

August 2021



Wiltshire

**DRAFT CLIMATE
STRATEGY** 2022-2027

Wiltshire Council



Foreword

Our world is already changing around us, with increasing temperatures, extreme weather and risks to property, health, wildlife habitats, and food production. Climate change affects us all, but we also all have the power to do something about it.

The council has acknowledged the climate emergency and committed to becoming carbon neutral as an organisation by 2030.

Being 'carbon neutral' or having 'net zero carbon' emissions means that any carbon dioxide emitted – from vehicles, homes, businesses or the land – needs to be balanced by an equal amount taken out of the atmosphere - for example being absorbed by trees or soil, or captured from factories by specialist technology. However, bearing in mind that nature absorbs carbon dioxide relatively slowly from the atmosphere and that technology to capture it is not yet available at scale, the easiest way to take action is to cut our emissions significantly. This also shifts our energy reliance from finite resources to long-term, sustainable sources of power.

This will mean making changes to the way we all live our lives. New technology will help us to enjoy our lives without

emitting carbon but this will need to be accompanied by changes in the way we do things.

Research shows us that a bright future, fuelled by clean energy, is achievable and affordable. However, we need a commitment to achieving this goal and we need to put actions in place now.

We also need to adapt to impacts of climate change that will be inevitable – for example by preparing for more floods and heatwaves. However, the long-term costs of adapting will be far higher if we do not act now to minimise our impact and so the short-term investment is very worthwhile.

Climate change is a global problem, but the UK is well-placed to set an example to the world. And we want Wiltshire to be a role model for the country.

The council's ambition for Wiltshire as a county – beyond just the council's footprint – is to achieve carbon neutrality by 2030 and contribute to global efforts to keep temperature increase to safe levels.

Everyone in Wiltshire is invited on this journey and we want to make sure that no-one is left behind or disadvantaged in this transition. From the older generations to the very youngest – who will be most affected by climate change – we want to invite you to help shape the future.

As a very large county made up of market

towns with their rural hinterlands, the challenges and the opportunities to cut greenhouse gases are quite different from those in urban areas.

The purpose of this strategy is to highlight key areas that we in Wiltshire can focus on in the next five years as well as setting out some important context on policy and emissions data. A discussion of challenges and opportunities in each theme was presented in a discussion document in **January 2021** so this strategy does not repeat that discussion. The strategy is structured around seven delivery themes.

We want to hear your views on this draft strategy. Please **have your say** during our consultation period which runs from 1 September to 17 October 2021.



Cllr Richard Clewer, Leader

Introduction

In February 2019, against a backdrop of increasing concern over climate change, the council acknowledged the **climate emergency** and committed to seek to make the county of Wiltshire carbon neutral by 2030. To this end, in July 2019 Wiltshire Council **pledged** as an organisation to become carbon neutral by 2030. A Global Warming and Climate Emergency Task Group was set up, gathering the views of a wide range of stakeholders to provide recommendations on ways to reduce carbon emissions.

Wiltshire Council has been working to reduce its carbon emissions for over a decade with some of the following results:

- we cut our carbon footprint by more than 80% between 2015 and 2021
- thanks to sustained investment in renewables over time, in 2019/20 we generated 4747 MWh from

renewable sources

- in October 2019, Wiltshire was **named** by Friends of the Earth as the most climate-friendly local authority area in England and Wales
- Since 2014/15, carbon emissions from streetlighting reduced by 69% before we applied a green electricity tariff which brought emissions down to zero.

We recognise that cutting carbon emissions deeply and rapidly over the coming years is a huge challenge and that there is much more to do. We will learn from best practice elsewhere and share our skills and experience with local partners who look to us for leadership on this agenda.

The council has engaged with public, private and community organisations in Wiltshire to develop the strategy to this point. The Wiltshire Climate Alliance was formed in 2020 as an umbrella organisation for environmental groups across the county. These groups have been holding the council to account on its

climate commitments. They have also helped to shape this draft strategy through workshops in 2020 and 2021, including two organised by the Wiltshire Climate Alliance Youth group of under 25s.

As national policy and legislation are crucial enablers of action at a local level, we are involved in influential national networks to shape and inform central government thinking. The council's leader chairs the **Countryside Climate Network**, made up of ambitious council leaders from 28 rural councils who represent over 45% of England's land area, making the case that rural communities can be at the forefront of climate action.

This strategy sets a framework for reducing emissions in Wiltshire over the next five years and for making the county resilient to climate impacts. This strategy is not a statutory document but it will influence other key council strategies and plans such as our Business Plan, our emerging Local Plan and our Local Transport Plan.



About this document

This document has deliberately been kept simple and succinct to encourage a wide readership. **The UK Climate Change Committee** estimates that local authorities can influence one third of emissions in their area. This makes public engagement and buy-in from organisations and businesses critical to tackling the other two thirds – as well as advocating for strong government action. This high level strategy sets out our objectives and areas of focus while remaining flexible. As the world around us evolves in terms of knowledge, legislation and policy, technology and the market, we will adapt to take advantage of these opportunities. Detailed delivery plans will be developed, and in recognition that we are facing an emergency, we are already taking action on a number of fronts.

This strategy is not perfect. It is built on the currently available evidence base, but there are gaps in understanding and more work will need to be undertaken over time. Technical studies will be commissioned as required to address these gaps.



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Transport

Achieving zero emissions surface transport in Wiltshire is a challenge which will require zero emissions vehicles and other measures. This is a necessary priority, since transport produces the largest proportion of emissions in the county.



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Homes and the Built Environment

New buildings need to be net zero carbon as soon as possible, using less energy and running on low carbon sources of electricity and heat. Existing buildings need to be retrofitted along the same principles. All buildings also need to be able to cope with the impacts of climate change.



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Natural Environment, food and farming

A healthy natural environment is crucial to achieving net zero, and providing ways for people and wildlife to adapt to the stresses of climate change. Central to our challenge is the efficient and sensitive use of land for all our needs – absorbing carbon dioxide, local food production, preserving habitats, generating energy and providing homes.



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Energy

We need to reduce the energy we use, as well using low carbon forms of energy. There are also opportunities to explore in terms of 'smart' and digital solutions that help to smooth demand, and ensure fair distribution of energy and new technologies.

Strategy overview



Green economy

We want to grow a carbon neutral and climate resilient economy in Wiltshire. This includes opportunities for training and more jobs in green sectors, as well as building up supply chains to enable objectives in our other delivery themes.



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Waste

Reducing waste and using our resources efficiently helps reduce the energy and emissions associated with extracting, manufacturing, transporting and storing all the products we use.



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Carbon Neutral Council

This section sets out the areas of work that will help Wiltshire Council become a carbon neutral organisation. The council's role also extends to providing leadership and opportunities to share knowledge and learn from one another.



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Strategies and Targets Timeline

An overview of key government and council milestones to 2050.



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“ Achieving net zero is a colossal challenge and significantly more challenging than government's previous target to reduce emissions by 80% by 2050. Achieving net zero means all parts of the economy, including those that are harder to decarbonise, need to reduce emissions substantially. In some sectors, there are well-understood pathways to net zero but there is uncertainty in other sectors over how to reduce emissions. This is because it is not yet known how quickly some technologies will develop or how much individuals will be willing to change their behaviours.

National Audit Office report, December 2020 ”



Our approach

This strategy will help Wiltshire Council – and Wiltshire’s people – to lead action on climate change.

We will focus on reducing carbon emissions in order to achieve net zero and keep global temperature to below 1.5°C. However, given that the effects of climate change are already being felt, we need to plan to be able to cope with the impacts of climate change associated with a 2°C rise in global temperature.

2030

Be a carbon neutral council

2030

Wiltshire to be carbon neutral

2°C

Be resilient to the impacts of climate change

We will scale up existing technologies and solutions, while supporting innovation for the future.

We will focus on Wiltshire-based emissions in the first instance as these are better understood. Although we recognise that embodied carbon in materials and in the imported goods that we buy and eat also need to be brought to net zero, this is something the council has extremely limited influence over.

The council only has direct control over 0.5% of carbon emissions in Wiltshire but can use its democratic mandate and other levers of influence to have an impact on wider emissions (see diagram), including influencing strategic partners on infrastructure projects.

