



July 2021

# Wokingham Borough Council Climate Emergency Action Plan

## Second Progress Report



# Contents

**Foreword**

**Introduction**

**The Changing Landscape**

**Overview and Scrutiny**

**A Year in Numbers**

**Current Emissions Profile**

**Targets and Estimated Carbon Savings**

**Wokingham Borough Council's Carbon Footprint as  
an Organisation**

**Climate Emergency Action Plan**

**Appendix 1. Data Sources**

**Appendix 2. Glossary**

**Appendix 3. Sustainable Development Goals**

**Appendix 4. Carbon Accounting Methodology &  
Assumptions**



## Foreword

The climate emergency we are facing is not just of our own making, it is the effect of all human created emissions throughout history. Today, we are at 1.2 degrees of warming and already witnessing unprecedented climate extremes and volatility in every region and on every continent. We are headed for a dramatic temperature rise of 3 to 5 degrees Celsius this century<sup>[1]</sup>.

This global warming trend stretches back many decades. The signs of an acceleration in warming are clear, 2020 was the hottest year on record so far, bookending the hottest decade worldwide<sup>[2]</sup>.

Our horizon for meaningful action is shrinking. Our climate and ecological emergencies are accelerating faster than expected, threatening humanity and the world's natural ecosystems. We are seeing an increased frequency and magnitude for extreme weather events from droughts, heatwaves, flooding, winter storms, hurricanes, and wildfires<sup>[3]</sup>.

Our future response must exceed the totality of our collective emissions. In October 2018, the Intergovernmental Panel on Climate Change (IPCC) report set out the dire consequences if humanity fails to limit warming to 1.5°C – on our health, economy and our lives. Effectively, the IPCC report said that the world had just 12 years to get a grip of the problem or face irreparable damage.

In response to this, The UK adopted The Paris Agreement in November 2016, and has committed to reduce greenhouse gas emissions by 100% by 2050. In April 2021, the government announced a new climate change commitment which will set the UK on course to cut carbon emissions by 78% by 2035. Today, over 300 District, County, Unitary & Metropolitan Councils have declared a Climate Emergency accounting for 74% of authorities in the UK<sup>[4]</sup>.

The COVID-19 pandemic global lockdowns have temporarily reduced emissions and pollution. But carbon dioxide levels are still at record high – and rising. In 2019, carbon dioxide levels reached 148 per cent of pre-industrial levels. In 2020, this upward trend has continued despite the pandemic, making the next decade critically important. As we overcome the pandemic, there is an opportunity to

reshape the world economy, transforming it into a mechanism for a sustainable future.

Over the last year, the UK Government has introduced more ambitious strategies to support the decarbonisation targets; while growing the economy and creating new, long-term green jobs. The Industrial Decarbonisation Strategy, The North Sea Transition Deal, The 10 Point Plan for a green industrial revolution, and The Energy White Paper aim to help the UK's trajectory towards meeting the new sixth Carbon Budget. At the same time UK Government has also announced its objective to end the sale of new petrol and diesel cars in the UK by 2030; and we are expecting to see the Transport Decarbonisation Plan and the Heating and Building Strategy over the next few months.

The strengthening of national climate policies over the last 12 months is a welcome development, however, there is still much more needed for the UK to successfully reach its target of net-zero emissions by 2050. The scale of the challenge is colossal, and everyone needs to play a role in tackling climate change, bringing together businesses, organisations and the public is vital to reach the climate change goals. The world as we know it is changing significantly, and we all have a responsibility to meet the challenge.

The cost of climate change action is outweighed by the significant benefits which will result from our actions, policies and investment. By taking action we will reduce pollution, generate fuel savings, enhance biodiversity, and support economic growth. Reaching net-zero will create jobs and trade but that transition to a green economy requires a workforce with the right skills - and that is also a problem we face.

<sup>[1]</sup> State of the Planet speech, United Nations Secretary General Antonio Guterres. December 2020

<sup>[2]</sup> [World Meteorological Organisation](#)

<sup>[3]</sup> [Facts about the Climate Emergency. UN Environment Programme](#)

<sup>[4]</sup> <https://www.climateemergency.uk/blog/list-of-councils/>

## Introduction

In response to the rising concern over the urgent need for action, in July 2019, Wokingham Borough Council members unanimously declared a climate emergency. The declaration set out the commitment to play as full a role as possible, leading by example as well as by exhortation, in achieving a carbon neutral Wokingham Borough by 2030. Subsequently, in January 2020, the council published its first Climate Emergency Action Plan, establishing the eight key priority areas to focus on for reducing CO<sub>2</sub>.

In July 2020, an annual report was presented to Council which detailed targets and actions that needed to be undertaken to reach the 2030 net-zero carbon target. In order to quantify the magnitude of the challenge and the level of commitment needed, we used trajectories and best estimates to quantify the carbon savings generated by the delivery of the actions and achieving the proposed targets. A short fall of 67.18 ktCO<sub>2</sub>e was identified, which provides a clear picture for the scale of the approach that is needed.

This Climate Emergency Action Plan Second Progress Report presents a costed-up action plan with carbon saving targets against individual projects, where possible. The report summarises the Borough's plans for the years ahead and demonstrates the benefits of becoming net zero. These actions will be delivered over the next ten years; however, some actions will be delivered sooner than others, and carbon savings will be achieved following the implementation of each target and in some cases further down the line.

Most of the actions to be delivered over the first few years set in motion the groundwork and foundations for new strategies and policies that will influence our way of life locally. The biggest gains are expected to come towards the end of the decade after most of the actions have come to fruition. Short term actions can be achieved within two or three years (2020-2023), medium term actions are designed to take several years to reach fulfilment (2024 to 2028), and longer-term actions will take many years to come to fruition (2028 to 2030).

Despite the Council's best efforts, the achievement of the targets established by this action plan relies on the engagement and support of our residents, communities, local towns and parish councils, and local businesses. These partners will not only help us to deliver but will take the responsibility for achieving targets to help close the gap.

We need to be agile to a dynamic landscape and anticipate that new actions and initiatives will be introduced over the coming years, which will enable us to close the shortfall identified. Targets and actions within this plan will change and develop over time. It is equally possible that expectations may have to be revised downwards. Therefore, the Council has committed to continually revisit targets, to tweak, adjust or even entirely re-evaluate them in line with actual progress, new policies, and global events that might affect the climate emergency agenda.

Furthermore, the council recognises the importance of the United Nations' SDGs and aligned the key areas of action within the Climate Emergency Action Plan to the SDG framework. In doing so, the council hopes to ensure that its actions contribute to global level action and lead to a socially just response to tackling climate change.

To ensure we are on track to reach these goals and that each project is working effectively, they will each be closely monitored, with a RAG rating system in place to provide clarity. Here each target has been assigned a colour based on the standard RAG system, where green represents being on track to being achieved, yellow indicates currently being slightly delayed or being depending on delivery of previous milestones, red indicates being delayed or cancelled and grey means it has not yet been started.

The annual climate emergency progress report will be published each year in July.

## The Changing Landscape

The last twelve months have been volatile, and although we have seen much disruption it has brought opportunities for change. It has sped up innovation in working practices and it has created greater focus on technology and the financial systems that underpin society. We have been compelled to adopt new behaviours, which have influenced the way we see the future and what is possible. A summary of these events and how they affect the climate emergency response is outlined below:

### Coronavirus - COVID 19 Global Pandemic

The pandemic has caused global social and economic disruption, dramatic loss to human life worldwide, unprecedented challenges to public health, food systems and the world of work in addition to the largest global recession since the Great Depression, according to the International Monetary Fund (IMF). However, one rare positive to emerge from the periods of lockdown in 2020 and 2021 has been a drop in global greenhouse gas emissions and improvements to air quality, primarily because of a significant reduction in transport. The pandemic is the biggest shock to the global energy system, with annual predicted decline in carbon emissions of almost 8%.

In Wokingham, changes to the way we work, and travel will pose challenges and opportunities as we transition to net zero. More home working will mean lower emissions from road transport, but higher emissions from our homes, as we heat and cool many different working spaces over the summer and winter months. Increased walking and cycling will bring many benefits to the environment and public health, but the shift from public transport to private cars can have a negative medium-term impact.

The pandemic's long-term effect on individual behaviours, economic activity and energy use around the world are unclear. However, one thing that is certain is that more large-scale actions are essential to avoid the worst impacts of climate change.

### Green Economy

The recovery from the coronavirus has been framed as a green recovery by the UK government which has committed £11 billion of subsidies. The green recovery focuses on policies which will benefit the economy as well as the planet and will require reforms in several sectors. The UK public overwhelmingly supports a green recovery with nearly 75% saying that this is a once-in-a-lifetime opportunity to tackle climate change.

In July 2020, Mr Johnson announced that UK industry would receive around £350 million to cut down carbon emissions under new plans to step up efforts to tackle climate change.<sup>[1]</sup> The package of funding is targeted at the heavy industry, construction, space and transport sectors by helping businesses to decarbonise across these sectors and secure the UK's place at the forefront of green innovation.

### Ten Point Plan for a Green Industrial Revolution

With the key objectives of Building Back Better, supporting green jobs and accelerating the UK's path to net zero, the Government's 10-point plan committed to mobilise £12 billion of government spending and up to £42 billion in private sector investment to create 250,000 green jobs. The plan introduced several upcoming policy documents such as the Energy White Paper, the National Bus Strategy and the England Tree Strategy. The ten points cover plans to advance renewable energy production, invest in more sustainable transport options, retrofitting buildings, investing in carbon capture, usage, and storage (CCUS) as well as protecting our natural environment.

### The Ban on the Sale of New Petrol and Diesel Vehicles

In November 2020, the Government announced the end of the sale of new petrol and diesel cars in the UK by 2030. The 2-phased approach will see the phase-out date for the sale of new petrol and diesel cars and vans brought forward to 2030 and a target for all new cars and vans to be fully zero emission at the tailpipe from 2035.

Between 2030 and 2035, new cars and vans can be sold if they have the capability to drive a significant distance with zero emissions (for example, plug-in hybrids or full hybrids), and this will be defined through consultation.



### **The Sixth Carbon Budget Report**

On the 9<sup>th</sup> of December 2020, the UK Climate Change Committee released its Sixth Carbon Budget report which included several subset reports and recommendations. The report identifies how local authorities can support the implementation of the Sixth Carbon Budget through the following core areas of delivery: Buildings, Transport, Waste, Electricity Generation, Land use, Land-use change and Forestry and Agriculture.

Local authorities have a range of existing levers that can be used to deliver local action that reduces emissions and prepares local areas to a changing climate. However, these levers alone are unlikely to be sufficient to deliver local authorities' Net Zero ambitions, due to gaps in powers, policy and funding barriers, and a lack of capacity and skills at a local level.

The Climate Change Committee (CCC) published an accompanying report on the role of local authorities in delivering the UK's Net Zero ambition. The report aims to provide a framework for aligning climate action at the local level with the CCC's pathways for the UK, as well as recommendations for local, regional and national Governments aiming to remove barriers to delivering local climate action in the UK.

### **Future Homes Standards**

The Government responded to a consultation on the Future Home Standards to ensure the ability for Local Plans, the document which sets out a council's planning policy, to set higher energy performance standards for all new homes. The government has set out plans to radically improve the energy performance of new homes, with low carbon heating and be zero carbon ready by 2025.

These homes are expected to produce 75-80% lower carbon emissions compared to current levels. To ensure industry is ready to meet the new standards by 2025, new homes will be expected to produce 31% lower carbon emissions from 2021. Existing homes will also be subject to higher standards – with a significant improvement on the standard for extensions, making homes warmer and reducing bills.

### **Environment Bill**

Most of the UK's environmental laws are derived from the EU environmental framework which is renowned as one of the strongest in the world. The

Environment Bill, currently going through Parliament, will bring new environmental legislation aimed at filling the governance gap created by Brexit.

The Environment Bill brings about urgent and meaningful action to combat the environmental and climate crises we are facing and acts as a key vehicle for delivering the bold vision set out in the 25 Year Environment Plan. It will support the country's desire to build back better after Covid-19 with measures that support both economic growth and the government's manifesto.

### **The Energy White Paper**

In December 2020, The Government published The Energy White Paper that sets the wider stage for the net-zero target and marks the start of a critical period that will see the government launch numerous consultations and strategies ahead of hosting the COP26 climate summit later this year.

The paper sets out the changes which will be required to transform our energy system, promoting high-skilled jobs and clean, resilient economic growth as the UK delivers net-zero emissions by 2050. We will reduce emissions through shifting from gas to electricity to heat our homes and by better insulating the buildings in which we live and work.

Our experiences as energy consumers will be very different. Smart technologies are revolutionising how we can engage the market. Smart meters and a range of smart appliances, backed by new smart tariffs, will give us control about how we use energy and help us manage our bills – running the washing machine or charging the electric vehicle when demand is low and electricity is cheap, even selling surplus power back to the grid at a profit.

### **Bus Back Better**

The National Bus Strategy for England was published in March 2021, this established the importance to shift back from private vehicle to bus quickly following the COVID 19 Pandemic recovery. The strategy commits to provide funding to support improvements to the quantity and quality of the service and establishes the need for partnerships between local councils and bus operators to deliver The Local Bus Service Improvement Plans.

### **The 26<sup>th</sup> UN Climate Change Conference of the Parties (COP 26)**

The UK will host the COP26 in Glasgow in November 2021. The summit will bring parties together to accelerate action towards the goals of the Paris Agreement and the UN Framework Convention on Climate Change. The aims of the negotiations are to accelerate action to reduce emissions, strengthen adaptation and resilience to climate impacts and scale up finance and support.

## **Oversight and Scrutiny**

### **Task & Finish Group for Climate Emergency**

In order to scrutinise the Action Plan, the Overview and Scrutiny Management Committee established the Task and Finish Group at its meeting in February 2020. The Task and Finish Group focused on scrutinising the emerging targets and key performance indicators underpinning the Action Plan. The Group has made 14 recommendations to the Council on ways to help to strengthen the Action Plan, making it more robust, transparent and evidence based.

The Council used this extensive input as the basis for further work focused in particular on our approach to enable the engagement of residents and key stakeholders across the Borough, as well as to clarify the impact of specific schemes and ensure that they were supported by SMART targets.

The Council published response to the Scrutiny Review to set out our underlying thinking about our current vision and strategy, outline what we intend to do and explain how the group's recommendations further our vision.

The Overview and Scrutiny Management Committee: Climate Emergency Task and Finish Group Report and Recommendations paper (September 2020) can be found [here](#). The Council Commentary and Response to Recommendations (October 2020) can be found [here](#).

### **Auditing and Reporting**

The council is constantly seeking to ensure the accuracy and quality of the information in the action plan, and that our response to climate change is as robust as it can be. To this end, we are exploring internal audit as well as different assessment and reporting frameworks to allow us to benchmark with other organisations.

<sup>[1]</sup> <https://www.gov.uk/government/news/pm-commits-350-million-to-fuel-green-recovery>

# A YEAR IN NUMBERS



## TRANSPORT

As a result of the government ban on non-essential travel and rise in home working

31%

Decrease in car use

44,930.85 tonnes of CO<sub>2</sub>

saved this year

Nitrogen Dioxide emissions reduction

in Peach Street and at Twyford crossroads compared to the year before

56% reduction

Of the council's carbon footprint resulted from changes to our way of working.



## PARK AND RIDE PROJECTS

Constructions started for Winnersh Triangle and Coppid Beach in March this year

Greenways and Public Rights of Way schemes

Route B

Section one (Cantley Park) completed

Section C & D, Loddon

in discussion with landowners

California Way

extra linking paths completed



## CYCLING TRAINING

325

residents received cycle training

238

Residents took part in Cycle September –

41,261

during Cycle September

5

Adults received cycling training

74

bikes serviced by Dr Bike



## ELECTRIC VEHICLES

New charging points installed at

- Matthews Green School
- Arborfield School
- Bulmershe Leisure Centre
- Elms Field



## RENEWABLE ENERGY

First Solar Farm

In planning application will generate 32MWh's a year and has the potential to save around 6,325 t CO<sub>2</sub> per year when compared to using traditional fossil fuels



## WALKING AND CYCLING

Trails were introduced throughout the borough using posters and QR trails at Hunt for Hound activities at California Country Park, Buckhurst Meadows, Wokingham Without and Arborfield Croft Gardens at Shinfield



## WOKINGHAM COMMUNITY ENERGY

The scheme will encourage sustainable energy projects, allow residents and local organisations to invest in green energy and help tackle the climate emergency



# A YEAR IN NUMBERS



## RETROFITTING BUILDINGS

500

buildings retrofitted

280 tonnes of CO<sup>2</sup>

potential annual savings

Through the Energy Company Obligation (ECO) and Green Homes Grant Scheme

## 9 Retrofit projects in schools

LED lighting, heating replacement and loft insulation

## Woodley Library & Household

Are two pilot projects to improve energy efficiency. This will inform future works



## CARBON SEQUESTRATION

250,000 trees

to be planted

£300,000

secured through the emergency tree fund



## NEW DEVELOPMENT

Dinton Activity Centre is the first net zero carbon building in the borough

The Local Plan Update (LPU) will introduce net zero carbon policies



## WASTE & RECYCLING

5,634 tonnes

recycled over the last year

15,502 tCO<sup>2</sup>

saved as a result

This equates to  
221.4 kgCO<sup>2</sup>  
per household



## SUSTAINABLE SCHOOLS

5,600+ views

The video series of the Youth Climate Conference was delivered online in October

6 Schools

are part of an air quality project and installed diffusion tubes to monitor pollution levels



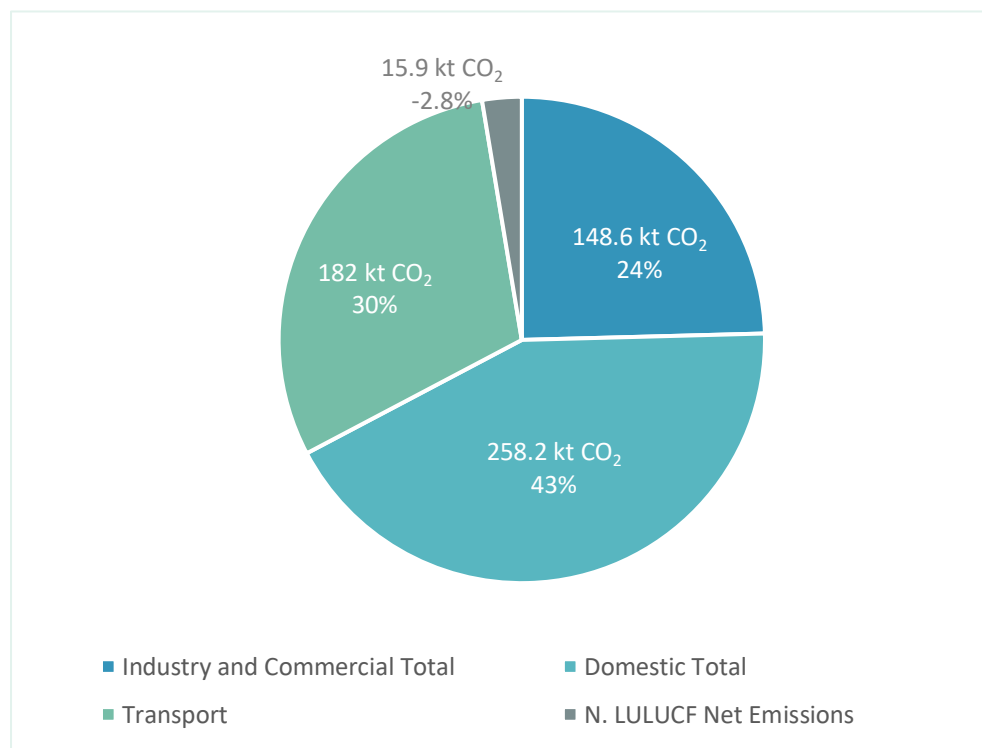
## BEHAVIOURAL CHANGE

First virtual event with businesses. 'Climate Conversations' focussed on the road to decarbonisation

Working in collaboration with our town and parish councils to identify and deliver carbon reduction projects



## Current Emissions Profile



**Figure 1.** Wokingham Borough Carbon Footprint 2018 (ktCO<sub>2</sub>)

Wokingham Borough's carbon footprint is **573 ktCO<sub>2</sub>** as seen in Figure 1. This is based on government data and reported two years in arrears (BEIS 2019)<sup>1</sup>. This is comprised of transport emissions (31.8%), emissions from the industrial and commercial sector (25.9%), and domestic sector emissions (43%).

