

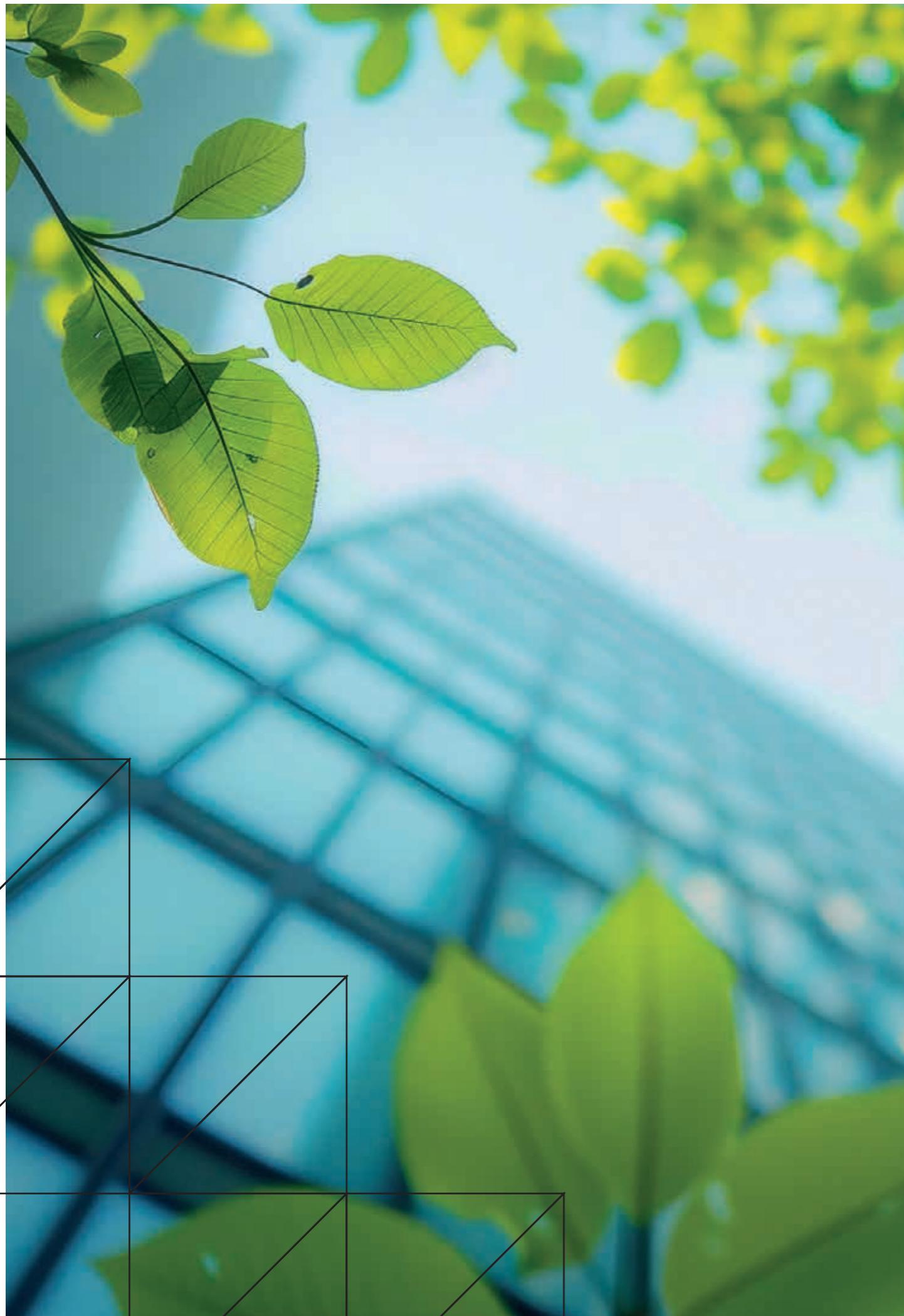
DECARBONISATION FRAMEWORK



Swindon. Greener Ambitions.

November 2025





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FOREWORD

When we talk about climate change, it's easy to get lost in the language of carbon targets and emissions data. At its heart, decarbonisation is about improving lives, making homes warmer and cheaper to run, protecting our green spaces for wellbeing and wildlife. Securing clean, reliable energy for the future.

That's why Swindon Borough Council made "Greener Swindon" one of our three core missions. It's not just meeting national targets; it's about delivering tangible benefits for our residents.

Take our streetlighting upgrade, for example. By switching to energy-efficient LED bulbs, we're not only reducing emissions, we are saving £400,000 a year on energy bills. That means we can maintain high levels of lighting for safety, while reinvesting those savings into other vital services across the borough.

We're investing £30m to upgrade our council houses, helping tenants stay warm and lower their energy bills. We're upgrading windows, doors, roofs, and heating systems, adding external wall insulation and draught proofing to reduce heat loss across hundreds of properties,

consistent with a fabric first approach. We're adding solar panels where possible.

We're also proud of Swindon's green spaces. For a town our size, we're fortunate to have so many places where people can walk, play, and connect with nature. And we're working to expand and enhance these spaces including supporting biodiversity and giving residents more opportunities to enjoy the outdoors. We're planting thousands of trees, many in urban areas, helping to improve air quality and making our streets greener.

This Decarbonisation Framework sets out how we'll continue this work over the coming years. It outlines the key actions we'll take to reduce our environmental impact, support residents to do the same, and ensure Swindon plays its part in meeting the UK's 2050 climate commitments.

This is a plan for a better future, one where our homes are more efficient, our air is cleaner, and our communities are more resilient.

This isn't a vanity project, we are working to ensure every pound spent works for you. Shaped by your input, through Let's Talk Swindon events and conversations with local young people. Reflecting the values we share for our environment, fairness for future generations, and pride in our town.

