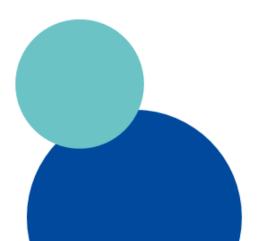
Waverley Borough Council's Strategic Response to the Climate Emergency

Carbon Neutrality Action Plan 2020 - 2030



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Foreword from the portfolio holder

Dear Waverley resident

On Wednesday 18th September 2019, Waverley Borough Council passed a motion which I moved on behalf of the Executive, declaring a climate emergency and committing the council to become a carbon neutral council by 2030. This action plan is a response to that declaration of a climate emergency.

Waverley Borough Council had never before declared a state of emergency of any kind, and this is significant. For this is not merely another policy initiative; it is an attempt to ensure we do everything we can as a council as part of a worldwide movement to reduce carbon emissions to a level which will keep global temperatures in check. In essence, we are doing our bit to avoid the utterly catastrophic events that will ensue should global temperatures rise by more than 1.5 degrees Celsius above pre-industrial levels. We are committed to lead by example in our response to the challenge of climate change and, in doing so, we shall do everything we possibly can to make Waverley a carbon neutral borough by 2030. Whilst the main focus of this plan is that of enabling Waverley Borough Council to become a carbon neutral council by 2030, we shall be bringing forward more detailed proposals for a zero-carbon borough by 2030 once these have been developed and agreed by the shortly-to-be-established Climate Assembly.

Being on an emergency footing means that everyone who works for or works with Waverley Borough Council should be aware of the carbon footprint for which they are responsible – and should be doing everything they can to reduce this carbon footprint to zero. Being on an emergency footing means that everyone who works for or with Waverley Borough Council should be doing everything in their power to influence others to reduce their carbon footprint and to influence other councils and private, public and third sector organisations to support us in our ambition.

Some of the actions we propose in this plan are easy to take and cost little to implement. Other actions are more difficult and more costly. Some will only be achieved through national government and Surrey County Council action and we shall work in partnership as appropriate to secure our goal.

Whatever the challenges we face over the coming decade, it has never been more important for our council to respond and play its part in the face of an impending climate catastrophe. We owe it to ourselves and to future generations.

Best wishes

Steve Williams

Portfolio Holder for Environment & Sustainability

Glossary

- **BEIS** Department for Business, Energy and Industrial Strategy
- **Carbon budget** Upper limit of carbon emissions associated with remaining below a specific global average temperature
- **Carbon Neutral** All carbon emissions are either eliminated or are offset by counteracting emissions through carbon absorbing projects. To become carbon neutral an organisation should be considering its own direct emissions as well as those created by suppliers.
- **CIL** Community Infrastructure Levy. Charge levied by local authorities on new developments which can be used to deliver infrastructure to support the developments in their area.
- CO₂e Carbon dioxide equivalent. Measure of global warming potential of various greenhouse gases.
- **Decarbonisation** the action of removing carbon from an activity or a sector
- **GHG** Greenhouse gases. Gases in the atmosphere which keeps the planet warmer than it would otherwise be including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and Sulphur hexafluoride.
- **LULUCF** Inventory sector that covers emissions and removal of greenhouse gases from land use, land use change and forestry activities
- **NET** Negative emission technology. Technologies which can capture extract and store carbon dioxide
- **NIL** National Infrastructure Levy
- **PPA** Power purchase agreement. Agreement between the buyer and seller of electricity.
- **SAP** or Standard Assessment Procedure is an energy rating procedure developed by BRE and based on the BRE Domestic Energy Model (BREDEM)
- **SCATTER** Setting City Area Targets and Trajectories for Emission Reduction
- SCC Surrey County Council
- **ULEV** Ultra low emission vehicle which emits less than 75g of carbon dioxide per km travelled.

Executive Summary

In 2019 Waverley Borough Council declared a climate emergency acknowledging the urgency to act and committed to becoming a carbon neutral council by 2030. The purpose of the Carbon Neutrality Action Plan (CNAP) is to provide a statement of the councils' areas of focus to achieve a carbon neutral borough. It offers a framework for change and will continually evolve as projects and actions are developed further.

We fully appreciate that meeting the target of carbon neutrality by 2030 will be challenging and it fundamentally dependent on the scale and pace of radical action nationally and funding streams from national government. However, it is extremely important that we do everything we can within our power to work towards achieving it.

The council has been recording its non-domestic greenhouse gas (GHG) emissions since 2008. By 2015 it managed to maintain its absolute emissions at the same level as 2008. We do recognise that more action is required now to rapidly move to a carbon neutral council. In 2015 the council's carbon emissions were 5,297 tonnes (t) CO₂e and this is the year which we will measure the progress of this action plan against.

The council's carbon responsibilities are not limited to non-domestic emissions. It owns 4861 social housing units with the responsibility to manage and maintain. By using the Standard Assessment Procedure (SAP) methodology, the emissions associated with the council housing stock in April 2015 were 11,983 1 t CO $_{2e}$ and represent the total carbon emissions based on standard assumptions for occupancy and behavior.

Waverley Borough's overall carbon footprint was 577 ktCO2e in 2015. This comprises domestic, transport emissions, as well as emissions from the industrial and commercial sector. An element of offset emissions from land use, land use

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¹ Data from Reduced data SAP methodology

change and forestry (LULUCF) are represented as a negative figure. When looking more closely at borough wide emissions, the council itself only accounts for 1% of the total.

Waverley has a crucial role in tackling climate change. We have a role as community leader, to set an example by adopting policies and plans to effect change, while encouraging and influencing others. The council recognises the magnitude of achieving the 2030 net zero target and acknowledges that it has limited powers, responsibilities, resources and finances. The council's role is to deliver where it can, to enable and support the community and partners to take action, to lobby and push change in policy, legislation and funding to enable carbon neutrality.