**Residential Buildings** emissions are the greatest single contributor to Wokingham's carbon footprint accounting for 258.2 ktCO<sub>2</sub>. Of these, 71.47 ktCO<sub>2</sub>

account for domestic electricity, 177.23 ktCO<sub>2</sub> for domestic gas usage and 10.17 ktCO<sub>2</sub> for usage of other fuels.

**Transport** emissions contribute to 182 ktCO<sub>2</sub>. A roads account 84.6 ktCO<sub>2</sub>, minor roads 88.7 ktCO<sub>2</sub>, other transport modes 8.7 ktCO<sub>2</sub>.

This figure excludes sectors that are completely beyond the council's scope of influence. For example, the emissions from major transport links (M4) (172.8 ktCO<sub>2</sub>) as well as diesel rail transport (12.8 ktCO<sub>2</sub>), which are managed by Highways England and national rail companies, respectively.

**Industrial and commercial Buildings and Operations** - Emissions from energy and fuel use in industrial and commercial buildings contributes to 148.6 ktCO<sub>2</sub> per year as follows: electricity 86.8 ktCO<sub>2</sub>, gas 40.7 ktCO<sub>2</sub>, large industrial installations 0.01 ktCO<sub>2</sub>, agriculture 4.1 ktCO<sub>2</sub>, and other fuels 17.1 ktCO<sub>2</sub>.

**Carbon sequestration** in the Borough accounts for 15.9 ktCO<sub>2</sub> a year through forestry and natural land use (LULUCF), which is around 2.8% of the Borough's carbon footprint.

### How we measure carbon emissions:

The Greenhouse Gas Protocol provides a global standardised framework to measure and manage emissions. To distinguish between emissions occurring inside and outside the borough's boundary resulting from activities within Wokingham, emissions are divided into three categories: scope 1, 2 and 3.

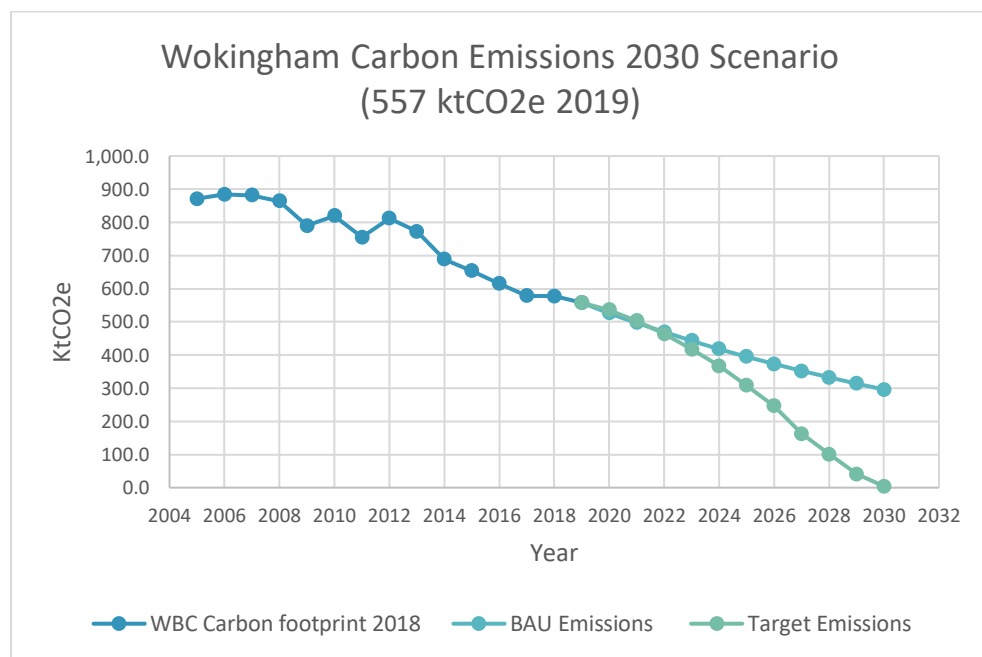
**Scope 1:** Emissions associated with combustion of fuels directly by a consumer. Within Wokingham this mainly refers to gas use for heating, cooking and hot water, and petrol/diesel used by vehicles whilst they are on the Borough's roads.

**Scope 2:** Energy which is purchased from elsewhere but used by a consumer. Within Wokingham this means the electricity used in the borough. The emissions are created at power stations located outside of Wokingham, but the electricity is used within the borough supplied via the electricity grid.

<sup>1</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2017

**Scope 3:** Emissions resulting from the behaviour and activity of a consumer but occurring from sources outside of their control. Within Wokingham these are the emissions from the food we eat, products we buy, our travel outside the borough, etc. Measuring these emissions is particularly complex as they are often a combination of scope 1 and 2 emissions in other locations. These emissions are out of the scope of the Borough's carbon footprint. However, the council will support behavioural change through the actions in this plan.

### Carbon Trajectory for Wokingham



**Figure 2.** Projection of current rate reduction of carbon dioxide emissions to 2030 in Wokingham Borough

The trajectory of carbon emissions for Wokingham Borough have been steadily decreasing since 2012. This is partly due to Central Government targets to increase the renewable energy infrastructure nationally resulting in a higher proportion of

renewable energy feeding into the electricity supply, and technological advances leading to greater energy efficiency.

Assuming that there is minimal action beyond current, national policy and nationally led decarbonisation of the electricity grid and transport through electric vehicles, the estimated carbon emissions by 2030 will be approximately **291.16ktCO<sub>2</sub>**. This figure excludes the carbon sequestration levels for the Borough that could potentially increase by -16.71ktCO<sub>2</sub>, providing a predicted carbon footprint of **274.45 ktCO<sub>2</sub>**.

The projected carbon emissions by 2030 have been calculated following an extrapolation of the data provided by BEIS. The method used was an extension of the behaviour of the carbon dioxide emissions recorded from 2007 up to 2017 for Wokingham Borough (data is published two years on arrears).

The overall picture is needed to help us understand the extent of the response required, however, this is classified as experimental statistics because of inherent uncertainties in the estimation of CO<sub>2</sub> emissions. We used available tools to local authorities such as the Tyndall report and the Scatter Tool to build scenarios that help to understand the uncertainties and key elements that will affect emissions in the future. The methodology is subject to ongoing review and refinement.

The CCC report does not recommend that local authorities are set binding carbon budgets due to the range of factors affecting local emissions that are beyond their direct control. However, it does recommend that local authorities consider Net Zero action plans for their own emissions and that they work in partnership to reduce area wide emissions<sup>2</sup>.

The latest government policies introduce new commitments which may influence the BAU scenario should they be successfully implemented, for example, the increase of renewable energy generation from offshore windfarms. The trajectory of carbon emissions will be reviewed once full details over expected savings are made available.

<sup>2</sup> Local Authorities and the sixth carbon budget. Climate Change Committee. December 2020  
Wokingham Borough Council - Climate Emergency Action Plan - Working Document



## Targets and Estimated Carbon Savings

This action plan establishes targets to achieve carbon dioxide reductions in the identified priority areas. These focus on tackling emissions from transport, energy and gas usage in domestic properties, generating renewable energy, planting more trees and other green foliage, encourage more recycling and encouraging behavioural change.

The carbon savings outlined by each target are the cumulative savings for all the action in that target for the next ten years. Some of these targets will not directly represent carbon savings but are essential to the delivery of the other targets; these are identified as 'Neutral' in the carbon saving column.

TR	Transport	tCO <sub>2</sub> e
1	Deliver a greenway network of over 37 Km across the Borough by 2030 with the ambition to deliver 60 Km by 2036	4.34
2	Double public transport use by 2030 from 2019 baseline	3879.86
3	20% reduction in total distance travelled in private vehicles per individual per year by 2030.	29302.50
4	The use of all cars, vans and motorbikes as a mode of transport decreases from 74% (current national/borough average) total miles to 56% in 2030	26372.56
5	Leading by example - Reduce by 70% CO <sub>2</sub> emissions produced by council related travel by 2030	680.18
6	Continue research and innovation programmes for the reduction of CO <sub>2</sub>	2898.77
EV	Electric Vehicles	tCO <sub>2</sub> e
7	50% Electric Vehicles (EVs) registered in the Borough by 2030.	45,000
8	Council's car fleet becomes entirely ultra-low emission by 2028.	45.2
9	100% new buildings are EV ready from 2022	Neutral
AQ	Air Quality	tCO <sub>2</sub>

10	Reduce NO <sub>2</sub> concentration by 50% against 2019 baseline in the three AQ management areas by 2025	Neutral
11	Educate the public on how they can actively improve air quality whilst reducing carbon emissions	Neutral
Estimated Total Carbon Savings		103,623.37

The above figures are best estimates.

RE	Renewable Energy Generation in Council's owned assets	tCO <sub>2</sub>
12	Increase the generation of renewable energy through investment in solar farms to power the equivalent of 25,000 homes within the Borough by 2030.	25,560
13	Increased renewable energy generation to generate equivalent to 1550 kWh per household in 2030	27,333.46
Estimated Total Carbon Savings		-52,893.46

The -52,893.46 tCO<sub>2</sub>e carbon savings from renewable energy generation are expressed as negative emissions.

RT	Retrofitting existing and council development	tCO <sub>2</sub>
14	By 2028 All council buildings to be retrofitted to carbon neutral standards	6,612.30
15	By 2029 all local schools to be retrofitted	5,034.08
RH	Retrofitting Households	tCO <sub>2</sub>
16	By 2030, 20% of all houses in the borough to be retrofitted	35,446.0
Estimated Total Carbon Savings		47,092.38

CS	Carbon Sequestration	tCO <sub>2</sub>
17	Plant 250,000 trees throughout the Borough by 2025 saving 3.5 ktCO <sub>2</sub> per annum	3,500
18	Carbon sequestration by design - improving carbon sequestration rates in future land management decisions, approximately 0.5 ktCO <sub>2</sub> e savings	620
19	Transition to low intensity (high carbon sequestration) land management approximately 0.05 ktCO <sub>2</sub> e savings per annum	224

20	Implement a programme of carbon sequestration opportunities	Neutral
	Estimated Total Carbon Savings	-4,344

The -4,344 tCO<sub>2</sub>e carbon savings from carbon sequestration targets are expressed as negative emissions because they generate carbon dioxide removal.

SY	Schools and Young People	tCO <sub>2</sub> e
21	Encourage and support school children in the Borough to take an active role in reducing carbon emissions	153.06
22	Celebrate schools' achievements in climate emergency initiatives and inspire the future generations	0.34
	Estimated Total Carbon Savings	153.4

Estimated CO<sub>2</sub> savings from engagement targets with schools have been reduced on last year's estimates by 79%. This is to be in line with the consumption-based UK carbon footprint which states that only 21% of all greenhouse gas emissions are from direct sources and therefore within our scope of influence. Only direct emissions can be categorised as savings against Wokingham Borough's carbon footprint, as defined above. This also ensures less risk of double counting of carbon savings from other sections of the action plan whilst recognising that behaviour change encouraged through engagement may result in an accelerated shift reach other targets within this plan.

WR	Waste & Recycling	tCO <sub>2</sub> e
23	Recover 80% recycling in the form of wet paper by October 2021	5,188.67
24	Achieve 70% recycling target by 2030	9,618.23
25	Zero waste going to landfill by 2050	8,944.74
	Estimated Total Carbon Savings	23,751.64

**Waste generation** & recycling related carbon emissions are not included in the BEIS datasets and are out of scopes 1 and 2. Hence, the savings are not included in the overall totals, but demonstrate the potential savings from such measures and their continued importance overall.

ND	New Development	tCO <sub>2</sub>
26	Towards the end of 2023, major residential development to be designed and built to achieve carbon neutrality	Neutral
27	From 2023, major non-residential development to be designed and built to achieve the BREEAM excellent standard	Neutral
28	Establish a spatial strategy and design framework which promotes active and sustainable travel, sustainable design and construction and enables biodiversity gain	Neutral
29	Support low carbon and renewable energy generation	Neutral
30	From 2023, all new residential and non-residential buildings to be designed and built to be EV ready	Neutral
31	From 2021 100% council new development is built to carbon neutral standards	Neutral
	Estimated Total Carbon Savings	Neutral

It is imperative that new homes in the council must be built to be low-carbon, energy and water efficient and climate resilient. Building new homes to net-zero carbon standards will not generate carbon savings: however, it will stop new carbon dioxide emissions being generated. New development targets are therefore preventative targets.

	Procurement	tCO <sub>2</sub>
32	By 2022, achieve sustainable procurement practice throughout the Council as part of Corporate Procurement Strategy	Neutral
33	By 2023, the Council will consider social value in all its procurement cycles	Neutral
	Estimated Total Carbon Savings	Neutral

It is essential that the council procurement and decision-making policies and procedures establish requirements for a low-carbon economy. Addressing the carbon emissions from our decision-making process and the supplier chain would contribute to the reduction of carbon emissions embedded in the council

operations, as this will stop new carbon dioxide from being generated. Procurement targets are therefore preventative targets.

C&E	Engagement and Behavioural Change	tCO <sub>2</sub>
34	Raise awareness in the community about the climate emergency agenda	Neutral
	Estimated Total Carbon Savings	Neutral

Engagement and behavioural change targets support the delivery of the climate emergency action plan. There is great need for significant changes to our consumption and behaviour patterns. Through active engagement programmes we plan to encourage our residents to be part of this change; their buy-in to this plan is crucial in achieving a net-zero Borough by 2030.

### Balancing the carbon savings

It is predicted that when all the actions in the plan have been implemented, the Borough will still fall short of its carbon zero target by 2030 by **67.18 ktCO<sub>2</sub>**. This figure has been balanced by accounting for renewable energy generation estimate of **-52.8 ktCO<sub>2</sub>** and the increase of carbon sequestration estimated to be **-4.5 ktCO<sub>2</sub>**.

We anticipate that new actions and initiatives will be introduced over the coming years, which will enable us to close the shortfall identified.

Because we are working ten years in advance, these targets are best estimates with the information we currently have. There is also an assumption that national policy will reduce carbon emissions to **274.45 ktCO<sub>2</sub>**. There is always a risk that these policies do not take place as anticipated.

### Considerations for the Delivery of the Action Plan

As more information becomes available, we will continually update the targets and actions within this action plan. The council is committed to play as full a role as possible, leading by example as well as by exhortation, in achieving a carbon neutral Wokingham Borough by 2030.

Not all carbon savings for all the projects listed in this plan have been calculated, as some of the information is not available yet. As projects develop, we will be able to give more information on carbon savings per individual actions.

This action plan is a predictive tool that allows us to understand generally, where we are heading and to implement new actions accordingly. Without this tool, we would not have a clear path on what the scale of the approach should be.

In an uncertain world, this plan has the potential to be affected by major global, national and local events. There is an appreciation that the council must be agile in how it responds to the climate emergency in order to fulfil its ambition of zero carbon Borough by 2030.

### Wokingham Borough Council Control and Influence

While Wokingham Borough Council has already established a strong track record for delivery on actions to address climate change, the Council's influence is varied and complex across the different activities that occur within their own operations and also within the Borough.

Wokingham Borough Council itself is only a small emitter in terms of the borough's emissions as a whole. In 2019/20 the Council emitted an estimated 11,156 tonnes of CO<sub>2</sub>. That represents around 1.45% of the approximately tonnes of CO<sub>2</sub>e from the Borough as a whole.

The Council's statutory powers and responsibilities are important levers to reduce emissions in the Borough. But these powers are limited when considering how to reach net zero across buildings, transport, and industry, meaning that partnership and collaboration – and the Council's role as an influencer and convenor – will be vital for the successful delivery of this plan.

More than half of the emissions cuts needed rely on people and businesses taking up low-carbon solutions - decisions that are made at a local and individual level. Many of these decisions depend on having supporting infrastructure and systems in place. Local authorities have powers or influence over roughly a third of emissions in their local areas.



## Consumption Based Emissions

These are emissions that extend beyond the Borough's boundary, whereby demand (and supply) of goods and services will be driving emissions in supply chains around the world. Research suggests that imports from abroad could represent a further 45% of GHG emissions (relative to the UK produced emissions totals).

We - the community - need to recognise the damage we cause through the goods we consume. Between 2017 and 2018, the UK's carbon footprint is estimated to have risen by 1 per cent. This slight increase reflects some increase in household heating and an increase in goods imported. However, not everything is bad news. In 2018, emissions relating to the consumption of goods and services produced in the UK were 37 per cent lower than in 1997.<sup>3</sup>

The Committee on Climate Change (CCC) is set to broaden its reporting to include all of the UK's emissions from 2033, incorporating those caused internationally by the country in the production and transportation of goods and services.