Thank you for being part of our mission to make Swindon greener.

**Councillor
Emma Bushell**

ENERGY & BUILDINGS



INTRODUCTION

Energy prices have risen sharply in recent years, and as a result, many households are now experiencing fuel poverty. One of the primary aims of this theme is to reduce fuel poverty in Swindon Borough. By ensuring all new builds are appropriately energy efficient, residents will not have to spend as much of their incomes on energy bills, which will support them during this cost-of-living crisis.

Improving energy efficiency of council buildings and other council assets reduces wasted energy and saves the Council money. We can use these savings to support other council functions.

GOALS



A

Reduce fuel poverty across the Borough.

B

Reduce energy usage from gas in favour of electricity in priority areas.

C

Increase renewable energy generation within the Borough.

D

Reduce energy usage on highway assets.

E

Enforce all decarbonisation measures in new builds.



OBJECTIVES

1

Improving energy efficiency through retrofitting suitable council-owned homes.

2

Erecting solar panels on suitable council-owned buildings and homes.

3

Identify sites for future solar or wind farms.

4

Support community energy projects within the Borough.

5

Reduce energy wastage from lost heat and unnecessary council assets.

6

Set a space heating policy for council offices.

7

Fix Building Management Systems (BMS), improving efficiency of council-owned buildings.

8

Understand viability of heat networks across Swindon Borough's housing stock.

9

Work with the Distribution Network Operator (DNO) to improve grid capacity within Swindon.

10

Create a specification or options assessment for lower carbon impact builds.



WHY ARE WE DOING THIS?



1. The energy network transition is the shift of energy production from sources that use fossil fuels and release greenhouse gases, to alternatives that produce minimal or zero greenhouse gas emissions. There is the opportunity to future-proof buildings so they can immediately take advantage of the energy network transition. This will mean that it won't be so expensive and complicated to upgrade all the Council's buildings, infrastructure and assets in a single phase.
2. To reduce the Council's reliance on the electricity grid, expanding energy security. Having a larger supply of council-owned renewables can have a multitude of benefits for the Council. Small-scale solar panel provision on council-owned buildings and homes, coupled with a battery, can be used to generate and store energy. If a surplus of energy is generated, this may be able to be sold for a profit.

Moreover, large-scale renewables, such as solar farms and wind turbines, can supply energy to council assets or be sold to the electricity grid for a profit.

3. Community energy could provide a supplementary income for residents, in the form of investment returns. We want to facilitate and encourage community energy projects, to help the local community have access to some of the financial benefits of renewables. The complexity and jargon associated with community energy can create a barrier to entry, this is something the Council is trying to actively work on.
4. Swindon's electrical grid infrastructure can only expand so far, and the limited capacity of the grid means a limit on the technology that can be installed. Renewable energy generation and battery storage will ease the burden on the grid. Further, improving grid capacity within Swindon would support the additional renewable energy generation proposed in the Borough.

MAKING IT HAPPEN...

1. For new development, we will insist on confident, high quality and responsive designs that are rooted in Swindon's heritage, but look confidently forward and address our pressing environmental emergency. They will be energy efficient and utilise a fabric-first approach with solar panels which will be encouraged where practical.
2. We will work with the planning team to ensure planning policy supports the phase out of gas boilers, and the addition of renewable energy technologies.
3. Heat pumps and heat networks have significantly higher upfront costs, comparative to gas. The Council will seek to help residents and local businesses to access funding / grant opportunities to retrofit buildings.
4. Before any existing council-owned buildings and homes are retrofitted, they will be assessed, to avoid disadvantageous side effects. For example, sealing older buildings too tightly can lead to issues like mould and mildew, as the natural air leakage previously provided a form of passive ventilation.
5. Make use of spaces for solar panels on roofs to decarbonise electrical energy generation and fast track the energy transition.
6. Inclusively involve residents in community energy projects through communicating effectively, removing the jargon and complexity.
7. Attitudes towards heat pumps and heat networks will have to be understood and carefully influenced. This may be a slow process as gas heating systems are perceived to be affordable, reliable and easy to maintain; and were previously understood to be sustainable.



GREEN SPACES



INTRODUCTION

The green spaces within the Borough are already a great resource for residents. The opportunity to enhance their biological diversity, and accessibility and inclusivity, will allow them to be enjoyed by a greater number of residents, visitors and wildlife.

Having access to good quality blue and green spaces has been demonstrated to have a multitude of physical and mental health benefits.

GOALS

**A**

Increase quality of green space in existing communities and ensure sufficient green spaces in new communities within the Borough.

B

Create, protect and enhance biodiversity in the Borough.

C

Ensure every ward achieves the national space standard within the Open Spaces Audit.

D

Adopt and complete the Green Infrastructure Strategy, Country Park Strategy, and the Forest Plan.

E

Protect and enhance water quality within the Borough.



OBJECTIVES

1

Complete the habitat creation programme of "Forest Meadows", in partnership with the Wiltshire Wildlife Trust.

2

Complete the "Trees for Climate" tree and woodland planting by the Great Western Community Forest.

3

Improve tree equity within the urban environment.

4

New development should include 10% Biodiversity Net Gain, and integrate wildlife corridors into developments where possible.

5

Improve natural habitats in the urban and peri-urban settings in the Borough.

6

Ensure the Local Plan requirement for new major residential developments makes provisions for allotments to be achieved.

7

Improve the urban environment through intelligent Green Infrastructure within the Heart of Swindon.



