

## Royal Borough of Windsor & Maidenhead Environment and Climate Strategy 2020-2025









## Contents

FOR	EWORD	3
АСК	NOWLEDGEMENTS	3
CLIN	NATE STEERING COMMITTEE	4
Exec	cutive summary	5
	Our approach	5
	Strategic themes	6
1.	Introduction	8
	Why have we declared a climate change and environment emergency?	8
	Global and national impacts of climate change and the environment emergency	9
	What are the likely impacts of climate change in the UK?	10
	What are the benefits of taking action?	11
	Policy context	12
	Introduction and approach to the strategy	13
	Scope of the strategy	15
	Building on the work we already do	15
2.	Baseline - where we are now	16
	Where do emissions in the Royal Borough come from?	17
	Industrial and commercial sector emission sources	19
	Domestic sector emission sources	19
	Transport sector emission sources	19
3.	Vision, aims and objectives	20
	Emissions trajectory to net zero - Roadmap to 2050	20
	The borough's pathway to net zero	21
	Strategic themes	22
4.	Initial action plan - 2020-25	29
	Circular Economy	30
	Energy	31
	Natural Environment	33
	Transport	35
5.	Implementation	37
	Our approach to prioritising actions	37
	Monitoring	37
	Funding	38
	Engagement and Communications	38
Арре	endix 1 – Council carbon emissions	39

## FOREWORD

In June 2019, the Royal Borough of Windsor & Maidenhead declared an environment and climate emergency. The issues driving this decision were, and remain, some of the most challenging ever faced by humanity. We recognise the possibility that, within a few decades at most, our planet could warm to an extent that would make life difficult for many and impossible for some, and this could drive the life of many species up to and beyond the point of extinction. We are all now aware of this, but we are also confident that if we take action and use our human ingenuity, we can turn back this tide.

The commitment we made as a council in June last year was to achieve a target of net zero carbon emissions in the borough by 2050, in line with the Government policy. We are aware that this is our minimum commitment and that, to be sure of addressing the challenges facing us, we need to try to bring the net carbon date forward when it becomes possible.

The past 12 months have allowed us to develop the report that follows. It has involved the work of councillors and council officers, as well as people across our communities. We have an ambition for the borough and we need everyone to do their bit to make that happen.

The COVID-19 pandemic in 2020 has inevitably impacted some of the work on this report, notably the public consultation on our strategy which had to take place virtually and online, however it has also taught us valuable lessons. It has shown how a society and individual communities can adapt, surprisingly rapidly, to new pressures, and how our energy, enterprise and community spirit can achieve what previously seemed impossible.

Cabinet adopted this strategy in December 2020. In adopting this strategy, the council in its entirety is demonstrating that this challenge is of paramount importance to us. We must communicate this commitment to our communities across the borough and show, through our actions and the urgency with which we apply them, that we are taking this very seriously.

We are proud to present this document. It will drive the decisions, resources and actions we take. If we achieve what we set out to do, we can look forward to a borough that is a healthier, happier, more community-focussed place to live, play and work, and that shows real leadership in tackling these major challenges. We look forward to delivering each of these promises alongside you.

Climate Steering Committee

## ACKNOWLEDGEMENTS

The Royal Borough of Windsor & Maidenhead would like to thank all those who have contributed to the development of this strategy and those who have taken the time to provide feedback and input on its development. This includes all those who took part in the stakeholder workshops and those who provided specific commentary on the draft strategy.

## **CLIMATE STEERING COMMITTEE**



#### **Cllr Donna Stimson**

Cabinet Member for Environmental Services, Climate Change, Sustainability, Parks and Countryside and Chair of the Steering Group



**Clir Karen Davies** Councillor for Clewer East and Vice Chair of the Steering Group



**Cllr Wisdom Da Costa** Councillor for Clewer and Dedworth West and Vice Chair of the Steering Group



**Clir Gerry Clark** Cabinet Member for Transport and Infrastructure and Steering Group Member



**Cllr Julian Sharpe** Councillor for Ascot and Sunninghill and Steering Group Member

## **EXECUTIVE SUMMARY**

This is a true emergency with our climate changing on a scale and pace that threatens our way of life and that of future generations. As a borough we need to take urgent and real action and our strategy sets out our approach to working in partnership with local communities to tackle this challenge.

Our vision is to be a borough where the community collectively works together to achieve a sustainable future; by protecting and enhancing our natural environment and achieving rapid decarbonisation to net zero carbon emissions by 2050 at the latest.

## **Our approach**

Climate change and the threats to our environment (e.g. loss of biodiversity, poor air and water quality) are global challenges in which everyone has a part to play. As a local authority we can take leadership at a local level. In June 2019, we made it our ambition to take the Royal Borough to net zero emissions by 2050 and take action to protect and enhance our local natural environment.

This strategy sets out our vision and five-year action plan for embarking on this challenge. While this is the council's strategy and we take responsibility for leading on its delivery, it will only be successful through collaboration. It will take the combined efforts of business, industry, residents and community groups to deliver the action that is necessary to make this a reality.

The impacts of climate change have already begun to be felt and it will be necessary to continue to adapt to these. However, it is of utmost importance that we take action at a local level to mitigate the effects of climate change as far as possible. This strategy is focused on mitigation, our approach to adaptation will be developed separately in consultation with the relevant bodies.



### Carbon emission sources in the Royal Borough

## **Strategic themes**

We have structured our strategy around four key themes to focus strategic action on areas we have control over at a local level:



#### **Circular economy**

Circular Economy refers to more sustainable resource use. Attention will be focused on reducing waste, encouraging material re-use, increasing recycling and supporting less resource intensive lifestyles.



#### Energy

67% of the borough's emissions are a result of energy consumption in buildings. Reducing our energy consumption, decarbonising our supply of energy and increasing local renewable energy generation is therefore key to realising the borough's net zero emission ambitions.



### **Natural environment**

We will take action to protect and enhance our environment. In doing so this will help protect the ecosystem service benefits we receive (e.g. clean air and water), tackle climate change, create great places to live and support resident's health and wellbeing.



### **Transport**

As a local authority, we will reduce the need for carbon intensive travel by encouraging walking and cycling as well as investing in digital infrastructure. We will create conditions for sustainable travel through the provision of infrastructure such as cycle routes and electric vehicle charging points and minimise air pollution impacts of road traffic by encouraging cleaner vehicles. Our strategy can only be delivered in partnership with all stakeholders to make net zero a reality. It will take the combined efforts of business, industry, residents and community groups to drive forward real change at the pace and scale that is required.