## Challenges & Opportunities

### Availability of resources, financial and otherwise, to meet the climate crisis.

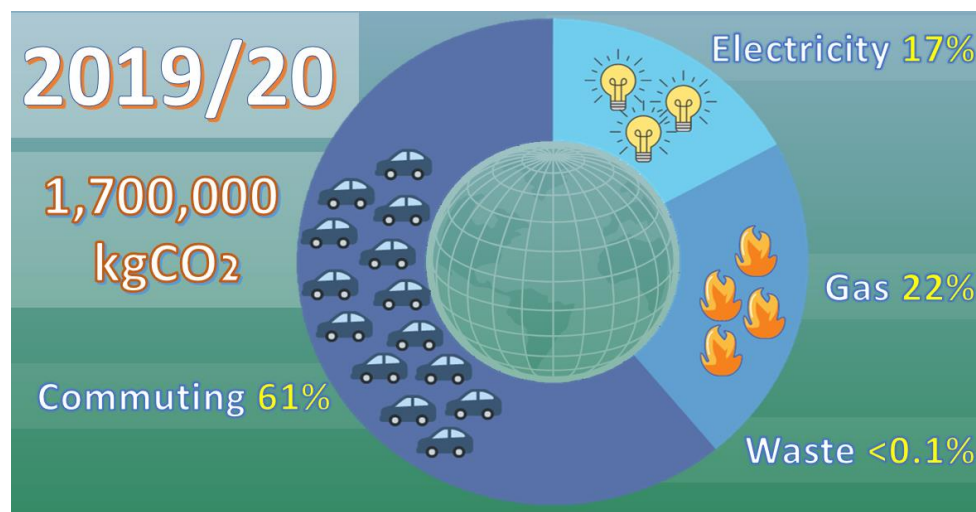
Local government has seen a very significant impact on its finances as a result of additional costs and lost income throughout the COVID-19 pandemic.

There is a risk that, despite our commitment to climate goals, projects may be delayed in favour of delivering core statutory duties. Local authorities require sufficient funding to increase their skills and capacity to deliver the project pipeline for Net Zero.

Nevertheless, there is an opportunity to ensure that all of our investments – to enable an inclusive economy, support thriving communities and deliver more, affordable housing – will deliver environmental co-benefits and support the transition to a net-zero carbon Borough.

The Council itself seeks to benefit from sustainable and low carbon revenue streams and there will be new opportunities to work with the Government and private sector on pilot projects, crowdfunding, grants and loans or joint projects.

## Wokingham Borough Council's Carbon Footprint as an Organisation



Wokingham Borough Council is working to meet our priority to provide a clean and green borough for our residents. This includes making improvements and changes to the way we work on a journey to becoming a net zero carbon organisation.

Since 2019, officers from across Wokingham Borough Council who are interested in driving sustainable shifts in the council as a workplace, have created the Green Team. In March 2021, the Green Team completed a report which estimated the council's carbon footprint as an organisation, from energy used and waste

<sup>3</sup> UK's Carbon Footprint 1997 – 2018, DEFRA

produced at office buildings as well as from staff commuting and how this has changed since the shift to majority home working since March 2020.

It was estimated that the 2019/20 carbon footprint was 1,700,000 KgCO<sub>2</sub> (1.7 ktCO<sub>2</sub>). The main contributor was CO<sub>2</sub> emission from commuting to and from work (61%) followed by gas consumption (22%), electricity consumption (17%) and finally emission from waste produced (0.1%).

Data was also gathered from the 2020/21 year, and this showed that changes to our way of working has reduced the Wokingham Borough Council carbon footprint by an estimated 56%. This was mostly due to a huge decrease in emissions from commuting which decreased by 87%, making gas emissions the largest emitting sector of our new and current carbon footprint.

The above is an estimation and is subject to change with improved data collection in years to come. Going forward, this annual report will help to set the tone for any discussion of the WBC estate and facilities, especially as colleagues return to work and adapt to a new way of working once again.

For this comparison report, information for energy consumption and waste tonnage was based on the most up to date information from the council's two biggest office sites which house the majority of staff. Please note that total energy consumption from all corporate sites produces 7,098 tCO<sub>2</sub> per annum from electricity and a further 4,058 tCO<sub>2</sub> per annum from Gas. This total carbon footprint (11,156 tCO<sub>2</sub>) accounts for 1.45% of the total Borough's footprint. The council aims to continue to reduce these emissions by improving energy efficiency and increasing renewable energy generation to become a net zero carbon organisation by 2030.

The targets specifically aimed at reducing council owned CO<sub>2</sub> emissions from operating as a workplace are:

## **Transport**

The council wants to lead by example when reducing carbon emissions from transport, target 5 aims at reducing 70% of CO<sub>2</sub> emissions produced by council

related travel by 2030 by promoting home working, remote working and reducing miles produced by council staff. Target 8 aims to transition the council's vehicle fleet to ultra-low emission by 2028.

## **Buildings & Energy**

The council is delivering a retrofitting programme and aims to retrofit all council buildings to improve their energy performance and achieve carbon neutral standards, where possible, by 2028 (target 14). Additionally, the council aims at installing renewable energy installations in its buildings when feasible.

## **Procurement**

The council is committed to achieve sustainable procurement practice throughout our operations and, as part of Corporate Procurement Strategy, to consider social value in all its procurement cycles. This is reflected in targets 32 and 33 and related actions.

## **Engagement and Behavioural Change**

Target 34.6 establishes the council's commitment to support changes in work practices and behavioural change amongst council staff.





# Climate Emergency Action Plan



## Transport

### Carbon savings:

Being one of the key sectors which contributes towards emissions in the borough, transport targets remain a priority for the council, with significant progress being made in a number of areas. However, the delivery of many projects has been massively affected and temporarily delayed in many cases, due to the impact of the Covid-19 pandemic.

Indeed, planned infrastructure work, changes and delivering training has been difficult during the past year, while policy changes to discourage public transport use and limit users in this period has led to sharp decline in numbers using these services. While these have begun to recover as restrictions are eased, they remain very uncertain along many other projects. Overall, this means much of the progress is temporarily halted (unless otherwise stated) while the potential implications of Covid-19 are assessed, to ensure the correct direction is taken following the scale of changes to working and transport patterns on the whole. Fortunately, despite these difficulties many programs were still able to be run successfully, and as a result of the government ban on non-essential travel and resulting rise in home working, there was a 31% decrease in car-use, leading savings of 44,930.85 tCO<sub>2</sub>e being achieved this year.

### Key achievements

- The two Park and Ride projects for Winnersh Triangle and Coppid Beach have planning permission and work started in March 2021.
- Great progress made in the delivery of our green ways and PRoW schemes, 75% of **Route B** has been agreed. **Route C** started its first trench of construction and **Route D** of The Loddon Distance is moving forward following very positive response from landowners.
- 320 children received cycling training sessions, Five adult cycle training sessions were delivered, and 74 bikes received support from Dr Bike.
- The adult bike loan scheme continues to facilitate bikes to residents that do not own a bike. The scheme was extended to keyworkers.
- Cycle September saw 238 residents taking part, 63% up on last year. A combined 41,261 miles were cycled and in total, 1,305lbs of CO<sub>2</sub> was saved if those miles have been driven.

- Online activities and resources for Bikeability and road safety available
- Walking and cycling trails were introduced throughout the Borough using posters and QR trails at Hunt for Hound activities at California Country Park, Buckhurst Meadows, Wokingham Without and Arborfield, Croft Gardens at Shinfield.

### Our Partners

For each target, the council has engaged with partners to ensure these are incorporated into existing plans and maximising their potential for success. Towns & parish councils, local bus companies, residents, schools, local businesses and consultants/subcontractors are key for the delivery of this plan.

Behavioural change is vital to producing the carbon savings associated with the actions listed below. Engagement with the stakeholders listed above will be key to the uptake in use of new and improved infrastructure such as greenways and bus services to reduce reliance on private vehicles and encourage a modal shift in the way we travel around the borough.

### Consumption Emissions

The only element of consumption within this sector would come from the initial purchase of a vehicle, which does not fall within our scope. Fuel is accounted for directly within scope 1 emissions.

### Future Opportunities

A variety of new government led policies have recently been announced which may improve the future effectiveness and likelihoods of these actions, including the ban on petrol/diesel vehicles being brought forward, the environment bill and the bus back better scheme. Therefore, as each of these develops, they will influence the below actions and scope of such. This is a live document, meaning as these developments are introduced they will be incorporated and actions adapted, assessing throughout what opportunities are available to maximise the potential benefits, such as optimising traffic management through advanced software and greater embracing of home-working still post covid.

### SDGs



TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
T1	Target 1. Deliver a greenway network of over 37 Km across the Borough by 2030 with the ambition to deliver 60 Km by 2036				4.34		7.5 M	
1.1	Deliver a comprehensive and connected network of greenway routes to encourage active and sustainable transport modes	Greenways are a strategic network of traffic free, multi-user routes that will connect the Strategic Development Locations to the existing heritage green and blue infrastructure, communities and places of interest, employment or recreational value.  Create a coherent network system of well signposted greenways that enable an increased take up of sustainable transport modes and becoming more active, towards a reduction of car usage. Overall, the network (SDLs) will provide 33.5 km of new and enhanced routes by 2030 and a total of 60 km by 2036.  This will achieve carbon savings of 4.34 tco2e	This network supports many of the later actions in enabling more people to switch away from cars, so the majority of savings are directly counted there, while also improving air quality and access to key areas.	Review and approve rights of way improvement plan Progress: Published in April 2020. 83 separate actions included in the plan which will be delivered in phases.	4.34	Short term	TBC	
				Route A - South of M4 SDL - Arborfield - Barkham - 5.5. Km		Medium term		
				Route B - Arborfield SDL - Barkham - Wokingham - 7.6 km		Short term	570,000	
				Route D - Arborfield SDL – Barkham – South Wokingham SDL - Wokingham - 7 Km		Medium term	TBC	
				Route E - River Loddon – Arborfield - 2.1 Km		Long term	TBC	
				Route F - Arborfield – Arborfield SDL - 4.0 Km		Long term	TBC	
				Route I - Arborfield SDL - Finchampstead - California Country Park - 1.9km		Short term	40,000	
				Route J - Arborfield SDL - Blackwater Valley - 2.9 Km		Long term	TBC	
				Route K - Arborfield Cross - 2.5 Km		Long term	TBC	
				Progress: On the Green Ways Projects a contractor for Cantley Park has been selected, while work continues on the Jubilee Avenue section. The council is working with SERT to align works and design at Woosehill Meadows and we expect to be starting a public consultation soon for that part. Design works continuing for Coombes Lane / Coles Lane. Greenway website created with all relevant information.			Nil	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		The River Loddon Long Distance Path (LLDP) will link between many of the Greenway Routes, particularly the greenways connecting to the Arborfield and the South of the M4 SDL. It aims to link the Thames Valley Path in the north of the Borough in Wargrave to the Blackwater Valley Path in the South of the Borough in Swallowfield. Overall, the LLDP network will provide 30.6km of new traffic free paths to encourage residents to become more active and utilise sustainable travel solutions, that ultimately will reduce the amount of private vehicles on the roads.		LLDP Section A - Blackwater Valley Path, Swallowfield to A327 Reading Road - 6.8 Km		Medium term	TBC	
			LLDP Section B - A327 Reading Road to Showcase Cinema, Winnersh - 8.42 Km			Short term	TBC	
			LLDP Section C - Showcase Cinema, Winnersh to Waggon & Horses Pub, Twyford - 6.55 Km			Short term	612,000	
			LLDP Section D - Waggon & Horses Pub, Twyford to River Thames - 8.84 Km			Short term	TBC	
T2	Target 2. Double public transport use by 2030 from 2019 baseline				3879.86		TBC	
2.1	Produce bus service improvement plan - October 2021	Gap analysis SWOT analysis, produce policies of what will need to be improved Enhance partnership - vision, plan, setting the policy framework and establishing targets for bus passenger growth within the borough.  The carbon savings are yet to be calculated but incorporated in the overall figure.	Setting the policy framework for bus services to recover from Covid and for establishing longer-term growth.  Allow access to funding - COVID-19 Bus Services Support Grant (CBSSG) or any new sources.	Publishing the bus service improvement plan Engagement and consultation local bus operators, internal stakeholders	Included in total	Short term	TBC	
2.2	Establish an enhanced partnership with contractors	Making legally bidding document with bus operators - define levels of service and provision of infrastructure in relation to the schemes Identifying key corridors and setting frequency of bus service - set up bus priority and how to improve journey times	Allow access to transformational funding	Have an Enhanced Partnership in Place by 1st April 2022	Included in total	Short term	TBC	



TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		The carbon savings are yet to be calculated but incorporated in the overall figure.						
2.3	Support electrification of local buses	<p>Zero emission bus regional areas (ZEBRA) Route 21 - Lower Early - Reading University - Reading Town Centre</p> <p>Depending on Reading buses having the required funding for fleet renewal Gov will fund 75% and LA need to fund the rest No. buses / - Reding buses website - route 21</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>		<p>Identification of the route/buses/ specifications</p> <p>Applying and achieve funding for Zero emission bus regional areas (ZEBRA) Trunch 1. 2021 May 2021 Trunch 2. September 2021</p> <p>2 years after award funding</p>	Included in total	Medium term	TBC	
2.4	Improve the bus public transport network for Wokingham Town.	<p>Identifying the key transport needs for the public travelling between Wokingham and surrounding areas: Wokingham Town, Finchampstead, Winnersh, Twyford, and Woodley to decrease the number of people arriving in personal vehicles at public transport interchanges (rail stations &amp; P&amp;R sites) by 5% by March 2022.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	This presents the opportunity to synchronise timetables.	<p>Launch public consultation.</p> <p>LCTS consultation Progress: Completed</p> <p>Re-tender the public transport contract with reading buses to procure an improved contract Progress: The town centre strategy is complete</p>	Included in total	<p>Short term</p> <p>Short term</p>	TBC	
2.5	Bus Stop Infrastructure Works to Support North Arborfield SDL Bus Strategy	Public Transport infrastructure enhancement includes more shelter from poor weather, more seating capacity and real time information displays to	<p>Connect people to jobs, study and local services</p> <p>Allow people who are old, young, disabled and isolated to commute</p>	Create a bus strategy for North Arborfield Progress: The strategy has been published and an implementation plan agreed	Included in total	Medium Term	54,000	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		encourage more residents to use the bus network.  The carbon savings are yet to be calculated but incorporated in the overall figure.	Help reduce traffic jams.	Start works on site.				
2.6	Increase peak-hour bus transport for Lower Early	Increase the capacity of bus transport between Lower Earley and Reading as surveys suggest morning services are at capacity and leaving passengers at stops. 5% decrease in the number of people arriving in single occupancy vehicles at public transport interchanges (rail stations & P&R sites) by March 2022.  The carbon savings are yet to be calculated but incorporated in the overall figure.	Connect people to jobs, study and local services Allow people who are old, young, disabled and isolated to commute Help reduce traffic jams	Review contract with Reading buses Progress: Additional capacity has been delivered on a short term basis	Included in total	Short term	£0-250,000	
2.7	Implement the South of M4 bus strategy	Increasing the frequency of the Leopard Bus services, serving the South of M4 SDL to increase the number of residents using this by 5%.  The carbon savings are yet to be calculated but incorporated in the overall figure.	Connect people to jobs, study and local services Allow people who are old, young, disabled and isolated to commute Help reduce traffic jams	Launch public consultation to understand demand for travel  Progress: Achieved in Feb 2020	Included in total	Short term	£480,000	
2.8	Investigate demand services opportunities and on-demand flexi-routes	Improve access to rural areas by implementing an uber style public transport service for people living in remote locations where a full service would be unviable but still help reduce car usage. Leading to a 5% increase in the number of trips from our public transport interchanges by bus and rail by March 2022.	Covid will limit the number of users of such services down to 1 or 2 passengers, making it less viable.	Twyford is being considered under the rural mobility fund bid as a pilot area.  Progress: A bid has been submitted but has been unsuccessful Investigate ARRIVA Click success  Progress: Under consultation to explore DRT further	Included in total	Short term	TBC	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		The carbon savings are yet to be calculated but incorporated in the overall figure.		Progress: Bid has been submitted				
2.9	Retender bus network operating in Wokingham Town Centre with low carbon engines	<p>Reduce emissions from the operation of public buses by specifying a low carbon engine classification for buses for Wokingham Town to be a minimum of Euro 6 standard by the end of 2020 and ultra-low emission by 2028.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	Research on these engines could be applied to other sectors.	<p>Change specification in the tender documentation.</p> <p>Purchase new buses.</p> <p>Communications campaign to promote new low carbon service.</p>	Included in total	Long term	TBC	
2.10	Deliver the Winnersh Triangle Parkway parking project and infrastructure enhancement at Coppid Beech	<p>Creation of more parking spaces at Winnersh parkway station and Coppid beech to encourage uptake of public transport for part of the journey, leading to a 10% increase in the number of residents using a train or park &amp; ride at least once a week by March 2026.</p> <p>This will achieve carbon savings of 153.34 tco2e</p>	Improvement costs offset somewhat by revenue.	<p>Design schemes</p> <p>Planning permission</p> <p>Choose contractor</p> <p>Start on site work</p> <p>Progress: Planning permission has been obtained and work started March 2021.</p>	153.34	Medium Term	£5,800,000	
T3	<b>Target3. (Demand) 20% reduction in total distance travelled in private vehicles per individual per year by 2030.</b>				29,302.5		TBC	
3.1	Engage businesses to promote homeworking and remote working when possible	Capitalise on the unintended consequences of the national lockdown by engaging with businesses to understand their working practices and encourage them to consider the new ways of working in their recovery plans to overall reduce the CO2 emissions caused by travel from workers of local businesses by 30% by 2022	<p>People are more likely to stay around their home areas in general, shopping locally etc, rather than driving to out of town areas after work.</p> <p>Increased time freedom due to lack of commute also increases adoption of active/sustainable transport methods.</p>	<p>Engage business through a survey to assess their working practices during the national lockdown and encourage new ways of working as part of their recovery plans.</p> <p>Progress: Research underway</p> <p>Deliver a communications campaign to encourage local business to learn from COVID-19 unintended consequences.</p> <p>Progress: Most businesses remain primarily working from home, with</p>	4,200	Short term	<p>Nil</p> <p>Nil</p>	



TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		This will achieve carbon savings of 4200 tco2e		employer packs being prepared to support this long term.				
3.2	Promote the Liftshare scheme through My Journey to help individuals and businesses develop bespoke travel policies	Reduce transport related CO2e emissions, reduce congestion, improved road safety and air quality by promoting Liftshare, which helps companies assess staff travel patterns to promote car sharing. To achieve a 10% reduction in the number of single occupancy car trips to and from businesses by March 2022.  This will achieve carbon savings of 14651.24 tco2e	Due to covid much more difficult to have lift sharing for health reasons.	Produce and submit proposal Procurement process	14651.24	Short term	TBC	
				Launch Liftshare scheme		Short term	TBC	
				Map commuter trips across the Borough and provide access to live data on how many miles/CO2 can be saved by people lift sharing across the Borough and for each individual business.				
				Set up CO2 emissions targets for local businesses				
				Deliver a communications campaign to promote active and sustainable travel modes through competitions				
				T4		Target 4. (Modal shift) The use of all cars, vans and motorbikes as a mode of transport decreases from 74% (current national/borough average) total miles to 56% in 2030		
4.1	To provide more primary school children with the opportunity to develop practical skills and an understanding of how to cycle safely.	Offer bikeability training up to level 3 to more primary school children in Wokingham Borough to improve cycling skills amongst children and improve air quality by substituting cycling for car journeys. Achieve a 5% reduction in the number of children being driven to Wokingham Borough schools by March 2022.  This will achieve carbon savings of 15.4 tco2e	Will be more likely to choose cycling over cars as adults, health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Compile and deliver an annual events programme for Bikeability courses.  Monitor impact of programme on take up of cycling to school Progress: 872 children trained on bikeability courses in 2020-21, with level 3 targets being exceeded.	15.4	Short term	£122,512	
4.2	Encourage and support local schools to join Modeshift Awards scheme for active and sustainable travel	Create a culture of active travel amongst school children, having a direct impact on air quality, carbon savings and helps improve student health and concentration levels. Leading to a 10% reduction in the number of children being driven to school by March 2026.	Will be more likely to choose active transport over cars as adults, health benefits from exercise. People have embraced local green spaces. Increased time freedom due to lack of commute also increases	Six schools targeted within the Wokingham Town, Finchampstead and Twyford areas (AQMA), to achieve Modeshift STARS accreditation at bronze, silver or gold level, as appropriate for the school, supported by active travel officers.	137.7	Medium Term	£89,000	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		This will achieve carbon savings of 137.7 tCO2e	adoption of active transport methods.	Progress: The six schools have agreed to participate once safe to do so				
				Promote the following campaigns in schools in the AQMA area: a car free day, an anti-idling campaign, national clean air day campaign, and Beat the Street Progress: Campaigns are scheduled to run this year		Short term	£101,101	
4.3	Roll out the Healthy School Streets programme	<p>Trial programme at school streets to tackle congestion, road safety and air quality by restricting motor traffic at the school gates for a short period of time, generally at drop-off and pick-up times. This will make it more difficult to drive to the school for the school run, resulting in a reduction in students being driven to school. Leading to a 10% reduction in the number of children being driven to school by March 2026.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	People have embraced local green spaces.	<p>Design how the scheme will work. Select a school to pilot scheme. Review the results of the pilot. Role out scheme more widely.</p> <p>Progress: Scheme on hold, to be reviewed in 2 years.</p>	TBC	Long term	£2,000	
4.4	Increase the uptake of cycling from local business by promoting the Love to Ride programme	<p>Encourages people to choose cycling as their main mode for essential travel and as a fun, enjoyable form of daily exercise. Aiming to reduce the CO2 emissions from employees of local businesses travelling to work by 10% by 2025.</p> <p>This will achieve carbon savings of 1240 tco2e</p>	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Ride anyway week campaign - 23 - 27 March 2020	1,240	Medium term	£50,000	
				<p>Run 4 campaigns per year to promote cycling to work</p> <p>Progress: Multiple campaigns have been run with positive responses, such as the QR trails, hunt and hound activities and climate action related design competitions.</p> <p>This includes cycle September which encouraged 1417 people to switch to bikes for over 1.2m million miles.</p>		Short - Medium term		

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
				Work in partnership with local businesses to promote active travel breakfast		Short term		
4.5	Develop the Local Cycling and Walking Infrastructure Plan (LCWIP) to be Borough wide and implement 50% LCWIP by 2030	Create a comprehensive network of walking/cycling routes across the Borough which are joined up, based on evidence and data from the LCWIP process.	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Phase 1. Completion of first LCWIP report 2020.	12,151.80	Long term	5,000,000	
		Aiming to increase cycling modal share by 4% and walking modal share by 5%.		Progress: First report complete but undergoing change in response to new government policy.				
		This will achieve carbon savings of 12151.8 tco2e		Phase 2. Roll out of further LCWIP studies across the borough from 2021 to 2025 Phase 3. Implementation of measures from the reports ongoing to 2030			33,000,000	
4.6	Deliver engagement and cycle training events across the Borough	Deliver cycling training events such as bike hubs, Dr bike checks, puncture repair classes, smoothie bike, cycling skills and bike obstacle course, Bike bonanza and Bikeability training levels 1-3. This increases confidence, road safety awareness and skill level on bikes to achieve a 2% increase in residents regularly cycling for leisure and utility by March 2022.	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Deliver events for Montague Park and a new one in Shinfield as planned in the Events Programme 2020 - 2021 Progress: Dr Bike sessions are still being run and are full booked up quickly, 74 bikes checked.	102.88	Short term	£1,500	
		Engage residents with active travel schemes by providing discounts for bikes & accessories.		Deliver Wokingham Bikeaton as planned in the Events Programme 2020 - 2021 Progress: The was delivered, albeit with restrictions due to covid		Short term	£500	
		This will achieve carbon savings of 213.18 tco2e		Deliver Cycle hubs for Woodley, FBC, Montague Park and Shinfield as planned in the Events Programme 2020 - 2021 Progress: Paused but cycle trails and scooter training delivered in replacement	110.3	Short term	£5,000	
4.7	Adult cycle training	Shine over 60s cycling program, focus on encouraging outdoor cycling for people over 60 for travel, leading to a 3% reduction in car use by residents over 60.  This will achieve carbon savings of 1757.8 tco2e	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Deliver SHINE rides events as planned in the Events Programme 2020 - 2021 Progress: 5 events delivered autumn 2020 before restrictions	1,757.8	Short term	£1,500	



TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
4.8	Completion of the Cross Berkshire Cycle Route – NCN 422	<p>Creation of a new national cycle route between Newbury and Windsor (approx. 30 miles), including a section within Reading, Wokingham Borough, West Berkshire, Bracknell Forest and Windsor &amp; Maidenhead, and it is included within the Thames Valley Berkshire Local Growth Deal. This will encourage more residents to cycle by connecting people with key destinations.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.	Completion of route across Wokingham with a combination of shared use and on-carriageway cycle lanes on the A329. Progress: Completed and has already seen an increase in cycling on the route.	Included in total	Short term	1,000,000	
4.9	South Wokingham Railway Crossings (Foot and cycle)	<p>Improved walking and cycling infrastructure will encourage residents to mode shift.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	Health benefits from exercise. Increased time freedom due to lack of commute also increases adoption of active transport methods. People have embraced local green spaces.		Included in total	Short term	1,500,000	
4.10	Promote active and sustainable travel modes amongst new residents in new developments.	<p>Inform new residents of the alternatives to single occupancy car use, promoting the wider benefits of active and sustainable travel while providing a local context. Welcome packs are provided with offers and discounts for sustainable travel like bus taster tickets and cycle shop discounts as well as localised cycle and bus maps and SANG walks. Aiming to achieve 25% of new residents travelling sustainably on a daily basis across the Strategic Development Locations each year by 2026.</p>	Health benefits from exercise. People are more likely to stay around their home areas in general, shopping locally etc, rather than driving to out of town areas after work. Increased time freedom due to lack of commute also increases adoption of active/sustainable transport methods. People have embraced local green spaces.	Welcome pack for Deer Leap Park and Orchard Rise in the Spencerswood area	Included in total	Medium term	£1,000	
				Welcome pack for Deer Leap Park and Orchard Rise in the Arborfield area		Medium term	£1,000	
				Welcome pack for Deer Leap Park and Orchard Rise in the Wokingham area		Medium term	£1,000	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
		The carbon savings are yet to be calculated but incorporated in the overall figure.						
4.11	Provide personalised travel planning to new residents	<p>All residents in new developments are offered transport advice about alternative modes of travel, including free testing ticket and tailored travel packages. Aiming to achieve 25% of new residents travelling sustainably on a daily basis across the Strategic Development Locations each year by 2026.</p> <p>The carbon savings are yet to be calculated but incorporated in the overall figure.</p>	Increased time freedom due to lack of commute also increases adoption of active/sustainable transport methods. People have embraced local green spaces.	Personalise travel planning to new residents in Shinfield development	Included in total	Medium term	£25,000	
4.12	Develop a domestic and industrial freight management policy alongside LTP4	<p>To develop a borough wide traffic distribution hierarchy to understand traffic capacity, and traffic carrying routes. Improving operational logistics could reduce the number of 'empty runs' and consequently the number of trucks on the road, leading to a 22% decrease in distance travelled by road freight.</p> <p>The framework will support decision making on the traffic distribution, based on air quality, carbon emissions and energy savings. Working towards creating a baseline and will then collect data accurately to streamline this figure.</p> <p>This will achieve estimated carbon savings of 23240.92 tco2e</p>	Reduces operational costs for firms and storage energy usage as more efficient supply chain. Covid will have impacted demand levels.	<p>Data gathering and assessment – development of the hierarchy</p> <p>Deliver the first draft freight management policy</p>	23,240.92	Short term	TBC	
T5	<b>Target 5. Leading by example - Reduce by 70% CO2e emissions produced by council related travel by 2030</b>				<b>680.18</b>		<b>TBC</b>	

TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
5.1	Deliver a strategy to reduce miles produced by council staff work related travel.	To investigate the possibility to introduce EV Car clubs for council staff between Monday to Friday and with the option to open to the public during the weekends. Aiming to reduce grey fleet miles by 30% from transport related trips.  This will achieve carbon savings of 291.5 tco2e	Sets example so other actions more likely to be followed.	Carry out assessment for car clubs and produce a strategy	291.5	Medium term	TBC	
5.2	Promote homeworking and remote working practices amongst council staff	In addition to home working, expand remote working practices in other locations to reduce unnecessary travel and the need for central office accommodation. Aiming to reduce the CO2 emissions travelled from council staff to work by 40% by 2022.  This will achieve carbon savings of 388.672 tco2e	Lockdown has greatly sped up this process and meant that everyone is doing it so integrates more easily with any partners. Sets example so other actions more likely to be followed.	Capitalise on the unintended consequences of the national lockdown by reviewing working from home practices in the council and consider new ways of working in the recovery plan for the council.	388.67	Short term	Nil	
				Deliver a staff survey to assess working from home preferences amongst council staff.		Short term	Nil	
5.3	Incentivise council staff to mode shift to active and sustainable transport or EVs	Investigate incentives that can be given to council staff to support their commute to work being more sustainable by implementing schemes that make such methods more accessible. Aiming to reduce the CO2 emissions from staff travelling to work by 10% by 2025.  This will achieve carbon savings of 97.17 tco2e	Increased time freedom due to lack of commute also increases adoption of active/sustainable transport methods. Sets example so other actions more likely to be followed.	Carry out an assessment of viability of salary sacrifice schemes that could be offered to council employees for sustainable transport or EVs.	97.17	Medium term	c£10k	
T6	Target 6. Continue research and innovation programmes for the reduction of CO <sub>2</sub> and NO				2898.77		TBC	
6.1	Continue to research and use innovative techniques to manage traffic and encourage	Research will continue and opportunities will be taken where appropriate. An arbitrary estimate of a 10% reduction in CO2 is assumed.	Benefits air quality, safety and congestion with reduced costs for all.	Low Carbon Transport Strategy completed	1449.39	Medium term	TBC	



TR	Action	Description / Outcome	Co Benefits / Unintended consequences	Milestone	Carbon Savings tCO2e	Timescale	Project Cost (£)	RAG
	uptake of sustainable modes and ultra-low emission options	This will achieve carbon savings of 1449.39 tco2e, which is in addition to below as it is achieved by improvements in engine efficiency and traffic solutions rather than a switch to active/sustainable methods.	Effects of transport shifts from covid need to be considered within analysis.					
6.2	Mobility as a service (MaaS) and future proofing the network.	<p>MaaS is part of ITS strategic objective</p> <p>Contribute to reduce the need to own a car and link up the public transport and active mode options to make it easier to travel sustainably, resulting in a further reduction of private motor vehicle ownership by 10%.</p> <p>This will achieve carbon savings of 1449.39tco2e</p>	<p>Benefits air quality, safety and congestion with reduced costs for all.</p> <p>Effects of transport shifts from covid need to be considered within analysis.</p>	<p>Data gathering and assessment</p> <p>To be considered further in 2021/2022</p>	1449.39	Medium term	TBC	
6.3	Deliver a variety of smart mobility projects	Deliver a combination of operational and information technologies that assess growing traffic peak demand while attaining environmental and user-experience data. This will deliver smarter and more sustainable transport mobility combining different modes and options (public transport, car sharing, car rental services, taxis and a bicycle system). These carbon savings are captured above.	<p>Benefits air quality, safety and congestion with reduced costs for all.</p> <p>Effects of transport shifts from covid need to be considered within analysis.</p>	<p>ITS strategy completed. Investigate key locations to be included in the pilot. Special focus on Park &amp; Ride sites and key gateways to the Borough.</p> <p>Gather C2 Cloud traffic data and put it in an open form to be utilise internally.</p>	Captured in above	<p>Short term</p> <p>Medium term</p>	TBC	

## Electric Vehicles

### Carbon savings:

In conjunction with the transport goals of reducing car usage and switching to more sustainable modes of transport, it is equally important to transition as many vehicles away from fossil fuel use as possible in order to cut down this major source of emissions on the road to net zero. Therefore, to support this process, the council has begun measures towards improving accessibility, providing guidance and funding advice, assisting businesses and developing the necessary infrastructure to provide a reliable network and convenient in order to encourage the uptake of electric vehicles within the borough.

However, this is a considerable undertaking and will require significant analysis, communication and commitment towards achieving the overall long-term goal. Fortunately, progress has already been made on a number of fronts, including the overall number of EV's within the borough, rising by approximately 315 vehicles, meaning carbon savings of 467.63 tco2e this year against the initial baseline.

### Key achievements

- During the Summer new electric vehicle charging points installed include two new points at Matthews Green Schools and five new points at Arborfield School (three in the school and two at the community car parks).
- One new Electric Vehicle Charging Point (EVCP) was installed at Bulmershe Leisure Centre in October 2020 and two new EVCP were installed in Elms Field in December 2020.
- Multiple other new charging points have now been planned for and continue to be explored in a rolling programme.
- Process underway to align all charging across the borough to a standardised system
- Feasibility study Electric Vehicle Overview and Benchmarking was completed by WSP in December 2020. The report sets out the EV background (EV, chargers, different ownership, operation and management models etc.) along with benchmarking compared the

activities that other neighbouring councils have undertaken in relation to EVs. The report also presents available funding opportunities, review of existing EV infrastructure in Wokingham and provides recommendations for the future.

### Our Partners

For each target, the council has engaged with partners to ensure these are incorporated into existing plans and maximising their potential for success. Towns & parish councils, energy suppliers, residents, car parks, local businesses and consultants/subcontractors are key for the delivery of this plan.

Behavioural change is vital to encouraging the uptake in EVs and thereby reducing carbon emissions as listed next to the actions below. To bring this about, stakeholder engagement will be key to the uptake in use of new and improved infrastructure such as improved access to charging points. Co-benefits such as cleaner air will be effectively communicated to both businesses and residents.

### Consumption Emissions

With the transition to electric vehicles there would be no associated consumption emissions within scope for households.

### Future Opportunities

In this sector government advice and funding available continues to improve, while a variety of new government led policies have recently been announced which may improve the future effectiveness and likelihoods of these actions, including the ban on vehicles being brought forward, the environment bill, and the sixth carbon budget report, including developments in EV infrastructure and hydrogen power. Therefore, as each of these develops, they will influence the below actions and scope of such. This is a live document, meaning as these developments are introduced they will be incorporated and actions adapted, assessing throughout what opportunities are available to maximise the potential benefits, such as standardising electric vehicle charging across boroughs and the ORCS expanded charging schemes.