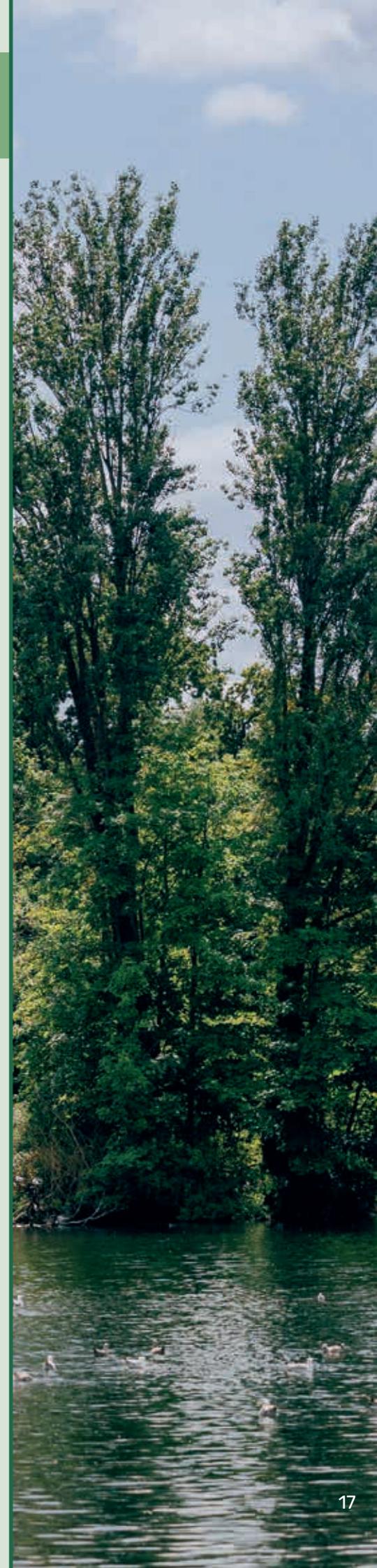
WHY ARE WE DOING THIS?



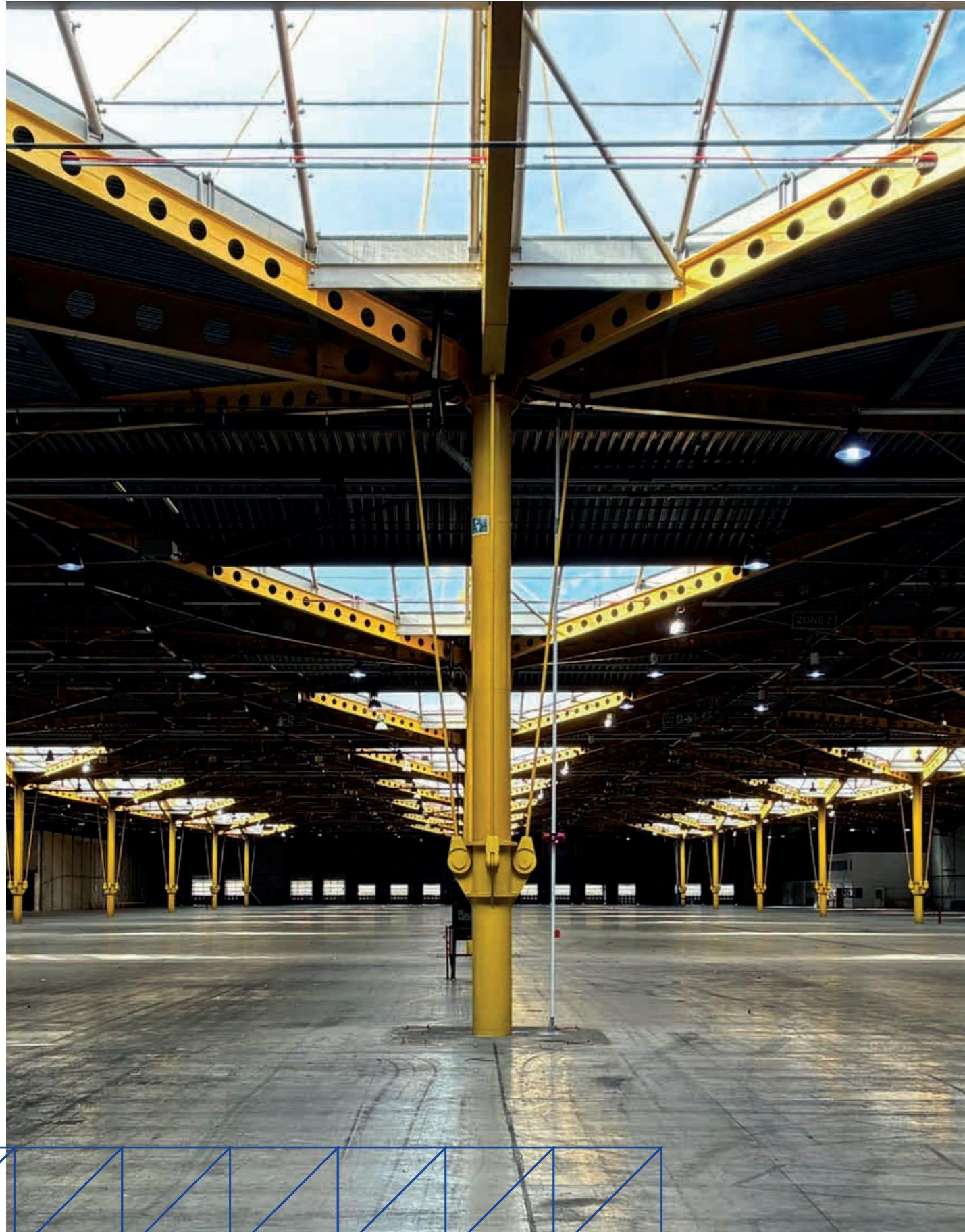
1. Green spaces and trees help to absorb carbon dioxide from the atmosphere, playing an important role in decarbonisation.
2. Thoughtful planting will help make the Borough more climate resilient:
 - During periods of drought, resilient and native planting are best placed to survive. Native planting is well adapted to the UK environment, and drought resilient planting requires very little water to thrive.
 - Trees within the urban environment during the summer can help in cooling, create shade and reduce solar glare from and into buildings.
3. A holistic Green Infrastructure strategy in the Borough, which integrates habitat restoration, wildlife corridors and pollinator pathways, will help to challenge the Ecological Emergency.
4. Green space could provide food growing opportunities for the local community through community gardens, community orchards and allotments. This could provide an opportunity for fresh food, foster a sense of community, and improve soil quality of these areas.
5. Urban greening will improve the aesthetic quality and air quality of Swindon Town centre, ideally encouraging more businesses to set up and greater visitor footfall in the area.

