wall insulation. The works are predicted to deliver carbon savings of around 4200tCO<sub>2</sub>e.
- SDC has received funding totalling approx. £5.5m for retrofitting housing to provide for energy efficiency and low carbon technology.
- Through Act on Energy 295 EcoFlex grants have been provided to residents, predominantly for fuel poverty, but many with carbon reduction benefits as well.
- An Expression of Interest has been submitted for further funding from the Sustainable Warmth Fund (formerly a combination of LAD3 and HUG1 funding) targeting some of the more energy inefficient private sector housing in the District.
- WDC has set aside £18m in the Housing Investment Programme for carbon reduction measures in Council homes. Recruitment currently taking place for new building surveyor posts to drive this work.

**2.2 Energy in Buildings: new buildings**

- Bringing forward low or zero carbon new buildings:
  - Proposals for the Community Stadium

- Kenilworth Leisure Centres (these are not zero carbon, but do include some significant energy efficiency reductions over and above building regulations)
  - Significant carbon reduction measures incorporated into the Creative Quarter – Spencer Yard proposal (albeit this is not net zero carbon due to the need to incorporate measures within listed and historic buildings)
- WDC is leading the way in investing in low carbon social housing including:
  - Development of 54 housing units at Europa Way (nearing completion) with carbon reduction upgrades
  - An agreement to purchase of 43 housing units at Bishops Tachbrook with net zero carbon specification
- Influenced design of new HQ building of 2<sup>nd</sup> Warwick Sea Scouts to swap the proposed gas heating system for Air Source Heat Pumps and Photovoltaic Panels.
- Net Zero Carbon standards included in the draft development brief for the redevelopment of Riverside House
- New cycle hire and café at Newbold Comyn to be net zero carbon design

### **2.3 Planning**

- WDC have developed a draft Net Zero Carbon Building Planning Policy Document that, subject to approval will be published for consultation in July 2021.
- SDC have adopted Climate Change and adaptation Supplementary Planning Document
- Climate change has been established at the heart of the new South Warwickshire Local Plan and a climate impacts assessment of the spatial options has been completed
- The preparation of the South Warwickshire Economic Strategy has established climate change as a key cross cutting theme and the objectives of the strategy are being informed by this.

### **2.4 Contracts and Procurement**

- The contract specification for the new waste collection and recycling service incorporates carbon reduction requirements and includes environmental impacts within the evaluation criteria
- The contract specification for the new SDC Grounds Maintenance service incorporates carbon reduction requirements and includes environmental impacts within the evaluation criteria
- The SDC Leisure Contract had been retendered including environmental assessment criteria
- WDC's procurement strategy and code of procurement practice has been redrafted to require s Corporate Social Responsibility (CSR) Criteria (including addressing Climate Change) at a combined weighting of 5-15% within the 'quality' criteria, for all contracts over £50,000 and environmental value.
- Both Councils are participants in the building of the Material Recycling Facility (MRF) in Coventry, giving the Council more control of recycling within the District;

### **2.5 Transport**

- New cycle routes/facilities proposed at Stratford Riverside, St Nicholas Park; Newbold Comyn; and Victoria Park.
- A new park and ride facility to be established at the Asps, Warwick. It is expected this will operate electric buses.
- installation of over 50 additional public charging points in south Warwickshire car parks during Spring 2021
- Installation of 8 on-road EV charging points during Spring 2021 to trial locations where this can bring benefits.
- Match funding agreed for a bid for Dept for Transport funding for eCargo bikes in Stratford District



- Working with Warwickshire County Council in undertaking a study on the future of electric vehicles and the need for EV charging to support this. This will form the basis for an EV charging strategy.
- Introduction of predominantly electric vehicles for WDC's directly operated fleet vehicles
- Have worked with Warwickshire County Council to ensure the Local Transport Plan 4 will have a strong focus on Climate Change – for example; electrification, alternative fuels and active travel;

## **2.6 Green Infrastructure**

- Proposals for improved green infrastructure and biodiversity at Stratford Riverside
- First of 160,000 trees planted as part of WDC's tree planting project
- Proposals for the development of new and enhanced green infrastructure at Newbold Comyn and Tachbrook Country Park