### SDGs



REF	Action	Description / Outcome	Co-Benefits/ Unintended Consequences	Milestone	Timeline	Carbon savings tCO2e	Project Cost (£)	RAG
T7	Target 7. 50% EVs registered in the Borough by 2030					45000		
7.1	To develop an EV strategy for Wokingham Borough	Borough wide strategy to specify the infrastructure for EV charging point to encourage the uptake of EVs.	Improved air quality, reduce NOx, PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.  Despite covid and traditional car sales declining in the pandemic, EV sales have risen across the board.	Carry out initial assessment of the EV requirements for the Borough	Short term	Included in total	Nil	
		Map the existing EV chargers across the Borough and on council property.		Instruct consultant on requirements baseline and create a brief to commission expert work			Nil	
		Obtain a baseline on current electric vehicle market, current ownership, forecast growth and charging infrastructure technologically.		Create a business case for funding			Nil	
		Develop and agree policy for EV charge point provision, which will maximise uptake of EV.		Consultant provides draft EV report Progress: This has been completed by WSP			TBC	
		Assess the potential for an integrated network of EV charge points. This would include encouraging the installation of EV charging points at motorway service areas and at large fuel retailers		Consult on report - recommendations for determining the best approach to providing charging solutions for the public.			Nil	
		Specific carbon savings cannot be attributed to the strategy as a document, but can be attributed to the actions that it sets out.		Establish policy, processes and protocol for responding to requests for charge points and how they can be operated and maintained. Progress: Multiple new charging points have been installed, with more planned in a rolling programme.			Nil	
				Agreeing partnerships, income streams and service providers to ensure best uptake			Nil	
				Produce EV strategy report and present to senior leadership teams for approval			Nil	
				Present strategy for approval			Nil	
7.2	Provide a uniform method of accessing public and private charge points	Set up the back office so that EV chargers are accessible and easy to use to encourage more people to use them. Provide accurate standardised public information on how to locate, use and pay for chargers in the Borough.  Carbon savings cannot be achieved without this.	Able to monitor power usage to ensure reliability. Opportunity for communication with users.	Investigate the types of back office payment systems used by the industry and assess the best option to be implemented at WBC. Harmonised EV related contracts such as electricity, maintenance, service and back office.  Progress: Consultation has begun with various potential providers for the required complex software	Short term	Included in total	Nil	

REF	Action	Description / Outcome	Co-Benefits/ Unintended Consequences	Milestone	Timeline	Carbon savings tCO2e	Project Cost (£)	RAG
7.3	Review the residential charge point infrastructure for those who have communal parking facilities such as flatted developments	Currently, 27% residential buildings (approximately 12,000 households) do not have off-street parking and therefore direct access to safely charging an EV vehicle. This represents a barrier for these occupants to own an EV and so reduces the uptake of EVs in the Borough.	Opportunity for communication with non-EV users.	First stage: Implement a pilot of EV charging points in selected location, aim at installing 18 new charging points for residents with communal parking facilities.	Short term	77.6	TBC	
		Initial pilot: 18 new charging points for residents generating an estimated of 77.6 tCO2e annual savings		Second stage: Based on the experience gained during stage 1, the council will seek to extend charging point facilities across the Borough.	Long term	77.6	TBC	
7.4	Ensure that all EV charging points installed in the Borough are 'smart ready' to balance the electricity load demands on the grid.	Ensure that charge points are smart ready by setting requirements prohibiting installation of charge points unless they meet certain load management specifications.	Able to monitor power usage to ensure reliability	Identification of dynamic load balancing or local storage systems that could be implemented in WBC	Medium term	Included in total	Nil	
		Establish the parameters for the management of available energy in an area through methods like dynamic load balancing or local storage systems.  This will ensure reliability of power supply in the system. Maintaining confidence in the network and increasing the uptake of EVs. Overall carbon savings cannot be achieved without this.		Engage with service providers about generic support for WBC EV chargers through standards such as OCCP.  Progress: Analysis complete on current EV provisions and process in place	Short term			
7.5	Support local businesses, including commercial property owners, to transition their commercial fleets to EV. Also	Consult with local businesses to understand needs, including taxi fleets, to develop the required charging infrastructure to support the uptake of EVs. Support the transition of 20% vehicles used for commercial purposes to ultra-low or electric.	Improved air quality, reduce NOx, PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.	Engage local business with Workplace Charging Scheme	Medium term	1,834.6	Nil	
				Provide information on salary sacrifice schemes to support employees to transition to EV			Nil	
				Assess opportunities to support the development of plug-in taxi programs within the Borough, considering the requirements for charge points.			Nil	



REF	Action	Description / Outcome	Co-Benefits/ Unintended Consequences	Milestone	Timeline	Carbon savings tCO <sub>2</sub> e	Project Cost (£)	RAG
	to encourage employees to switch to EV for private use	This includes applying for grants and funding for purchase and installation cost, etc. Guide and advice local businesses about the benefits of transitioning to EVs.  This will achieve savings of 1,834.6 tCO <sub>2</sub> e		Deliver a sustained campaign to inspire residents and local businesses to 'Go Ultra Low' and transition to EVs			Nil	
7.6	Promote uptake of EVs with our residents through engagement	Support and educate our residents about the benefits of transitioning to EVs. Make available information that will support residents in taking the decision to transition to EVs, including government schemes that will support residents in the installation of EV charging points.  60% of residential buildings have parking facilities, 46,800 households. Overall carbon savings cannot be achieved without this.	Improved air quality, reduce NO <sub>x</sub> , PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.	Deliver a sustained campaign to inspire residents to 'Go Ultra Low' and transition to EVs.	Medium term	Included in total	Nil	
7.7	Coordinate the installation of EV charging points into private and commercial owned land in line with the EV network plan approved in the strategy.	Investigate the requirements to install EV charge points to commercial property such as business parks, shopping centres, etc.  The carbon savings are yet to be calculated but incorporated in the overall figure.	Improved air quality, reduce NO <sub>x</sub> , PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.	Align the EVs installation requirements to the building retrofitting programs.  Progress: EV standards from highways design guide is being used. Feasibility study on additional car parks underway.	Medium term	TBC	TBC	
T8	<b>Target 8. Council's car fleet becomes entirely ultra-low emission by 2028 producing 45t CO<sub>2</sub>e savings</b>					45.2		
8.1	Ensuring 100% of the car fleet operated by the council is ultra-low emission by 2028	Leading the way by transitioning the 16 WBC owned and leased vehicles to EV or low carbon vehicles at the end of their leasing contract/life. Vehicles range from minibuses, cars and a tractor in Dinton Pastures.	Helps set the example by leading the way. Opportunity for communication with non-EV private users.	Deliver the programme to transition WBC owned vehicles to be ultra-low vehicles by 2028. The Street Cleansing team have trialled an electric street sweeper with good results.  Review lease contracts and establish a programme for transitioning leased vehicles to EV when engaging in new contracts	Medium term	45.2	TBC  TBC	

REF	Action	Description / Outcome	Co-Benefits/ Unintended Consequences	Milestone	Timeline	Carbon savings tCO2e	Project Cost (£)	RAG
		This will achieve savings of 45.2.6 tCO2e		Embed requirements for EV’s or Low Emission vehicles in WBC Fleet Guidelines Policy and WBC Vehicle Procurement Guidelines.			Nil	
				Update the Vehicle Procurement Application form to include the consideration of EV’s or Low Emission vehicles as a standard with no sign off from the Board for any vehicle that does not meeting this requirement.			Nil	
8.2	Installed EV charging points into council owned buildings in line with the EV network plan approved in the strategy.	<p>EV network plan will have standardised EV charging point requirements to make charging easy to access.</p> <p>To support this ensure all council-owned assets comply with the standard. Include locations such as libraries, leisure centres, parks, etc.</p> <p>Specific carbon savings can be attributed to the retrofitting of each building depending of the installation requirements of EV charge points.</p>	Improved air quality, reduce NOx, PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.	Align the EVs installation requirements to the building retrofitting programs.	Short term	Project specific	TBC	
8.3	Establish contractual policies that promote the use of EV or ultra-low emissions vehicles as the council's preferable vehicles, including on education and	<p>Ensuring all our contractors use ultra-low of EV when possible will reduce emissions from contractors and suppliers vehicles working for and in partnership with the council. This includes Education and Social Care transport providers to encourage/specify transition to ultra-low vehicles for use on HTST transport.</p> <p>50% (which exceeds the statutory minimum of 35%) contract transport fleet will be hybrid or fully electric by 2028.</p>	Improved air quality, reduce NOx, PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production. Opportunity for communication with non-EV users.	Include in procurement policies considerations for EV/ultra-low emission vehicles as a standard.	Medium term	Project specific	Nil	
				All buyers/commissioners to apply contractual policies when subcontracting services			Nil	
				Review the contracts with our transport providers and establish requirements to transition to ultra-low emissions vehicles				

REF	Action	Description / Outcome	Co-Benefits/ Unintended Consequences	Milestone	Timeline	Carbon savings tCO2e	Project Cost (£)	RAG
	social care services	Specific carbon savings can be attributed to each contractor depending of their size fleet and type of service provided.		Optimise HTST routes to reduce mileage				
T9	<b>Target 9. 100% new buildings are EV ready from 2022</b>							
9.1	Make all new houses electric vehicle ready by establishing requirements for EV charging points in new dwellings as described in the EV strategy	Establish the requirement for EV charging point infrastructure for new dwellings in the Borough where appropriate. Make sure that new homes planning applications submitted from 2023 and where appropriate, have a charge point available. This will ensure there is no barrier for new homeowners or occupants of new dwellings to own or leased an electric vehicle. Developers will have to ensure there is sufficient power serving their developments. Overall carbon savings cannot be achieved without this.	Improved air quality, reduce NOx, PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production. Opportunity for communication with non-EV users.	<p>Publish policy as part of the adopted Local Plan.</p> <p>Developers to be informed of policy and requirements shall be listed in planning application</p> <p>New developers to ensure that there is sufficient power serving new developments.</p>	Medium term	Included in total	Nil	

\*Action 7.8. Note, this action has been removed and it was explored and the decision made not to take it forward. Full details are included in the methodology.

## Air Quality

**Carbon savings:** Carbon savings for air quality targets are reported in the transport section as actions overlap.

Wokingham Borough Council's efforts over the last year have focused on tackling the levels of air pollutants, particularly in the Air Quality Management Areas in the borough. Mitigations to tackle all pollutants including Particulate Matter 2.5 (PM2.5) and Nitrogen oxides (NOx) align with measures to reduce carbon emissions in the borough such as by reducing idling, congestion and increasing awareness through education, to name a few.

At this time the Air Quality Agenda has focused on raising awareness and behaviour change around the issues associated with air quality, with specific carbon savings yet to be seen as a result. We can, however, assume that levels of CO<sub>2</sub> emitted from vehicles in the borough will have fallen in line with the fall seen in NOx levels. Unfortunately, CO<sub>2</sub> is not monitored in the same way. Over the course of the next year, as interventions such as the no-idling zones and ITS systems are implemented, we are expecting to be able to calculate more specific savings from these interventions.

### Key Achievements

- Changes in travel behaviours due to lockdown restrictions have resulted in a downward trend in NO<sub>2</sub> emissions, evidenced in Q1, Q2 & Q3 of 2020/21 in both Peach Street and at Twyford crossroads compared to the year before.
- Funding secured to scale up air quality monitoring by placing more units around the borough to measure PM2.5.
- Mobile diffusion tubes have been placed at 6 schools in the Borough as part of the Eco-Travel Officer programme.
- Schools competition for no-idling banners was completed and two styles of banners have been printed and installed at hotspot locations for congestion and idling such as outside Wokingham Train Station and along school railings.

- The Public Protection Partnership have been awarded £259K from the DEFRA Air Quality grant programme to deliver a project to make improvements to air quality across the three council areas covered by PPP. Behaviour change will be a key focus of the project.

### Our Partners

The Public Protection Partnership has been a key partner for the delivery of these projects. We have worked very closely with local schools in particularly in the Air Quality Management Areas and collaborated with our towns and parish council's, residents, and local businesses.

Behaviour change will be very important to encourage the necessary mode shift towards active travel in order to improve air quality by working with partners listed above and particularly schools. There is currently a great opportunity at this time to maintain some of these shifts in travel behaviours.

### Consumption Emissions

These are out of scope carbon emissions relating to the air quality agenda that must be taken into consideration. This includes out of borough road, rail and air travel as well as the purchased we make which are transported to the shops we buy from or when we purchase online, including food miles.

### Future Opportunities

Changes in travel behaviours due to lockdown restrictions have resulted in a downward trend in NO<sub>2</sub> emissions, evidenced in Q1, Q2 & Q3 of 2020/21 in both Peach Street and at Twyford crossroads, compared to the year before.

Nationally, the Environment Bill includes key measures on air quality. The Secretary of State will be required to periodically review the national Air Quality Strategy for England, the government will need to set 2 new targets to reduce annual levels of PM 2.5, local authorities will have new powers, including to declare an Air Quality Management Area (AQMA) and establish plans to reduce public exposure to air pollution which exceeds air quality targets.

### SDGs





REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T10	<b>Target 10. Reduce NO2 concentration by 50% against 2019 baseline in the three AQ management areas by 2025</b>					TBC		
10.1	Continue air quality monitoring for NO <sub>2</sub> concentration in air quality management areas	<p>There are 47 locations across the Borough. The Public Protection Partnership (PPP) set up a target to reduce Nitrogen Dioxide emissions from transport in Wokingham Town Centre and Twyford Crossroads.</p> <p>Monitoring which is overseen by Defra has shown a reduction of NO<sub>2</sub> levels in Wokingham Town Centre, Twyford Crossroads and the 60m either side of the M4 throughout the whole of the Borough over the last 6 years to 2018.</p> <p>Monitoring allows us to assess the levels of pollution so we can increase the effort to reduce pollutants in the most affected areas</p>	<p>Public health benefits through reducing the risk of respiratory diseases and irritation, particularly impacting the vulnerable population.</p> <p>The lockdown restrictions associated with the Covid-19 pandemic have resulted in an unsustainable drop in year on year percentage change in NOx levels in monitored areas.</p>	<p>Continue implementing pollution prevention and control inspections required at Local Air Quality Management (LAQM) as set out in Part IV of the Environment Act (1995). The Air Quality Annual Status Report is published annually and provides an update of the monitoring results for the LAQM.</p> <p>The PPP has been awarded a £259k grant to deliver various projects focusing on improving air quality across the 3 authority areas including more monitoring.</p>	On going	Monitoring at Peach Street and Twyford Crossroads in 2020 has seen average monthly year on year falls in NO <sub>2</sub> of 40% and 28% respectively and would expect to see similar falls in CO <sub>2</sub> emissions	Nil	
10.2	Changes to how we manage and control the traffic in the Borough	<p>Use intelligent traffic systems to allow the traffic signals at Twyford crossroads to respond to reduce air pollutants concentration and therefore CO<sub>2</sub>e emissions.</p> <p>Result in reduced congestion and resulting emissions through improving traffic flow in the most traffic heavy areas. If successful, this technology could become more widely used at other junctions in the Borough.</p>	<p>Reduce congestion in the borough.</p> <p>Public health benefits through reducing the risk of respiratory diseases and irritation, particularly impacting the vulnerable population.</p>	<p>Prepare Intelligent traffic signals (ITS) strategy for Twyford Crossroads which is a priority location for ITS. Cameras in AQ detectors to be installed on Twyford Crossroads</p> <p>Develop preliminary design Easthampstead Road – Complete</p> <p>London Road Corridor identify as an adaptive traffic management corridor – Underway:</p>	<p>Short term</p> <p>Short term</p> <p>Short term</p>	<p>Work currently ongoing to calculate the estimated carbon savings from the whole ITS scheme and will be published within the upcoming ITS Strategy. Case studies suggest a 11-17% saving.</p>	<p>£13M assigned to managing congestion &amp; pollution Of this £3M currently being used for ITS</p> <p>TBC</p> <p>TBC</p>	

REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
10.3				Traffic signals upgrades, CCTV cameras, and software improvements have commenced.				
				Carry out a study to assess transport movements in Twyford in particular routes. Specifically for lorries and heavy-duty vehicles. This will be delivered through freight management work.	Short term		£40K	
				Produce a parking management study at Twyford to identify opportunities to reduce unnecessary travel into Twyford when possible. Commenced but delayed by Covid. Expected delivery by April 2022	Medium Term	TBC	£60K	
				Traffic reassignment scheme to be delivered in three phases Follow Network hierarchy – day to day traffic	Medium Term	TBC	TBC	
				Speed Management programme to be delivered in three phases: First phase completed – review of speed limits  Second phase underway – revision  Third phase: Implementation – dependant on hierarchy	Short term	TBC	£10M	
					Medium Term	TBC		
10.3	Implementation of air quality mitigation projects	<p>Using the data from the air quality monitoring work above, air quality hot spots have been identified in the Borough.</p> <p>Reduce NO<sub>2</sub> emissions from transport in Wokingham Town Centre and Twyford Crossroads</p>	Public health benefits through reducing the risk of respiratory diseases and irritation, particularly impacting the vulnerable population.	<p>These plans have recently been sent to Defra for its annual assessment and will confirm if it is satisfied with the progress made against them.</p> <p>The PPP has been awarded a £259k grant to deliver various projects focusing on improving air quality across the 3</p>		Future projects will focus on behaviour change and have associated carbon emissions savings to be	TBC	

REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
			Increased awareness of the air quality issue through various mitigation projects.	authority areas including more monitoring.		calculated once projects are scoped.		
				Commissioned study to identify further air quality improvement measures for Twyford Crossroads which will feed into a further action plan. Report completed.	Short term		PPP	
				A Smart Living Pillar installed in Twyford as a pilot to improve air quality. Pillar installed in November 2019 as part of a pilot project.	Short term	Small levels sequestered through associated road-side planting	External organisation	
				Assessment of measures to be implemented in Twyford and extend into surrounding areas. Review undertaken by WBC Air Quality Working Group with decision made to focus on the key actions to improve air quality most efficiently in the hotspots for pollutants. Intervention method to be implemented and linked with improvements in traffic signalling.	Medium term	Neutral	Nil	
T11	Target 11. Educate public on how they can actively improve air quality whilst reducing carbon emissions							
11.1	Engage the public with air quality matters by providing information through campaigns and activities	Working with schools to increase awareness of air quality issues though running a competition to produce signs, stickers and leaflets to be distributed across the Borough with focus on hotspots.	Public health benefits through reducing the risk of respiratory diseases and irritation, particularly impacting the vulnerable population.	Run communications campaigns that include subjects such as Myths & facts of idling, Home air quality. Increase awareness of the impact of poor air quality on health.	Short term	Neutral – Raising awareness through engagement means we can achieve accelerated carbon savings accounted for in the other targets.	Nil	
		Reduce air pollutants concentration and consequently CO <sub>2</sub> e emissions	Increased awareness of the air quality issue through various mitigation projects.	There have been 2 comms campaigns. Clean Air Day is upcoming.				
				Run a schools air quality competition, to engage children, parents and local residents with air quality issues related to idling.				

REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
11.2	Reduce idling			Completed for 2020, created 2 styles of banners to be installed in key areas, including Twyford crossroads, Wokingham station and around schools.				
				Promote active travel initiatives across 10 schools in the area including 6 with mobile diffuser units to monitor air quality. 6 schools have been given diffusion tubes for measuring air quality alongside virtual lesson plans to raise awareness of air pollution.				
				Introduce an 'emissions and idling policy' in the Borough.	Medium term	Anticipate a 25% reduction in emissions from commercial vehicles	Nil	
				Implementing No-Vehicle-Idling zones, around as many schools in the Borough as possible, by the end of 2022, and in other identified areas such as taxi ranks, GP surgeries, and close to level crossings. Signage has been approved and locations for the zones are being confirmed.	Medium term		Cost of metal plates and enforcement	



## Renewable Energy Generation

### Carbon savings: 20tCO<sub>2</sub>e

Over the last year, Wokingham Borough Council has worked in setting the ground to deliver projects that will increase the generation of renewable energy across the Borough. Our targets to increase generation of renewable energy through investing in solar farms and to support the generation of renewable energy in the Borough remain.

The council has also delivered the installation of renewable energy systems in public buildings and is planning to continue on this trajectory.

### Our Key Achievements

- The first solar farm in Barkham Ride will generate 32MWh's a year and has the potential to save around 6,325 tCO<sub>2</sub> per year when compared to using traditional fossil fuels.
- The Wokingham Community Energy scheme was approved by Executive in January 2021. The scheme will encourage sustainable energy projects, allow residents and local organisation to invest in green energy and help tackle the climate emergency.

### Our Partners

The delivery of the projects listed in our action plan will not be possible without the support and collaboration of the towns and parish council's, residents, local businesses, suppliers, the national grid, public energy suppliers. For the delivery of the first solar farm, the council has worked closely with SSE, DBO, the farmers, specialist consultants and the local community.

In order to achieve the actions below, the council is aware that engagement will be key to encourage behaviour change needed to achieve the goals below. Raising awareness about the benefits of renewable energy generation bring to both the environment, and what that means in tangible terms as well as co-benefits such as more green employment and skills opportunities in the local labour market.