MAKING IT HAPPEN...

1. Utilise the Great Western Community Forest 'Trees for Climate' funding for a diverse range of uses, ranging from street trees within urban areas of the Borough to larger-scale tree planting in the countryside.
2. Use biodiversity offsetting monies to create linked pocket habitats for wildlife.
3. Produce and maintain strategic documents, including the Green Infrastructure Strategy, Country Parks Strategy, and Forest Plan, to guide planning, implementation, and enhancement of green and blue infrastructure.
4. Influence the Local Plan to support the delivery of green spaces, urban greening initiatives and allotment provision.
5. Mobilise and expand a skilled volunteer network to support the creation and maintenance of green spaces, habitats, wildlife corridors, and tree planting, supplementing staff capacity and helping share specialist knowledge across the community.
6. Incrementally increase the accessibility of existing green spaces, through removing potholes on paths for wheelchair users, putting in wheelchair-accessible benches and upgrading existing signage to user-friendly formats.
7. Continue with the Swindon Forest Meadows Programme.
8. Enter into discussions with Thames Water to discourage their use of the waterways in the Borough.



BUSINESS



INTRODUCTION

Swindon has already got a thriving local economy, with a great offering of national and local businesses. We take pride in the diversity and quality of businesses and employment opportunities available in the Borough. We want to continue to work in collaboration with businesses to continue to strengthen these council-business relationships.

GOALS



A

Increase engagement with businesses in Swindon aiding them to achieve their decarbonisation ambitions.

B

Improve infrastructure within Swindon. Reinforce green building standards to support businesses. Improve electric vehicle infrastructure and cycle routes.

C

Explore feasibility of localised renewable energy production networks to lower energy costs to business and accelerate decarbonisation.

D

Ensure decarbonisation is linked to business creation, employment and training. Including in housing retrofit Modern Methods of Construction.



OBJECTIVES

1

Establish formal, recurring engagement channels with local businesses to discuss decarbonisation and wider sustainability themes.

2

Create an online knowledge hub and share best practices.

3

Provide decarbonisation advice and upskilling to all sectors. For example, upskill Swindon Culture Collective CIC.

4

Help support local businesses to identify, access, and effectively utilise grant funding and other funding opportunities to help them decarbonise.

5

Offer Travel Plan advice to businesses.

6

Deliver targeted upgrades to transport and environmental infrastructure across the Borough to support sustainable business growth.

7

Encourage the growth and establishment of innovative sustainability-focused businesses in Swindon.



WHY ARE WE DOING THIS?



1. To help foster better knowledge-sharing between businesses, laying the foundations for an even more prosperous local economy and to allow complimentary businesses to connect with each other more easily.
2. Businesses can have the potential to significantly reduce their carbon emissions and introduce wider sustainability measures to save money and resources.

3. The Council sees decarbonisation as an economic opportunity, particularly within industries such as housing retrofit and Modern Methods of Construction, and will support businesses to unlock further employment and training opportunities for the local community.
4. The Council also sees decarbonisation as an economic opportunity for new businesses to establish themselves in Swindon – particularly those which are innovative and sustainability-focused.

MAKING IT HAPPEN...

1. We will aim to employ local companies to help facilitate our own decarbonisation journey.
2. Success stories will be promoted through local media, Invest Swindon, and regional networks.
3. Actively engage with our key employers and local businesses to establish formal, recurring engagement routes which best meet their needs. There is an option to host engagement events in-person and invite speakers to share how they have decarbonised their business infrastructure and operations.
4. Business engagement will help inform a knowledge hub which will digitally share examples of best practice and helpful advice for businesses at any stage of their decarbonisation journey.
5. The Council will utilise the Swindon Culture Collective CIC and upskill them in decarbonisation practices. Swindon Culture Collective CIC is a not-for-profit organisation which has been established to lead the programme and support the network of arts and cultural organisations in Swindon. They, therefore, have a great opportunity to help the creative industries in Swindon decarbonise and become more sustainable.
6. To complement wider business engagement efforts, a more personalised and one-on-one business support approach will be delivered concurrently. The Council will offer Travel Plan advice to businesses, to help them encourage a modal shift among their employees. Further, we will aim to build relationships with smaller, local businesses to assist their understanding of their Scope 1, Scope 2 and Scope 3 emissions. This knowledge of context can help identify the most logical decarbonisation solutions and opportunities, driving meaningful change.

TRANSPORT

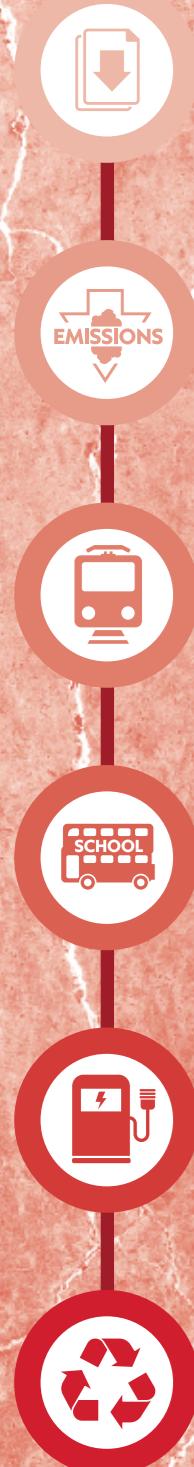


INTRODUCTION

Ease of access to the town centre is vital to its prosperity. Ensuring there are a range of avenues for people to get to Old Town, the town centre, schools, and workplaces gives people more options depending on their circumstances. Swindon already has great access nationally via trains, extending public transport and active travel cover will help better connect the local population.

