

# Canterbury City Council

## Climate Change Action Plan

### 2020-2030

DRAFT 1.5

## Executive Summary

This document sets out Canterbury City Council's Climate Change Action Plan from 2021 onwards. It explains the importance of climate action as part of the Council's work to provide services and infrastructure for the district as described in the Corporate Plan. This document sets out why we need to act and the approach for the next 5 years.

The plan shows the scale of activity that will be necessary to achieve carbon reduction goals and explains that the council will seek significant external funding sources and opportunities to be able to deliver many aspects of the decarbonisation plan.

## The headlines

Through this plan, the Council commits to achieving:

- Net zero emissions by 2030 from the council's operations and assets
- Net zero emissions by 2050 across the full range of activities needed to support the council's work
- Climate resilience in the services, public buildings and infrastructure that supports the district

Across the district we will

- Work with all stakeholder groups to accelerate the transition to net zero
- Support residents, business, institutions and communities to reach net zero
- Invest in making the district more resilient to extreme weather and flooding

Canterbury City Council will do this through enabling major investment in:

- Improving energy efficiency at our council buildings and properties
- Enhancing carbon removal in our open spaces
- Protecting our shared natural resources
- Driving net zero through our supply chain
- Integrating climate considerations into all our decisions

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## Who we are

Canterbury City Council is the local authority for the Canterbury district which includes the city of Canterbury, the towns of Whitstable and Herne Bay, and the surrounding villages and communities. The Council provides a wide range of local services including planning, housing, refuse collection, street cleaning, parks and open spaces, and support for local businesses. The Council works closely with Kent County council which also provides key services for the district including education, adult and social care, and highways infrastructure.

Canterbury City Council's work to deliver services and shape the development of the district through the Local Plan gives the Council a high profile responsibility to demonstrate and lead work for the common good throughout the district.

## Why we want to do this

Canterbury City Council's core purpose is to promote the long-term interests of the district and its social, environmental and economic well being. The council has a strong history of working to protect and enhance the district with many plans, policies and projects to conserve our natural resources of air<sup>1</sup>, land<sup>2</sup> and water<sup>3</sup>.

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<sup>1</sup> [Air Quality Management Strategy](#)

<sup>2</sup> [Open Space Strategy](#)

Scientific evidence shows us that the climate is already changing and that the work that we have all been doing to date falls short of the pace and scale of change needed if we are to limit global warming to 1.5 degrees.

We do not need to compromise the local economy to act for the environment. In reality, climate action will enable economic activity and provide jobs. In order to remain relevant and commercially viable, we need to be responsible and resilient.

In developing this plan, we have focused on achieving tangible action aligned with proven examples. The plan is underpinned with an evidence-based approach, and following international guidance we have included a broad range of emission sources and physical risks. Founded on science-based targets, rather than simply a call to action, our Climate Change Action Plan aims to ensure that Canterbury City Council and the district make a positive contribution to the global effort. We will help reduce the causes of climate change, work on resilience to the risks posed by climate change, and take up the opportunities presented by the transition to a net zero economy. This is one of the defining Council policies. It supports delivery of the Council Corporate Plan.

The Council cannot do this alone and therefore this strategy sets out how we will work in partnership with Kent County Council and our district institutions and businesses to develop the solutions to tackle climate change. We must build back better following the pandemic, making sure no one is left behind. We invite you to work with us as we adapt so that

<sup>3</sup> [Riverside Strategy](#) and [Coastal management strategies](#)

our district and the wider world can do what is needed now for the benefit of all.

## What we can do

For climate action we can contribute towards the achievement of net zero greenhouse gas emissions, build resilience to the risks of climate change and champion economic activity that delivers climate action.