Most activities to mitigate climate change involve new and smarter ways of doing things. It will be essential to involve all sectors and generations, and especially children and young people as they will be the most affected.

Principles

Our strategy and delivery plans will:

- Be inclusive – ensuring the

transition to a low carbon, climate resilient future is accessible to all sectors of society, including our rural communities and businesses.

- Be evidence led – using the best available science and analysis, while working to increase knowledge in areas where there are gaps. Our evidence base has been informed by feedback from a wide range of stakeholders.
- Follow the Greenhouse Gas Hierarchy, making sure that low carbon technologies and offsetting do not take the focus away from reducing energy use in the first place.
- Deliver co-benefits – where action to tackle carbon emissions also yields health or financial benefits, such as air quality and physical exercise benefits from walking and cycling.
- Further embedding climate considerations in decision-making.

Local Authority spheres of influence

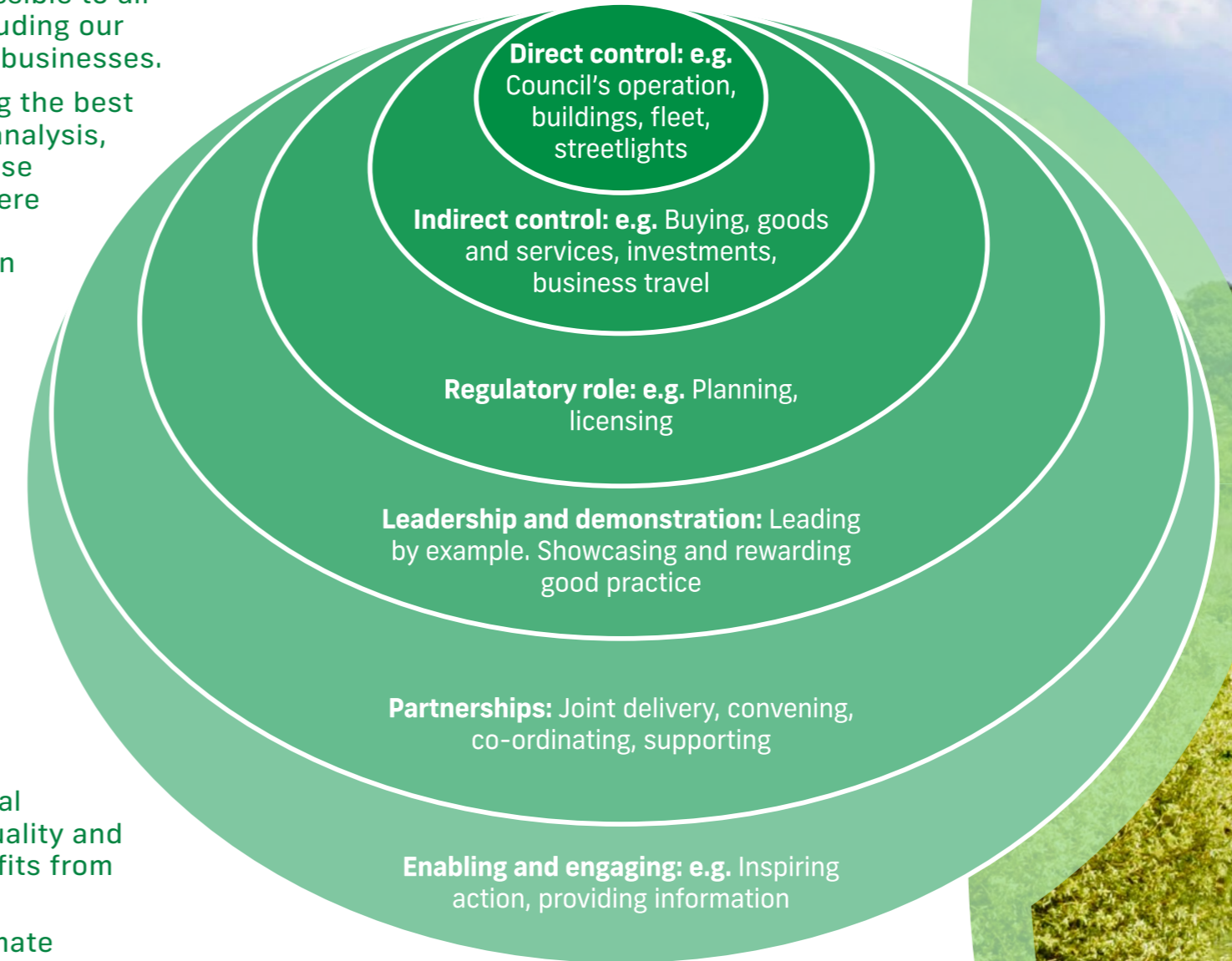


Photo: Caen Hill Locks

Context

This strategy identifies areas of focus for climate action for the period 2022-2027. Immediate opportunities are highlighted !, while we also include the wider challenge and objectives for the longer-term.

International and national bodies, such as the UK Committee on Climate Change (CCC) and the International Energy Agency have given clear messages that governments are not yet doing enough but that there is a viable way to achieve net zero and avoid the worst impacts of climate change. We are currently on course for 3-4°C of warming but with a concerted international effort and investment, limiting warming to 1.5-2°C is possible, as per the UN Paris Agreement.



National

2050

UK to become carbon neutral

2030

68% reduction in carbon emissions

1.5°C

Keep UK temperature rise below 2°C while aiming for 1.5°C



International

1.5°C

Keep global temperature rise below 2°C while aiming for 1.5°C



The 2020s must be the decisive decade of progress and action.

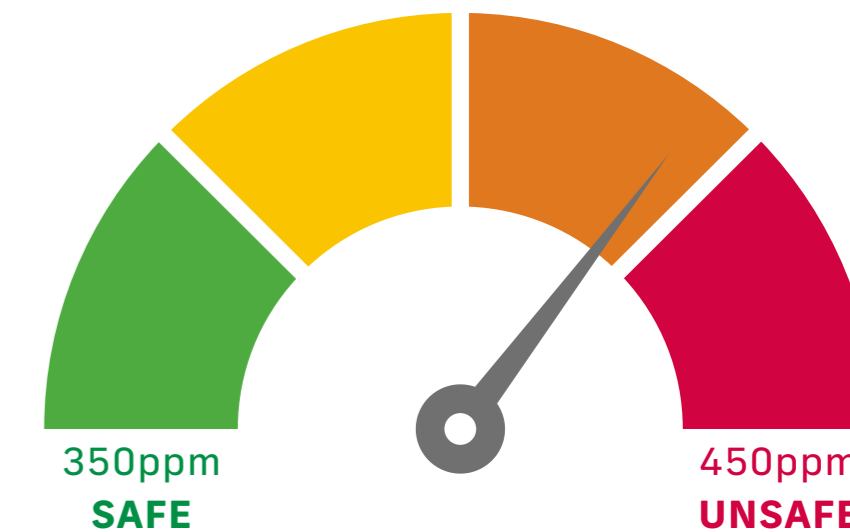
Climate Change Committee sixth carbon budget



Photo: Westbury White Horse

Britain's emissions have fallen for the last eight years in a row and are now 48.8% below 1990 levels. UK emissions dropped by 9% in 2020, mainly due to the large reductions in road transport during nationwide lockdowns and the reductions in business activity.