Our strategy sets out how we as a local authority can influence and impact on emissions in the Royal Borough. However, we call upon residents and businesses who live and work here to harness control over their emissions and make the net zero carbon emission ambition a reality. The governance and engagement approach we take to enable and ensure partnership working will be developed over the coming months.



- Its own operations and activities the council has direct control
- Its procured goods and services the council has direct control
- Policy making the council has direct control over policy making but is influenced by community needs and partners
- Business activities the council can encouage businesses to share our vision and encourage action
- Community and resident activities the council can encourage these groups to share our vision and encourage action

This strategy will be delivered through services across the council, co-ordinated through our sustainability team working with groups and organisations in different sectors. An annual monitoring report will be prepared. We will use this to track progress towards our net zero target as a borough and to inform the actions we need to collectively take to make progress. We will publish progress on an annual basis and in doing so coordinate borough-wide efforts on carbon reduction. Publishing progress will also demonstrate transparency so that residents can ensure we are delivering against our commitments.

The council will use a range of internal funding sources to develop and deliver its programme of activity. A challenge of this urgency and scale will require funding from central Government. We will also continue to lobby Government to make available specific funding for local authorities to tackle the climate crisis.

## 1. Introduction

## Why have we declared a climate change and environment emergency?

**1.1 Climate change is a global and immediate challenge.** The consequences of not acting are increasingly well understood and the climate movement is gaining momentum in communities, and at national and local levels of government across the world. The UN 'Paris Agreement' seeks to limit global average temperature rises to 1.5°C above the pre-industrial period as it has been warned that anything beyond 1.5°C would have catastrophic consequences, and in many cases irreversible effects on humans, animals and plants.

**Our natural world too has suffered significant losses.** The 2019 State of Nature report demonstrated that populations of the UK's most important wildlife have plummeted by an average of 60% since 1970. In England specifically, 36 plant species have become extinct and 13% of species are threatened with extinction.

The role of the natural environment in creating great places is critical to the success of the borough economy and to our residents' health and wellbeing, therefore it is important we take steps to protect it. In addition to their intrinsic value, wildlife and ecosystems provide essential services on which we all depend; clean air and water, crop production through soil formation and pollination services, pest control, essential human health services and climate regulation.

## Global and national impacts of climate change and the environment emergency



## What are the likely impacts of climate change in the UK?

The frequency and severity of extreme weather will increase across the UK<sup>1</sup>, but the degree to which we experience this is dependent upon the level of warming we experience e.g. 1.5°C, 2°C, 3-4°C. Heatwaves like that seen in 2019 are expected to happen every other year by 2050 and the winter storms in 2015 were at least 40% more likely because of climate change<sup>2</sup>.

These changes to the climate have a series of impacts associated with them, the severity of which is dependent upon the degree of warming we face. Without mitigating the impacts of climate change as far as possible and adapting to the inevitable impacts, risks include:



- Humans suffering from heat stress experienced in buildings ill-equipped to deal with changes to the climate. These impacts could be faced by buildings of all types including homes and hospitals, care homes, schools and offices
- Heat damage to transport, energy, buildings and communications infrastructure from extreme weather events e.g. risk of rails buckling, cables sagging and road damage
- Increased risk of drought, Thames Valley region is classed as seriously water stressed
- Increased flood risk to the built environment including people's homes and businesses
- Species and habitats affected which in turn affects the 'ecosystem services' the natural world provides e.g. clean air, water, crop pollination
- Risks to supply chains
- Price increases for food and other imported commodities as conditions for growing food become less predictable and crop yields decrease
- Increase in heat-related illness and death
- Flooding impacts on wellbeing and livelihoods<sup>3</sup>

- 1 UK Climate Projections (UKCP), Met Office
- 2 UK Climate Projections (UKCP), Met Office
- 3 Climate change impacts and adaptation, Environment Agency, November 2018

## What are the benefits of taking action?

Research, most notably the Stern Report in 2006 has shown that the benefits of taking action to reduce emissions considerably outweighs the costs<sup>4</sup>. The benefits are numerous and as part of our public consultation, we asked our residents what they believed the most compelling benefits for them were which are highlighted in bold below.



### Economic

- Clean and inclusive growth in the local economy
- Reduced energy costs
- Increased energy security
- High quality employment
- Reduced congestion

#### Social

- Improved air quality
- More active, outdoor lifestyles
- Healthier diets
- Warmer, healthier homes
- Quieter, safer streets
- Reduced health care costs

#### **Environmental**



- Protection against biodiversity loss and environmental degradation caused by climate change
- Reduced risk of flooding, heatwaves and extremes
- Healthier water

## **Policy context**

## 1.2 Climate emergency

In 2015, an historic international agreement on climate change was reached. Known as the 'Paris Agreement' countries committed to:

- Keep a global temperature rise this century well below 2°C above pre-industrial levels
- Pursue efforts to limit the temperature increase even further to 1.5°C.
- All countries work together to bring greenhouse gas emissions to net zero within the second half of the 21st century

In May 2019, the Committee on Climate Change (the independent body tasked with advising the UK Government on climate change) set out the actions needed to reach net zero carbon emissions by 2050. The recommendations included the need to legislate for the 2050 target, the need for strategies across all sectors of the economy (including international shipping and aviation) as well as the need to meet any targets through domestic effort rather than through carbon offsetting schemes. The accompanying technical report set out the key actions the UK needs to take to deliver on its target, which include actions local authorities can take to play their part and actions businesses and residents at a borough level can take to deliver change locally.

The report specifies accelerated action in the 2020's. This includes: to largely decarbonise the electricity grid and phase out coal for renewables; action to ramp up the electric vehicle market; decision taking in relation to HGVs transition to zero carbon technology; development of decentralised energy networks; energy efficiency programmes for buildings; and the need to reduce waste and ban waste-to-landfill. This context has informed the development of this strategy and actions to tackle these areas are specified under the Action Plan section.

The Government's 2017 Industrial Strategy White Paper embeds the principle of a low carbon economy and says it is essential for maintaining our quality of life and ensuring our continued prosperity. Many of the actions required to support the five foundations of productivity (ideas, people, infrastructure, business environment and places), will also support action on climate change. Clean growth and the future of mobility it says are also critical to a low carbon future.

The locally approved 'Berkshire Local Industrial Strategy', developed by the Thames Valley Berkshire Local Enterprise Partnership sets out the region's commitment to responsible economic growth. It embeds the importance of the climate emergency as well as the value of place to the ongoing success of the local economy. This means that valuing our natural environment and quality of life of residents will be central to plans to continue to grow the economy. This has guided the development of this strategy and the actions it contains.