### 1. Support the achievement of net zero by

- Enabling the investment and change to council services and assets to reduce emissions and switch to low and zero carbon technologies
- Planning for a net zero district
- Working with our strategic partners to enable and deliver projects at a district level that reduce emissions

### 2. Build climate resilience by

- Preparing our district response to the natural and human-made threats of climate change
- Protecting the people who use council services, housing and buildings, streets and public spaces
- Providing thriving and biodiverse green spaces and habitats through our direct services our planning functions

### 3. Championing green economic activity

- Providing infrastructure and spaces for businesses and communities to thrive in transition to net zero
- Modelling new ways of delivering inclusive and sustainable local economy
- Supporting organisations in pioneering, preparing for and responding to changes in regulations, markets, products and ways of working
- Supporting, celebrating and advocating responsible practices and investment

## Our approach

### Evidence base

The work to address both the causes and effects of climate change by the council at an organisation and district level is not new. The Corporate Plan and Local Plan both have policies and objectives for reducing emissions, building resilience to services and society and for reducing the risk to the natural and built environment. However, the latest international and national evidence and commitments to strengthen and increase climate action on all levels provides more up to date and science-based targets to reduce emissions and clearer evaluation of the risks from climate change. The work to prepare this Climate Change Action Plan has used published evidence and guidance from Government departments (Business Energy and Industrial Strategy, Department for Agriculture and Rural Affairs, Department for Transport) and from Kent County Council Environment Strategy, Energy and Low Emissions Strategy and Climate Change Risk and Impact Assessment. The work to prepare

the plan has involved workshops and meetings with council service leads and the guidance and input of the Councillor Working Group on Climate Change.

## The emissions sources we include

Many organisations and authorities focus on driving down the emissions they have most control over – scope 1 (the fossil fuels that are purchased and consumed - mostly natural gas for heating, and petrol and diesel for vehicles) and scope 2 (the emissions from generating electricity - mostly used in buildings and street lighting). Addressing scope 3 (the emissions from all products and services that the council buys and uses) can be daunting as it covers everything an organisation buys, sells, invests in, leases to others and disposes of as well as commuting and business travel. But for authorities and institutions like ours, scope 3 makes up a large portion of the total carbon footprint. Measuring it can lead to the design of innovative solutions to reduce carbon emissions significantly.

We have included scope 1, 2 and all scope 3 emissions because it is best practise from the international greenhouse gas protocol to include all the emissions and because we want to take ownership, show leadership and help make this standard practice. This can make it appear that we have greater emissions than our peers that have not included scope 3 data. We have evaluated as much of the scope 3 emissions as we can using estimates based on expenditure, energy certificates, mileage and surveys. We will continue to improve our understanding of scope 3 data. We will also advocate for standardisation of reporting to ensure everyone addresses their total carbon footprint effectively.

## Turning risks into opportunities

The Climate Change Risk and Impact Assessment conducted by Kent County Council sets out the best current information about the current and projected risks from climate change on the region and district. The disruption to the environment, society and the economy from long-term climate change and different weather conditions are widespread and include:

- Risks to health, wellbeing and productivity from higher average temperatures and heatwave events.
- Risk of shortages in the public water supply.
- Coastal and inland flooding of communities, businesses and infrastructure.
- Risks to natural systems, including terrestrial and freshwater ecosystems, soils and biodiversity.
- Threats to food production, distribution and trade.
- New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals.

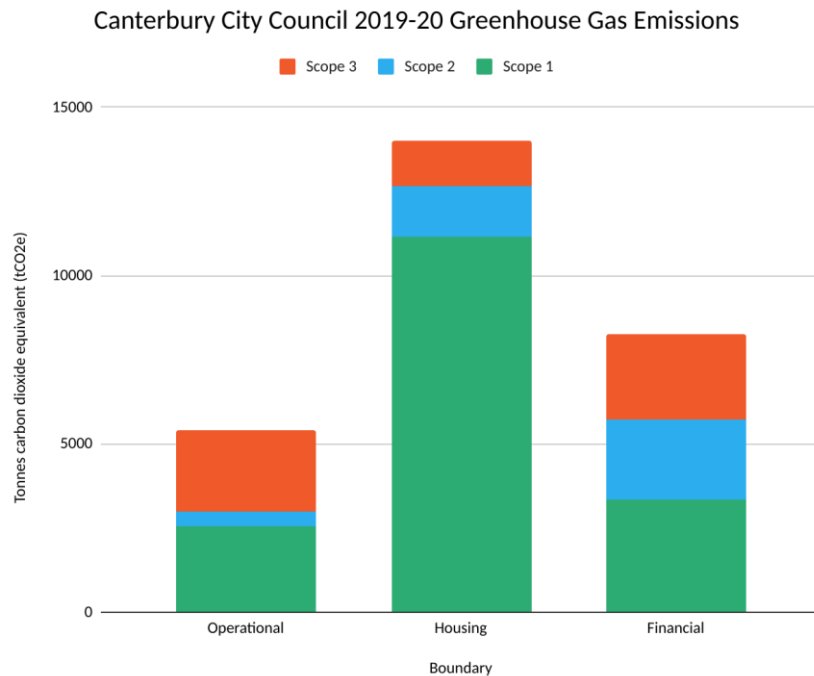
Reducing the risks and making resilience provides us with many opportunities, including:

- Better health, wellbeing and productivity from climate action.
- Better local space for people and nature, including urban biodiversity.
- Reducing unnecessary use of resources (water, food) and generation of waste and use of natural capital (greening rather than air conditioning to reduce temperatures).
- Reducing fuel poverty and inefficient heating.

- Creating jobs in the local economy.
- A more resilient district in the face of climate impacts.

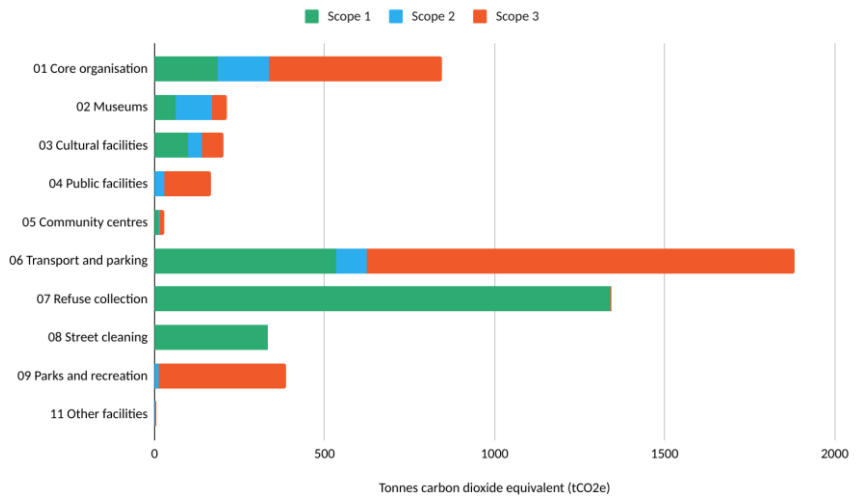
## Our baseline

Our evaluation of greenhouse gas emissions from all council operations and owned assets for 2019-20 is around 28,000tCO<sub>2</sub>e.



Based on the calculated energy performance of the housing stock accounts, heating council housing accounts for the largest section of council greenhouse gas emissions.

Canterbury City Council 2019-20 Greenhouse Gas Emissions (Operational control)



Operational control means where the council directly runs or manages a responsibility. This includes the staff, offices and lots of the services.



Operating the fleet for refuse collection vehicles accounts for the largest amount of transport-related emissions.

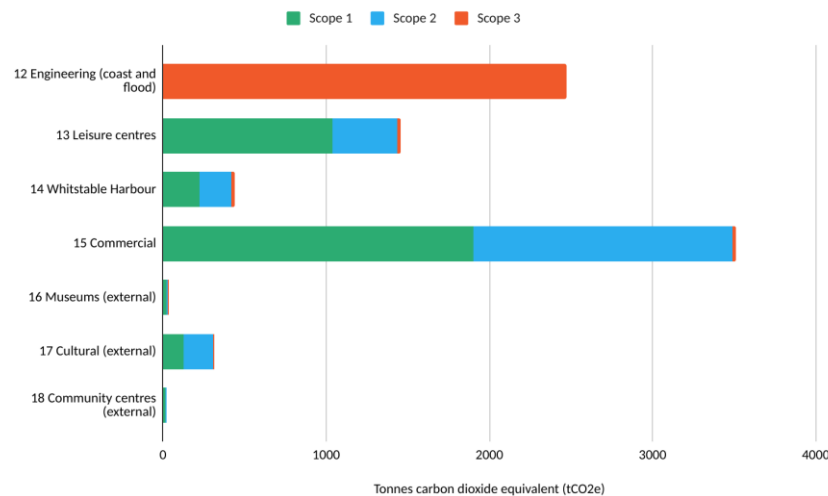


Other sources of vehicle emissions include the street cleaning, grounds maintenance and the park and ride bus operation.