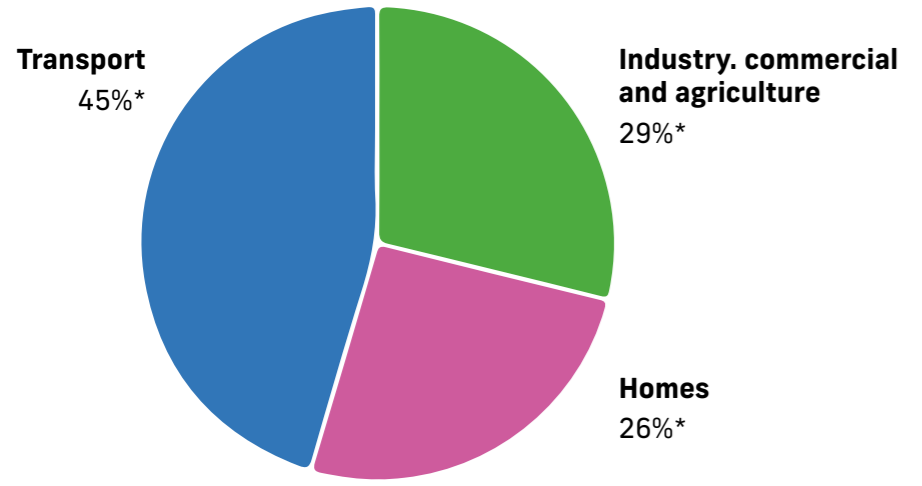
The current level of carbon dioxide in the atmosphere as of May 2021 is **420ppm**



Where we are currently

To reduce emissions and work towards making Wiltshire carbon neutral, we first need to understand our emissions. The pie chart below shows the key sources of emissions in Wiltshire (chart 1). These are the territorial emissions from Wiltshire and do not take into account imported goods.

Chart 1: Wiltshire emissions by source, ktCO₂ (BEIS data, 2019)



Wiltshire's renewable electricity generation accounted for approximately 6% of our total energy demand.

Wiltshire has made rapid progress in reducing carbon emissions: while Gross Domestic Product (GDP) and number of dwellings grew in recent years, energy usage and CO₂ emissions fell (chart 2). There remains a significant way to go to decarbonise transport, reduce reliance on fossil fuels for heating, and protect and enhance carbon stored in the natural environment.

Chart 2: Relative changes in GDP, Number of dwellings, CO₂ emissions and energy demand in Wiltshire.

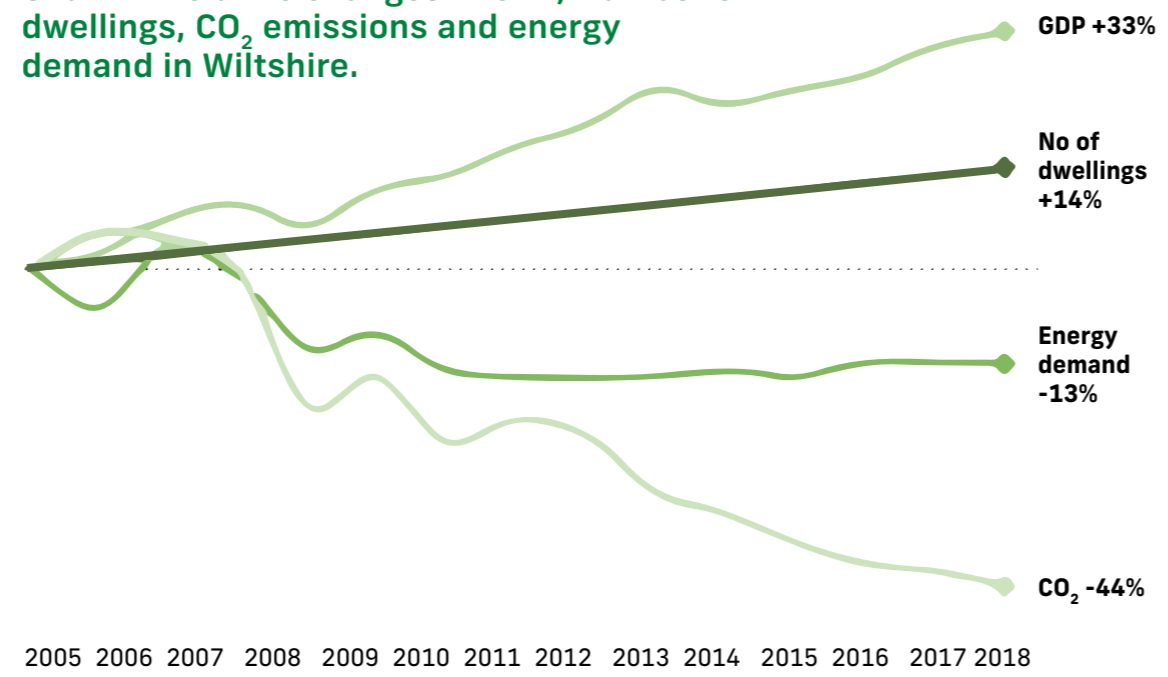


Chart 3 shows Wiltshire's emissions per person per year for 2005- 2019. These initially reduced in line with the regional/national averages but the rate of reduction in Wiltshire has slowed in recent years.

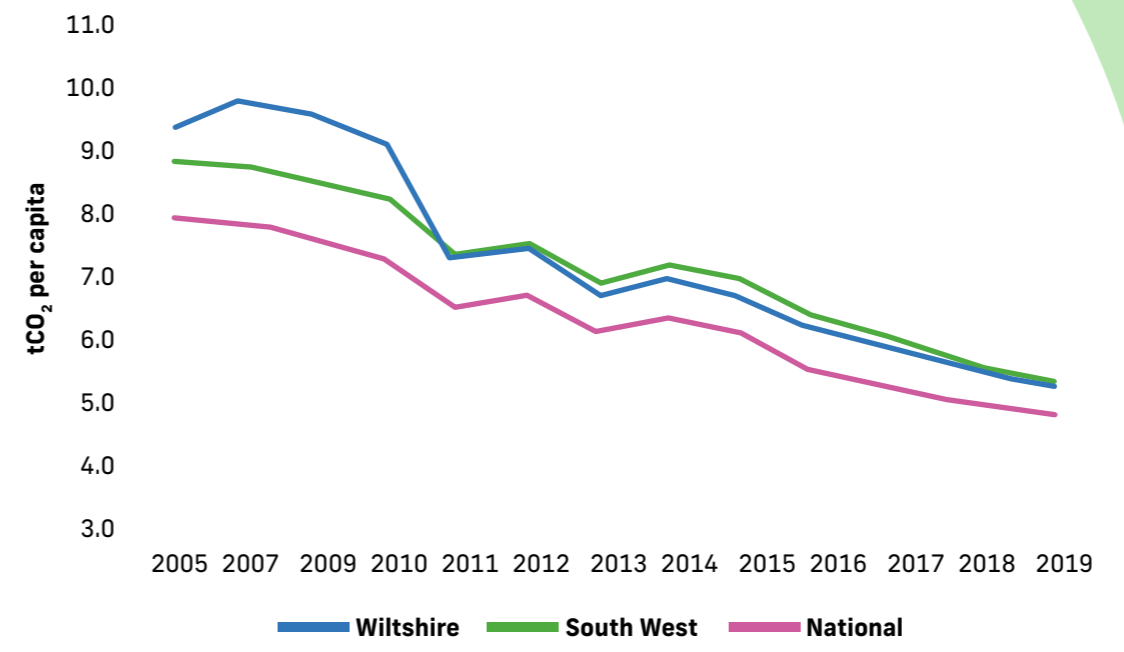
The Tyndall centre for climate change research has calculated carbon budgets to 2050 for every local authority area. These budgets set out the maximum amount of carbon dioxide that can be emitted and still limit global warming to 1.5 degrees compared to pre-industrial levels. With no change to current

emissions, Wiltshire would use up all its budget within seven years.

As part of developing a delivery plan for Wiltshire, research will be carried out to find the most efficient measures to achieve carbon reduction and establish the cost of trajectories to carbon neutrality.

We will use our monitoring and reporting framework to help understand the impacts of the strategy – in terms of carbon, costs and additional benefits in areas such as air quality, jobs and skills.

Chart 3: Change in per capita CO₂ emissions over time



Emissions explained

Throughout this document we use the term 'carbon' and 'carbon dioxide'. Carbon is not harmful in itself, but is used as shorthand for carbon dioxide - the gas responsible for 80% of global warming.

Other greenhouse gases also contribute to climate change, such as methane and nitrous oxides.

While the charts in this section only track carbon dioxide (CO₂), we need to stop all greenhouse gases from accumulating in the atmosphere. The actions that we put in place will also decrease the other main greenhouse gases.