## **2.7 Establishing Our Climate Baseline and Opportunities**

- Undertook a People's Inquiry into climate change
- Commissioned and published a carbon baseline report for South Warwickshire, along with carbon reduction plans
- Have commissioned a report looking at the potential for renewable and low carbon energy
- Have established the amount of carbon that each Council is directly responsible for

Appendix B: The Anthesis Report – Executive Summary

EXECUTIVE SUMMARY  
SOUTH WARWICKSHIRE'S CLIMATE EMERGENCY

Report Overview & Scope

This report was jointly commissioned by Warwick District Council and Stratford-on-Avon District Council in response to their climate emergency declarations and ambitions to achieve district-wide net zero emissions by 2030. Both Councils recognise that climate issues do not stop at the district boundary and that there is considerable value in working collaboratively to tackle climate change across South Warwickshire. This report will be used to help inform the nature and extent of interventions needed to quickly and effectively achieve emissions reduction within South Warwickshire.

Report Objectives:

- 1. Provide a better understanding of South Warwickshire's carbon footprint using a location-based accounting approach and build on existing work to date;
- 2. Explore the science-based carbon budget and emissions reduction pathways for both Districts;
- 3. Analyse the land use and agricultural footprint as well as carbon sequestration potential for Stratford-on-Avon District, given its rural nature; and
- 4. Reaffirm and identify a number of emission reduction interventions and milestones for both Districts.

South Warwickshire's Carbon Footprint

The chart below shows South Warwickshire's emissions profile for 2017, compiled using the SCATTER Inventory Tool. The profile below includes all emissions generated within both district-boundaries (scopes 1, 2 & 3). In 2017, South Warwickshire's energy system was responsible for net emissions totalling 2744.5 ktCO<sub>2</sub>e. This is composed of 1259.6 ktCO<sub>2</sub>e from Warwick District and 1484.9 ktCO<sub>2</sub>e from Stratford-on-Avon District. The majority of emissions across South Warwickshire resulted from buildings & facilities (40.6%) and transport (52.4%).

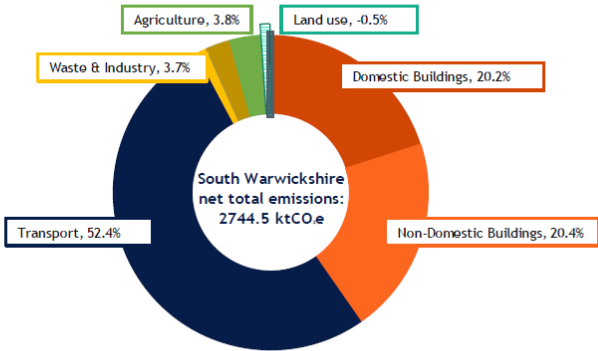


Figure 1: SCATTER 2017 inventory for South Warwickshire, shown by sub-sector.

EXECUTIVE SUMMARY  
LAND & AGRICULTURAL EMISSIONS STRATFORD-ON-AVON

Land & Agricultural Emissions Overview

This section of the report provides further analysis into emissions from the natural environment and agriculture within Stratford-on-Avon, given the more rural nature of the District.

Total gross emissions from agriculture and land use have been estimated at 155 ktCO<sub>2</sub>e according to the most recent data. A breakdown of the emissions can be seen opposite in figure 2.

Of the gross emissions, livestock is the dominant source, responsible for approximately 94 ktCO<sub>2</sub>e (64% of the gross total for agriculture and land use emissions). Emissions from fertiliser are responsible for approximately 32 ktCO<sub>2</sub>e (22% of the total).

The net figure for emissions is lower, at just under 146 ktCO<sub>2</sub>e, owing to land use changes within the district acting as a net carbon sink. Land use, land use change and forestry (LULUCF) is responsible for 8 ktCO<sub>2</sub>e of net sequestration, or removal of carbon emissions from the atmosphere, giving a net total of 146 ktCO<sub>2</sub>e.

Detailed analysis of these key agriculture & land use emission sources and emissions reduction scenarios can be found in Chapter 3 of the main report.