## 1.3 Environment emergency

The Environment Bill 2020 is also important; it brings into UK law the target of reaching net zero carbon emissions by 2050. It also creates a wider framework for environmental governance, including a new direction for resource and waste management. It embeds the principle of biodiversity net gain and air quality improvement by requiring the Government to set new more ambitious targets. It sets into law the principles of the Government's 25-year environment strategy that was published in 2018. This has guided the development of this strategy and the actions it contains.

## Introduction and approach to the strategy

- **1.4** The Royal Borough of Windsor & Maidenhead in June 2019 declared an environmental and climate emergency. As part of that commitment it was agreed the council would:
  - Undertake an in-depth review of the council's carbon footprint;
  - Consult and agree on a net zero carbon emissions by 2050 strategy for the Royal Borough;
  - Call upon the Government to provide the additional powers and resources required.
- 1.5 The council to date has passed other motions related to the environment and actions to enact those motions are detailed in this strategy. These include the December 2018 motion to support the principles campaign group 'Plastic Free Windsor and Plastic Free Maidenhead' put forward with regard to single use plastic reduction; and the July 2019 motion to support biodiversity in the borough by making amendments to its roadside verge maintenance and planting approach.
- **1.6** We all have a role to play in making this climate and environment strategy a success. This strategy sets out the actions we will take as the council. It also sets out how we will work with our partners and communities to deliver our commitment to be net zero by 2050, at the latest. Clearly, given the pressing need to address this global challenge we see this very much as a backstop date and will work with our partners as fast as resources, opportunities and national policy and legislation allow us to reach net zero.
- 1.7 This strategy will be a priority across every part of the council. It will require officers and members to work together to review council policies to ensure they are compatible with our commitment to deliver carbon emissions to net zero. Our strategies will need to be reviewed considering our commitments on climate change to support our overall commitment to net zero by 2050. The actions set out in this strategy will support those changes and set policy direction for any new or emerging strategies.



- **1.8** We have prepared the strategy through engagement and with the involvement of the Royal Borough community. This has involved several public workshops and meetings to seek views and develop ideas and actions for our approach. It has also included a public consultation, the input from which has been used to shape the final version of the strategy. We have also sought best practice from other local authorities and other organisations to ensure we learn the lessons.
- 1.9 The strategy has been developed through a cross-party working group of members. The group has been supported by officers from across the council, from various services and with different specialisms.

## **1.10** Delivery of our strategy will be contingent on working in partnership with a wide range of stakeholders who have control over emission sources in the borough.

It will require support and action from central Government to drive forward changes across the whole country. It will also require local action from individual residents, community groups and partners to enable change. The way we communicate the strategy and keep engaging with the local population throughout delivery to get their buy in, will therefore be a key part of our strategy.

Emission sources	Who has control?
Energy used in homes	Examples include:
	House occupiers e.g. renters
	House owners
	Developers
	Local and national government
	Energy infrastructure operators e.g. government
	Organisations who promote/create incentives for investment in energy
Energy used in	Examples include:
businesses/industry	Building occupiers
	Building owners
	Developers
	Local and national government
200	Energy infrastructure operators e.g. government
	Organisations who promote/create incentives for investment in energy
Transport	Examples include:
	Residents and visitors in their choice of transport
	Local and national government
	Transport operators e.g. bus and taxi operators

### Who has control over emission sources in the borough

## Scope of the strategy

- **1.11** The strategy focuses on mitigation of (as opposed to adaptation to) climate change and how we as a borough can significantly reduce our carbon emissions. The actions presented in this document are for us as a local authority to undertake.
- 1.12 We recognise that we will also need to adapt to the changing climate. As part of our action plan, we commit to conducting a climate risk assessment and will use the outcome of that work to develop an adaptation plan for the borough.

## Building on the work we already do

- **1.13** The council already has strategies and policies in place to support a reduction in carbon emissions. The Local Transport Plan (2012–2026) and Cycling Action Plan (2018-2028) already set out proposals to help reduce emissions from transport and grow the number of cyclists by 50% by 2028. This is significant given the relatively low uptake of cycling in the borough currently.
- 1.14 The 'submitted version' of the Borough Local Plan also sets out the Local Planning Authority's key objectives and policies on the environment and climate change to guide new development. A Green and Blue Infrastructure Study has documented the Royal Borough's natural infrastructure assets which will inform our approach to protecting biodiversity and our natural capital.

## 2. Baseline - where we are now

- 2.1 The council has calculated the Royal Borough's carbon emissions using the most up to date data set ('UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2018' published by the Department for Business, Energy and Industrial Strategy (BEIS) in 2020). This is to understand where emissions come from and what activities they relate to.
- 2.2 This information is key to understanding what actions the Royal Borough of Windsor & Maidenhead can take to reduce emissions, and the part it can play to ensure the Royal Borough can achieve the target of net zero emissions by 2050 at the latest and ideally faster. Emissions as they currently stand constitute the baseline against which future performance will be measured.
- 2.3 The strategy currently provides a baseline for carbon dioxide emissions. It does not provide baselines for other areas such as biodiversity. The council commits to explore how these could be included at a later date in line with specialist advice and existing studies, and actions for this are included in the Action Plan section of our strategy.
- 2.4 The council will monitor two sets of emissions; those arising from our own estate and operations, and those arising from activities carried out in the Royal Borough i.e. emissions generated from domestic dwellings and business premises, as well as from travelling within the borough. This methodology follows the guidance provided by BEIS for what should be included in the baseline. This strategy will focus on the wider borough as it represents a far greater source of carbon emissions than the council's operations alone.
- 2.5 The council will produce a separate strategy for its own operations but has already undertaken a review of its own carbon footprint which has been provided as an appendix to this document. This used the internationally recognised World Resources Institute GHG Protocol to ensure residents have confidence in our approach. This is to ensure that as an organisation committed to environmental excellence, we lead by example, encouraging others in the borough to follow.
- 2.6 We will use the local authority data published by BEIS each year to track progress towards our net zero target as a borough and to inform the actions we need to collectively take to make progress. We will also calculate the carbon saving impact of actions we take where appropriate. We will publish progress on an annual basis and in doing so coordinate borough-wide efforts on carbon reduction. Publishing progress will also demonstrate transparency so that residents can ensure we are delivering against our commitments.