An average person

will emit 5.2 tonnes of CO₂ per year



Return flight to Orlando

will emit 2.1 tonnes of CO₂



Return flight to Rome

will emit 0.44 tonnes of CO₂



Return rail trip to Rome

will emit 0.04 of CO₂



An area the size of Wiltshire

completely covered with trees could absorb only 1/3 of our county's annual emissions.



How National Policy Supports our Strategy

The strategy has been written during the COVID-19 pandemic, at a time when we are in need of economic recovery, hope and determination for a healthier and prosperous future. The pandemic has changed the way we live and work, showing that we can respond when there is an urgent need for action. Some of these changes are positive for the climate and we can harness these and build on them.

The UK government has set a target of achieving net zero emissions across the entire country by 2050. This is in line with international goals set by the United Nations. In Wiltshire we can, and will, go further and faster.

The UK government puts supporting green jobs and the net zero carbon goal at the centre of its plans for a green recovery. It is committing significant investment towards

achieving this goal, such as £1 billion for retrofitting buildings, £1.3 billion for developing electric vehicle infrastructure and £5.2 billion for new flood and coastal defences.

During the pandemic the government has made a range of climate-related announcements although some expected national strategies have been delayed. National policy is changing rapidly in the run up to the United Nations Climate Summit, known as **COP26**, to be held in Glasgow in 2021, when the commitments from all countries who have signed up to the Paris Agreement will be reviewed. As the host nation, the UK is seeking to provide ambitious leadership and has set interim targets to net zero by 2050: a 68% reduction on 1990 emissions by 2030 and a 78% reduction by 2035.

The message from national government and independent studies is that many of the solutions we need are already understood and available. They include solar and wind power, heat pumps for buildings, electric cars – and more walking, cycling and public transport. We therefore need to base our immediate action on existing technology and

behaviour change, while innovating for the longer-term.

The UK Committee on Climate Change (CCC) **Sixth Carbon Budget Report**, (December 2020) provided specific scenarios and recommendations for transition to net zero for each sector. The report is clear that we still have the opportunity to turn the situation around and it is achievable, and affordable.

Many of these measures will deliver co-benefits, for example the woodlands and green corridors created to absorb carbon will also boost wildlife and provide accessible green spaces which is of proven benefit to physical and mental health and wellbeing.

There is a recognition in the **Environment Bill** of the negative impact that climate change is having on biodiversity and the benefits that the natural environment can provide in mitigating over-heating and winter flooding. The Environment Bill also contains wide-ranging proposals to overhaul how waste is managed in the UK, with a focus on treating waste as a resource; increasing levels of recycling; and making producers responsible for meeting the costs of collecting and processing of packaging waste.

The **10 Point Plan** and the Sixth Carbon Budget report set out very clear intentions on our national direction of travel as shown in the illustration.

This context allows us to be ambitious but also means that we need to stay flexible. This will enable us to adapt to changes in national policy and anticipated national strategies for the decarbonisation of heat, aviation, electric vehicle infrastructure and the net zero 2050 strategy.

As national policy and legislation are a crucial enablers of action at a local level, we are involved in influential national networks to shape and inform central government thinking in this area. The council chairs the **Countryside Climate Network**, made up of ambitious council leaders from 28 predominantly rural councils who represent over 45% of England's land area, making the case that rural communities can be at the forefront of climate action.

National Intentions



More renewable energy, including offshore wind, hydrogen and nuclear

More journeys by public transport, walking and cycling



Thousands of jobs created in green sectors



More electric vehicles



Grid evolution, smart energy generation and storage technologies



Delivery themes

! = starting immediately

Wiltshire has a beautiful natural environment with rural villages as well as more urban settlements. Our population is split roughly equally between urban and rural areas. The strategy for tackling climate change in Wiltshire is structured around seven delivery themes. These

are presented separately, but there is a large amount of overlap between the themes. For example decisions on where we locate homes and employment (built environment) will affect travel patterns (transport). Reducing energy consumption (energy) underpins other delivery themes such as avoiding trips (transport) and building net zero carbon homes (built environment). How we use land will impact all the themes - for renewable energy, tree planting, food or the built environment.

As would perhaps be expected in a rural county, the largest carbon emitter and our first delivery theme is transport. The natural environment, which featured as a key topic in engagement, is also a wide-ranging theme with many objectives.

The diagram on the opposite/next page illustrates the connections between the themes.

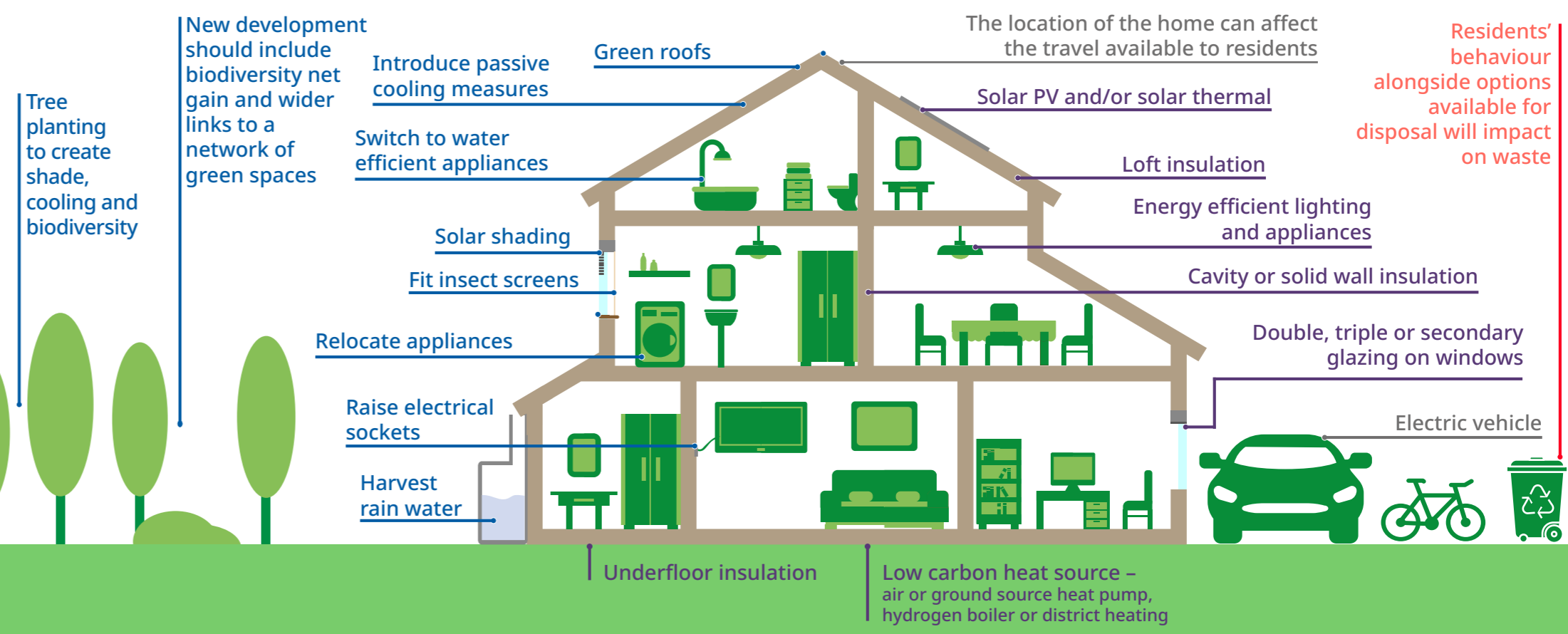
This strategy does not set out specific actions and targets; these will follow via delivery plans which will provide more detail on how the objectives will be delivered.



How we build new homes and retrofit existing ones is an important part of the delivery themes of **Home and the Built Environment**, but how we do this also impacts, and is related to, the other delivery themes as well.



By aiming to be a **Carbon Neutral Council** we can look to lead by example with our ten year council home retrofit scheme and pilot of zero carbon builds



Transport

The UK Government's recent Transport Decarbonisation Plan sets the scene for our approach to reaching net zero for transport. It is clear that in Wiltshire, a rural county where the car is currently the main travel mode, an important part of the picture will be electric or other zero emissions vehicles. We also want residents to be able to choose modes of travel such as cycling, walking, shared and public transport because they are convenient, affordable, green and inclusive.