### Consumption Emissions

Total life cycle GHG emissions from solar PV systems are similar to other renewables and nuclear energy, and much lower than coal. These emissions are not considered in the action plan below.

### Future Opportunities

The Government energy white paper, and new commitments identified in the 10 Point Plan for a Green Industrial Revolution will bring new opportunities and stronger targets to promote renewable energy generation. As this is a recent policy, and still under development, we will closely track its progress.

For example, part of this 10 point plan includes quadrupling wind power production to 40GW by 2030, sufficient to power all current homes and 4x the current capacity. Therefore, should this be delivered, it will represent a fall in emissions on the BAU scenario.

### SDGs



REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone	Timescale	Carbon Savings tCO <sub>2</sub>	Estimated Project Cost	RAG
T12	<b>Target 12. Increase the generation of renewable energy through investment in solar farms to power the equivalent of 25,000 homes within the Borough by 2030 saving approximately 25,560 tCO<sub>2</sub></b>					25,560	£21M	
12.1	Deliver the installation of a solar farm in Barkham with the capacity to generate in excess of 36 MWp of energy.	<p>Installation of a large-scale solar farm on council owned land will allow the council to offset its carbon emissions from electricity and gas usage and possibly 'retail' any excess.</p> <p>Large scale solar farm installed in Barkham with the potential of generating 36MWp output achieving 34,500,000 kWh's per annum by 2023.</p> <p>Estimated carbon savings 7,970 tCO<sub>2</sub></p> <p>Potential to feed 8,000 homes.</p>	<p>Planning status of the land would remain unchanged with it reverting back to farmland after the solar farm reaches the end of its lifespan.</p> <p>Generation of green energy locally</p> <p>15,000 new trees on the farmland will be planted</p> <p>New route for walkers, cyclists and horse-riders are being considered</p>	Asset review board to the potential sites - consultant briefing for review of master planning of specific sites - With WSP for land planning now.	Short term	7,970	£21M	
				Options appraisal - commission specifications of the project to procurement team				
				Site tenant notice - one year notice				
				Initial procurements process - identify the contractor - framework and due diligence process - 6 months				
				Planning application - full application submission – completed				
				Consultation processes with local residents is undergoing				
				Project delivery - Construction of solar farm - Project management				
				Start operation expected by December 2023				
12.2	Deliver the installation of a solar farm in Site 2 with the capacity to generate in excess of 20 MWh of energy.	<p>Installation of a large scale solar farm on council owned land will allow the council to offset its carbon emissions from electricity and gas usage and possibly 'retail' any excess.</p> <p>Installation of solar farm in Site 2 with the potential of generating 20+ MWh generation by 2025.</p> <p>Estimated Carbon savings 5,112 tCO<sub>2</sub>e</p> <p>Potential to feed 5,000 homes.</p>	<p>Generation of green energy locally</p> <p>Direct way to reduce carbon emissions</p> <p>Surplus power is feed to the mains grid thereby distributing clean energy locally</p> <p>Planning status of the land would remain unchanged with it reverting back to farmland after the solar farm reaches the end of its lifespan</p>	Asset review board to the potential sites - consultant briefing for review of master planning of specific sites	Medium term	+/- 5,112	TBC	
				Options appraisal - commission specifications of the project to procurement team				
				Site tenant notice - one year notice				
				Initial procurements process - identify the contractor - framework and due diligence process - 6 months				
				Planning application - full application submission				
				Consultation processes with local residents				
				Project delivery - Construction of solar farm - Project management				
				Start operation				

REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone	Timescale	Carbon Savings tCO <sub>2</sub>	Estimated Project Cost	RAG
12.3	Deliver the installation of a solar farm in Site 3 with the capacity to generate in excess of 20 MWh of energy.	<p>Installation of a large scale solar farm on council owned land will allow the council to offset its carbon emissions from electricity and gas usage and possibly 'retail' any excess.</p> <p>Installation of solar farm in Site 3 with the potential of generating 20+ MWh by 2027.</p> <p>Estimated Carbon savings 5,112 tCO<sub>2</sub>e with the potential to feed 5,000 homes.</p>	<p>Generation of green energy locally Direct way to reduce carbon emissions</p> <p>Surplus power is feed to the mains grid thereby distributing clean energy locally</p> <p>Planning status of the land would remain unchanged with it reverting back to farmland after the solar farm reaches the end of its lifespan</p>	Asset review board to the potential sites - consultant briefing for review of master planning of specific sites	Medium term	+/- 5,112	TBC	
				Options appraisal - commission specifications of the project to procurement team				
				Site tenant notice - one year notice				
				Initial procurements process - identify the contractor - framework and due diligence process - 6 months				
				Planning application - full application submission				
				Consultation processes with local residents				
				Project delivery - Construction of solar farm - Project management				
				Start operation				
12.4	Deliver the installation of a solar farm in Site 4 with the capacity to generate in excess of 20 MWh of energy.	<p>Installation of a large-scale solar farm on council owned land would allow the council to offset its carbon emissions from electricity and gas usage and possibly 'retail' any excess.</p> <p>Installation of solar farm in Site 4 with the potential of generating 20+ MWh by 2030.</p> <p>Estimated Carbon savings 5,112 tCO<sub>2</sub>e potential to feed 5,000 homes.</p>	<p>Generation of green energy locally Direct way to reduce carbon emissions</p> <p>Surplus power is feed to the mains grid thereby distributing clean energy locally</p> <p>Planning status of the land would remain unchanged with it reverting back to farmland after the solar farm reaches the end of its lifespan</p>	Asset review board to the potential sites - consultant briefing for review of master planning of specific sites	Medium term	+/- 5,112	TBC	
				Options appraisal - commission specifications of the project to procurement team				
				Site tenant notice - one year notice				
				Initial procurements process - identify the contractor - framework and due diligence process - 6 months				
				Planning application - full application submission				
				Consultation processes with local residents				
				Project delivery - Construction of solar farm - Project management				
				Start operation				

REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone	Timescale	Carbon Savings tCO <sub>2</sub>	Estimated Project Cost	RAG
T13	<b>Target 13. Support the generation of renewable energy in the Borough to generate the equivalent of 2500 kWh per household in 2030, this will result in carbon savings of approximately 44,666.3</b>					27,333.46		
13.1	Set up a Community Energy Fund for Wokingham (WEC)	<p>A Community Energy Fund will help accelerate the uptake of renewable energy generation within the Borough. It will allow the council to engage with the community in the journey to net-zero carbon. The WCEF funds renewable energy installations through local shares from the community, enabling individuals and local organisations to support and benefit from the scheme.</p> <p>The scheme aims to generate an average of 27,000 kWh/year of renewable energy from the installation of small-scale PV systems funded through this scheme.</p> <p>Estimated carbon savings per year 6.90 tCO<sub>2</sub>e Estimated carbon savings for ten years 69 tCO<sub>2</sub>e</p>	<p>Enable residents and the community to become investors in renewable energy installations.</p> <p>Facilitate access to external funding to cover the cost of renewable energy installations across the Borough.</p> <p>Projects can be wholly owned by the community</p> <p>Support the creation of new green jobs in the area</p> <p>Help to increase the premium of renewable energy technologies by increasing uptake</p>	<p>The scheme was approved by the council in January 2021.</p> <p>The scheme will be launch by summer 2021</p> <p>WBC will partner with Wokingham Energy Community (WEC) and will put forward potential buildings that could be considered for the scheme. These will include schools without solar PV, Young and Community Centres, etc.</p> <p>An annual report will be provided by WEC and Eneary4all one year after it has been launched – summer 2022</p>	Short term	69	Nil	
13.2	Support residents and local businesses to reduce their energy usage and carbon emissions and increase the uptake of green energy	<p>Develop a comprehensive service to residents and local businesses, offering green energy provision, as well as energy efficiency measures, consultancy and advice</p> <p>Provide a scheme which allows for Public and businesses to 'buy'</p>	Wider uptake of green energy will reduce the green premiums and allow more people to access cheaper green energy tariffs	<p>Feasibility assessment for the council to commence a 'Green label' energy procurement initiative for all borough residents / businesses.</p> <p>Development of the scheme, initial conversations with potential partners</p>	<p>Short term</p> <p>Short term</p>	TBC	TBC	



REF	Action	Description/Outcomes	Co-Benefits/Unintended Consequences	Milestone	Timescale	Carbon Savings tCO <sub>2</sub>	Estimated Project Cost	RAG
		<p>Green electricity / Gas through WBC (referral)</p> <p>Estimated uptake and carbon savings will be identify through the feasibility assessment.</p>		Scheme approval by Executive and launch the scheme	Medium term			
13.3	Support the delivery of smart grid technologies	<p>A modernise energy service through smart grid technologies and digital infrastructure will provide more accurate information about energy consumption and costs, so consumers can easily understand how to save money on their bills.</p> <p>The project aims to monitor the benefits of energy management trials, implemented by Smarter Grid Solutions, and to advise on future upscaling potential.</p>	Digital infrastructure enable consumers to access innovative solutions such as smart tariffs. These tariffs reward consumers financially for using less electricity at peak times of demand or using more when overall demand is low and there is surplus generation available	Work in collaboration with ADEPT, UoR and the LEP to deliver initial research on test different control strategies / interventions.	Medium term	Nil	Nil	

## Retrofitting Domestic and Commercial

### Carbon savings: 300tCO<sub>2</sub>e

Over the last year, the council introduced and started the delivery of the Energy Company Obligation (ECO) and Green Homes Grant schemes. These seek to support residents to reduce their energy usage and carbon emissions and increase the uptake of green energy technologies.

Households who install energy saving measures will see significant savings in their energy bills and carbon emissions. Many of the households benefited will be low-income or vulnerable households on benefits, whose homes currently have poor energy efficiency ratings.

Despite the limitations caused by lockdowns, council assets and schools have also been retrofitted. Feasibility assessments have been of pilot schemes in council houses and Woodley.

### Our Key Achievements

- Over 500 properties have benefited from the ECO and GHG schemes achieving potential carbon savings of 280 tCO<sub>2</sub> per year.
- Over 10 schools retrofitted.

### Our Partners

The delivery of the projects listed in our action plan will not be possible without partnering with Parish & Town Councils, Residents, schools, subcontractors.

Behaviour change will also be vital in supporting residents and businesses to retrofit their properties and Wokingham Borough Council will work to raise awareness on how to make the best and most efficient choices and how to go about this through effective communication with stakeholders.

### Consumption Emissions

Total life cycle GHG emissions from solar PV systems are similar to other renewables and nuclear energy, and much lower than coal.

### Future Opportunities

The Government energy white paper, and new commitments identified in the 10 actions plan for green recovery will bring new opportunities and stronger targets to promote renewable energy generation. However, as this is recent policy and still under development, it will be closely monitored to support and strengthen our own targets.

### SDGs



REF	Action	Description / Outcome	Co-Benefits/Unintended Consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG	
T14	Target 14. By 2028 All council buildings, excluding schools, will be retrofitted to carbon neutral standards						6,612.30	4,500,000	
14.1	Improve energy performance of council owned buildings to carbon neutral standards	Implement a wide range of energy efficiency projects at existing properties to improve energy efficiency. These include, installing LED lighting, Cavity Wall, loft insulation boiler controls etc., all to make the property ‘consume’ less energy.  Programme for retrofitting corporate assets based on energy performance baseline and energy improvement requirements.  6,612.30 tCO <sub>2</sub> e savings by 2028	Reduce cost of energy bills  Support more jobs in the green and sustainability industries  Emerging of new supply chains for building efficiency will reduce the cost of the green technologies such as heath pumps, batteries, solar panels, etc.	Have a baseline of energy performance for each council-owned asset. Three year assessment, average kilowatt value (FY from 2017-18, 18-19, 19-20).	Short-term	6,612.30	4,500,000		
				Identify energy performance improvement requirements to all corporate sites and recorded in the Corporate Assets Carbon Reduction Database.	Medium term				
				Set up a programme for retrofitting assets.					
				Carry out a feasibility assessment on Woodley Library as a pilot project.					
				Establish guidelines of energy improvements that can be used for all corporate assets.					
				Deliver the retrofitting programme.					
				14.2	Improve energy performance of council housing stock			There are around 2,600 council owned housing units. We want to improve energy performance of council housing and incrementally reduce the use of domestic gas and replace it with cleaner technologies.  This will contribute to a reduction in energy bills and fuel poverty rates.  Improve energy efficiency of council owned houses to improve EPC bands E,F & G	Improving the energy efficiency of our homes will mean households can significantly reduce demand and save money on their bills.  Reduce fuel poverty rates
Carry out assessment to Public Energy Supplier funding that could be used to improve the energy profile of council housing.	Short term	Nil							
Carry out an assessment to ECO (Energy Company Obligation) scheme and potential funding.	Short term	Nil							
Pilot energy improvement work to a property increasing it from SAP D to B.	Short term	TBC							

REF	Action	Description / Outcome	Co-Benefits/Unintended Consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		Carbon savings will be informed by the number and type of interventions delivered in each property		Carry out independent EPC ratings for each property. This is dependent on budget allowances.	Medium term		TBC	
				Establish and deliver a retrofitting programme for council housing based on EPC baseline and available budgets. This will be informed by the stock survey	Medium term		TBC	
T15	<b>Target 15. By 2029 all local schools to be retrofitted</b>					5,034.08		
15.1	Upgrade various energy measures in the schools to improve their energy performance.	Schools retrofitting programme will be based on initial assessment. Works will typically include: LED lighting, Insulation measures, controls upgrades, heating upgrades / replacements and Renewable Energy Generation technologies. Priority given to energy 'payback' calculations of less than five years against energy spend. This will improve energy performance and has the potential to save 5,034.08 tCO <sub>2</sub> e when completed	<p>Improving the energy efficiency of our schools will significantly reduce demand and save money on their bills.</p> <p>Support more jobs in the green and sustainability industries</p> <p>Emerging of new supply chains for building efficiency will reduce the cost of the green technologies such as heat pumps, batteries, solar panels, etc.</p>	<p>Carry out energy audits to all schools to identify possible energy reduction projects.</p> <p>Establish and deliver the schools retrofitting programme which will be based on carbon 'paybacks'</p>	<p>Medium term</p> <p>Medium term</p>	5,034.08	This project is included in the budget for retrofitting council property (4,500,000)	
T16	<b>Target 16. By 2030, 20% of all houses in the borough to be retrofitted</b>					35,446.0	75,0000	
16.1	Develop and deliver schemes to support retrofitting of homes. Such as ECO (Energy Company Obligation) offering.	<p>Support residents to reduce their energy usage and carbon emissions and increase the uptake of green energy technologies. This scheme will include energy efficiency measures.</p> <p>More residents will be able to improve the energy efficiency of their properties and switch from gas to electricity</p>	<p>By improving the energy efficiency of our homes will mean households can significantly reduce energy demand and save money on their bills.</p> <p>Improve health as homes become more</p> <p>Reduce fuel poverty</p>	<p>Set up the scheme. Identify the type of measures that can be implemented</p> <p>Identification of suppliers that will help deliver the scheme</p> <p>Scheme approval by Executive</p> <p>Launch the scheme – identify and contact the residents that can benefit from the scheme</p> <p>Continue advertising and implementation</p>	<p>Short term</p> <p>Short term</p> <p>Short term</p> <p>Short term</p> <p>Medium – long term</p>	Potential carbon savings 35,446.0	FY21/23 75,0000	

REF	Action	Description / Outcome	Co-Benefits/Unintended Consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		Potential carbon savings 44,307.5 tCO <sub>2</sub> e						
16.2	Gren Homes Grant	Support residents to reduce their energy usage and carbon emissions and increase the uptake of green energy technologies. This scheme will include energy efficiency measures. More residents will be able to improve the energy efficiency of their properties and switch from gas to electricity	By improving the energy efficiency of our homes will mean households can significantly reduce demand and save money on their bills.  Reduce fuel poverty	Deliver Green Homes Grant LAD 1	Short term	Carbon savings shared with ECO scheme	Nil	
				Green Homes Grant LAD 2	Short term			
				Continue application for upcoming grants	Medium term			
16.3	Support residents and local businesses to reduce their energy usage and carbon emissions by retrofitting their properties - Green Bank Scheme	The Green Bank Scheme will provide loans to assist householders in their net zero carbon ambitions. This will include energy efficiency measures on the fabric of the building and replacing appliances with low carbon versions. Householders will pay this back against a loan re-payment (plus interest) over a period of time (7, 10 and 15 years).	More residents will be able to improve the energy efficiency of their properties and switch from gas to electricity.  By improving the energy efficiency of our homes will mean households can significantly reduce demand and save money on their bills.	Identify partners and set up the scheme	Medium term	Carbon savings shared with ECO scheme and GHG	TBC	
16.4	Smart City Cluster pilot project	The project focus on energy savings from 'small' devices using a 'smart' plug. This project will help to inform on technologies that will help reduce energy consumption		Trial to other office locations where the impacts across numerous devices can be tested and monitored. They are looking for a minimum energy saving of 5% along with associated cost savings. Looks very promising.	Medium – long term	Nil	Nil	
16.5	Street lighting project	A major street lighting LED Upgrade Scheme took place over the last few years. This has significantly reduced energy consumption and equipped the streetlights with remote control/monitoring. The council will further explore projects that have the potential to create further carbon savings.		<b>Part-night lighting:</b> There are approx. 2,000 unit operating "part-night" in Wokingham, where they switch off between 0:30 and 5:30. The council will explore how this scheme could be extended to other roads	Medium – long term	Carbon savings will be identified through the feasibility assessments	TBC	
				<b>Dimming:</b> All of the new LED lights are dimmable and in the majority of locations we currently dim them to 80% power at 10pm and 60% power	Medium – long term		TBC	



REF	Action	Description / Outcome	Co-Benefits/Unintended Consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		Carbon savings will be identified through the feasibility assessments		at midnight. The council will explore the possibility to further fine-tune these dimming levels.				

## Carbon Sequestration

**Carbon savings:** None yet to report.

The actions identified in our plan seek to not only address climate change but also to improve our local air quality, protect and enhance important habitats and safeguard our local biodiversity. The council has committed to plant 250,000 trees by 2025.

Over the last year we have focused on doing the groundwork that will ensure the long-term sustainability of this project as it is essential to consider the maintenance of the trees in the long-term, as well as making sure we choose the right tree for the right location, promote native tree planting and well targeted woodland creation, as well as encouraging retention of trees.

The delivery of tree planting will be supported by a Tree Strategy, this will help meet statutory biodiversity obligations, while maximising the wide range of benefits that trees and woods can deliver for health, amenity, climate change and water management.

The council plans also include projects to manage grassland, rewild land, and protect and enhance wetland habitats.

### Our Key Achievements

- Created a partnership with the Woodland Trust to support the delivery of our tree planting and secure £300,000 through the Emergency Tree Fund.