## Where do emissions in the Royal Borough come from?



- Emissions in the borough total 658 kilotonnes of carbon dioxide (ktCO2)
- Vehicle usage 219 ktCO2, 33% of total emissions
- Electricity used to power homes 66 ktCO2, 10% of total emissions
- Gas and other fuels used to heat homes 187 ktCO2, 29% of total emissions
- Electricity used in commercial/industrial buildings 101 ktCO2, 15% of total emissions
- Gas and other fuels e.g. oil used in commercial and industrial buildings 82 ktCO2, 13% of total emissions
- 2.7 Borough-wide carbon emissions comprise of those deemed under Local Authorities' scope of influence by The Department of Business, Energy & Industrial Strategy (BEIS). They have produced carbon dioxide (CO2) emission estimates for every local authority-controlled area in the UK. These comprise of:
  - CO2 emissions produced in the commercial, industrial and agricultural sectors from the usage of electricity, gas, and other fuels
  - CO2 emissions produced in the domestic sector from the usage of electricity, gas and other fuels
  - CO2 emissions produced from road transport

- 2.8 BEIS recommend local authorities exclude emission sources which are not controlled at a local level. Emissions from the following are therefore excluded;
  - Motorways
  - EU emissions trading systems sites
  - Diesel railways
  - Land use, land use change and forestry (which encompasses emissions relating to agriculture and de/reforestation)
- 2.9 The most recent figures provided by BEIS state emissions arising from the borough total 657.5kt CO2 (Figure 1). This is made up of 185.6kt CO2 from industry, commercial and agricultural sectors, 253kt CO2 from domestic premises and 218.8kt CO2 from transport. Domestic emissions make up the largest portion of emissions (38%) closely followed by transport emissions which make up 33%. Industrial, commercial and agricultural emissions make up the final 28%. These emissions will be used as a baseline against which the Royal Borough's future performance will be compared.



2.10 As the graph demonstrates, significant emission savings have been realised in both the domestic sector and industrial and commercial sector. This is broadly a reflection of UK wide trends driven mainly by reductions in emissions from power stations and the decarbonisation of the electricity grid. It is worth noting the transport sector has seen little change and tackling emissions in this area remains a robust challenge. The steps we are taking to address the transport emission challenge, as well as the challenge of reducing emissions in other areas are outlined in the following chapters.

## Industrial and commercial sector emission sources

2.11 Industrial and commercial sector emissions are made up of energy consumption on industrial sites and commercial sites.
These comprise of electricity, gas and other fuels (e.g. oil). More than half of the emissions from this sector come from electricity use (58%).

## **Domestic sector emission sources**

- 2.12 The domestic sector emissions come from energy consumption in and around the home; electricity, gas and other fuels such as oil. Approximately two thirds of emissions from this sector come from gas usage (66%).
- 2.13 In both the domestic and industrial and commercial sector, emissions produced are affected by the energy source used, the type and condition of the buildings (including their insulation), the average ambient temperature (urban areas can be much warmer and therefore easier to heat than rural areas), and the behaviour of occupants.

## **Transport sector emission sources**

2.14 Transport emissions are made up of road transport. Emissions estimates are made based on the distribution of traffic, therefore some of the emissions within an authority represent through traffic, or part of trips into or out of the area, whether by residents or non- residents. Emissions come from both freight and passenger transport for both business and private purposes. Approximately half of these emissions are produced on A-roads (52%) and 39% of remaining emissions come from minor roads. The last 9% represent emissions from combustion of lubricants and from vehicles which run on liquid petroleum gas.







## 3. Vision, aims and objectives

3.1 This is a true emergency with our climate changing on a scale and pace that threatens our way of life and that of future generations. As a borough we need to take urgent action and our strategy sets out our approach to working in partnership with local communities to tackle this challenge over the next five years.

# Our vision is to be a borough where the community collectively works together to achieve a sustainable future; by protecting and enhancing our natural environment, and achieving rapid decarbonisation to net zero carbon emissions by 2050 at the latest.

3.2 Our strategy has not been prepared to simply protect and enhance our natural environment and deliver carbon emission reductions as quickly as we can. It is important that it supports a better quality of life, better health and wellbeing outcomes as well as a thriving economy for residents across the borough.

## **Emissions trajectory to net zero - Roadmap to 2050**

- 3.3 As a borough, we must begin to reduce carbon emissions across all sectors immediately. Residents, businesses and community groups will all need to act to achieve the emissions reductions required. The council has set out a trajectory for the borough but only if all areas of society act, will the targets be met. Furthermore, achieving these targets is heavily dependent on support from the UK Government in changing national policy to accelerate action on climate change.
- 3.4 As part of our public consultation, we asked residents whether there was a methodology they believed should be applied to the borough. We have also undertaken an internal review of the different methodologies to understand which is most appropriate for the borough. The methodology favoured by most responses in the public consultation, as well our own internal review, was the one developed by the Tyndall Centre.
- 3.5 The Tyndall Centre for Climate Change Research is a well-respected partnership of four British Universities and one Chinese University to research climate change mitigation. Their approach is derived from the commitments enshrined in the Paris Agreement, informed by the latest science on climate change and is defined in terms of science-based carbon setting.

3.6 Implementing a science-based trajectory goes beyond what many other local authorities have undertaken, demonstrating our leadership in this area. An initial assessment of other local authorities approaches suggests approximately half of councils have not put in place a science-based target. The graph below displays the carbon reduction trajectory required for the borough as set out by the Tyndall Centre:



## The borough's pathway to net zero

3.7 The council recognises the urgency needed and in line with the Tyndall Centre trajectory has set out the following targets for the borough;



## **Strategic themes**

3.8 We have structured our strategy around four strategic themes. The strategic framework provides the basis for our ongoing activity and investment. The themes comprise of circular economy, energy, natural environment and transport and in doing so reflect the commitments that were made by the council in declaring both an environment and climate emergency.



## Strategic framework summary

3.36 For each theme we have identified an over-arching aim and three objectives. These have guided the action plan for the first five years and will provide the strategic framework for the development of future action plans to 2050.

## Circular economy

**Aim:** Reduce waste and consumption, increase material re-use and increase recycling rates in the borough.

### **Objectives:**

- Improve recycling rates
- Encourage waste avoidance and material reuse through our services and operations.
- Champion waste reduction in the wider community.

## Energy

Aim: Reduce energy consumption and decarbonise supply.

### Objectives:

- Reduce energy demand.
- Decarbonise supply.
- Increase renewable energy generation.

## Natural environment

Aim: Cleaner air, higher water quality and increased biodiversity.

## **Objectives:**

- Protect and enhance our natural environment.
- Green our towns and urban areas.
- Increase awareness of biodiversity.

## Transport

Aim: Enable sustainable transport choices.

- Transform transport and digital infrastructure to reduce the need for travel.
- Create infrastructure to shift journeys to low/zero carbon modes e.g. cycling, public transport .
- Invest in zero emission vehicle infrastructure.