Seven key priority areas have been identified each containing a number of high-level targets that will focus efforts to achieve the ambitious carbon neutral target. In order to prioritise resources the plan has been divided in Short, Medium and Long term actions. A scoring system for cost and carbon impact has also been introduced and uses broad assumptions to provide an indication of the scale of investment required and carbon saving achieved for each action. Quantifying the carbon impact of potential actions can be complex and will require ongoing commitment and effort. At this stage, it has not been possible to fully quantify the carbon impact of delivering each action contained within the plan, but this information will become clearer as each action is further developed. Embedding a carbon neutral culture within processes and policies is significant to sustain long term change. The council will review its practices and engage with staff, suppliers and contractors as well as residents and local businesses in order to actively influence change.

Becoming a carbon neutral council is a corporate priority as is ensuring that Waverley is financially sound with infrastructure and services fit for the future. This plan will require significant financial investment, which will come from a combination of sources, including council funds and grant funding. In many cases, there will be an associated return of investment from energy savings and those actions should be looked at as a priority.

This action plan will be a live document, continually updated to reflect further refinement, funding availability, policy and technological changes. It should be seen in the context of our sustainability policies which will set out the significant actions that Waverley Borough Council will need to take during the coming decade to mitigate the serious impact of the climate change that is already happening.

Introduction and purpose

On 18th September 2019 Waverley Borough Council noted the urgency to respond to climate change and declared a 'climate emergency' that requires urgent action. The council:

- aims to become carbon neutral by 2030, taking into account both production and consumption emissions, and take a leadership role to achieve this working with other councils, including town and parish councils within the borough
- recognises that the achievement of the target will require central government to provide the powers, funding and other resources to achieve the target and therefore calls on the government to provide such powers, funding and other resources as appropriate to facilitate achieving the 2030 target

The purpose of the Carbon Neutrality Action Plan (CNAP) is to provide a statement of the councils' areas of focus to achieve a carbon neutral council by 2030. It offers a framework for change. We do not have all the answers yet, but we are committed to investing time and resources, as much as possible, to responding to the climate emergency by taking actions to deliver, enable and support a carbon neutral vision for Waverley.

Policy Contexts

Global

The United Nations Framework Convention on Climate Change (UNFCCC) and scientific community have identified that man-made climate change will have a severe human, environmental and economic impact. Global action is required to reduce greenhouse gas concentrations in the atmosphere to "a level that would

prevent dangerous anthropogenic interference with the climate system" (Article 2). In 2015 196 states signed the Paris Agreement which committed to dealing with greenhouse gas mitigation, adaptation, and finance. Under the Paris Agreement, each country must determine, plan, and regularly report on the contribution that it undertakes to mitigate global warming.

National

In 2008 the UK passed the Climate Change Act, which committed the UK to lower net greenhouse gases by at least 80% of the 1990 baseline. In 2019 the Climate Change Act was amended and the target to be carbon neutral by 2050 was set. This action plan is aligned with national policy and hopes to play its part in the delivery of the national agenda.

Local

Waverley is a large rural borough in southwest Surrey with a population of approximately 123,000 spread over four main population centres and surrounding villages. In 2019 Waverley Borough Council declared a climate emergency and committed to becoming a carbon neutral council by 2030 acknowledging the urgency to act. Surrey County Council (SCC) along with many other districts and boroughs across the county, also declared their commitment to act on climate change aiming to be carbon neutral by 2050.

Emission baseline and projections

Organisational baseline

The council has been recording its non-domestic greenhouse gas (GHG) emissions since 2008. The emissions measured are direct emissions from fuel combustion (Scope 1), indirect emissions from electricity purchased (Scope 2) and indirect emissions from energy consumption from all our outsourced buildings and service delivery (Scope 3). The adoption of the Carbon Management Plan in 2010 and the Energy Efficiency Plan in 2015 took the council through a carbon reduction journey. Since 2008 we have seen a natural growth in population and social housing provision, we have increased the service provision in several areas and by 2015 we

have managed to maintain our absolute carbon emissions at the same level as in 2008. We do recognise that more action is required now to rapidly move to a carbon neutral council. In 2015 the council's carbon emissions were 5,297 tonnes (t) CO₂e and this is the year which we will measure the progress of this action plan against. As shown in Figure 1, the majority of the council's emissions come from outsourced services and buildings.

The council's carbon responsibilities are not limited to non-domestic emissions. It also owns 4861 social housing units and has responsibility to manage and maintain them. Although the council has control over the quality of the buildings, it has little control over how the tenants choose to live with regards to sustainability

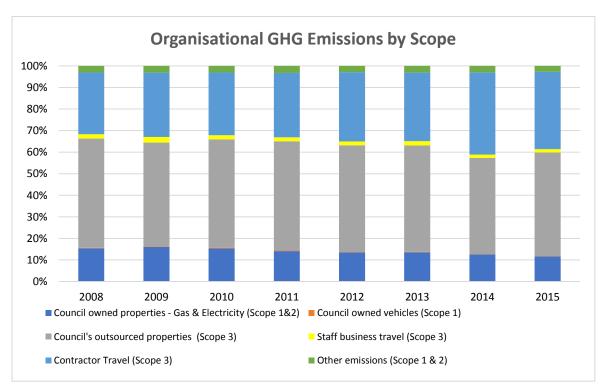


Figure 1. Organisational emissions

considerations. By using a Standard Assessment Procedure (SAP) methodology we are able to assess the energy performance of our social housing and set a baseline which we will use to measure improvements against. The emissions associated with the council's owned social housing in April 2015 were 11,983 ² t CO_{2e}. This figure represents the total carbon emissions based on standard assumptions for occupancy

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² Data from Reduced data SAP methodology

and behavior. It therefore does not represent the actual carbon output from social housing. It is within Waverleys gift to retrofit council homes to make them as energy efficiency as possible. An engagement programme will be developed to encourage more environmentally conscious behaviours in order to reduce energy consumption, thereby cutting energy bills.