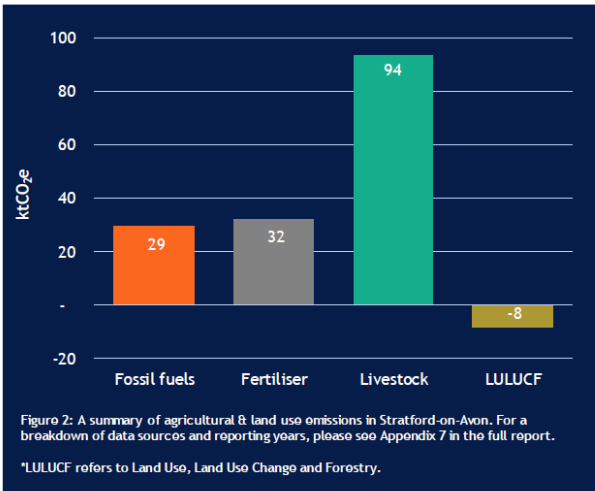


Figure 2: A summary of agricultural & land use emissions in Stratford-on-Avon. For a breakdown of data sources and reporting years, please see Appendix 7 in the full report.

\*LULUCF refers to Land Use, Land Use Change and Forestry.

## EXECUTIVE SUMMARY

### SOUTH WARWICKSHIRE'S DECARBONISATION PATHWAY

#### South Warwickshire's SCATTER Pathway

The graph to the right shows two possible future emissions pathways for South Warwickshire as modelled by the SCATTER Pathways Tool compared to a Paris-aligned recommended reduction pathway.

The blue line represents the "business-as-usual" (BAU) emissions trajectory if no significant action was to be taken other than the greening of the National Grid. The green line tracks maximum ambition, requiring South Warwickshire to act significantly beyond national policy. Adoption of a High Ambition Pathway delivers emissions reductions of 55% by 2030.

Despite aggressive climate change action, hard-to-remove residual emissions persist. Whilst emissions from most sectors are greatly reduced, the scale of improvement is not enough to reach net zero by 2030. Further ambition and additional technological and nature-based solutions will need to be considered to close this "gap".

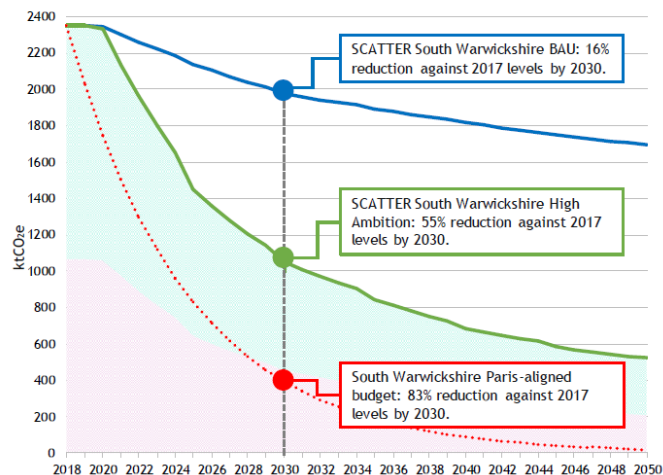


Figure 3: Future emissions pathways for South Warwickshire (2018-2050), with Stratford-on-Avon's high ambition pathway highlighted in teal and Warwick's high ambition pathway highlighted in purple.

## EXECUTIVE SUMMARY

### SUMMARY OF INTERVENTION MEASURES

#### Emissions Reduction Interventions

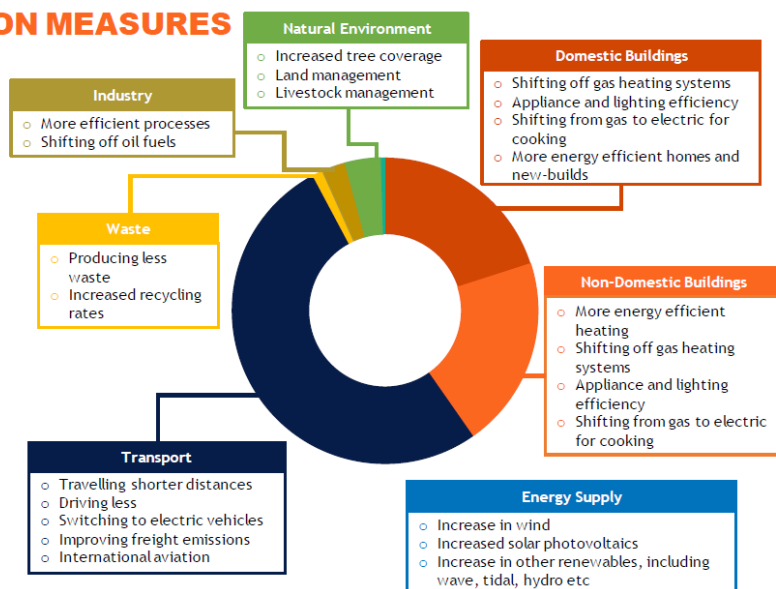
The report assesses a number of emission reduction intervention measures considered within the SCATTER Pathways Tool (summarised opposite). Activity in each of these areas underpins the pathways' trajectories.