Quick progress is essential, so we will need to act across all areas of focus simultaneously. The range of solutions available to us in Wiltshire means that buses will play a central role to our journeys, both in rural areas and more urban places. In towns and city the ideal is to be mostly car-free. Cycling and walking will increase and present us with a pleasant way to get around to shop, work, socialise, and enjoy improvements to our health, local environment and economy. Our Local Transport

Plan will work out the best mix of solutions to help us achieve zero emissions.

Objectives

- To achieve a transport system in Wiltshire that has zero carbon emissions, acknowledging the different solutions for our towns and city versus rural villages.
- Creating the infrastructure for increased walking, cycling, shared and public transport and use of alternative fuels, including electric vehicle charging points
- Achieving high-quality, bus-based, public transport and transport hubs that offer a pleasant and convenient way to get around, and seamless combined journeys
- Locating and designing new developments to reduce the need to travel and provide more opportunities for people to travel by zero or low carbon transport modes, for work, leisure and errands

A zero carbon mobility and transport system will:

Avoid unnecessary travel – reducing the need to travel through digital options, rationalising & combining journeys and locating services, homes and jobs within reach

Shift to more sustainable modes of transport – achieving sustainable mobility and accessibility through public transport, walking and cycling, particularly in our towns and city

Improve vehicles and infrastructure – while hydrogen and other alternative fuels are being tested and developed, we know that electric vehicles need to be part of the immediate solution



One thing you can do: reduce your carbon footprint by using the bus or cycling when going on short trips

Our areas of focus

Wiltshire Council will:

- ! Better understand our carbon baseline and the impact of different transport actions
- ! Develop a new Wiltshire Local Transport Plan, Local Plan and Green and Blue Infrastructure Strategy that will set out plans and policies to achieve the vision for sustainable mobility and transport in Wiltshire
- ! Explore how the council can best support charging infrastructure to encourage the uptake of electric vehicles by Wiltshire residents and businesses, through Wiltshire Council's Electric Vehicle Charging Infrastructure Strategy
- ! Produce Local Cycling and Walking Infrastructure Plans for Wiltshire and the three major settlements
- Use planning powers and regeneration programmes to increase accessibility to local services and facilities, creating places that enable local living, and explore the potential for '20 minute' neighbourhoods or similar concepts for Wiltshire
- Develop an ambitious Bus Service Improvement Plan as required under

the new National Bus Strategy. Central themes will be reducing carbon emissions through efficient buses and improved services

- Develop a Wiltshire Council travel plan: though commuting accounts for just 20% of journeys nationally, the council can address this for its 4,500 staff

Using our influence and partnerships we will:

- ! Develop a vision for sustainable mobility and transport in Wiltshire as a basis for the changes needed to achieve zero carbon travel.
- ! Encourage town councils to support existing Town Cycle Networks
- Support schools to develop green travel plans
- Develop an active travel network that is inclusive, safe and enjoyable to use, meets the latest design guidance and embraces new modes such as e-bikes. Routes should coincide with the Rights of Way network, canals, green open spaces and wildlife corridors where appropriate
- Ensure that infrastructure is resilient to the impacts of climate change, such as flooding, extreme heat and power outages

- Use all tools available such as government funded initiatives, behaviour change campaigns, and existing planning policy and guidance for good design to deliver zero carbon transport in Wiltshire set out in the emerging Local Transport Plan
- Work to further increase access to high-speed broadband, to enable digital options including home working, and encourage businesses to embrace these options
- Encourage recovery and ongoing support of the local economy, building on trends to shop local during the pandemic
- Promote local tourism as well as having a 'green travel offer' available for our visitors
- Work with parish and town councils and community groups to support car clubs, car sharing and community and public transport
- Explore the potential for local delivery hubs, and coordinated, low-carbon forms of transport for the last mile of deliveries in towns
- Work with partners to move to ultra-low emissions vehicles for public transport, and to carbon neutral fuels for heavy fleet vehicles



Homes and the built environment

Ensuring new development is built to net zero carbon standards as soon as possible is a key theme from all engagement to date. The current review of the Wiltshire Local Plan is looking at this within the constraints of the national planning system and housing market.

However, it is not just new buildings that need to be net zero because they make up a very small proportion of all buildings in Wiltshire. We also need to retrofit existing buildings so that they are energy efficient and use low carbon sources of energy. Research for the strategy (including by the Global Warming and Climate Emergency Task Group) shows that there are different types of retrofit technologies: well-established such as insulation; technologies that are becoming more widely used such as air source heat pumps; emerging but tested new technologies such as **Energiesprong**; and potential emerging

options such as hydrogen boilers (that are unlikely to be deployable at scale before 2030). The key is that we don't wait for new technologies but move forward with what we can now, learning from others including the council's own work programmes.

Objectives

- New buildings, including homes, to be net zero carbon and adaptable to climate change as soon as possible (including measures such as water efficiency)
- Existing buildings in all sectors to be retrofitted to improve energy efficiency and decrease energy demand through low carbon technology
- New and existing buildings to be adapted to climate change for both heating and cooling, and to include measures of benefit to the wider environment where possible (see diagram on page 17 for some of the potential measures)

The objectives for the built environment are concise, but reaching them - in particular the retrofit of existing homes and buildings - is a significant challenge.

In relation to the existing Wiltshire housing stock, over 450 homes would need to be retrofitted every week for the next 9 years to get to net zero by 2030. This shows the importance of applying for retrofit funding and engaging with residents as an immediate area of focus; and partnership working in all sectors to allow us to build the supply chains and resident confidence to enable high levels of retrofit in later years.

The non-residential sector can raise specific challenges, e.g. liability and ownership issues at schools, or the many typologies of buildings with different challenges in the industrial and commercial sectors. Access to funding, whether this is in the form of grants or the ability to borrow, will also be key.

Our areas of focus

Wiltshire Council will:

- ! Implement a ten year programme to retrofit all council homes to Energy Performance Certificate (EPC) B standard
- ! Aspire for net zero carbon development by the council where viable and possible
- ! Use the Local Plan review as an opportunity for zero carbon

standards in new builds; stronger policy on adaptation and mitigation; and improved policies on other aspects such as water use and well-considered site layouts.

Using our influence and partnerships we will:

- ! Help residents to understand and engage in retrofitting their homes by active promotion
- ! Help fuel-poor households improve the efficiency of their homes by targeted support
- Disseminate learning from our own programmes to partners locally and nationally, including social housing providers
- Work in partnership to raise standards in the wider built environment such as business and schools



Historic Environment

Recent research by Historic England (2019) and others shows how historic buildings can be retrofitted to help meet climate aims.

Warm and Safe Wiltshire

A fair and just transition is a key principle of the strategy. Warm and Safe Wiltshire provides home energy efficiency advice and grants to full-poor households.



One thing you can do: reduce your carbon footprint by turning down your thermostat