Borough wide baseline

Waverley Borough's overall carbon footprint was 577 ktCO2e in 2015. This comprises transport emissions (40%), emissions from the industrial and commercial sector (20%), and domestic sector emissions (40%). Offset emissions in the borough from land use, land use change and forestry (LULUCF) were 61 ktCO2e. Despite the 33% tree coverage across Waverley land use offsets only a minority of the borough

emissions. The 2015 footprint figure will be the one used as a baseline which future emissions are measured against.

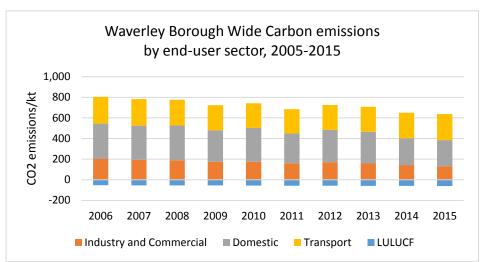


Figure 2. Carbon emission breakdown by sector.

Waverley Borough is in a period of growth with an increase in housing provision and naturally its population will also see an annual grow. As set out in the adopted Local Plan Part 1, the council will make provision for at least 11,210 net additional homes in the period from 2013 to 2032 (equivalent to at least 590 dwellings a year). Inevitably, the absolute figure for carbon emissions in the area is also likely to

increase. An alternative way to measure the borough's carbon footprint is on an emission's per capita basis. This will demonstrate the

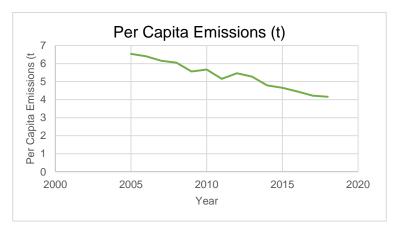


Figure 3. Per capita emisssions

emissions in the context of a growing population. In Waverley the per capita emissions have been steadily reducing since 2005 as shown in Figure 3 and in 2015 they were 4.7tCO2e.

When looking closer at the borough wide emissions, the council itself only accounts for 1% of the total borough wide emissions. Although a relatively small contribution towards the area wide footprint it is still hugely important in terms of demonstrating leadership in the local community.

Trajectory

The Department for Business, Energy and Industrial Strategy (BEIS) funded a project to develop Setting City Area Targets and Trajectories for Emissions Reduction (SCATTER) to support local authorities with modeling area emission targets based on scenarios that are consistent with the United Nations Paris Climate Agreement. Using this methodology, it has been possible to set out the potential paths to achieving net zero carbon by 2050. The tool is based on several broad assumptions and considers technology and national policy as they stand at the moment. This tool is useful in providing indicative pathways but will need reviewing every few years when key assumptions within it are updated in line with technological developments and policy changes.

The full report on "Setting Climate Commitments for Waverley" can be available on request and the key conclusions are outlined in this section.

Borough Wide targets

For Waverley to make a strictly proportionate contribution to the delivery of the Paris Agreement (2050 target) it should stay within a maximum cumulative "carbon budget" of 3.6 million tonnes (MtCO₂) for the period of 2020-2100. In order to remain within this "allowance" a carbon reduction programme of mitigation measures should be put in place to achieve a minimum 13.4% year on year carbon reduction. If the proposed trajectory is followed it will be possible to achieve carbon neutrality by

2041, with 5% of the budget remaining. This action will require, national and local action. It cannot be achieved by the local authority alone.

Bringing forward the target date to 2030 will mean an average reduction in carbon emissions of 27% per year from 2016. Table 1 indicates the recommended reduction target milestones to a) meet the Paris Agreement and b) meet Waverley's ambitious 2030 carbon neutrality target both compared to the 2015 baseline.

A key recommendation of the SCATTER report is that Waverley should encourage and deploy sustainable energy generation within the area and where possible influence

Year	CO₂ reduction for 2050 target	Indicative CO ₂ reduction for 2030 target
2020	23.6%	33%
2021	35.1%	40%
2022	43.8%	47%
2023	51.3%	53%
2024	57.8%	60%
2025	62.8%	67%
2030	81.9%	100%
2035	91.2%	
2040	95.7%	
2045	97.9%	
2050	99%	

Table 1. Recommended area wide CO2 reductions

national policy on this matter. Managing land use and land use change and forestry (LULUCF) to ensure CO₂ sequestration where possible is also a key recommendation. These conclusions are helpful in setting Waverley's priorities over the next 10 years.

To be carbon neutral by 2030, there will need to be a net reduction of 38 kt of carbon year on year across the borough from 2015 levels. Figure 4 compares the recommended pathways as indicated using the SCATTER tool to meet the targets of the Paris Agreement as well as the indicative pathway to meet Waverley's ambition.

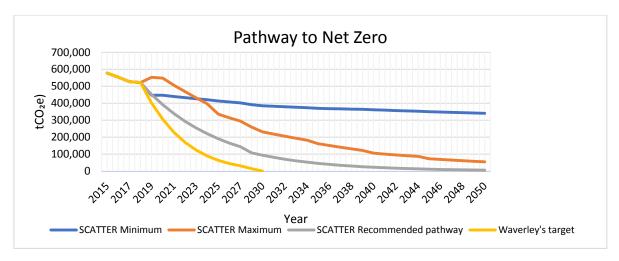


Figure 4. Borough wide pathways to net zero carbon

Waverley's ambition is to become a carbon neutral council by 2030. We recognise that this will be extremely challenging in many ways. Technological development and the scale of the financial commitment will limit what can be achieved but we are determined to do everything within our powers to meet this target.

In order to create an indicative reduction pathway for the councils own emissions, we have used the same methodology and principles presented above for the borough wide emissions. As recommended by the SCATTER tool, a 13.4% reduction year on year has been applied and Figure 5 illustrates the reductions required by the council to meet the 2050 carbon neutrality target as per the Paris Agreement. Bringing forward the target year to 2030 would result in a very ambitious trajectory to reflect the council's climate emergency commitment.