We will look to improve cycle lanes and walking routes across the borough too, as further ways to travel. Providing improved and easy to use public transport and cycle paths has additional benefits as it reduces wear-and-tear of the road, potholes, and maintenance fees.

GOALS

**A**

Deliver a strategy for decarbonising the Council fleet.

B

Achieve emissions reductions at Waterside depot.

C

Provide Swindon residents and visitors a significant choice of transportation options.

D

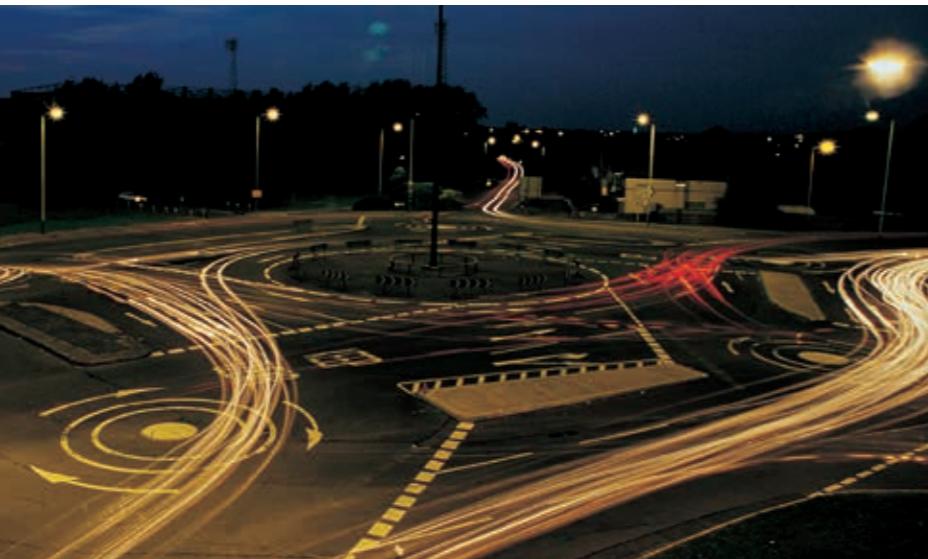
Improve transportation options for school children to get to and from school.

E

Improve electric vehicle charging infrastructure across the Borough.

F

Increase use of recycled materials, instead of traditional materials, in delivering our road resurfacing programme.



OBJECTIVES

1

Engage with staff at Waterside depot, and across the Council, on their needs for vehicles. Use this engagement to help inform the appropriate decarbonisation of council vehicles.

2

Bring in Hydrotreated Vegetable Oil (HVO) fuels at Waterside depot. By 2030 bring in the Council's first Zero Emission Vehicles (ZEVs).

3

Improve bus routes across Swindon, including improving infrastructure and operations.

4

Improve and increase provision of cycle paths across the Borough.

5

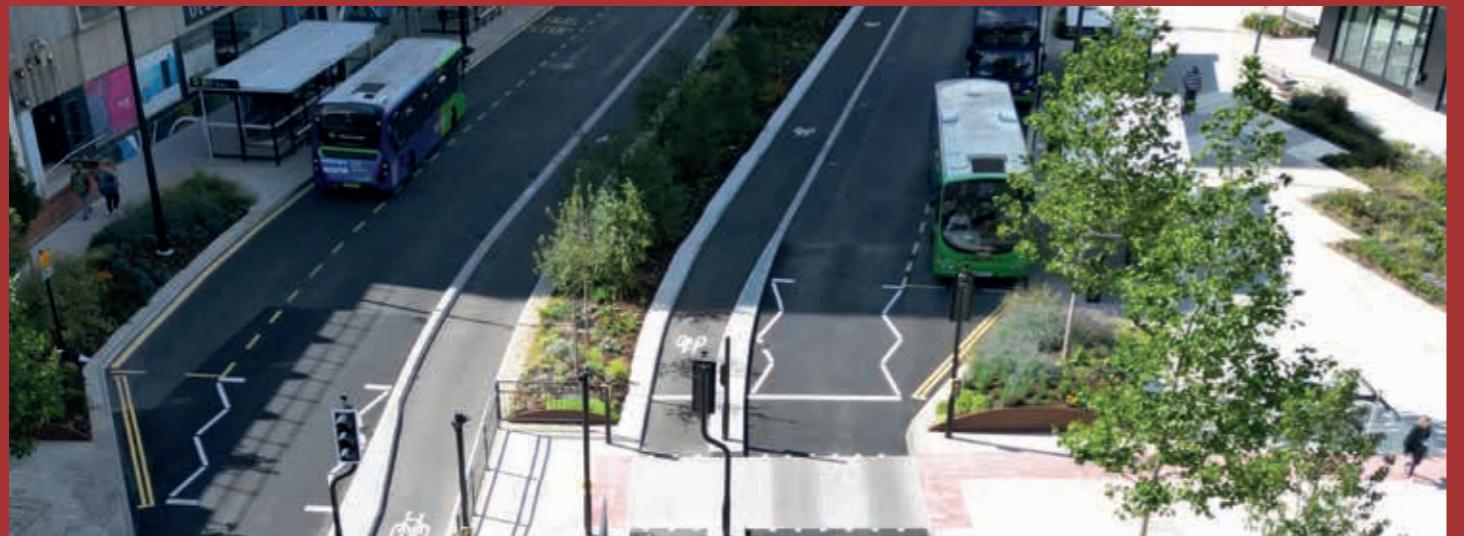
Improve road safety for children through Safer Routes to School (SRTS) initiatives.