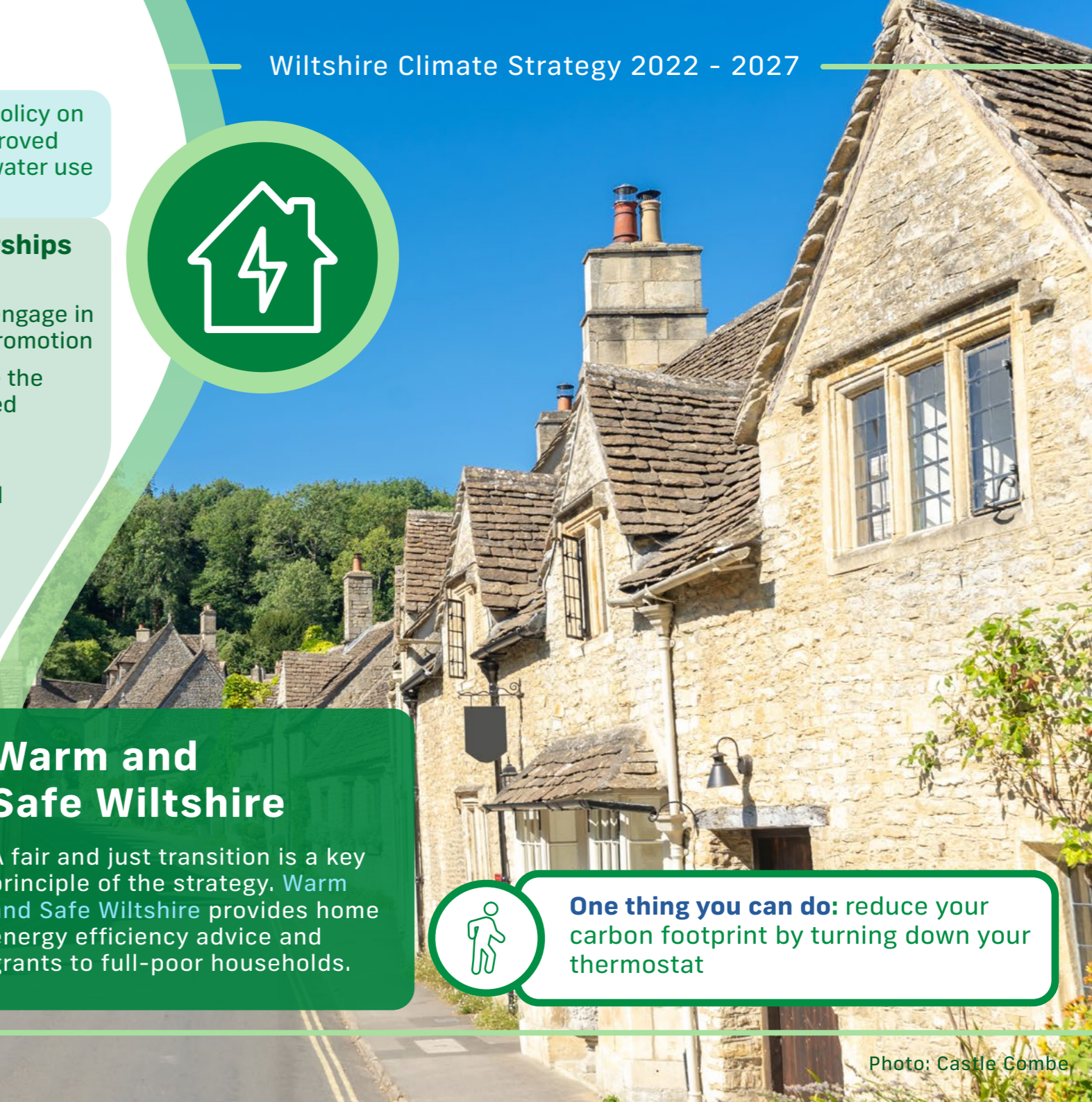


Photo: Castle Combe

Natural Environment, Food and Farming

A healthy natural environment provides ecosystem services for people, wildlife and the economy, including absorbing carbon dioxide (see diagram).

Nature-based solutions alongside technical measures can help us adapt and be resilient to climate change.

The food production system in the UK accounts for around 20% of national greenhouse gas emissions. The recent **National Food Strategy** looks at solving the problem of producing enough food while simultaneously restoring nature and absorbing carbon.

Objectives

- Efficient and environmentally sensitive use of land, providing for the needs of an increasing population and nature:
 - food production, renewable energy generation, housing and transport, alongside woodland creation and

nature recovery.

- Absorbing carbon, by plants and well-managed soils
- Sustainable, low-carbon food and farming systems
- Protect and extend our network of green spaces and land and water habitats. Make best use of this network of green and blue spaces for biodiversity, active travel, recreation, cooling, shade and absorbing carbon
- Natural water management – reducing flood risk and summer droughts.

It will be important to value the historic, cultural and working environment that makes Wiltshire special and gives us a sense of place and identity, while making room for new solutions which may create change in our landscape and settlements.

Our areas of focus

Wiltshire Council will:

- ! Support the roll out of the **Community Environmental Toolkit**
- ! Consult on a **Green and Blue Infrastructure Strategy** for Wiltshire, to be a framework for partnership working
- ! Plant trees and create other suitable habitats on council land where

appropriate

- ! Develop Wiltshire Council Tree and Woodland Planting Strategy to establish targets and advice on planting the right tree in the right place
- Update the Wiltshire Council Climate Change Adaptation Plan

Using our influence and partnerships we will:

- Work with Wiltshire stakeholders, communities and farmers on ways to reduce emissions from food and farming. Encourage and support landowners and farmers in improving soil health, water quality, woodland and other habitat creation, renewable energy and regenerative practices
- Support landowners and community groups to enhance their green infrastructure
- Be informed by Swindon and Wiltshire Local Enterprise Partnership's research to measure natural capital and use it to inform decision-making
- Recognise the role canal and river trusts play in natural flood management of our river catchments and biodiversity, and explore the potential of the canals for active travel and renewable energy generation.



Climate change is making it more important than ever to protect and enhance biodiversity, habitats and soil health. While some councils have declared an 'ecological emergency' Wiltshire Council is responding through its emerging Wiltshire Green and Blue Infrastructure Strategy, which will establish shared goals and aspirations. In partnership with stakeholders, delivery will include nature recovery plans, tree and woodland planting and integrated water catchment management.



One thing you can do: peat acts as a carbon store, but damage to peatlands is leading to loss of carbon and habitat so use peat free compost in your garden, or why not try making your own, using a **food waste composter?**

Energy

At present the grid supplies energy on demand. Once transport and heating are electrified, there will be a much greater demand. In order to manage this **a flexible and 'smart' grid** will be needed. Energy consumption will also need to be reduced wherever possible.

While progress has been made on decarbonising electricity by using renewable energy to power the grid, the decarbonisation of heat remains a significant challenge and potential opportunity. As we change the fuels that we use for heating, skills and supply chains will also need to adapt to provide non-fossil fuel alternatives.

Objectives:

- Existing energy use within Wiltshire to be reduced to allow for decarbonisation
- Heat and electricity to be decarbonised (moving from fossil fuels to alternatives)

Our areas of focus

Wiltshire Council will:

- ! Install renewables and alternative technologies on council property where appropriate
- ! Carry out a Wiltshire-wide assessment of the potential for renewable energy production using a range of technologies

Using our influence and partnerships we will:

- ! Promote the benefits of green energy tariffs to residents and partners while also encouraging energy reduction
- Raise awareness of the need to start with energy reduction, and the role of flexibility and the smart-grid, to guide changes in behaviour
- Increase renewable electricity generation (and associated technologies such as storage) within Wiltshire by working in partnership with others, including community energy groups. The need for energy generation must be balanced against other land uses and this will be reviewed

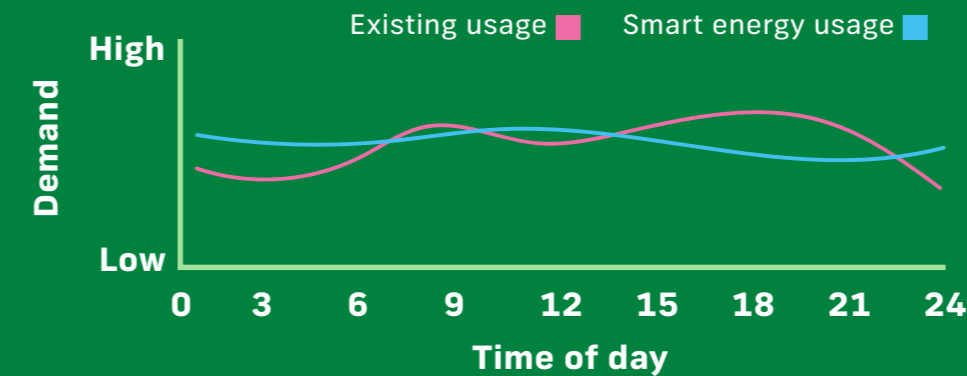
- Continue to work with partners to look at the future of the grid and alternative, new and emerging technologies

Future technology mix

Future energy scenarios by the National Grid and the 10 Point Plan by central government both show technologies currently only at trial stage playing a large role in the move to net zero. Research by the International Energy Agency (IEA) shows existing technologies being key until 2030 with the emerging technologies starting at pace after 2030.