The gas used to heat buildings is a contributor to the greenhouse gas emissions.

Canterbury City Council 2019-20 Greenhouse Gas Emissions (Financial control)



Financial control is where the council owns an asset such as the Marlowe Theatre and many commercial units which are managed and operated by someone else.



Constructing new buildings and coastal defences produced the largest amount of emissions in scope 3 in 2019-20. Careful choice of building materials and construction methods will be needed to reduce emissions from future projects.

The work to reduce emissions to net zero requires major projects across the council asset base, particularly in the area of heavy vehicles and heating buildings. New projects that alter existing properties or construct new buildings will need to work to new standards that minimise emissions associated with building and operating the buildings.

## Factoring climate change into everything we do

Reinforcing and building on the commitments the we made in our Corporate Plan, and to make sure we are doing all we can to reach our goals, we commit to:

- Accessing the best evidence of our impact possible so we can learn, share our experience and improve our actions as we go.
- Ensuring that vulnerable groups who are most likely to be impacted by climate change are prioritised in our decision-making.
- Embedding a climate lens into all our decision-making.
- Identifying measurable targets to track performance against our goals.
- Monitoring progress against our targets at regular intervals.
- Keeping our actions and targets in line with changing legislation and recommendations.

- Reporting publicly to our committees and via published annual reports.
- Reviewing and refreshing the action plan every five years.

## Adapting to climate change

Even with all the global, national, regional and local efforts to reduce the emissions that cause climate change, the scientific evidence shows that climate change will continue to impact our world. The important work to adapt to the changing climate by improving systemic resilience to climate impacts needs to happen alongside projects to reduce emissions.

Canterbury City Council is working with Kent County Council to translate the identified climate risks and impacts into tangible adaptation measures for incorporation into Corporate and Local Plans and plans and policies for council services.

## Funding climate action

Whilst there are many actions that the council can take, our options investigation and scenario modelling for ways to reduce emissions from our operation and estate show that significant new funding will be necessary. The most costly aspects for decarbonisation include making council housing, leisure centres, public and commercial buildings and refuse collection services reach net zero carbon.

Our initial estimates indicate that at least £200m investment in these activities will be required. Effective implementation of the plan will therefore need significant new external funding sources.

## Our climate vision, aims and goals

### Our climate change vision

Canterbury district becomes a leading organisation in emissions reduction, building resilience into its services and assets, and empowering the district in climate action.

### Our climate change aims

- Support the achievement of net zero emissions
- Build climate resilience
- Champion a sustainable district

### Our goals

#### *For the council*

- Canterbury City Council emissions from scope 1, 2 and 3 are net zero across both the operational and financial boundary by 2030.
- Canterbury City Council services and assets are resilient to climate change risks.

#### *For the district*

- Canterbury district is well on the path to emissions reduction in line with regional and national goals by 2030.



Canterbury district society, environment and economy becomes progressively and proportionately resilient to the impacts of climate change.

- Strengthen our requirements and supplier engagement to drive performance and innovation in delivering sustainable products and solutions
- Upskill our workforce on net zero