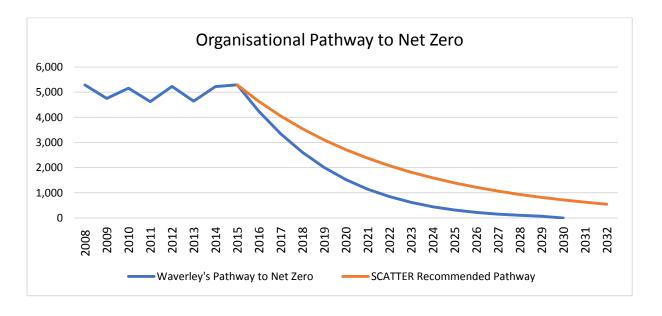


Figure 5. Waverley Council's indicative pathways

Carbon offsetting and sequestration

Offsetting is where carbon is removed from the atmosphere to help negate the emissions that are pumped into the air by human activities. If Waverley follows the SCATTER recommended pathway to 2050 neutrality there will be a shortfall by 2030. This is due to an expectation that domestic passenger transport will continue being in use to some extent, existing housing even if deeply retrofitted, will still have an element of heat loss and some new technologies essential to future decarbonisation will not be readily available until post 2030. We anticipate that new actions to offset carbon locally such as Negative Emissions Technologies (NETs)³ will close this gap. The council will investigate all possible options to sequester carbon locally including, tree preservation and afforestation, rewilding and improving land management to increase carbon in soil.

The path to becoming Carbon Neutral

We are committed to becoming a carbon neutral council and doing everything in our power to ensure that Waverley is a carbon neutral borough by 2030. We fully appreciate that meeting the target of carbon neutrality by 2030 will be challenging and it relies heavily on action beyond the council's control, but it is extremely important that we do everything we can within our power to work towards achieving it. It is important to note that the route to carbon neutrality for any local council is, in large measure, dependent on the scale and pace of radical action nationally and funding streams from national government.

Vision

Waverley's newly adopted corporate strategy outlines the council's vision. With regard to the climate emergency commitment the council is committed to:

Promote and sustain a sense of responsibility by all for our

Negative Emission Technologies noting biodiversity, championing the green
https://unfccc.int/sites/default/files/resource/28_EASAC%20Report%20on%20Negative%20Emission%20Technologies.pdf

The Council's role

Waverley has a crucial role in tackling climate change. We have a role as community leader, setting an example by adopting our own policies and plans to effect change, as well as encouraging and influencing others. The council recognises the magnitude of achieving the 2030 net zero target and acknowledges that it has limited powers, responsibilities, resources and finances. The council is committed to reducing its own carbon footprint to zero, to champion businesses who also are actively working to reduce their carbon footprint, and to create both the infrastructure and provide the information resources to help the residents to reduce their carbon footprint be it personal, domestic or transport.

Many of the changes that will be required to achieve carbon neutrality will be the responsibility of others including public, private and third sectors and individuals. The council will work closely with partners in implementing this action plan by:

- Delivering actions where the council can directly deliver a defined outcome
- Enabling and Leading actions where the council's role is to facilitate delivery of defined outcomes, for instance changes to policy and provide a leadership role within the community
- Supporting actions where the council can encourage or contribute to the delivery of a defined outcome
- **Lobbying** actions where the council's primary role is to promote and push for change (policy, legislation or funding)

These categories will feature throughout each individual action within the action plan.

Key priorities and targets

In order to identify the key priority areas for this action plan we have considered the responses to a public consultation, we have reviewed Surrey's Climate Change Strategy and also reflected on the recommendations from the SCATTER report.

Ultimately, Waverley Councillors have set the strategic direction and officers have had an input on service specific capabilities. The key areas of focus as well as high level targets are outlined in this section.

Focus on Organisational Emissions

As a community leader the council will set an example and set high standards in becoming carbon neutral. Not only practically on its own estate but also across its policies, service delivery and investment decisions.

We will:

Identify pathways to reducing emission from our own buildings by 100% by 2030

High level targets

- Develop a plan to reduce emissions from travel by converting our fleet to 100% zero emissions including contractor vehicles through the procurement process
- Promote reduction and re-use as well as recycling, consistent with our aim to become a zero waste organisation by 2030
- Ensure sustainable procurement practices throughout the council as part of the Council's Procurement Strategy
- ➤ Reduce car journeys for commute by Waverley staff by 60% by 2025 and promote zero carbon transport including active transport

Focus on Active Travel and Air Quality

Active travel offers the opportunity to minimise emissions but also reduces congestion and improves local air quality however Waverley is not responsible for highways or transport therefore will be somewhat restricted as to how much we can deliver ourselves.

We will:

- Work with Surrey County Council to reduce volume of traffic on our roads and encourage a radical transformation of our transport infrastructure in favour of active transport.
- Produce and deliver a Low Emission Clean Air Strategy
- Work with partners to deliver a greenway network, connecting the main centres across the Borough by 2030

Focus on Energy Generation

Generating energy at source is a crucial element of achieving carbon neutrality. There will be more reliance on electricity in the future therefore renewable generation through domestic installations and community energy schemes will offer the potential to increase local energy generation. Identifying opportunities for large-scale schemes in the borough will be key.

We will:

High level targets

- ➤ Establish potential sites and identify funding models for renewable energy generation projects in the Borough by 2021 building on the Surrey County Council Land Use Strategy
- Identify opportunities for and facilitate community power generation in the borough

Focus on the Built Environment (Housing, Planning)

The council owns 4861 properties and has a duty to maintain them to statutory standards. Although the council's direct responsibility lies with the performance of the building fabric it has no control over the behaviour of its tenants. Waverley is also an active developer, building new council homes in order to meet the housing needs of the local people. This offers an opportunity to lead by example and show the local development industry what is possible and show the public what they can demand from private developers.