Using smart technology to balance demand will reduce peak energy requirement



One thing you can do: switching to a green energy provider can significantly reduce your carbon footprint.

Green economy

The future economy will include more jobs in sectors such as renewable energy, electric vehicles and installing low carbon heating in buildings. This is a huge opportunity for Wiltshire.

A circular economy is one where resources are used as efficiently as possible, changing what was traditionally a linear process – using things and then throwing them away - to a circular process where value is retained and recovered within the system.

Objectives:

- To grow the green economy in Wiltshire, increasing capacity and skills in key sectors to meet demand and delivery targets
- Wiltshire businesses take action to become carbon neutral and climate resilient

Our areas of focus

Wiltshire Council will:

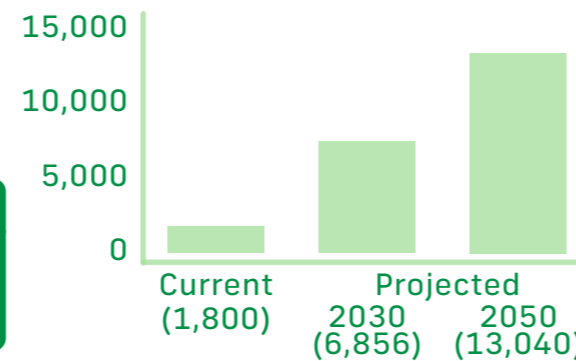
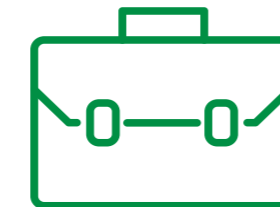
- ! Stimulate the green and circular economy and local supply chains by delivering programmes in key sectors such as housing retrofit and investment in renewables
- ! Work with our suppliers to require them to measure and reduce their carbon emissions
- Support the growth of businesses focused on sustainability and zero carbon innovation and attract new ones to invest in the county
- Showcase what leading businesses are doing on this agenda in Wiltshire
- Promote green skills opportunities to young people through the Wiltshire and Swindon Careers Hub and encourage engagement with green jobs through Wiltshire Council Employment and Skills programmes

Using our influence and partnerships we will:

- ! Continue to promote 'shop local' campaigns and encourage people to use their local retail centres
- Work with training providers and employers to increase training for green skills. This depends on generating sufficient demand which our own council programmes will help with
- Work with local networks to support small organisations, from SMEs to local charities, to become climate resilient and sustainable
- Input to government policy and funding programmes, to make sure they are appropriate for Wiltshire residents and businesses



Number of green jobs in Wiltshire:



A 2020 survey of 1,000 people aged 18 to 34 found that 50 percent wanted a job in the green economy.

Good Energy Survey, 2020



One thing you can do: by sourcing a **reputable local trader** for your renewable energy or heat pump installation you'll help build local supply chains throughout Wiltshire. It is important to thoroughly insulate your home first.

Waste

Wiltshire's emissions from waste are due to our household, commercial and construction waste, but also emissions from landfill and other waste management facilities in the county.

The council's current **household waste** management strategy follows the waste hierarchy, aiming to reduce and recycle waste as much as possible, while dealing with residual waste in the most sustainable way currently available. This includes using energy from waste which, in future, is likely to be required to lower its emissions through carbon capture and storage. Ideally we would have a lot less waste and this would be managed within a circular economy.

Objectives:

- Work towards a circular economy
- Work towards zero avoidable waste in Wiltshire and decarbonising the waste management process

- Manage waste in accordance with the waste hierarchy, increase the amount of waste recycled and reduce the amount of waste sent to landfill

Our areas of focus

Wiltshire Council will:

- ! Continue to provide efficient recycling services and review the potential for expanding the range of items collected and maximising the efficiency of collections wherever possible
- ! Continue to review our household waste management strategy, reflecting carbon assessment of options, including the impact of processing waste locally or abroad, and recognising the proposals in the government's Environment Bill to potentially extend the scope of recycling collections, to include separated food waste

Using our influence and partnerships we will:

- ! Prevent waste - provide advice and information to help reduce the amount of waste generated by householders as well as commercial waste
- Repair and re-use - work with local organisations and contractors to maximise opportunity for items to be repaired and reused.
- Work with businesses and partners to reduce commercial waste
- Lobby government in support of the most sustainable options for future national waste management strategy



By recycling and composting household waste rather than sending to landfill, in 2020/21 we saved 38,781 tonnes CO₂



98% of the waste collected by Wiltshire Council, for recycling, composting or reuse, was managed within the UK and not exported abroad



One thing you can do: Waste food accounts for 8-10% of global greenhouse gas emissions, from rotting food, and through the (wasted) energy used to produce, store, transport and package it. Reduce the amount of food waste that you throw away by utilising your leftovers and meal planning.



As well as reducing the amount of waste going to landfill, recycling helps conserve raw materials and protect natural habitats



Landfill waste produces 20 times more emissions than recycling

Carbon neutral council

Objective:

- To become carbon neutral as an organisation by 2030
- Provide leadership locally and nationally, sharing learning

Our 2030 pledge relates to the council's carbon emissions (or 'carbon footprint') that are within our direct control, i.e. those from our operations and buildings. In order to fulfil this commitment, the council's carbon footprint will be drastically reduced compared with its current footprint and any residual emissions will be offset.

Our areas of focus

Wiltshire Council will:

- ! Integrate carbon reduction and climate resilience into decision-making and strategic planning

! Develop a new Carbon Neutral Council Plan to map our pathway to net zero, to include:

- Property / Assets: continue to decarbonise heating, improve energy efficiency and expand renewable electricity generation.
- Fleet: review, move to electric vehicles and identify alternative solutions for larger vehicles.

! Continue to monitor and reduce direct emissions, while working to understand and reduce scope 3 emissions (supply chain and outsourced operations) for wider impact.

! Work with the council's supply community, to help achieve economic, environmental and social benefits for the public good and the people of Wiltshire (including reduced carbon emissions) when the council buys goods or services

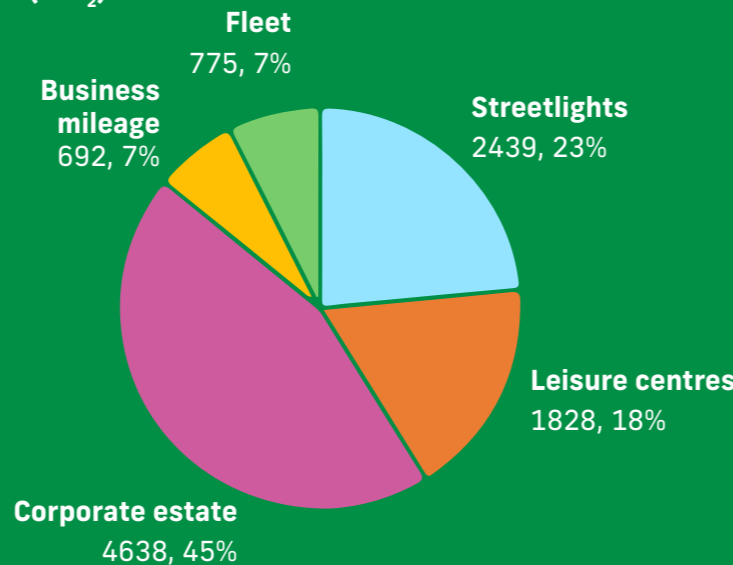
- Ensure council property and infrastructure is resilient to the impacts of climate change.