6

Effectively utilise the Local Electric Vehicle Infrastructure (LEVI) fund to install electric vehicle chargers across the Borough.



WHY ARE WE DOING THIS?



1. School is a vital part of children's and parent's lives. Improving bus routes and road safety will reduce the burden on parents to drop off and collect their children on the school run, freeing their days up, and providing children with greater independence and freedom, growing their confidence. These improved routes to school will also improve air quality, reducing impacts on young people over their lives.
2. These measures also aim to provide more travel options for those with mobility impairments, better connecting all residents to the Old Town, the town centre and local green spaces.
3. Ensuring value-for-money in council services must be a priority for council

operations. We need to be prepared for when electric vehicles are comparable in upfront costs to ICE vehicles, as the running costs for electric vehicles, including refuse and heavy goods vehicles, are cheaper than standard ICE vehicles. Any excess energy generated on site from solar or waste can be sold to the grid.

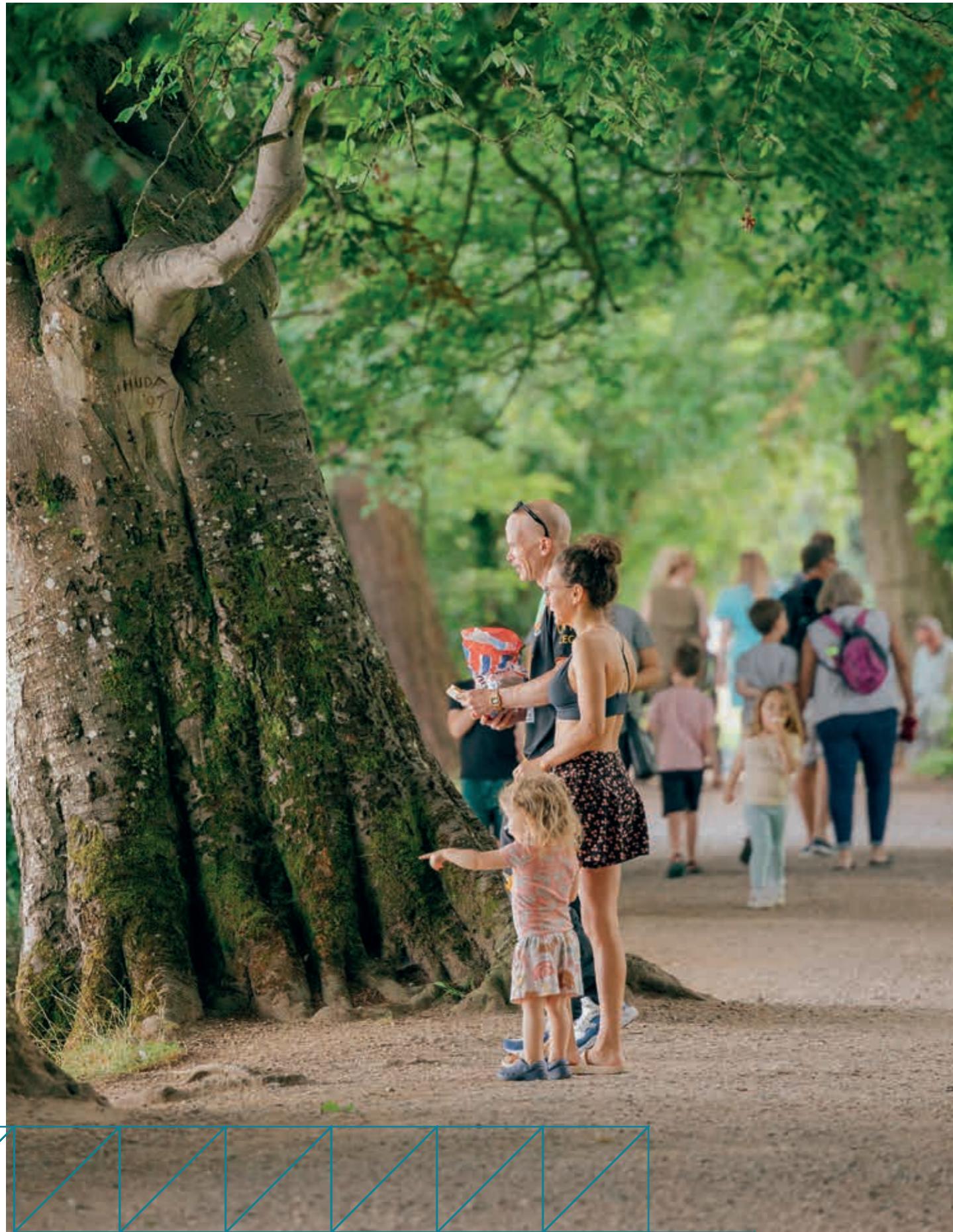
4. We are using UK Government grants to put additional charging infrastructure across the Borough, preparing Swindon for when electric cars are cheaper and more available.
5. Recycling waste materials into highway maintenance programs offers a cost saving for the residents of Swindon whilst delivering improved roads.

MAKING IT HAPPEN...