Through the planning process the council is able to influence and control future development standards while balancing its other priorities.

We will:

- Aim to adopt Local Plan Part 2 by December 2021 enabling us to apply a stronger suite of development management policies to deliver more sustainable development; produce a Supplementary Planning Document that will support carbon neutral developments by December 2021; and review the Local Plan in order to strengthen our planning policy requirements for sustainability by 2023.
- ➤ Ensure that explicit advice is provided to developers, consistent with our carbon neutral goal.
- ➤ Produce an Asset Management Strategy which will present a decarbonisation path for our existing council stock by November 2021

- > Ensure that all new council homes be carbon neutral by 2030
- ➤ Adopt a new Housing Strategy by 31 March 2021 that will set objectives for carbon neutral affordable housing delivery during the term of the Strategy (2021-2026).
- Secure the budgets to enable all new-build council homes and estate regeneration projects to be built or retrofitted to a carbon neutral standard.
- Work with partners to facilitate the retrofitting of all buildings throughout the borough to carbon neutral standards.

Focus on Waste and Resources

Waverley is one of 11 districts & boroughs who are a part of Surrey Environmental Partnership (SEP) with Surrey CC. Waverley is a waste collection authority and Surrey are responsible for the waste disposal. Targets for recycling and waste to landfill have been set by SEP and the Surrey Waste Local Plan (2019-2033) sets out how and where different types of waste will be managed in the future.

We will:

- Work with SEP and other partners to enable Waverley to become a zero waste borough, promoting reduction and re-use as well as recycling
- ➤ Reuse, compost or recycle at least 70% of collected waste by 2030 in line with SCC Waste Strategy

- ➤ Reduce residual household waste consistent with a 90% recycling rate, based on current waste targets.
- Work with Surrey County Council and the Waverley community to implement a domestic waste strategy centered on circular economy principles and innovative approaches to waste reutilisation and recycling, aiming to achieve a 15% year-on-year reduction in residual waste over the period of this plan
- Work with partners to reduce the volume of commercial and industrial waste, a large proportion of Waverley's waste stream, in line with the proposed reduction in household waste.

Focus on Land Use and Adaptation

Offsetting by sequestering carbon will be essential; Waverley already has a 33% tree coverage. All forms of carbon sequestering will need consideration including selecting trees or hedgerows to plant that will maximise sequestering potential, improving land and woodland management practices and rewilding.

Changes in climate are already happening and Waverley will look to mitigate the impact it has already caused.

We will:

High level targets

- Produce a Tree and Hedgerow Planting Policy and Action Plan by 2021 to establish the sequestrating potential in the borough.
- Produce a Green Infrastructure Policy by 2021 taking onto account the net zero commitment
- ➤ Develop a Climate Change Adaptation Strategy that will outline how the council will put measures in place to minimise the impact of our changing climate

Focus on Supporting a Green Economy

Waverley is keen to promote the transition to economies that are low carbon and resource efficient.

We will:

- Develop a strategy to provide incentives and support for local businesses to operate on a sustainable model and commit to becoming carbon neutral by 2030
- ➤ Incorporate a preference for using local suppliers when procuring goods and services taking into consideration legal constraint within procurement rules
- ➤ Encourage the development of small, local sustainable businesses in the borough as well as a culture for shopping locally

Actions

Quantifying impacts of potential action and developing a pathway for Waverley to become a carbon neutral can be complex and will require ongoing commitment and effort. This action plan will be a live document, updated annually to reflect policy and technological changes as well as funding availability. At this stage, the carbon impact of delivering the actions contained within it has not been fully quantified. Whilst some of the actions are worked up enough to be able to demonstrate exact carbon savings from delivery, many are not yet at that point and will require more work. In order to prioritise resources and maintain some focus we have chosen to separate our actions in short, medium and long term. While more effort will be put in the short-term actions, we will continue planning for the long-term ones too.

The action plan detailed in Annexe 1 contains 70 indicative short, medium and long-term actions which will contribute towards our carbon neutrality target. Each action is linked to the key priorities and targets outlined in the previous section. The role of the council in achieving each action is made clear and it defines the limitations of the successful delivery. There is also indication, in outline, whether those actions link to any other priorities of the corporate strategy.

A broad cost assumption has also been included in order to establish the magnitude of investment for each one. Low (£): £0- £50k, medium (££) is £50-£250, High (£££) is £250- £1m and Very High (££££) is £1m+. As and when more specific costs are identified the plan will be updated with actual figures.

It is not possible to provide a carbon impact of all actions at this stage. Further, detailed work will be required in order to produce a more definite assessment of the carbon reduction of each action with in the plan. In an attempt to provide a high-level estimation, a carbon impact scale has been incorporated into the plan. This method will help identifying those actions that are likely to have the highest carbon reduction contribution and also those actions that will be more complex to quantify for various reasons. Low impact: reductions in council's own emissions of less than 1%, Medium: reductions in council's own emissions between 2%-5%, High: reductions in council's own emissions between 6%- 10%. Enabling, mitigation and lobbying

scoring has also been included for the actions relating to borough wide emissions. The carbon impact will be updated with specific figures as and when they become available.

Embedding Change

The council is committed to leading by example. This means making sure that the climate emergency is embedded in everything we do. Having recognised the climate emergency as our number one corporate priority. This section sets out the actions we will take to embed the carbon neutral culture throughout the organisation.