Using our influence and partnerships we will:

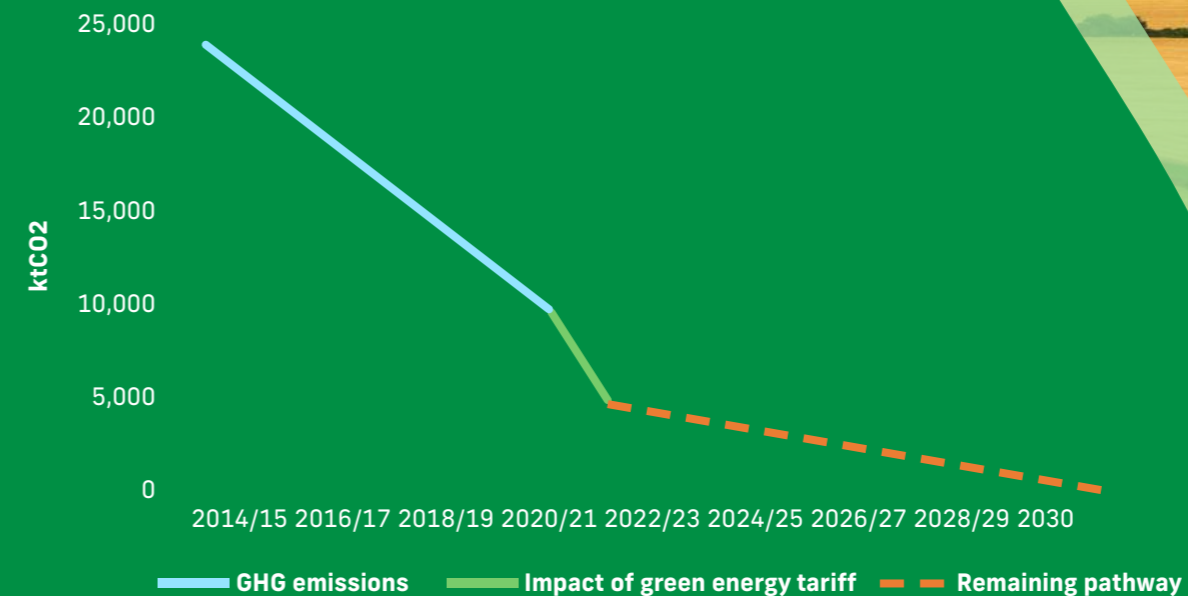
- ! Lobby government for increased funding and powers through groups such as **UK100/ Countryside Climate Network, ADEPT** and the **County Councils Network**
- Work with public sector partners, voluntary and community sector and over 20,000 businesses across Wiltshire to share knowledge and delivery



Wiltshire Council emissions 2020/21 before application of green electricity tariff (tCO₂)



Wiltshire Council greenhouse gas emissions since 2014/15



One thing we will do: Develop a carbon literacy programme for staff and councillors.

Working together

The climate emergency is a complex problem and there are no easy solutions. Everything is linked, so benefits in one area such as energy efficiency in homes can also mean 'co-benefits' in others such as warmth, health and financial savings.

Delivery within each theme will naturally cross over into other themes and will require working in partnership with organisations, residents, businesses and the entire community of Wiltshire.

Engagement with stakeholders has shown that Wiltshire organisations and businesses are already working on their own pathway to carbon neutral and are keen to work with the council and each other towards this goal.

It is clear that information and awareness will play a central part, and change by individuals as well as organisations, businesses and the council, is critical.

The council has been progressing on carbon reduction for over 10 years. It is now time to increase the scale and pace of action, working with others to achieve this.

There is interest from parish and town councils in climate change. Many are looking to Wiltshire Council for leadership and ideas for action.

(National Association of Local Councils climate change survey 2020, and engagement during the climate strategy development)



Photo: Salisbury Community Energy solar panels on Salisbury Cathedral.
Credit: Ash Mills

Governance

The council has set up a robust internal governance framework to oversee the climate programme, as set out in our January 2021 **discussion document**. As part of this, six-monthly progress reports are provided to **Cabinet** and Council and published online. The Global Warming and Climate Emergency Task Group provides scrutiny for this programme of work.

- ! A new Climate and Environment Forum will be set up to enable a regular two way dialogue and share ideas with local community representatives.

We will continue to deliver through existing partnerships, such as the Wiltshire Public Service Board and the Education Employment and Skills Action Group. We will also convene additional working groups as required, as springboards for collaboration.



Photo: County Hall, Trowbridge

Next steps

This draft strategy will be reviewed during autumn 2021 in light of consultation feedback and any relevant changes in national policy. The final strategy is expected to be adopted by the council in early 2022.

As our understanding, measuring and monitoring improves we will be able to define the pathways towards net zero for the council and for the county as a whole. Meanwhile we will take immediate action on the 'no regrets' measures highlighted by an exclamation mark throughout the delivery themes section. Research indicates that these actions are clearly needed, are possible using existing technologies, and not likely to be a mistake, even when we have more data about how they impact carbon emissions.

Delivery plans will be produced, informed by technical studies, which will involve a more in-depth analysis of impacts, costs and co-benefits. The council has already allocated £88m capital and £3.9m revenue to deliver on its climate programme but we know more will be needed.

The council will access government funding wherever possible and use invest to save principles for its own assets.

An information campaign will help to increase awareness of climate change and provide practical steps to residents.

We will continue to monitor progress on our direct emissions and increase measurement and understanding of indirect emissions. We will track progress on our strategic objectives and emissions data and report these to Council. Ultimately our success will be measured through a reduction in emissions for the council and for the county as a whole. However the two year time lag in reporting on government statistics and the wide range of other factors influencing emissions means that other measures will also be reported. These measures will be set out in our delivery plans.

Our approaches will need to develop over time. This overarching strategy is designed to be flexible and will be reviewed as the national context and technology evolve.



Carbon foot-printing tools

For individuals: footprint.wwf.org.uk

Parish and town councils: impact-tool.org.uk

Neighbourhood-level statistics: www.carbon.place

Strategies and targets



● Government ● Wiltshire Council

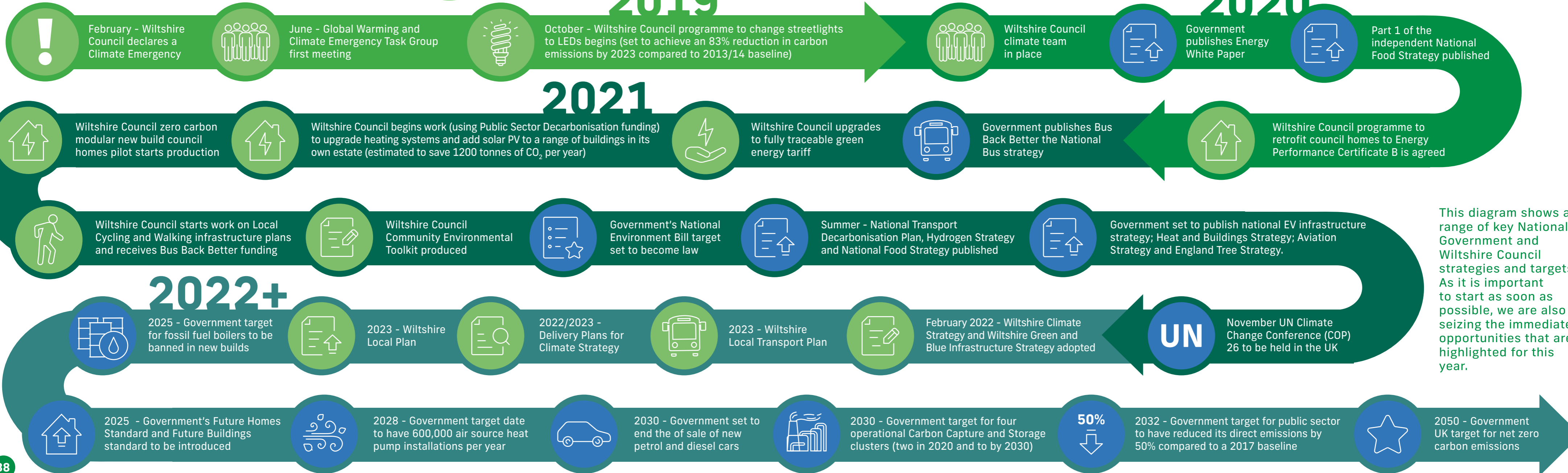
Wiltshire Climate Strategy 2022 - 2027

2019

2020

2021

2022+



This diagram shows a range of key National Government and Wiltshire Council strategies and targets. As it is important to start as soon as possible, we are also seizing the immediate opportunities that are highlighted for this year.

Wiltshire Council
Climate Strategy 2022 - 2027

www.wiltshire.gov.uk/climate
#WeareWilts