**3.9 Aim:** Reduce waste and consumption, increase material re-use and increase recycling rates in the borough

- Improve recycling rates
- Encourage waste avoidance and material reuse through our services/operations
- Champion waste reduction in the wider community
- 3.10 Unlike the traditional linear economy where product materials are disposed of after one use (e.g. where a plastic water bottle is used once and then disposed of), a circular economy places central value in material preservation. Materials are kept in use for as long as possible then recovered to form new products and re-used (e.g. plastic from the water bottle is re-used to make fabric).
- 3.11 As a local authority we recognise a circular economy forms an essential part of tackling climate change and addressing the environmental emergency by helping to reduce waste production. We have already taken steps to reduce the environmental impact of the waste we collect by having a 'zero to landfill' policy which means carbon emissions arising from landfill are avoided.
- 3.12 Our first objective is to avoid waste and encourage material re-use. We will reduce single use plastic usage in our own estate and draw on expertise in the local community to help us identify appropriate actions through a plastic free borough strategy developed by Plastic Free Maidenhead and Plastic Free Windsor.
- 3.13 We will also champion waste reduction in the wider community. We will take actions to encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others. We will do this by working in partnership with businesses, residents and facilities that provide education expertise.
- 3.14 Finally, we will improve recycling rates. By 2025 the Royal Borough will improve its recycling rate to above 50% which will move us to the top 100 performing councils in the country. It is estimated that 65% of UK waste needs to be recycled by 2035 to meet net zero carbon targets. In the Royal Borough around 44% of household waste is recycled or composted, which is in line with the average household recycling rate for England<sup>5</sup>.
- 3.15 We will carry out education and engagement initiatives to encourage recycling amongst householders and expand our community involvement volunteering scheme to help deliver this outreach programme. As part of our objective to improving recycling, we want to increase use of our food waste collection service. A fifth of UK greenhouse gas (GHG) emissions are associated with food and drink<sup>6</sup> therefore it is important that food waste is reduced as far as possible and unavoidable food waste is separated. We want to see at least a 10% increase in the food waste collection service by 2025 and again we will look to engage and involve the community to help deliver this outreach work.

<sup>5</sup> Resources and Waste Strategy for England 2018

**3.16 Aim:** Reduce energy consumption and decarbonise supply

- Reduce energy demand
- Decarbonise supply
- Increase renewable energy generation
- 3.17 Both reducing energy demand and decarbonising the energy supply are required to meet a net zero carbon emissions target. The Committee on Climate Change believe that a shift to a renewable based energy supply is essential. Our objectives under this theme reflect these three focus areas. Taking action in these areas will create co-benefits too, for example supporting householders to improve insulation levels will help tackle fuel poverty, protect the vulnerable and ensure affordable housing.
- 3.18 Two-thirds of the borough's emissions arising from energy consumption take place in buildings. Taking action to reduce building emissions is key to realising the borough's net zero emission ambitions. Most buildings in the borough that will be here in 2050 have already been built. Our focus therefore will be to look at how best to support existing buildings to improve their energy efficiency and transition to low carbon heat and power solutions.
- 3.19 We want to take significant steps to improve the energy efficiency and renewable energy generation capacity in the buildings we own and manage. We will leverage our powers as a Local Planning Authority and put policies in place to incentivise the development of zero carbon buildings. We will use our position and influence to engage residents and businesses; 39% of energy related emissions come from the domestic sector and 28% from the industrial and commercial sector.
- 3.20 Currently the Royal Borough produces 13,067 megawatt-hours (MWh) renewable energy per year<sup>7</sup>. It should be feasible to increase renewable capacity ten-fold based on other borough performance<sup>8</sup> and we will aim for this by 2025. The decarbonisation of heat to shift away from oil and gas towards low carbon alternatives such as heat pumps will be essential to meeting the target. As will increasing local solar capacity in the domestic sector. Current estimates suggest local solar capacity should be generating equivalent to 2500 kilowatt-hours (kWh) per household in 2030<sup>9</sup> (from a current baseline of 222 kWh per household<sup>10</sup>).
- 3.21 The council will support the increase in renewables generation by implementing a collective solar purchasing scheme to give residents confidence when installing solar arrays; support the transition to low carbon heat by helping residents access funding to install new technologies and protect the most vulnerable with fuel poverty initiatives that will both reduce carbon and keep people warmer and safer in their homes.

- 7 Renewable electricity by local authority, Department for Business, Energy and Industrial Strategy, 2019
- 8 Renewable electricity by local authority, Department for Business, Energy and Industrial Strategy, 2019
- 9 SCATTER tool https://scattercities.com

<sup>••••••••••••••••••••••••</sup> 

<sup>10</sup> https://www.gov.uk/government/statistics/regional-renewable-statistics

**3.22** Aim: Cleaner air, higher water quality and increased biodiversity

- Protect and enhance our natural environment
- Green our towns and urban areas
- Increase awareness of biodiversity
- 3.23 Climate change and habitat fragmentation are two major drivers for the decline in biodiversity across the UK. The Environment Bill 2020 sets out the overarching national approach for tackling the decline. It includes a new system of spatial strategies for nature covering the whole of England. The aim of these Local Nature Recovery Strategies (LNRS) is to identify areas of importance for biodiversity and where the recovery of biodiversity could contribute to other environmental benefits.
- 3.24 We will work with partners to develop a Local Nature Recovery Strategy and collectively agree opportunities for improving biodiversity across the borough. Through this mechanism we will explore the opportunity for a gain in 'priority' habitat across the borough. We will also use this opportunity to engage with major landowners and encourage their participation as large parts of the Royal Borough are recognised for their biodiversity value. Part of this work will be to create a new biodiversity baseline and action plan across the borough, working in collaboration with local community conservation groups. This will allow us to define our priorities, monitor and manage our biodiversity assets more effectively with local buy-in to bring about long-lasting change.
- 3.25 We will look for opportunities to 'green' our urban environment. Through the planning system, we will support the implementation of legislation requiring improved biodiversity of land designated for development by ten per cent as a minimum. In addition, we will take planning policies and decisions to enable the provision of green infrastructure in urban areas. We will look for opportunities to 'rewild' areas under our management and ownership, including changes to the mowing regime of public areas to better support biodiversity such as road-side verges, parks and cemeteries.
- 3.26 We are keen to realise our natural environment's ability to sequester carbon dioxide emissions, beyond tree planting alone. It is estimated restoring the UK's habitats could absorb a third of UK emissions. Globally, plants have removed 25% of human-made carbon emissions, whilst soils contain more carbon than is stored in those plants and the atmosphere combined. The action we take to sequester carbon therefore will balance a tree planting programme with other actions, such as soil preservation, to bring about carbon sequestration.
- 3.27 Engagement is key to realising our ambitions for biodiversity preservation and enhancement. We will be taking a leadership role by providing biodiversity training to our own staff. Our in-house experts will take biodiversity awareness out to the community and offer training to local schools, businesses and residents. Finally, we will use the knowledge and passion in local community nature organisations such as 'The Wilds' to help raise awareness and tackle biodiversity loss.