We will:

- include considerations for carbon implications for all projects considered for capital investment by the Council. (immediately)
- change the culture of the organisation and the wider community by providing climate literacy training to all Staff and Councillors (by 2021)
- engage with all suppliers and contractors and partner organisations through service level agreements to encourage a net zero carbon approach in their service delivery (ongoing)
- amend the council's contract procurement rules to ensure that all bidders are required to assess and document all measures they are taking to reduce the carbon footprint of their operations. The goal of carbon neutrality will form part of the evaluation criteria (by 2021)
- adopt an Climate Neutrality Communications Strategy to engage with Waverley staff, council tenants and the wider Waverley residents (by 2021)
- set up a Citizen's Assembly to encourage public participation in shaping the climate emergency agenda, securing agreement to develop a boroughwide plan for a net zero carbon borough by 2030, making clear the actions for Waverley Borough Council in its leadership role within the local community. (by 2021)

Finance and Resources

Becoming a carbon neutral council is a corporate priority as is ensuring that Waverley is financially sound with infrastructure and services fit for the future. This

plan will require significant financial investment. However, in many cases there will also be an associated return of investment from energy savings.

In order to achieve the objectives of this action plan the council will:

- Consider identified projects every year to coincide with capital budget setting. Whilst there are financial constraints, the council has developed a prioritisation methodology which covers a number of criteria including any ongoing revenue costs or savings, deliverability, the extent to which the proposed scheme meets the council's priorities and the environmental credentials of the project. Invest to save capital projects are encouraged and supported particularly when achieving a revenue payback of 5 years or less.
- Support divesting the pension fund from fossil fuel companies in order to support the wider movement towards carbon neutral as well as avoiding the risk of medium-term losses through stranded assets.
- Investigate the use of Green Bonds to provide the capital impetus to decarbonisation of the council's social housing and municipal buildings.
- use of Power Purchase Agreements (PPAs) to fix the council's long-term energy costs whilst supporting community energy that retains wealth in the borough and guarantees renewable, zero-carbon power generation

The council has already established a new role, the Sustainability Projects Officer as a commitment to the work that is required to support the delivery of the Carbon Neutrality Action Plan.

Waverley will continually look for external sources of funding as they become available to supplement the costs of projects. Currently there are many government funding streams available that we are actively looking to take advantage of.

We will also find ways to utilise the Community Infrastructure Levy (CIL) and the development of Allowable Solutions as a way of supporting the delivery of the carbon neutral vision. However, it must be noted that there may be potential challenges as a result of the introduction of a National Infrastructure Levy (NIL) in place of CIL over which Waverley Borough Council may have no control.

Programme management

To succeed in achieving carbon neutrality it is important to demonstrate leadership at the highest level. Good programme governance is key to making carbon neutrality effective in Waverley. The following structure will ensure a high level of commitment and management of this programme.

Executive Committee

The Executive will ultimately be responsible for the delivery of the action plan, making key decisions to enable progress.

Climate Emergency Board

A board will be established, ideally to assist with removing barriers and monitoring the progress on the action plan. Progress updates should be provided by each service throughout the year.

Climate Emergency Officers Group

An officers group is already in existence and will remain the vehicle to deliver this ambitious agenda. The members of this group are the individual project owners that are responsible for delivery of the projects within the action plan.

Annual progress

This action plan is intended to be a live document and will be updated frequently as required. An update of the action plan will be presented to Executive and Environment O&S Committee annually with the next update scheduled for October 2021 in order to align with budget setting processes for the following year.

Annexe 1 – Indicative Action Plan

Key	':						
Council's Role Indicative costs Carbon impact Co benefits-link to other corporate prior					efits-link to other corporate priorities		
D	Deliver	£	Low - £0-£50k	L	Low - <1% reduction in council's own emissions	G	Local, open, participative government
Е	Enable and facilitate	££	Medium - £50k- £250	М	Medium – 2-5% reduction in council's own emissions	E	Supporting a strong, resilient local economy
s	Support and encourage	£££	High - £250-£1M	Н	High – 5-10% reduction in council's own emissions	Н	Good quality housing
	Lobby	££££	Very High - £1M +	Enabling Lobbying	Potential borough wide reduction	Р	Effective strategic planning and development management
-	LODDy	LLLL	Very Flight - £ livi +	Mitigating	- Yet to be quantified	W	Improving the health and wellbeing

Short Term Actions – 2020-2023

Key focus area	No	Actions	Target date	Council's role	Indic. Cost	Carbon impact	Co- benefits
Organisational Emissions	O1	Work with SCC to map out opportunities for solar generation on Waverley assets and tree/hedgerow planting	2020	D	£	L	E
	O2	Identify and resolve any barriers to use of existing Mod.Gov by all councillors and officers to access and use all committee papers electronically.		D	£	L	G
	O3	Full Council and Standards Committee to consider proposals for transition to 100% electronic provision of agenda papers. Any accessibility issues to be identified and resolved by Equality Impact Assessment.	2021	D	£	L	G

04	Rethink Pilot - work with SCC to nudge behaviour to consider alternative	2021	Е	£	L	
	ways for staff to travel to get to work.					
O5	Investigate the option of ULEV pool cars for business use and promote	2020	D	££	L	
	behavioural changes.					
O6	Replacing Borough Hall lighting: 12 fluorescent tubes with LEDs, including	2020	D	£	L	
	connections and controls.					
07	Optimise the parking software system to minimize necessity to print	2020	D	££	L	
	documents.					
O8	Develop an Energy Performance Contract when procuring the new Leisure		D	£	M	
	Centre management contract	23	_			
O9	Conclude the lighting replacement programme in Car parks with one final .	2020	D	£	L	
	car park					
O10	Cranleigh Leisure Centre - Carry out an energy audit to establish what	2020	D	£	L	W
	work would be required to build the new leisure center in Cranleigh as					
	carbon neutral as possible. To include a step-by-step list of emissions versus costs.					
011	Improvements in Energy Efficiency at Farnham Leisure Centre –	2021	D/E	Appro	L	W
	• Install a 90 kW Combined Heat and Power Plant. Project details			х.		
	provided by a technical report			£300k		
	Installation of pool covers to reduce evaporation, heat loss from the					
	pool will reduce the need for ventilation from the pool hall.					
	Replace 12 showers in the members changing rooms with ones					
	that have reduced flow rate.					
	Fit insulation jackets on steel sand filters.					