Measures have been grouped into different sectors, which also link directly to the sectors described within the annual emissions profile.

Each group of measures has activity focused on demand-side reductions, switching to electrified systems, or greening energy supply.

The SCATTER measures are not exhaustive, but help to define "what needs to happen" rather than answering the question of "how will Warwick and Stratford-on-Avon get there?".

Further detail on the level of ambition and milestones of each intervention are provided in detail in the full report.



## EXECUTIVE SUMMARY

### CARBON SAVINGS TO 2030 & RECOMMENDATIONS

#### Carbon Savings Analysis

SCATTER also provides insights into the activities that have the most significant effect on reducing the emissions total within the model. The table opposite acts as a means of “ranking” the importance of these interventions in terms of their carbon impact. Emissions savings are presented as a cumulative total for the period 2020 - 2030.

Under this analysis, on-road transport interventions demonstrate the highest potential for emissions savings and improvements to domestic and non-domestic space heating and hot water also offer significant savings potential. Energy supply savings must be considered in isolation of demand-side measure savings to avoid double counting.

#### Recommendations

Further discussion will be needed to understand Warwick District Council and Stratford-on-Avon District Council's potential to influence and the feasibility of each measure. In order to achieve a 55% emissions reduction by 2030, both Council's should consider the following:

- Working together to develop a joint Climate Action Plan
- Continue to engage with key local stakeholders
- Consider a variety of funding streams to support financing carbon reduction
- Combine efforts to decarbonise council-owned assets, enabling both District Councils to take a leadership role and demonstrate best practice

Warwick & Stratford-on-Avon District Councils | Executive Summary

| Sector                 | Subsector                                                | Cumulative Savings (2020 - 2030) |                           |
|------------------------|----------------------------------------------------------|----------------------------------|---------------------------|
|                        |                                                          | Warwick                          | Stratford-on-Avon         |
| Domestic Buildings     | Domestic space heating and hot water                     | 526 ktCO <sub>2</sub> e          | 518 ktCO <sub>2</sub> e   |
|                        | Domestic lighting, appliances, and cooking               | 90 ktCO <sub>2</sub> e           | 79 ktCO <sub>2</sub> e    |
| Non-Domestic Buildings | Commercial space heating, cooling and hot water          | 195 ktCO <sub>2</sub> e          | 231 ktCO <sub>2</sub> e   |
|                        | Commercial lighting, appliances, equipment, and catering | 95 ktCO <sub>2</sub> e           | 81 ktCO <sub>2</sub> e    |
|                        | Industrial buildings & facilities                        | 103 ktCO <sub>2</sub> e          | 91 ktCO <sub>2</sub> e    |
| Transport              | On-road transportation                                   | 1,464 ktCO <sub>2</sub> e        | 1,705 ktCO <sub>2</sub> e |
|                        | Aviation                                                 | 12 ktCO <sub>2</sub> e           | 11 ktCO <sub>2</sub> e    |
| Waste                  | Solid waste disposal                                     | 4 ktCO <sub>2</sub> e            | 4 ktCO <sub>2</sub> e     |
| Industry               | Industrial processes                                     | 29 ktCO <sub>2</sub> e           | 51 ktCO <sub>2</sub> e    |
| Natural Environments   | Land use and livestock                                   | 14 ktCO <sub>2</sub> e           | 52 ktCO <sub>2</sub> e    |
|                        | Land use                                                 | 7 ktCO <sub>2</sub> e            | 17 ktCO <sub>2</sub> e    |
| Energy Supply          | Renewable energy generation                              | 1,037 ktCO <sub>2</sub> e        | 1,051 ktCO <sub>2</sub> e |

Table 1: Summary of Cumulative Carbon Savings (2020 - 2030) across Warwick and Stratford-on-Avon.