**3.28 Aim:** Enable sustainable transport choices

- Transform transport and digital infrastructure to reduce the need for travel
- Create infrastructure to shift journeys to low/zero carbon modes
- Invest in zero emission vehicle infrastructure
- 3.29 To date, the transport sector nationally has proved to be a challenging area in which to make carbon emission reductions and locally the same is true. Since 2005, transport emissions locally have remained stubbornly static while substantial emission reduction gains have been made in other sectors. In our role as a transport authority we can lead the change to bring about the reduction in carbon required. There is still a key role for residents, businesses and visitors to play as the way they choose to travel will ultimately dictate the emissions from transport.
- 3.30 There are significant benefits associated with taking action to travel in a more sustainable way. Higher uptake of active travel (walking and cycling) will have the added benefit of improving our population's health and wellbeing. This will also reduce air pollution, which will further improve a range of health benefits and reduce inequality for those who are disproportionately impacted by pollution.
- 3.31 We are committed as an authority to creating accessible and affordable sustainable transport choices. Our approach will address the elements required to meet decarbonisation targets: reduce the need for travel; shift a share of mileage undertaken by carbon intensive forms of travel to active travel modes and public transport; and decarbonise unavoidable private vehicle journeys.
- 3.32 To reduce the need for travel, we commit to transforming infrastructure to improve digital and physical connectivity in the borough. We are working closely with the other local authorities in Berkshire and the Thames Valley Berkshire Local Enterprise Partnership (TVB LEP) to develop a digital strategy and local action plan. As new development comes forward across the borough, we will ensure they are creating great places, spaces and services near each other which will further reduce the need to travel.
- 3.33 We will create infrastructure and trial initiatives to increase the uptake of walking, cycling and public transport. We will build on our existing cycling action plan and its ambition to increase cycling. A supporting delivery plan with a pipeline of projects will be developed to ensure we are in the best position to secure external funding for projects from the TVB LEP and Department for Transport.

- 3.34 The nature of the borough means that there will continue to be essential car journeys. To support this, we will ensure delivery of zero emission vehicle infrastructure (e.g. electric vehicle charging infrastructure) to support the transition away from traditional petrol and diesel cars.
- 3.35 Full details of the infrastructure and initiatives we will put in place to meet the decarbonisation targets will be set out in the forthcoming revision to the Local Transport Plan (LTP). Between now and 2025 there are several actions we will undertake which are detailed in the action plan contained in the next section of this document.

## 4. Initial action plan - 2020-25

- 4.1 In the following section, we set out actions identified to support the realisation of our vision, aims and objectives. The actions were identified by stakeholders during workshops and expert opinion. The community that collectively makes up the Royal Borough must work together to identify the most cost-effective course of action. The actions in the plan are not an exhaustive list. Throughout the public consultation and the delivery period, the council will work with stakeholders and partners to identify opportunities to do more where possible.
- 4.2 We as the council commit to taking the actions below to support the borough to decarbonise in the quickest and most effective way possible. Emissions will be monitored on an annual basis and actions will be evaluated against their capacity for decarbonisation versus the resources required to deliver them. Each action has a measure of success which will be subject to regular reporting. Further details are set out in the chapter on monitoring.
- 4.3 To ensure the actions taken best protect Royal Borough residents, we will carry out a climate risk assessment to map out the likely impacts the borough will face. We will do this in collaboration with experts such as the Environment Agency, water and energy utilities, infrastructure operators and businesses to leverage work already carried out in this area. We will then prioritise actions that mitigate the risks identified.
- 4.4 Actions have been assigned to each of our four strategic themes. Each of the four themes contains a key action. This is a project which is likely to require external funding or will form the first step in achieving a larger aim.

## **Circular Economy**

The action plan below provides specific detail on how we will implement our aims and objectives on the circular economy theme. For each objective, we have identified target actions and measures of success. It should be noted these actions do not represent an exhaustive list, rather they represent actions that have been identified to date. Between now and 2025 we will continue to identify and undertake actions that contribute to meeting our objectives.

Objectives	Action	Measure of success
KEY ACTION: regime to deliv	Review household waste collection ver increases in recycling	Increase household recycling to 50% by 2025 moving us to top 100 performing councils in the country
Improve recycling	Increase availability of recycling facilities	Host a mini specialist recycling service point as a trial by 2022
rates	Increase awareness of Royal Borough recycling facilities	Obtain statistically significant baseline data on awareness levels
		Broaden our outreach work through event attendance, mailout communications and social media promotion
	Avoid food waste incineration by promoting uptake of the food waste collection service	10% increase in the food waste collection service by 2025
Encourage waste avoidance	Reduce single use plastic usage in our own estate	Adopt a single-use plastics strategy based on the draft being developed by Plastic Free Windsor
and material reuse through our	Investigate the feasibility of a material reuse shop associated with the recycling and waste site	Prepare a feasibility study and business case
services and operations	Provide opportunities for people to grow their own food	Review existing land and allotments policy and identify opportunities to increase availability
Champion waste reduction in the wider	Champion material re-use initiatives	Implement a trial repair café hosting at least three events as soon as pandemic restrictions allow
community		Support existing school swap shops and enable three new ones to be created
	Support plastic free refillable shops and other plastic free schemes	Promotion in resident communications
		Pop-up space provided in community buildings
	Work with businesses to encourage reuse throughout their operations	Identify high impact sectors and develop an innovative support package by 2023
	Encourage more plant-based food and promote buying local and seasonally	New campaign including a food section in resident communications
		Partner with local suppliers to promote sustainable food production and education

## Energy

The action plan below provides specific detail on how we will implement our aims and objectives on the energy theme. For each objective, we have identified target actions and measures of success. It should be noted these actions do not represent an exhaustive list, rather they represent actions that have been identified to date. Between now and 2025 we will continue to identify and undertake actions that contribute to meeting our objectives.