	 Replace the existing pool hall and gym windows with new triple glazing with a double soft heat reflective coating. Review operation of AHU and explore more efficient options. 				
O12	Haslemere Leisure Centre - Replace the existing Pool hall lighting with LED equivalents	2021	D/E	£	L
O13	Edge Leisure Centre - Replace the existing sports hall lighting with LED equivalents. The energy savings are likely to be on the region of 50%.	2021	D/E	£15k	L
O14	Work with Housing contractors to modifying response times or batching of work in areas on specific days to reduce travel costs. Especially important for trades that only have one or two operatives.		D/E	£	L
O15	Godalming Leisure Centre - Install a 90kw Combined Heat and Power Plant. Further work to be done on specification and costing.	2023	D/E	£250k appro x	M - 150t
O16	Woolmer Hill Pavilion upgrade – improve energy performance of the building with a view to make it carbon neutral.	2021	D	£110k	L – 15t
O17	Develop a plan to work with all existing contractors to reduce their carbon footprint from fuel consumption and make explicit their goals in terms of carbon reduction.	2021	S	£	L
O18	Modify procurement policies and present a revised procurement policy to Executive consistent with the promotion of sustainable and ethical trading for approval and implementation by January 2022.	2022	D	£	L

	T1	In partnership with SCC pilot the installation of on street EV chargers to encourage residents and taxi drivers to switch to electric vehicles. Promotion of chargers once in place	2020	S	£££	Enabli ng	
Active Travel and Air Quality	T2	Review taxi licensing policy to encourage the use of ultra-low emission vehicles and introduce a maximum age limit for cars. Proposed targets are: • From 1 January 2023 a new application to licence a taxi must be a ULEV. • From 1 January 2027 new licences must only include zero emission vehicles Consultation January – March 2020		D	£	Enabli ng	
	Т3	Upgrade of the Eastern boundary footpath to be carried out. Path to be widened with sensitive lighting to improve access for all users and promote alternative transport options between North Farnham and the main central area. The footpath will connect to the current Southern boundary footpath.		E	Initial budge t £500k + £170k	Enabli ng	W
	T4	Develop and implement plans for a network of cycle routes across Waverley, in partnership with Surrey County Council, ensuring that by 2030 all towns and main population centers are connected by dedicate cycle routes. • Guildford- Godalming Greenway		E	£420k - initial budget Total cost	Enabli ng	W P

		Farnham Cycle way			££££		
		Downs Link					
	T5	Continue the roll out of EV chargers in Waverley owned car parks to	2021	D	£-££	Enabli	
		encourage the switch to electric vehicles.				ng	
	T6	Introduce differential parking charges to incentivise electric car users.	2021	D	£	Enabli	
						ng	
	E1	Work with partners to install Solar Panels over Waverley owned car parks	2022	D	££££	М	
		which can supply the lighting and EV chargers.					
	E2	Review renewable energy options in senior living units to increase	2021	D	££	L	Н
		renewable energy generation to 100% by 2030.					
	E3	Undertake a feasibility study of an extensive (up to 2000 homes) PV	2022	D	£	Enabli	Н
Energy Generation		(photovoltaic) panels and solar thermal installation programme.			HRA	ng	
Generation	E4	Seek to purchase batteries to store electricity/ energy supplied overnight	2022	D	££££	Enabli	
		when it is cheaper. To supply offices or properties during the day or sell				ng	
		back to the National Grid. Explore opportunity to work with Pivot Power.					
	E5	Investigate and implement opportunities for community energy projects in	2023	E/S	£££	Enabli	E
		conjunction with other stakeholders, including not-for-profit organisations				ng	
	B1	Develop plans for alternatives to individual gas boilers in new and existing	2022	D	£	L	Н
		Council homes, based on a pilot scheme.			HRA		
	B2	Evaluate the stock condition data held to ensure it is robust enough to	2022	D	£	М	HW
Built Environment		inform plans for energy efficiency. Take remedial action on any short falls identified.			HRA		
	В3	Undertaken a stock condition / energy efficiency survey of all the senior living schemes to inform an asset management plan for the schemes	2022	D	£	L	HW

B4	Desktop modelling exercise to ascertain current private sector stock conditions, including use of data from Experian, English Housing Surveys and Energy Performance Certificates. This will enable us to identify areas of interest for planned programmes of works to meet the carbon neutral commitment.	2021	D	£40k	Enabli	H
B5	Review of Home Improvement policy for Private Sector Housing to increase the availability of grant aid for domestic energy efficiency schemes. Achieved by changes to list of eligible works and/or applicants' eligibility criteria.	2020	D	£	Enabli ng	H
B6	Work with Affordable Housing partners to meet climate change agenda in terms of incorporating good policy and practice on new affordable housing developments in Waverley.	2020	E	£	Enabli ng	H W
B7	Work with landscape consultants to develop Climate Positive Design for new council homes, developing carbon off-set opportunities in the materials used in hard landscaping and plants in soft landscaping.	2020- ongoi ng	D	£	L	НР
B8	Continue to provide EV chargers to new build homes and introduce to refurbishment projects. Future proof parking bays by installing infrastructure so additional chargers can be added.	2020- ongoi ng	D	££	Enabli ng	H P
B9	Review the design specifications for acquisitions and procurements to include opportunities to build carbon neutral homes – of Passivhaus standard or equivalent.	2022	D	£	Н	HP
B10	Review of Design Awards criteria to place greater emphasis on sustainability goals.	2021	S	£	Enabli ng	HP
B11	Produce a Supplementary Planning Document that will support	2021	Е	£	Enabli	НР