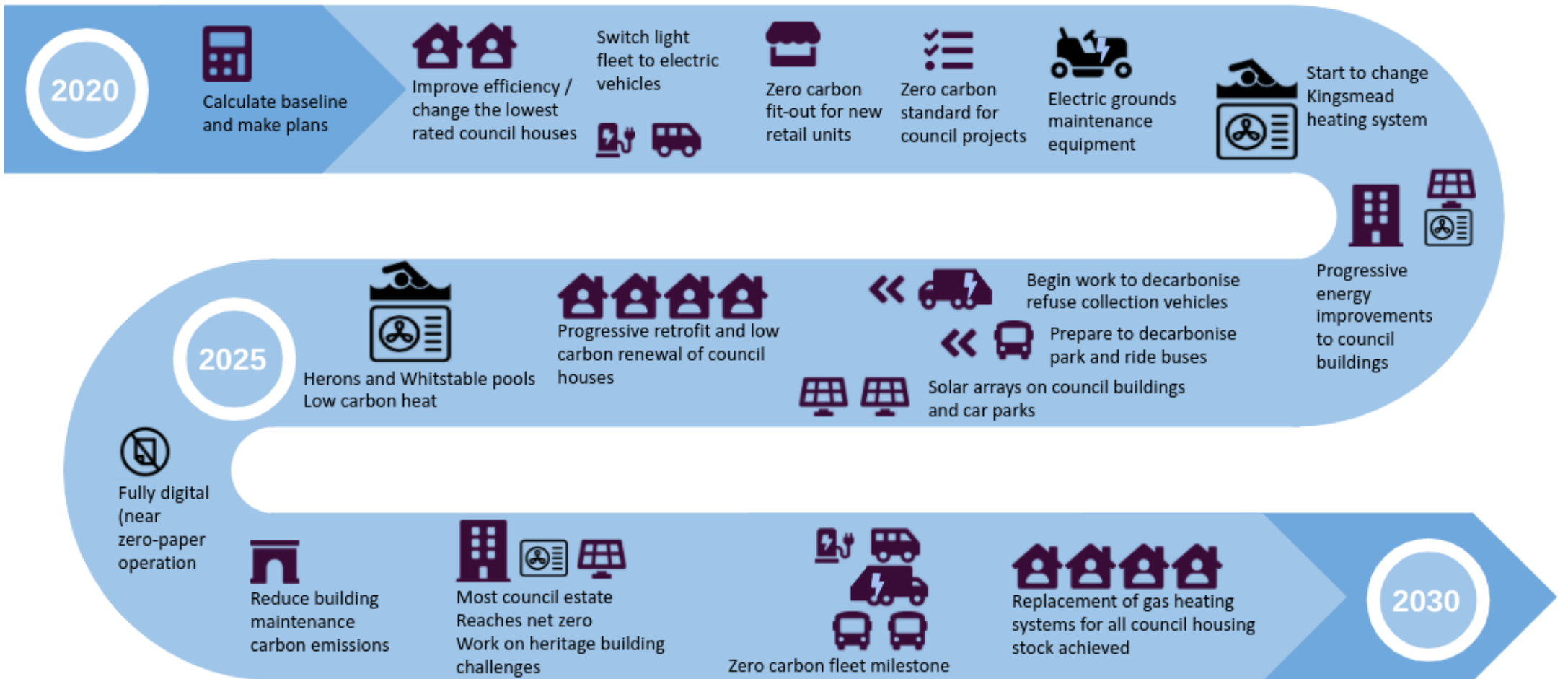
## The first five years

The most effective climate action methods, technologies and funding sources are fast -evolving and the action plan will need annual review. Our climate change actions are summarised as follows:

### Actions to support the achievement of net zero emissions

- Transform the energy efficiency of the council operational buildings through the adoption of best available low carbon technologies
- Maximise the use of renewable energy sources across all council buildings
- Introduce new land management practices across our open spaces aiming to maximise their ability to remove carbon, and optimise their biodiversity and resilience value
- Embed circular economy principles into our capital projects and reduce carbon intensity by using life cycle carbon and cost assessment techniques and design specifications
- Accelerate the move to net zero carbon and energy efficient tenanted buildings - council housing and non-domestic buildings - working closely with tenants to achieve shared goals

An indication of the route to net zero for council emissions:



## Actions to build climate resilience

- Embed resilience measures into our upgrade plans for our owned and operated buildings
- Upskill our workforce on climate resilience
- Embed a climate resilience focus into all our decision-making
- Incorporate resilient design into the council's work in the public realm, natural and open spaces