1. Continue to host the Net Zero Working Group and make creating and delivering the strategy for decarbonising the Council fleet and depot a key priority.
2. Make the Swindon Local Cycling and Walking Infrastructure Plan a central consideration for all future developments, to better integrate Swindon's central neighbourhoods and connect to the rail station.
3. Prioritise Central Swindon schemes identified in the Swindon Local Cycling and Walking Plan to connect and improve links between neighbourhoods.
4. The Council has recently been successful in securing feasibility funding from Active Travel England. We will make submissions for additional funding to deliver the schemes identified.
5. Continue to work with the Swindon Bus Company to improve public transport provision in and around Swindon.
6. Promote the safer routes to school initiatives, once adopted.
7. Utilise the remaining grant funding from the Government's Local Electric Vehicle Infrastructure (LEVI) Fund to erect EV charging infrastructure on residential streets that do not have off-street parking or access to EV charging.



HEALTH



INTRODUCTION

We want to reduce the day-to-day impacts of climate change on Swindon's residents by improving heat and cold resilience of buildings. Buildings should be safe, comfortable and able to adapt to different temperatures. This will lessen the risk of serious harm to Swindon's residents.

We also want to safeguard against, and prepare communities, buildings and infrastructure for, extreme weather events. Having appropriate emergency preparedness in place will help minimise the number of fatalities and serious injuries caused by these events.

GOALS

A

Minimise impacts of climate change on Swindon's residents by improving heat and cold resilience.

B

Have Emergency Preparedness in place for extreme climate and weather events.

C

Improve understanding of the potential impacts of climate change and where possible help alleviate people's anxieties.

D

Maintain high air quality in the town and wider Borough.



OBJECTIVES

1

All new homes will be well-insulated to reduce the risk of fuel poverty. They will at a minimum meet the Future Homes Standard legislation, which will have benefits including improved insulation and airtightness, reducing the risk of overheating.

2

Improve adaptability to weather events, focusing on groups most at risk and on simple wins, for example create policies to help prevent children overheating during heatwave events.

3

Emergency plans will be communicated to residents. All libraries will act as 'cool spaces' during heatwave events and 'warm spaces' over winter. Over winter 'Warm Packs', will be available for vulnerable and elderly residents.

4

Monitor disease impact as a safety measure and undertake following measures if appropriate.

5

Support young people's anxieties around climate change impacts.

6

Target air quality hot spots in the Borough for improvements.

7

Support initiatives around active travel through connected safe routes and infrastructure, and discuss low traffic zones around schools.



WHY ARE WE DOING THIS?



1. To help support our resident's mental health and wellbeing. People can have a number of stresses and worries around climate change and extreme weather events, for example concerns around how flooding will affect their home, or how heat exposure will affect their health. Fuel poverty is another significant worry for people, and many younger people worry about longer-term impacts, such as geographical displacement. We want to be able to better understand and better support our residents' anxieties.
2. Climate change impacts affect societal groups disproportionately. Residents who are pregnant, elderly, children, or have certain pre-existing health conditions, are more vulnerable to changing temperatures. We want the Borough to be a comfortable and safe place for all these groups. We are doing this by future-proofing new homes and having 'cool spaces' during

heatwave events and 'warm spaces' during cold events. These public spaces will also benefit low socio-economic groups and homeless residents, who may not have access to reliable cooling and warming systems during extreme weather events.

3. The health of our residents is incredibly important to us, and imperative to the Council's decarbonisation journey. Through enhanced active travel opportunities, improved access to green space, and air quality improvements, physical and mental health outcomes should improve in the Borough. Furthermore, improved air quality has the potential to reduce the number of residents with certain health conditions which include asthma, lung cancer and chronic obstructive pulmonary disease.
4. Better air quality has been shown to improve children's cognitive performance and concentration levels at school.

MAKING IT HAPPEN...

1. New buildings will be designed to be better adapted to climate change impacts. The Council will investigate new builds to ensure that, at a minimum, Future Homes Standard legislation is met.
2. The Council will provide tools to be more resilient and help residents be better adapted to climate change impacts. However, community engagement is imperative to the success of the goals and objectives of this theme. We intend to engage with the community in a variety of ways to promote these tools. Particular groups, notably elderly residents, will be provided with physical maps of 'cool spaces' to use during heatwave events and 'warm spaces' to use over winter. They will also be provided details to order a 'Warm Pack'.
3. Response and recovery plans for extreme weather events will be embedded into our processes. These plans will cover a wide range of extreme weather events, including outlining the appropriate response and recovery during a heatwave, cold event, flash flood, and disease outbreak.
4. The Council will continue exploring further measures to improve emergency preparedness.
5. Workstreams will be set up to support people's anxieties around climate change impacts and the Council will work closely with the charity Way UK, to further support young people.
6. Air Quality improvements will be systematically monitored and reported, to identify benefits and understand if further improvements need to be made. We will embed air quality improvement measures into our urban and peri-urban environments.