Objectives	Action	Measure of success
KEY ACTION: Engage with residents/businesses on reducing building carbon emissions and review planning policy to improve the energy efficiency of new builds		See below for engaging residents/businesses measures of success Prepare a new supplementary planning document (SPD) to incentivise the building of net zero carbon emission buildings
Reduce energy demand	Facilitate energy efficiency improvements in domestic private premises	Year-on-year improvement in Heat the Home Counties funding uptake Minimum energy efficiency standards in the private rented sector enforced through the use of energy performance certificates (EPCs) Increased take-up of flexible home improvement loans
	Reduce energy demand across buildings and assets we own and operate	Conduct a review of the strategic opportunities for reducing energy demand across the built estate Reduce energy emissions in buildings we own and manage by 50% by 2025, in line with the Tyndall Centre decarbonisation trajectory
	Incentivise developers to build zero carbon buildings and reduce water demand in line with Thames Water recommendations	Prepare a new supplementary planning document (SPD) in 2021 based on best practice to support these targets
	Incentivise developers to refurbish existing buildings to zero carbon home standard and reduce water demand in line with Thames Water recommendations	Prepare a new supplementary planning document (SPD) in 2021 based on best practice to support these targets
Decarbonising supply	Encourage businesses and industry to decarbonise their energy supply and reduce emissions	Engage with the Chamber of Commerce and set up a forum for collaboration with the private sector in 2021
	Engage housing associations around a programme of retrofitting homes with low carbon heating/power solutions	Monitoring framework to be included in the council's annual monitoring report
	Encourage carbon intensive (e.g. oil) heated homes to adopt lower carbon alternatives	Host an outreach workshop to encourage the most carbon intensively heated homes to adopt lower carbon alternatives

Increase renewable energy	Scope decentralised energy (e.g. solar, heat networks, heat pumps) potential across the borough	Scope renewable generation potential in the borough in 2021
generation	Incentivise renewable energy uptake among Royal Borough residents and businesses	Work with residents, businesses and community organisations such as MaidEnergy to implement a collective solar purchasing scheme in 2021
	Increase requirement for renewables generation in new build	Prepare new guidance on renewables requirements through a Supplementary Planning Document (SPD) in 2021

## **Natural Environment**

The action plan below sets out how we intend to realise our vision, aims and objectives for the natural environment theme. For each objective, we have identified actions and measures of success. It should be noted these actions do not represent an exhaustive list, rather they represent actions that have been identified to date. Between now and 2025 we will continue to identify and undertake actions that contribute to meeting our objectives.

Objectives	Action	Measure of success
KEY ACTION: Create a biodiversity action plan (BAP) for the borough		To have a biodiversity action plan (BAP) by June 2021
Protect and enhance our natural	Work with partners to develop a Local Nature Recovery Strategy (LNRS) and establish a Nature Recovery Network	Carry out preliminary mapping work by 2021
environment	Identify opportunities for rewilding on sites we manage for nature conservation	Identify potential sites and objectives including biodiversity improvement targets by 2022
	Continue and extend the council's new mowing regime on roadside verges for the benefit of wildflowers	Extend scheme by 100% by 2024
	Develop a biodiversity baseline and metrics for the borough as part of the biodiversity action plan	Agree baseline measures and metrics by June 2021
	Increase tree cover in the Royal Borough to sequester carbon dioxide emissions. Create a new woodland and tree management strategy in 2021 to support our tree cover, carbon sequestration and wider biodiversity ambitions	Maximise the potential for tree planting on council owned land (plant at least 15,000 trees by 2025) and the carbon sequestering potential of these newly planted trees. Look to run joint schemes with private landowners
Green our towns and urban areas	Work with developers to provide green infrastructure in new town centre developments	Ensure all new town centre development provides some form of green infrastructure in any public realm
	Deliver the biodiversity net gain requirement for developers through the planning system	Create a new Supplementary Planning Document (SPD) to deliver a minimum 10% biodiversity net gain through the planning system
	Increase biodiversity in public owned open spaces such as parks and cemeteries	Integrate biodiversity improvement metrics into the borough BAP

continued overleaf

Increase awareness of biodiversity	Provide biodiversity training to planning officers	Ensure planning officers have been provided with biodiversity training by the end of 2021
	Set up biodiversity and climate education sessions at Braywick Nature reserve	Run training sessions for local businesses and education sessions for local schools
	Offer conservation volunteering and awareness training for council employees and partners	Increase volunteer programme participation by 20%
	Encourage wildlife friendly gardening	Better support existing schemes run by community organisations
	Engage with landowners, especially those who have a significant influence over biodiversity in the borough	Carry out engagement with the ten largest landowners in the borough

## Transport

The action plan below sets out how we intend to realise our vision, aims and objectives for the transport theme. For each objective, we have identified actions and measures of success. It should be noted these actions do not represent an exhaustive list, rather they represent actions that have been identified to date. Between now and 2025 we will continue to identify and undertake actions that contribute to meeting our objectives.

Objectives	Action	Measure of success
KEY ACTION: T that demonstrat wide carbon rec	o prepare a new Local Transport Plan tes our contribution to meeting borough- duction targets	To prepare a new Draft Local Transport Plan by 2021
Transform transport and digital infrastructure	As part of development planning, identify opportunities to reduce the need to travel in new 'growth areas'	To ensure site promoters have developed plans for 'growth areas' including Ascot, Maidenhead Town Centre and South West Maidenhead
to reduce the need for travel	Facilitate roll out of digital infrastructure in the borough to enable flexible working	Identify partners to provide 5G and superfast broadband
	Trial Smart City concepts in the Royal Borough	To have implemented a trial by December 2023
Create infrastructure to shift journeys	Remove barriers to walking and cycling through delivery of the 2018-2028 Cycle Action Plan	Delivery of the Cycling Action Plan 2018-2028 schemes and put in place a system for residents to make suggestions e.g. for 20mph zones
to low/ zero carbon modes e.g. cycling, public transport	Reduce transport emissions at sensitive locations to improve air pollution and encourage walking/cycling	No idling' zones outside schools investigated by April 2021 Achieve the National Air Quality Objective (AQO) across all Air Quality Management Areas (AQMAs)
	Investigate options for demand responsive transport in the borough and implement a trial through external funding	To have prepared a funding bid to Government in the next available bus funding opportunity
	Launch a car sharing scheme for the Royal Borough	Provide a recommendation for a borough-wide scheme by December 2022 in line with the redevelopment of Maidenhead

continued overleaf

Invest in zero emission vehicle infrastructure	Increase electric vehicle charging capability and explore cycle charging in the Royal Borough	Identify a partner and funding model and roll out charging point infrastructure required to meet carbon reduction targets. Monitor progress through the council's annual monitoring report
		Parking supplementary planning document (SPD) to be adopted setting out standards for electric vehicle charging in new developments
	Set new emissions standards for taxis and buses	Incorporated as part of the new Local Transport Plan

## 5. Implementation

- 5.1 Our strategy has been developed in partnership with a range of stakeholders and we will continue to work with all stakeholders to make net zero carbon emissions by 2050 a reality.
- 5.2 Whilst this is the council's strategy and we take responsibility for leading on its delivery, it will only be successful through collaboration. It will take the combined efforts of business, industry, residents and community groups to make decarbonisation a reality and drive forward real change at the pace and scale that is required. We will look to examples of best practice from across the country to ensure a structure that is effective. There is also a substantive role for central Government and regional organisations such as the Thames Valley Berkshire Local Enterprise Partnership.
- 5.3 The strategy will be delivered through services across the council, co-ordinated through our sustainability team working with groups and organisations in different sectors. Responsibility for delivery will be split across council members portfolios. A detailed delivery plan will be prepared that sets out the programme for delivery of the action plan, with funding streams and key delivery partners identified.