## Actions to champion climate change work across the district

- Incorporate robust climate change mitigation and adaptation policies into the Local Plan
- Work with Kent County Council to bring projects and funding to the district in line with the Energy and Low Emissions Strategy
- Work with the Environment Agency to reduce and build resilience to coastal and inland flood risk
- Work with partners to reduce district emissions through the Climate Change Partnership Board
- Prepare and publicise best-practice guides, design standards and policies that help residents and businesses with climate action
- Delivery an ongoing multi-channel engagement programme to inform, educate and gather feedback on climate change

## Climate change action plan - details

Our detailed action plan focuses on the work that we can start now in 2021 and indicates the priorities for what will come next and take longer. The plan will require annual review and update as new funding, technology options and best practice emerges.

Net zero actions					
Reference	Action	Responsibility	Target	Emission reduction potential tCO <sub>2</sub> /yr <sup>4</sup>	Timescale
NZ1	Secure low carbon electricity supply	Commissioned Services	Procure a long-term electricity base load to power council operations	<b>~100</b>	2021-22
NZ2	Minimise office accommodation emissions	Commissioned Services	Included emissions reduction outcomes in office relocation project, aiming to enable net zero	~975	2021-23
NZ3	All-electric light fleet	Procurement	Cars and vans to be replaced with electric vehicles progressively to 100% electric	<b>~30</b>	2025
NZ4	Workplace charge points	Transport Team	Increase availability of charge points to serve staff and grey fleet	~30	2021
NZ5	Procurement	Procurement	Value chain emissions analysis to inform procurement emissions reduction strategy	~450	2022
NZ6	Employee commuting and home working	Climate Change Officer	Net emissions analysis to inform net zero strategy for home working / commuting balance	~150	2021
NZ7	Green recovery projects	Housing / Asset Team	Apply for and implement emissions reduction projects from BEIS, SALIX and other green recovery funding sources	~100	2021-22
NZ8	Heat decarbonisation plans	Commissioned Services	Develop heat decarbonisation plans for top 80% of asset emissions	<i>Requires evaluation</i>	2021
NZ9	Commercial solar PV electricity	Property and	Complete first of a phase of solar projects on council commercial assets	<b>~50</b>	2022

<sup>4</sup> These values show the relative opportunity for emissions reduction. Figures in bold can be delivered by the action. Other figures will require further action to deliver emissions reduction

	generation	Regeneration			
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Net zero actions (continued)					
Reference	Action	Responsibility	Target	Emission reduction potential (tCO2/yr)	Timescale
NZ10	Leisure centre decarbonisation plan	Commissioned Services	Commission and agree plans to decarbonise heat from the three leisures centres.	~1400	2022
NZ11	Develop net zero design skills	Engineering + Property and Regeneration	Train staff and produce progressive net zero design aims for engineering and property projects.	-	2021-22
NZ12	Develop net zero retrofit skills	Engineering + Property and Regeneration + Housing Services Team	Secure PAS2035 (domestic) and PAS2038 (non-domestic) expertise for retrofit design, coordination and evaluation in the relevant teams	-	2021
NZ13	Housing projects	Housing Services Team	Develop pilot projects for Whole House Retrofit, Sequential Retrofit and Green Heat Scheme measures as part of the housing strategy.	~20	2021
NZ14	Develop carbon sequestration policy	Environment Team / Commercial Services	Incorporate evaluated carbon sequestration actions into the open spaces and grounds maintenance policies and plans.	~50 <sup>5</sup>	2022
NZ15	Stakeholder engagement	Climate Change Officer	Engage and consult with tenants of council commercial and public buildings to formulate joint decarbonisation plans.	~3500	2021
NZ16	Heavy fleet decarbonisation	Climate Change Officer with	Develop options appraisal to inform and plan for phased changes to decarbonise refuse collection, street cleansing and bus fleets.	~2000	2022

<sup>5</sup> Estimate based on delivering 10 hectares of sequestration

		service leads			
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Climate resilience actions				
Reference	Action	Responsibility	Target	Timescale
CR1	District adaptation plan	Climate Change Officer	With KCC, develop a district adaptation plan (building on the Kent Climate Change Risk and Impact Assessment)	2021