SUMMARY

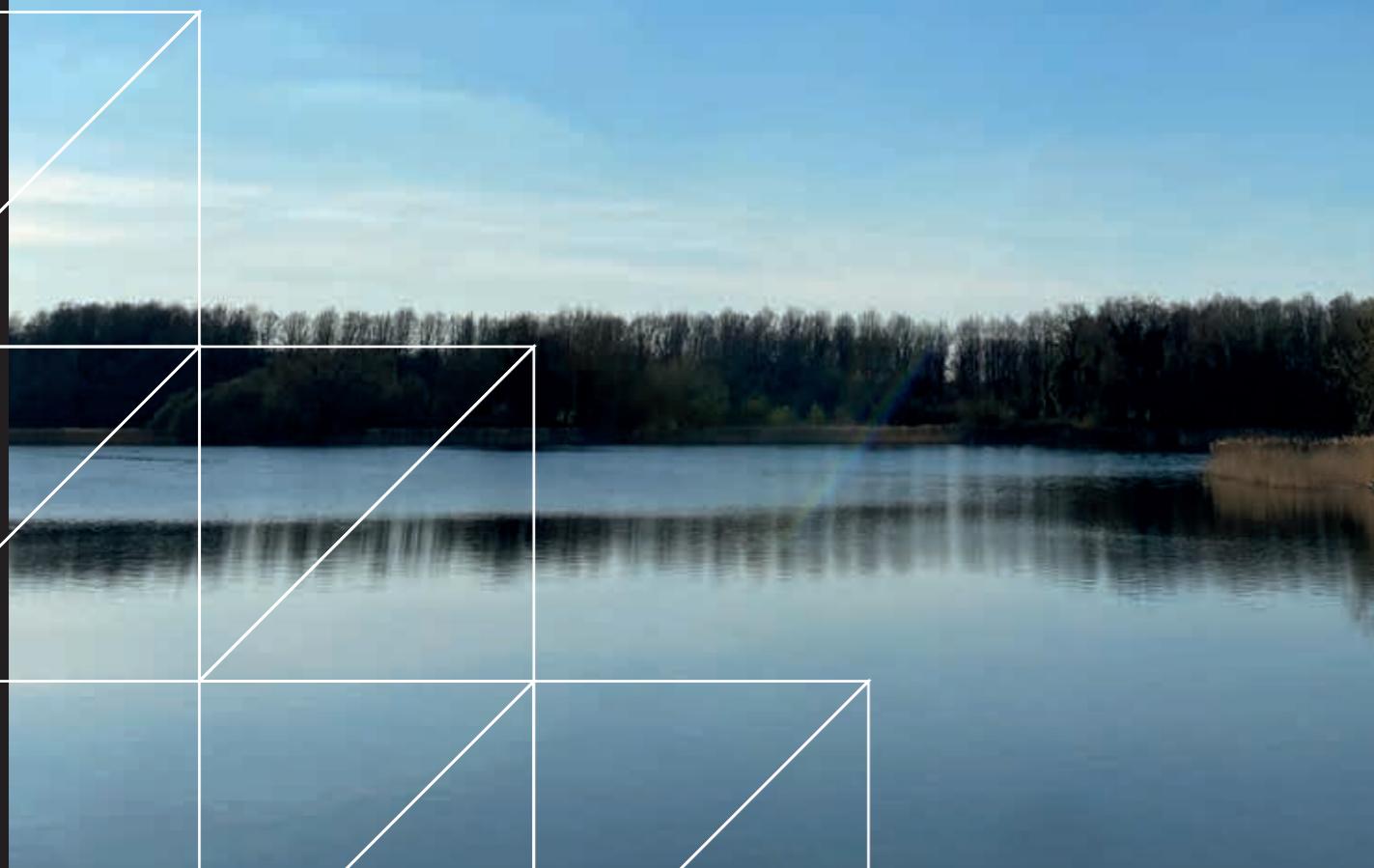
Building a greener Swindon is a central goal of the Swindon Plan, with the decarbonisation framework critical to its implementation. The framework outlines emission reduction strategies across council operations and borough wide initiatives to combat climate change, build resilience and prepare Swindon for the economic and environmental opportunities decarbonisation can deliver.

The framework is structured around five key sectors, each with specific goals to lower carbon emissions and support sustainable growth:

Energy and Buildings • Green Spaces • Business • Transport • Health

Within each sector, there are clear objectives, facilitated by current practices and planned initiatives to drive decarbonisation. It also highlights the wider social and economic benefits of these efforts, including improved health and wellbeing and the enhanced quality of the local environment.

The goals and objectives set out have been influenced by the data and feedback gathered through Let's Talk Swindon events, translating local insights into targeted actions across the five key sectors.



ENERGY AND BUILDINGS

Rising energy costs have escalated the need to tackle fuel poverty and build energy resilience. The council aims to accelerate the transition to renewables, retrofit buildings and ensure the energy efficiency of new developments. Expanding access to funding will support the adoption of low carbon strategies, reduce grid reliance and enable community reinvestment through the sale of surplus energy.

GREEN SPACES



Green infrastructure is a key priority, aligning with community support for enhanced existing green spaces and integration into new developments. The council plans to implement large scale tree planting, improve urban habitats and influence the Local Plan to embed greening initiatives. These actions are vital to absorb carbon dioxide, improve air quality and mitigate health risks during heat events.

BUSINESS



The council is committed to assisting local businesses achieve their decarbonisation goals by augmenting engagement, launching an online knowledge hub and increasing access to grants. These initiatives incorporate emission reduction into everyday practices, encourage green industry growth and foster knowledge sharing across the local economy.

TRANSPORT



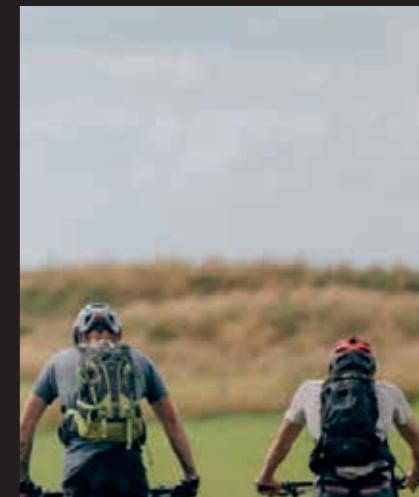
In response to resident priorities, the transport strategy focuses on expanding travel options, improving school commute safety and enhancing active travel, in collaboration with Swindon Bus Company. Alongside initiatives to advance the decarbonisation of the council's fleet and expand electric vehicle infrastructure, these measures will ease travel pressures for families, encourage sustainable transport and improve air quality.

HEALTH



The framework seeks to minimise the health impacts of climate change and strengthen resilience to extreme temperatures. Through ensuring new developments are well insulated, establishing response and recovery plans, and introducing adaptive policies, such as designating libraries as 'warm' and 'cool' spaces, these actions will support wellbeing and reduce climate related health inequalities.

DECARBONISATION FRAMEWORK



Swindon Borough Council

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November 2025