## Our approach to prioritising actions

- 5.4 Actions will be evaluated against four criteria to determine their degree of priority and the order in which they will be carried out.
  - Criteria 1: Those with the highest potential to meet the aims set out in the strategy (e.g. contribute most to carbon reduction, contribute most to biodiversity net gain) will be prioritised.
  - Criteria 2: The opportunity for accessing external funds to carry out the action.
  - Criteria 3: The risks/costs of inaction.
  - Criteria 4: Compatibility with the council's capabilities, function and resources to deliver the action.

## Monitoring

- 5.5 An annual monitoring report will be prepared setting out the council's annual carbon emissions and the most recent BEIS data for the Royal Borough's carbon emissions. The report will also set out progress against our objectives and actions. This tool can be used collectively by the community that makes up the Royal Borough to understand performance against target. As part of our commitment to assess the carbon saving potential of actions (where feasible), we will be able to monitor individual projects for delivery against those set out at project initiation.
- 5.6 Performance will also be assessed against an updated carbon reduction trajectory to 2050, which will be published six months after this strategy has been approved by Full Council. It is expected the trajectory will comprise of emission reduction targets from 2025 to 2050 in five-year increments.
- 5.7 We will seek to review the strategy on a five-yearly basis with a new action plan and targets. We will also review the scope of emissions included in the target based on the latest Government guidance.

5.8 In addition to the five-year reviews, we will also conduct interim reviews after years one and three to ensure the action plans remain relevant. We will also track progress against the trajectory so we can measure success. This is to ensure we make the urgent progress required to tackle the environment and climate emergency.

## 5.9 Governance

- 5.10 The intention is that the cross-party Climate Steering Group will continue to oversee the development and delivery of the strategy. Delivery of projects will be integrated into existing governance structures such as our capital funding processes.
- 5.11 The steering group will be supported by a new Stakeholder Advisory Board that will meet on a bi-monthly basis to support monitoring and delivery of the action plans. The board will be made up of key community stakeholders covering each of the four strategic themes. This will provide the opportunity for knowledgeable and talented individuals from across the borough to challenge and review the action plans and make recommendations on changes to the action plans.
- 5.12 To reflect the interest and enthusiasm of young people throughout the strategy development period and especially during the public consultation, we would like to make young people community representatives on the Stakeholder Advisory Board to provide a platform to champion issues important to young people, and bring innovative ideas on how we can deliver the strategy in an inclusive, engaging way.
- 5.13 In addition, we will conduct a review of best practice governance and engagement models (used by other local authorities) and develop our governance structure in response to that, to make it fit for purpose.

## Funding

- 5.14 A challenge of this scale will require funding from central Government. The council will seek to make maximum use of any opportunities to bid for funding, including using its contract with Our Community Enterprise CIC. We will also continue to lobby Government to make available specific funding for local authorities to tackle the environmental and climate crisis.
- 5.15 The council will use a range of internal funding sources to develop and deliver its programme of activity where appropriate. This will include individual service revenue budgets, our capital programme and developer funding such as S106 funding and the community infrastructure levy.

## **Engagement and Communications**

5.16 We will capitalise on the eagerness people expressed in the public consultation to be involved with education/engagement of the wider public and explore the ideas raised in the consultation with respondents. We will promote the actions people are taking to tackle climate change too. Through the Stakeholder Advisory Board, we will work in conjunction with the resident community to deliver the strategy. For example, we will work with the 'Wilds' community groups to increase awareness of biodiversity and work with the plastic free community to increase awareness of single use plastic issues.

- 5.17 Engagement and communication initiatives and activities will form an essential part of the strategy delivery. We will:
  - Improve understanding of climate change impacts and strengthen our capabilities as a council to tackle it, as well as build support for the actions we take to tackle climate change. We will undertake an internal training programme on the carbon dioxide costs and impacts of everyday activities (known as carbon literacy training) to help achieve this goal.
  - Engage with key groups and organisations on the work that can be undertaken in partnership as we move forward.
  - Engage with residents and organisations on how they can contribute to the delivery of the strategy through the actions they take on a day-to-day basis.
  - Communicate progress on the delivery of the strategy on a regular basis.

## Appendix 1 – Council carbon emissions

Our carbon emissions inventory has been developed in accordance with the World Resources Institute GHG Protocol, the internationally recognised and established methodology for calculating organisational carbon footprints. The Royal Borough has taken an operational control approach to calculating its emissions.

Emissions represented include: direct emissions from sources controlled by the borough i.e. fuels consumed at council owned premises and from owned vehicles; emissions from purchased energy produced off site i.e. electricity; and other emissions produced indirectly i.e. mileage undertaken by staff travelling on business.

We commit to expanding the scope of our carbon footprint to include emissions produced indirectly because of our activities e.g. waste arising from council premises.

Electricity, gas and oil emissions arise from the following operations:

- Street lighting
- Corporate buildings
- Car parks
- Libraries
- Schools
- Parks, cemeteries and pumping station supplies
- Day care and community centres

Transport emissions arise from:

- The council fleet of pool cars;
- Mileage undertaken by staff travelling on business

Due to the fact they fall outside of our operational control, we will not be including the following:

- Leisure centres operated by a third party;
- Investment properties where we have no control over what activities are undertaken in the buildings;
- Emissions from contractors as they will be responsible for monitoring and managing their own emissions.

While these are considered out of scope for the council's own direct emissions, it should be noted that we recognise the need to do all we can and will work with procurement to look at ways we can contractually require our contractors/operators to tackle the climate emergency and reduce carbon emissions.

Carbon emissions calculated most recently represent the council's carbon baseline, against which future performance will be compared. They are set out here below:

Source	Emissions (tonnes of carbon dioxide emissions equivalent (tCO2e))
Gas	1,415 tCO2e
Oil	278 tCO2e
Transport	74 tCO2e
Electricity	2,818 tCO2e
Total	4,585 tCO2e

Data here has been calculated using 2018/19 consumption data provided by suppliers. Emissions factors are produced by the Department for Business, Energy and Industrial Strategy and are available here: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/847121/Conversion-Factors-2019-Condensed-set-for-most-users.xls</u>

If you have any queries or would like to discuss anything further, please contact sustainability@rbwm.gov.uk