District climate actions				
Reference	Action	Responsibility	Target	Timescale
DCA1	Make climate action a priority in the revised Local Plan 2021-2040	Planning	Put in place a new plan that prioritises measures to reduce district emissions and create climate resilience	For public consultation in mid 2021
DCA2	District level carbon budgets	Climate Change Partnership Board	Working with KCC and district partners, agree district level carbon budgets and secure pan-district buy-in	2021-22
DCA3	Energy Innovation Area	Climate Change Officer	With KCC and other strategic partners, develop an Energy Innovation Area in the district to enable Energy and Low Emissions Strategy projects	2022
DCA4	District engagement	Corporate Communications / Climate Change Officer	Communicate climate change action broadcast of opportunities for residents and businesses and engagement and consultation on council plans.	Ongoing
DCA5	Clean Air Zone	Climate Change Officer (with Transport Team and Air Quality)	Develop Clean Air Zone feasibility options	2021
DCA6	Transport strategy	Climate Change Officer (with Transport Team and Air Quality)	Include evaluation of carbon emissions reduction for the actions within the transport strategy.	2021-22

## Glossary

### **Climate change**

Climate change is the term used for the long term change of weather patterns. The overall effect is the increase in average global temperature from the historic records. The change is known to be caused by human activities, mostly from the burning of fossil fuels - gas, petrol, diesel and coal - and also from changes in the way that the land is used - particularly large scale deforestation. These activities affect the balance of gases in the atmosphere that control the climate.

### **Greenhouse gas emissions**

The main greenhouse gas from human-made activity by volume is carbon dioxide which comprises about 0.04% of air. Other gases from human-made activity also contribute to the greenhouse effect, including methane, nitrogen oxides and refrigerants. In calculating greenhouse gas emissions, the gases are all expressed together in terms of tonnes of carbon dioxide equivalent emissions (tCO<sub>2</sub>e). The vast majority of the emissions that are causing the climate to change are from burning fossil fuels.

### **Climate Change Action Plan**

The basis for deciding on how to act to reduce the causes of climate change is through understanding the different sources of greenhouse gas emissions. By regularly calculating the emissions from fuel bills, meter readings and orders for materials and services, an organisation can measure its emissions and design activities to reduce them. It is important to define the boundaries - what is included and what is not included - for calculating the emissions because there are some things that are easier to control and change than others.

### **Operational boundary**

This is a way of defining the emissions that an organisation can control itself through its management of staff, services and contracts.

### **Financial boundary**

This extends the boundary of an organisation to include assets like buildings and land that an organisation owns but leases or loans to others to manage. The control is less direct, but the organisation has influence over the building - its fabric and heating and how the building is maintained or modified.



### **Emissions scopes**

Where the emissions are generated is called the scope. Some emissions, like the carbon dioxide from burning fuels to power vehicles and heating buildings are generated on site, which is called scope 1. Emissions from electricity are generated at the power station and these are called scope 2. Other emissions like those for manufacturing goods are generated in multiple places and include getting the raw materials, making the product and transporting before it is used - these are called scope 3 emissions.

### **Scopes 1, 2 and 3 for an organisation:**

(Defra Environmental Reporting Guidelines and the Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, revised edition)

Scope 1 (direct) means emissions from activities owned or controlled by your organisation that release emissions into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles, emissions from chemical production in owned or controlled process equipment.

Scope 2 (energy indirect) means emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of your organisation's activities, but which occur at sources you do not own or control.

Scope 3 (other indirect) means emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. Examples of scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal which is not owned or controlled, or purchased materials.

### **Net zero**

Net zero emissions refers to the point at which the balance of greenhouse gas emissions being generated is equal to the amount being absorbed. The details of how to achieve net zero are not yet fully understood. However, net zero is an internationally recognised requirement for long term climate stability.

### **Resilience and adaptation**

Resilience refers to making society and infrastructure prepared for the impacts of climate change like increased summer temperatures. Adaptation means adjusting how society and infrastructure operates to lessen the effects of climate change. Both are required in order to safeguard people and society as the climate changes.