### Our Partners

The delivery of tree planting and other carbon sequestration projects listed in our action plan will not be possible without the support and collaboration of the towns and parish council's, residents, local businesses, suppliers, the national grid, public energy suppliers.

Wokingham Borough Council's partnership with the Woodland Trust will ensure we receive the advice and support needed to ensure that we will be able to maximise the wide range of benefits that trees and woods can deliver.

Behaviour change remains important through the solutions to the climate and ecological emergencies which are recognised as intertwined. Residents have appreciated their green spaces across the borough throughout the pandemic more than ever before and stewardship over those spaces is widely accepted as vital.

### Consumption Emissions

There are consumption emissions associated with every purchase of a good or service including of trees. However, by planting native trees, these emissions will be as low as possible. These are out of scope CO<sub>2</sub> emissions.

### Future Opportunities

The Climate and Ecological Emergency (CEE) Bill was introduced in parliament on Wednesday 2nd September 2020. This Bill will accelerate change and provide positive outcomes for the local authority climate emergency agenda. Further resources and funds are to be allocated if the Bill is passed into law.

Point 9 of the Government's Ten Point Plan for a Green Industrial Revolution focuses on protecting our natural environment where the government committed to protect 30% of UK land by 2030 by designating new national parks and AONBs, initiate recovery projects as well as plant 30,000 hectares of trees and rewild the countryside to the measure of 30,000 football pitches.

Further upcoming national policy includes the England Tree Strategy and the Nature Strategy.

### SDGs



REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
T17	<b>Target 17. Plant 250,000 trees throughout the Borough by 2025 saving 3.5 ktCO<sub>2</sub>e per annum</b>					<b>3,500</b>	<b>No allocated</b>	
17.1	Create a new forest that will increase the number of trees in the Borough to improve carbon capture and biodiversity net gain	<p>Large-scale (greater than 5ha) woodland planting on council owned land on high carbon capture potential sites (e.g. arable land, improved grassland).</p> <p>Carbon sequestration potential of 7.83 tonnes of CO<sub>2</sub>e equivalent per hectare in first year of planting, 13.7 tonnes thereafter.</p> <p>Current woodland cover estimated at 2576 ha of Wokingham Borough (14.3%). Planting 115 ha more woodland (and associated green infrastructure) would get the Borough woodland land cover close to 15%.</p>	<p>Improve our local air quality</p> <p>Protect and enhance important habitats</p> <p>Safeguard local biodiversity</p> <p>Improve water management</p> <p>Help to combat climate change</p> <p>Provide space for leisure and recreation</p>	Initial feasibility study, project plan and business case development	Medium term	3,500	<p>Tree stock, planting, and maintenance during establishment estimated at £1,500,000</p> <p>Planning, consultation, public co-ordination, and handover estimated at £220,000</p>	
				Identify council owned land that is suitable for a major tree planting scheme				
				Review our estate portfolio for agricultural land / improved grassland, which has the potential to be converted to woodland.				
				Engage forestry specialist contractor to advice on feasibility, constraints, and process. Prepare consultant brief				
				Preparing plans and consulting public				
				EIA Screening / Planning				
				Grant and other scheme applications				
				Ordering and planting trees (with protection)				
				Installation of other site infrastructure				
				Produce forest management plan				
				Handover to site manager (phased) - Ongoing management				
17.2	Deliver small-scale woodland planting on council estate in existing parks and opens spaces sites.	<p>Identify potential programme to invest in small-scale woodland planting on council estate in existing parks and opens spaces sites. This small-scale planting can be deployed with shorter time scales than larger afforestation schemes.</p> <p>Estimate 5 to 10 ha of land available (circa 8,000 to 16,000 trees if planted as woodland).</p>	<p>New community orchards for local food production</p> <p>Improve our local air quality</p> <p>Safeguard local biodiversity</p> <p>Improve water management</p> <p>Help to combat climate change</p>	Assessment to council estate portfolio to identify areas in existing public open space that has potential to be converted to woodland.	Medium term	7,938	<p>Tree stock, planting, and maintenance during establishment estimated at £135,000</p> <p>Planning, consultation</p>	
				Carried out an internal review of constraints, costing, and scheduling. Preferably looking to target small low risk areas				
				Preparing plans				
				Implement public consultation on identified sites				
				Grant and other scheme applications				

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
		Potential for the sites to be planted as Community Orchards for local food production and BAP targets. Converting from improved grassland to traditional orchard with wildflower rich ground flora has the potential to still sequester circa 6 tonnes of CO <sub>2</sub> e equivalent a year.	Provide space for leisure, recreation and education	Ordering and planting trees (with protection) Ongoing management - Produce/review woodland management plan Promote tree planting campaigns to engage with residents, schools and local businesses (e.g. National Tree Week on 28th November)			, public co-ordination, and handover estimated at £35,000	
17.3	Support woodland and hedgerow creation on private sites.	Set up a grant scheme for local private landowners to apply for funding to create new woodland and hedge roads on privately owned sites.  Recommend running scheme as yearly rounds with a ceiling of 16,000 whip trees (equivalent to 10ha broadleaf woodland) per year.  If run in 2022/23, 2023/24, and 2024/25 with complete take up it has a potential to deliver 48,000 trees.		Produce Wokingham Borough Tree strategy to establish guidance for the delivery of the scheme Set up the scheme. Define the thresholds, suitability assessment and grants or plants Call for sites - Scheme promotion and engagement with local landowners Selection for piloting with a beacon site Tranche 1 - Planting plan design and approval, establishing contract negotiation, payment mechanism, compliance checking and other grant and carbon trading scheme support Review of tranche 1 take-up and feasibility assessment for tranches 2 & 3	Short term Short term Short term Medium term Medium term	9,531	Tree stock, delivery, and planting (with partners) estimated at £90,000  Scheme creation, promotion and community engagement estimated at £45,000	
17.4	Make Wokingham a Garden Forest by promoting and encouraging residents to plant new trees	Establish general process and guidance that could allow residents and local businesses who want to plant and maintained their own trees either with our permission on our land, or to help them have a successful tree on their own land. A community of garden tree owners - scheme will be required to engage the community and ensure the legacy of the tree planting, securing that trees will be looked after.		Produce Wokingham Borough Tree strategy to establish guidance for the delivery of the scheme Design the scheme; include considerations on types of trees, maturity. Provide the mechanism to select the right tree for the right place. Establish the delivery mechanism Launch the scheme and engage with residents and local businesses. Provide guidelines on the types of trees to be	Short term Short term Medium term	4,950	Tree stock and delivery (with partners) estimated at £130,000 Scheme creation, promotion, and community engagement	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
		<p>These schemes will seek to deliver 6,000 trees</p> <p>Estimate that a scheme with approximate 10% of householder take up rate has the potential to deliver 6,000 to 7,000 trees planted. Recommend that that the scheme should be budgeted to have a 10,000 tree ceiling.</p>		<p>planted, the pathway for application of new trees and the benefits from the tree (carbon savings, biodiversity gain, etc.).</p> <p>Implementation of the scheme. System to take and register the orders - place tree orders and delivery. Record keeping.</p> <p>Legacy - is there ongoing support offered. Long-term recording of benefits Opt-out (local offsetting)</p> <p>Annual review and monitoring of the scheme</p> <p>Assume request a tree scheme will run for 1 year only but potential to turn into an annual campaign depending on uptake in 2023</p>	<p>Medium term</p> <p>Medium term</p> <p>Medium term</p> <p>Medium term</p>		estimated at £60,000	
T18	<b>Target 18. Carbon sequestration by design - improving carbon sequestration rates in future land management decisions, Approximately 0.062 ktCO<sub>2</sub>e savings</b>					660		
18.1	Develop the Wokingham Borough Tree Strategy to support long-term creation and retention of woodland and trees	<p>Developing a tree strategy for the Borough which will help define: Appropriate species (and adaptation to climate change); Good management practice; Facilitating ongoing recruitment to veteran tree population; Appropriate places for woodland creation; and access.</p> <p>Improving the retention rate of trees - The longer trees are standing the longer carbon is locked up.</p> <p>Encouraging planting of woodland on private land.</p>		<p>Identification of requirements for Tree Strategy</p> <p>Development of Feasibility study brief (including land appropriation and/or acquisition) Develop and builds upon existing studies Identify land available and type of habitat Verify likely carbon sequestration Confirm more detailed cost estimates Allows milestone point for decision to continue with full funding</p>	<p>Short term</p> <p>Short term</p>	Neutral	Nil	



REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
18.2	Include in the Local Plan Update policy for carbon sequestration potential. Subject to inspection, the local plan update will include: Green Infrastructure Policy Tree Policy Flood Policy Biodiversity Policy Design Policy	<p>Policies written to avoid loss of established habitat will help retain carbon stores.</p> <p>Policies written to seek multifunctional design of green and blue infrastructure will build in carbon sinks to new development.</p> <p>Policies written to retain and enhance biodiversity (particularly botanic diversity) will aid carbon sequestration in soils.</p> <p>Design guide to green and blue infrastructure will encourage inclusion of low intensity (maintenance) habitat for carbon sequestration.</p> <p>Assuming roughly 70ha of green infrastructure created in the LPU cycle. A nudge of 10% cover from high intensity maintenance grassland to low intensity species rich, brought about by good design guiding, could sequester a further 42 tonnes of carbon dioxide equivalent per year.</p>	<p>Avoid / reduce the loss of established habitat.</p> <p>Retain and enhance biodiversity</p>	<p>Require a review of ability to enhance carbon sequestration rates for all new policies and design guides to be published alongside.</p> <p>Independent assessment - design policy approach to maximise carbon sequestration</p>	Medium term	42	£10,000 Approx.	
18.3	Develop the Local Nature Recovery Strategy to provide complementary funding source to aid land use change (LULUCF being a carbon sink)	Developing a Local Nature Recovery Strategy that covers the Borough will provide a 5% uplift on the number of biodiversity net gain units that can be generated in areas identified as part of a local nature recovery network. The ability of soil to sequester carbon correlates positively with biodiversity.	<p>Biodiversity net gain unit capacity raises the value of land</p> <p>Avoid / reduce the loss of established habitat.</p> <p>Retain and enhance biodiversity</p>	<p>Develop the Local Nature Recovery Strategy through the Berkshire Local Nature Partnership</p> <p>Initial analysis of 30% target area - mapping exercise</p> <p>Consultation exercise with stakeholders</p>	Medium term	Neutral	Initial £40000 further funding will be required	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
		<p>Additional biodiversity net gain unit capacity raises the value of land (for making improvements for biodiversity), and will leverage funding for habitat improvement that will lead to soil restoration and carbon sequestration.</p> <p>On assumption that average of 2.5 units per ha (not including current woodland area) can be generated at £15,000 per unit, the 5% uplift on a LNRS (over and above the national strategy area) would generate value on the biodiversity potential of £5,276,250</p>		Revising the Local Nature Cover Strategy and taking it through the local authority adoption process				
18.4	Develop a Natural Flood Management partnership and scheme	<p>The creation of wetland habitat as part of a programme of restoration of natural flood management processes has potential to sequester carbon and reduce soil degradation.</p> <p>The partnership work and scheme would place through agreements with Environment Agency, water companies, and other Loddon Catchment Partnership partners.</p> <p>Natural flood management measures that prevent degradation might prevent 0.25 tonnes of carbon per hectare being released into the atmosphere.</p>	Reduce risk of floods and improve water management	<p>Initial mapping exercise to identify locations that will provide wetland habitat and could be forward into the scheme</p> <p>Consultation exercise with stakeholders</p> <p>Revising the Strategy and taking it through the local authority adoption process</p>	Long term	0.25	TBC	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
T19	<b>Target 19. Transition to low intensity (high carbon sequestration) land management. This will sequestrate approximately 0.024k tCO<sub>2</sub>e per annum</b>					<b>642</b>		
19.1	Work to transition Grassland Management to less frequent cutting scheme allowing wildflowers to bloom and set seed	<p>Considerations to the BLUE heart campaign style management of grassland moving away from improved grassland habitat under an intensive cut cycle and allowing rewilding of highway verge and other areas increasing</p> <p>Currently approximately 125ha of Environmental Localities greenspace is improved or semi-improved grassland.</p> <p>Converting 1/3 of the approx. 125ha of improved grassland within Environmental Localities portfolio to species rich grassland on a once a year cut could sequester an additional 242 tCO<sub>2</sub>e per year (33% of 125 x 5.87, for conversion rate of improved to pollen and nectar mix from NERRO43).</p> <p>Converting rural highways verge to cut and collect, estimate of 4 tonnes per hectare would equate to 400 tonnes CO<sub>2</sub>e per year for 100% conversion.</p> <p>5% pilot is estimated to have the potential to sequestrate 20 tonnes of CO<sub>2</sub>e per year.</p>	<p>Less maintenance than traditional mowing schedules can save money</p> <p>Significantly increasing local wildlife density and diversity</p> <p>Support learning for schools' children and the wider community and provide opportunities to get involved in environmental projects</p>	<p>Pilot the principle of cut and collect to highways verge to improve biodiversity and soil restoration in selected areas. Run a 5% conversation pilot for highways verge and rural highways verge</p> <p>Target of 12.5ha of wildflower grassland creation across Environmental Localities sites. Converting 10% of this to pollen and nectar mix would sequestrate approximately 74 tonnes of CO<sub>2</sub> equivalent per year.</p>	Medium term	642	Estimated at £130,000	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
19.2	Work to transition Grassland Management to support the Restoring Biological Processes	<p>Natural greenspace grassland will perform better at carbon sequestration where:</p> <p>a) soil compaction from machinery is kept to a minimum, and</p> <p>b) structural diversity is encouraged by 'conservation' grazing (instead of uniform cutting).</p> <p>With the additional natural greenspaces being taken on alongside development the scale to justify an internally owned and managed conservation-grazing herd may be reached.</p> <p>A goal of 642 tCO<sub>2</sub> per year (0.64 ktCO<sub>2</sub>e) would be targeted to be met in the period 2025 to 2030</p>	<p>Less maintenance than traditional mowing schedules can save money</p> <p>Significantly increasing local wildlife density and diversity</p>	A feasibility study for applying a Legacy Gracing approach will set out the steps towards reducing our reliance on machine cutting and restoring soils.	Medium term	642		
19.3	Implement Citizen Science Engagement for Hedgerow Restoration	<p>There is approximately 1534 km of (mapped) hedgerow in Wokingham Borough. Of this, approximately 963km (63%) is within the countryside (as defined by settlement hierarchy). Of this, approximately 397km (26%) are associated with the adopted highway.</p> <p>Hedgerows are a good target for restoration work to increase the number of standing mature trees storing carbon. At a 50m spacing 400km of hedgerow would be equate to 8,000 open growing trees.</p> <p>Potential to increase an additional 3,200 tCO<sub>2</sub>e captured over the next 70 years.</p>	<p>Improve our local air quality</p> <p>Safeguard local biodiversity</p> <p>Improve water management</p> <p>Help to combat climate change</p>	<p>TVERC product development to take PTES hedgerow survey data and project in an interpreted way to inform hedgerow management for land managers.</p> <p>Tool can be used by Trees &amp; Landscape officers for enforcement of the Hedgerow Regulations.</p> <p>To inform a planting and restoration plan (as a part of the tree strategy), a citizen science condition assessment programme would greatly enhance the targeted planting of trees in suitable locations.</p>	Medium term	3,200	£15,000	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Estimated Project Cost	RAG
T20	<b>Target 20. Implement a programme of carbon sequestration opportunities</b>					<b>Neutral</b>	<b>Nil</b>	
20.1	Engage the community with Community Garden Schemes	<p>Allow new allotment site due to be opened in 2020 as part of the South Wokingham Strategic Development Location (SDL)</p> <p>Carbon savings for these schemes are detrimental, however engaging residents with allotments and community garden schemes contributes to behavioural change</p>	<p>Promote production of fresh, local, seasonal produce</p> <p>The social contact offered by gardening in an allotment environment helps to combat the lack of social capital embodied by loneliness</p> <p>Gardening can prevent and alleviate mental ill-health and offer physical benefits</p> <p>Improve local air quality</p>	Work with UoR in assessing the 'Life Cycle Sustainability Analysis (LCSA) of Urban Food Production – the Case of Allotment Gardens and identify future opportunities for engagement	Short term	Neutral	Nil	
20.2	Enable the assessment and test of carbon sequestration new technologies	<p>Enable the safe testing and assessment of new initiatives for carbon sequestration</p> <p>There is potential for carbon savings of individual projects which will be assessed on once projects have been identified</p>		<p>Road spray initiative investigated as part of options appraisal for air quality initiatives.</p> <p>It was recommended that this initiative was not explore further as the benefits to AQ and carbon savings are minimal</p>	Short term	Neutral	TBC	



## Engaging Schools and Young People

### Carbon savings: 153.4 tCO<sub>2</sub>e

Due to lockdown restrictions over the last year there has been limited engagement with schools. The council has worked to build up contacts with school and gain more experience of delivering these targets virtually which will be implemented in the updated action plan below.

### Our Key Achievements

- A Youth Climate Conference was delivered online in the second week of October. The video series received a total of 5,600+ views across all social media platforms.
- A total of 9 retrofit projects were undertaken at schools including LED lighting and variable heat pumps. A further 10 projects approved for similar retrofit projects including LED lighting, heating replacement and loft insulation. Carbon saved from retrofitting projects are accounted for under target 15.1 for 'Retrofitting Domestic and Commercial Assets'.
- 6 schools are taking part in an air quality project and have diffusion tubes at their schools to monitor levels of pollutants. As part of this programme, a series of educational events, learning aids, competitions and lesson plans are being rolled out to the borough's primary schools more widely.

### Our Partners

Wokingham Borough Council is keen to engage with as many schools and young people in the borough as possible in order to tackle the climate emergency as the council recognises the next generation are the driving force being this international movement. Schools, teachers and young people themselves will be the council's key partners for delivery of the actions set out below.

Behaviour change is a key aim of this section of the climate emergency action plan and should raise awareness and allow both children, young people to continue to drive this agenda. Making the voices of young people heard should also encourage intergenerational learning meaning sustainable behaviour change is encouraged from their parents and families.

### Consumption Emissions

The engagement targets below are to reduce overall carbon footprints of our residents which includes all 3 scopes of emissions. The carbon savings associated with the targets below have been reduced from last year's estimates by 79% in line with the consumption-based UK carbon footprint which informs us that only 21% of all greenhouse gas emissions are from direct sources and therefore within our scope of influence.

We have made the decision to lower these predicted savings also to ensure that there is less risk of double counting of carbon savings whilst realising that possible behaviour change as a result of engagement means and accelerated the shift to more sustainable behaviours and therefore drives carbon emissions down further by 2030.