		developments consistent with the policy of carbon neutrality.				ng	
	B12	Produce a sustainability checklist for the use of officers and members for	2021	S	£	Enabli	H P
		the review of planning applications in order to ensure that full account is				ng	
		taken of all criteria in relation to the consideration of planning applications.					
	B13	Produce a checklist for developers to audit sustainability in planning	2021	S	£	Enabli	НР
		applications.				ng	
	W1	Investigate feasibility of a community composting scheme to reduce the	2021	D	£	Enabli	W
Waste and Resources		necessity of garden waste collection				ng	
	W2	Introduce the kerbside collection of textiles & WEEE to promote recycling	2021	D	££	Enabli	
		and reduce the need for residents to drive to bring sites.				ng	
	W3	Develop a plan for becoming a zero waste borough through encouraging	2021	L	£	Lobby	
		waste reduction and reuse as well as recycling both in respect of domestic				ing	
		waste and commercial and industrial waste.					
	L1	Work with Parish and Town councils and relevant not-for-profit	2021	E/S	£	Enabli	E W
		organisations to encourage local food production via allotments and				ng	
		community Farms.					
	L2	Investigate the opportunity to identify unused land that can be used for	2021	E/S	£	Enabli	E W
		local food production.				ng	
Land Use and	L3	Provide a badge system for local (less than 30 miles) producers of food.	2022	E/S	£	Enabli	E
Adaptation						ng	
	L4	Adoption of policies that will enhance the natural environment such as:	2020	D	£	Enabli	
		Biodiversity policy and action plan.				ng	
		Pesticide policy with a view to phasing out the use of pesticides					
		Tree /hedgerow planting policy taking a sustainable approach to					

		planting, provide succession for tree stock that are able to cope with future diseases and pests and opportunity to offset carbon.					
	L5	Work with SCC to replace and renew the roadside verge with new and replacement plans, and the removal of stumps, refine grass cutting regime consistent with the highest biodiversity standards and promote rewilding.	2020	S	££££	Enabli ng	
	L6	Support the Wey and Arun Canal Trust in the renovation and upgrade of the canal path.	2021	S	£	Enabli ng	
	L7	Facilitate and support a multi-agency bid for some of the £33 million available for flood elevation schemes. Focus will be to utilise the concept of natural flood risk management achieving the objectives of lowering flood risk and planting trees and restoring marshland.	2021	S	£	Mitiga ting	P
	GE1	Develop a strategy to provide incentives and support for local businesses to operate on a carbon neutral model.	2021	Е	£	Enabli ng	E
Green Economy	GE2	Develop a business award scheme to incentivise local businesses to become carbon neutral.	2022	S	£	Enabli ng	E

Medium Term Actions 2024-2026

Key focus area		Actions	Date	Council s role	Cost indicatio n	Carbon impact	Co- benefits
Organisational	O19	Review the carbon implications of the grounds maintenance contract, from vehicles and equipment, at the next contract evaluation point in 2024. All vehicles to be zero carbon by 2030 as part of a phased programme.	2024 and 2029	D	£££	Н	
Emissions	O20	Investigate the relocation the council office headquarters as part of a redevelopment of the Burys. Carbon neutral buildings should be prioritised.	2023- 25	D	£	М	
	O21	Switch to green tariff at the end of the current energy procurement contract.	2024	D	£	L	
	T7	Work with SCC and Town & Parish councils to introduce residential parking permits that encourage the use of electric vehicles.	2025	Е	£	Enabling	
Active Travel and Air Quality	Т8	Develop and implement plans for a network of cycle routes across Waverley, in partnership with Surrey County Council, ensuring that by 2030 all towns and main population centers are connected by dedicate cycle routes. • Godalming/Haslemere/ Farnham/ Cranleigh	2025	E	££££	Enabling	W
	Т9	Introduce a bike hire scheme in all major hubs with allocated parking bays at railway stations, bus terminals, in town centers and at university and educational sites.	2025	Е	£££	Enabling	VV
	T10	Introduce a pool of electric scooters across Waverley that can be used for short journeys, once legalised for use on roads and/or pavements.	2025	Е	££	Enabling	W
	T11	Investigate the option for uber buses to be available across the borough particularly in outlying areas not currently serviced by alternative public	2025	Е	£££	Enabling	EW

		transport. Extension of the Hoppa service to cover a wider population					
	T12	Investigate the introduction of bylaws to prohibit garden bonfires	2025	E	£	Enabling	
	T13	Investigate the possibility of having smoke control areas within Waverley. This will ensure only authorised fuels in approved appliances (exempted stoves) can be used	2025	E	£	Enabling	
	T14	Investigate working with businesses to encourage home working where appropriate and introducing charging for work place parking spaces and promote the switch to electric vehicles and the use of public transport.	2023	Е	£	Enabling	
Built Environment	B14	Review the climate change policies within the Local Plan Part 1. Review due 5 years from adoption.	Feb 2023	E/S	£	Enabling	
Waste and Resources	W4	Encourage Surrey County Council to use its powers to stop fossil fuel mineral extraction in Waverley.	ongoing	L		Lobbying	W

Long Term Actions 2027-2030

Key focus area	No	Actions	Date	Council s role	Cost indicatio n	Carbon Impact	Co- benefits
Organisational Emissions	O20	 Renegotiate the spec of the waste contract, at the next contract break, to include: Investigation of the implications of reducing bin collections. (Monthly bin collections for refuse / rather than fortnightly). Investigation of the implications of increasing the green waste collections at peak seasonal times. Additional collections of leaves can reduce the number of bonfires. 	2027	D	£££/ ££££	Н	
Active Travel and Air Quality	T15	Develop and implement plans for a network of cycle routes across Waverley, in partnership with Surrey County Council, ensuring that by 2030 all towns and main population centers are connected by dedicate cycle routes. • Connectivity to Milford, Elstead, Witley, Chiddingfold, Hindhead, Dunsfold, Bramley, Tilford, Frensham by 2030	By 2030	E/S	££££	Enabli ng	E W
Energy Generation	E6	Investigate the option for micro hydro electricity generation on rivers/ at mills within Waverley.	2025	D	£	Enabli ng	