### Future Opportunities

There are various environmentally focused initiatives, award schemes and accreditations which schools can work towards and many schools in the borough have achieved some of these awards. The council's aim is to make it as simple as possible to identify which scheme will work for them and what their pupils want to achieve and support schools in their journey to becoming more sustainable or even net zero carbon and how this can tie in with the curriculum at all levels.

### SDGs



REF	Action	Description/Outcomes	Co-Benefits/Unintended consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T21	Target 21. Encourage and support school children in the Borough to take an active role in reducing carbon emissions							
21.1	Deliver annual climate emergency assemblies at local schools	<p>Introduce discussions about Climate Emergency amongst children and young adults via an annual climate emergency assembly for all secondary school students.</p> <p>98.5 tCO<sub>2</sub>e savings</p>	<p>Restricted access and communications with schools due to covid-19 restrictions in place.</p> <p>Engagement from pupils should also reduce out of scope emissions in their carbon footprints, such as from food choices.</p>	<p>Plan and deliver climate emergency assemblies with all secondary schools.</p> <p>Climate Emergency Assemblies were delivered to all year groups in 3 Secondary Schools in the borough to a total of approximately 3,357 pupils before lockdown restrictions came into place. 37.4 tCO<sub>2</sub>e savings achieved this year.</p>	Short term and ongoing	98.5	Nil	
21.2	Create climate committees in schools	<p>Provide an opportunity for students, teachers, parents and the local community to work together to support the delivery of climate related projects.</p> <p>Increase engagement with climate emergency issues and ownership of actions to reduce carbon dioxide emissions.</p> <p>One per school starting with secondary schools initially.</p> <p>11 tCO<sub>2</sub>e savings per school per annum</p>	<p>Restricted access and communications with schools due to covid-19 restrictions in place.</p> <p>Engagement from pupils should also reduce out of scope emissions in their carbon footprints, such as from food choices.</p>	<p>Produce information pack for how to set up a school council. Provide contacts within Wokingham Borough Council to help/attend when needed. Wokingham Borough Council is soon to pilot Youth Voice (youth council) which will contain a regular climate emergency item.</p>	Medium term	11	Nil	
		<p>Aim to set first committees up with particularly engaged schools in 2021, or 2022 depending on the schools capacity post covid-19. Headteachers summit to be held in July 2021. This summit aims to share of schools to schools on how schools can respond to the climate emergency, including setting up eco-committees for pupils.</p>		Short term and ongoing	Nil			
21.3	Deliver the Youth Climate Conference	<p>Increased awareness, engagement and understanding of climate emergency issues amongst children and young adults attending. Youth Climate Conference is aimed at</p>	<p>Restricted access and communications with schools due to covid-19 restrictions in place meant the event was held online</p>	<p>A Youth Climate Conference was delivered online in October 2020 comprising of 9 informative videos from charity partners and academic researchers. The video</p>	Short term and annual	5.3	2,000	

REF	Action	Description/Outcomes	Co-Benefits/Unintended consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		sixth form (16+) students from across the Borough.  5.3 tCO <sub>2</sub> e savings	only with less engagement than planned.  Engagement from pupils should also reduce out of scope emissions in their carbon footprints, such as from food choices.	series received a total of 5,600+ views across all social media platforms.  Aim to repeat this event virtually one a platform which allows for improved engagement.				
21.4	Encourage schools to include climate emergency issues in lesson time	Commitment from schools to include climate change in lesson time, for all children in at least one subject i.e. science, geography, philosophy, PSHE.  Increased knowledge amongst children and young adults on climate emergency issues  37 tCO <sub>2</sub> e savings	Will be able to raise awareness around the connectedness of the climate emergency into all affected topics such as biodiversity.  Engagement from pupils should also reduce out of scope emissions in their carbon footprints, such as from food choices.	Create a series of climate emergency lesson plans for Key Stages 1-3 initially. An initial climate emergency lesson plan has been drafted for testing in secondary schools.	Medium term	37	Nil	
				Create a pledge with criteria for all schools to sign; to be presented at the Secondary Federation. Create campaign to engage across schools and the public to lobby for commitment from all schools. Use different communication channels (e.g. local news, social media, etc.)				
				Gain commitment from all schools and follow up to see how they are fulfilling the promise, with positive press coverage.				
21.5	Encourage schools to adopt sustainable property and operational management practices that reduce carbon emissions and support the environment	Develop a sustained campaign to encourage schools to focus on environmental issues to promote behavioural change.  Better informed children and school staff on sustainability practices.	Restricted visitor access in schools due to covid-19 restrictions in place meant carrying out the retrofitting works have been delayed in some cases.  Learning opportunity around how energy use impacts our carbon footprints.	Work with schools to encourage retrofitting and raise awareness about energy ratings, usage and consumption.	Short term	See Target 15.1	See Target 15.1	
				Work with schools to identify the school's carbon footprint including consumption emissions where possible, such as from food choices. The council has assisted 2 schools with this in the last year.	Short term	Neutral	Nil	

REF	Action	Description/Outcomes	Co-Benefits/Unintended consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
21.6	Encourage Wokingham Borough schools to become net zero carbon and embrace sustainability	Create positive partnerships with schools to make the best use of already existing schemes such as the Eco Schools Scheme, UN Climate Accreditation for school staff, etc.	Behaviour change promoted in specific areas as demanded by the accreditation aimed for.	Get all schools to sign up to bronze level of eco schools by December 2021	Short term	TBC	Nil	
		All schools to achieve Eco Schools programme by December 2025.		Set up an incentive for all local schools to become green flag level by December 2025				
		Support schools to assess their carbon emissions and sustainability status.  Each school to have a sustainability and carbon emissions baseline to help schools to take better informed actions in the journey to become net-zero carbon.	Learning opportunity to tie in the various services the council can provide into the climate emergency.	Produce and online resource on the Council's offering to schools.	Short term	Neutral	Cost of software	
				Assessment of sustainability initiatives implemented at schools to identify what they already do and how we can support them to become net-zero carbon.	Short term		Nil	
				Energy performance assessment for each school. The energy team have undertaken 19 site surveys which have included an energy audit to see whether any other energy efficiency projects could be undertaken (as of 25th May 2021).	Short term and ongoing	See Target 15.1	See Target 15.1	
		Learn from best practices amongst local schools. Create an active network of support within and among schools.	Comradery amongst a local network of schools, students and teachers to share lessons learned through both failure and success and accelerate the path to carbon neutral.	Draw up a step-by-step toolkit for schools to exemplify best practice in the borough, including financial cost.	Short term	Neutral	Potentially cost of software	
				Create our own federation/platform for sustainability within schools with sustainability leads at schools. Look into ways where we can use internal school communications systems to nudge users.				

REF	Action	Description/Outcomes	Co-Benefits/Unintended consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
21.7	Support schools to implement carbon sequestration projects	<p>Connect schools to voluntary sector and the community in projects such as planting in care homes, working with local allotments and farms.</p> <p>Increased engagement with carbon sequestration projects among children and young adults.</p>	Focus on wildlife, biodiversity and connection to where food comes from as co-benefits to absorbing carbon we produce from the atmosphere via planting.	Planting trees and plants to create a small-scale young forest in school grounds or council owned land. Promote tree planting campaigns in schools grounds as part of education in climate change issues. Have engaged with schools to promote the free tree packs via the Woodland Trust and offering planting advice. Aim for 10% of schools in the borough to successfully plant on their grounds.	Medium term	1.26 (0.18 per school)	Nil/Grant funding	
							Nil/Grant funding	
				Make more allotment plots available to people on council owned ground to encourage young people to grow their own food.		Drives down food miles (out of scope)	Nil/Grant funding	
21.8	Waste reduction	Run competition between schools to promote recycling, reduce waste and increase children's awareness about the impact of waste and reduce recycling contamination.	Covid-19 has meant that more disposable items are being used and therefore general waste has seen an increase in the last year from schools.	Set up the competition guidelines and trial competition in a specific school.	Short term	See target 27.1	Nil	
		Schools connected to Food Waste Hero volunteers and local businesses, to share surplus food (and other goods) rather than produce waste to increase children's awareness about the value of food and goods and reduce waste.		Investigate Freecycle for food schemes, to reduce food from schools go to waste and gets used, either for food banks or homeless shelters	Short term	More information is required. 605.59 KgCO <sub>2</sub> e is emitted per tonne of food waste going to landfill.	TBC	



REF	Action	Description/Outcomes	Co-Benefits/Unintended consequences	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T22	<b>Target 22. Celebrate schools achievements in climate emergency initiatives and inspire the future generations</b>							
22.1	Launch sustainability awards for schools	<p>Create an awards scheme to recognise and celebrate the efforts and achievements of local schools and their engagement with the climate emergency agenda.</p> <p>Engage children with climate emergency initiatives.</p>	Raise awareness of achievements and inspire the wider borough to engage with the climate emergency agenda.	Establish the criteria for all schools to participate. Promote the school awards	Short term	Neutral	To be confirmed once the project is scoped and costed	
22.2	Nurture creativity and resourcefulness amongst children and young adults	<p>Create a culture of innovation and enterprise thinking on climate emergency solutions</p> <p>Help develop resourcefulness and creativity that is connected to climate change.</p> <p>0.34 tCO<sub>2</sub> savings</p>	Raise awareness of achievements and inspire the wider borough to engage with the climate emergency agenda.	<p>Roll out the Dragons Den climate competition across all schools.</p> <p>The pilot was successfully completed at one secondary school before lockdown restrictions limited access to schools.</p>	Short term	0.34 tCO <sub>2</sub>	10,000	
22.3	Implement a behavioural change programme within schools that would support the adoption of new behaviours, particularly within sustainability and climate change	Initial pilot in three schools will result in engaging 200 children who are encouraged and rewarded for taking daily sustainable actions.	Raise awareness of achievements and inspire the wider borough to engage with the climate emergency agenda.	<p>Identify and propose schools that should be part of the pilot - Autumn to Winter.</p> <p>Set up focus groups with children to drive the platform design. Potential to use eco committees within schools.</p> <p>Write a Business Case that includes timelines, activities and carbon savings to obtain funding for the scheme implementation.</p>	Short term	More information needed on which behaviours will be targeted etc.	39,590	

## Waste and Recycling

**Carbon savings:** 15,502.79tCO<sub>2</sub>

Overall, this year's total waste increased to 71,664 tonnes, with the recycling rate at 49.7% as compared to 50.3% in 2019/20. This difference is due to a number of reasons including covid clear-outs coinciding with the closure of recycling centres as well as wet paper material that could not be recycled. Despite this, recycling rates in the borough still reached 35,634 tonnes of this total, meaning 15,502.79 tonnes of CO<sub>2</sub> savings and 221.47kgCO<sub>2</sub>e per household, a huge achievement.

However, as waste emissions are outside of the borough's scope and not included in the initial figures, they have not been included in the overall savings figures but remain here to demonstrate the potential savings which can be achieved towards global emissions from these initiatives and highlight the importance of such measures.

This is thanks to the successful implementation of a number of initiatives around the existing waste and recycling goals set out in the initial plan. These include new measures for improving the quality collected recyclables and several campaigns to increase awareness.

### Our Key Achievements

- A number of communications campaigns through social media to increase recycling levels of food waste during October and November.
- Through collaboration with school catering contractor Caterlink, significant progress has been made to remove cling film, plastic cups, straws and bottles from 34 local authority schools in the borough, with reusable plastic pots, containers and fully recyclable package materials being introduced.
- An interim solution to tackle wet recycling problem was approved at the end of September, with new recycling bags delivered to residents.

### Our Partners

For each target the council has engaged with partners to ensure these are incorporated into existing plans and maximising their potential for success.

Here the main partners for each have been the Town and Parish Councils, Veolia (waste collection), re3 (Waste disposal). We are also working closely with our schools and residents and will look to collaborate further with our local businesses.

Behaviour change is of great importance to firstly reduce the amount residents and businesses throw away and secondly to encourage to recycle more. There are a number of different ways to engage and communicate with residents to encourage this shift in behaviour which the council is exploring. Over the last year one of Wokingham Borough Council's biggest communications campaigns has been to increase participation in the food waste recycling scheme.

### Consumption Emissions

Per household these overall figures relate to an average of 0.514 tonnes of residual waste, while 0.509 tonnes are being reused/recycled. While it is impossible to calculate exactly which materials these will relate to, some of the more significant elements can be estimated to demonstrate the separate consumption emissions being produced from the disposal of each material. Therefore, within this household figure, it is estimated that 217.61kgco<sub>2</sub>e arises from residual waste and 11.25kgco<sub>2</sub>e arises from all the recyclables combined. A breakdown for these estimates with individual figures and all carbon savings can be found in the methodology section.

### Future Opportunities

A variety of new government led policies have recently been announced which may improve the future effectiveness and likelihoods of these actions, including, the environment bill, the white paper and the sixth carbon budget which includes section specifically regarding waste. Therefore, as each of these develops, they will influence the below actions and scope of such. This is a live document, meaning as these developments are introduced, they will be incorporated and actions adapted, assessing throughout what opportunities are available to maximise the potential benefits, such as producing energy from waste.

### SDGs



REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
T23	<b>Target 23. Eliminate loss of MDR recyclable material in the form of wet paper</b>					<b>5188.67</b>		
23.1	Increase awareness amongst residents to keep paper and card dry	<p>Improved awareness about overall recycling quality and increased communication with residents.</p> <p>Residents more likely to participate as not handling soggy waste. Covid communication about keeping waste clean and dry in order to prevent covid transmission to workers etc., will also indirectly benefit.</p> <p>More home deliveries mean more cardboard from packaging, so residents need to be extra vigilant to maintain quality. May need to increase sack size to allow for this.</p>	<p>Reaching a high level of awareness amongst residents about the implications of wet recyclables and impact on recycling rate through regular (weekly) campaigns to prevent loss of recyclable material.</p> <p>This will generate 5188.67 tco2e savings</p>	<p>Social media campaign to remind residents to continue keeping their paper &amp; card dry</p> <p>Progress: Successfully ran the 'Stamp out the damp' campaign and similar communications, including sharing information with residents on how to use the new bags and keep waste dry.</p> <p>Information displayed on the website</p> <p>Progress: Website fully updated and social media / e-newsletters used to communicate information also.</p>	Short term	<p>5188.67</p> <p>Note: This is out of scope so not included in overall figures</p>	TBC	

REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
23.2	Implement interim solution for keeping paper and cardboard dry	<p>Improved awareness about overall recycling quality and increased communication with residents.</p> <p>Residents more likely to participate as not handling soggy waste. Covid communication about keeping waste clean and dry in order to prevent covid transmission to workers etc., will also indirectly benefit.</p> <p>More home deliveries means more cardboard from packaging so residents need to be extra vigilant to maintain quality. May need to increase sack size to allow for this.</p>	Provision of interim initiative to residents to protect paper & cardboard from wet weather during autumn & winter periods to prevent loss of recyclable material.	<p>Agreement between the council, Veolia and members on the interim solution (Exec report). Formal agreement through executive approval.</p> <p>Arrangement and delivery of the interim solution to residents by Veolia.</p> <p>Communicate with residents about this initiative.</p> <p>Brief consumer services and social media on new initiative.</p> <p>Progress: Deductions from rejections dropped drastically in Q4 thanks to implementation of reusable bags.</p>	Short term		TBC	
T24	<b>Target 24. Achieve 70% recycling target by 2030</b>					<b>9618.23</b>		
24.1	Implement a new waste and recycling collection system with improved facilities	<p>Improved system in general facilitating this across all materials. Includes permanent solution to keeping paper and cardboard dry.</p> <p>Due to closures under lockdown, importance of being selective with waste so as to not overload general waste when limited disposal is available.</p>	<p>Following consultation, a full Waste Strategy will be devised and implemented which will focus on waste minimisation, a high recycling rate, improved quality of recycling and reduced collection/ disposal costs and reduced carbon emissions.</p> <p>Specific carbon savings cannot be attributed to the strategy as a document, but can be attributed to the actions that it sets out.</p>	<p>Prepare consultants briefing, Options appraisal in early 2021, Market research and Decision making by end of 2021. Devise and adopt the communications plan by 2022 Development of the Waste Strategy throughout 2021</p> <p>Progress: Research and proposals and underway for the new waste strategy</p> <p>Communication with residents pre-delivery</p> <p>Delivery of new waste collection methods by March 2026 (three month)</p> <p>Ongoing communication with residents post delivery</p>	Medium term	<p>Included in total</p> <p>Note: This is out of scope so not included in overall figures</p>	TBC	

REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
				Assess impact of the new initiative on the property stock				
24.2	Improve residents' engagement with waste and recycling initiatives via partner Green Redeem	<p>Increased communication with residents.</p> <p>Due to closures under lockdown, importance of being selective with waste so as to not overload general waste when limited disposal is available.</p> <p>Increase in gardening and allotment interest may lead to greater garden waste recycling, food waste and composting opportunities.</p> <p>Closure of recycling centres combined with a surge in waste from lockdown clear-outs will have increased waste and decreased recycling rates. However, going forward people have started to give more to charity shops and find ways to re-use/sell unwanted items rather than disposing of them, while also being more selective of waste on the whole, so as to not overload general waste when limited disposal is available.</p>	<p>Weekly customer email to subscribers and monthly targeted campaigns to coincide with council's services and initiatives to increase the level of participation in recycling and improve the accuracy of recycling materials. Alongside greater awareness amongst residents about environmental issues.</p> <p>This will generate 6771.65 tco2e savings</p>	<p>Weekly email to prompt residents on presenting their waste / recycling.</p> <p>Waste reduction campaign by GreenRedeem to coincide with the delivery of blue bags.</p> <p>Climate Change Emergency campaigns - what residents can do at home to cut their carbon (link to garden waste collection/food waste reduction/recycling &amp; increase in recycling).</p> <p>Progress: Ongoing – We have run a number of successful campaigns/communications in this area and continue to do so.</p> <p>Promote and prompt residents to renew Garden Waste</p> <p>Progress: Residents reminded via email and in other communication to renew their service. 11% of annual recycling amount now coming from this service.</p> <p>Promote online bulky waste collection service</p>	Short term	6771.65	TBC	
24.3	Target low participation areas to increase food waste tonnage to	Low participation areas likely low in all aspects so identification can allow for focus and communication	Improve uptake in food waste recycling to increase food	Identify low participation areas from Veolia crew report and send letters.	Short term	1664.69	TBC	

REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
	increase participation above 50%	on all recycling. Likely will lead to greater food security/reduced inequality due to more donations of excess. Also greater health as residents able to purchase cheaper veg and items in general under shop excess schemes. Panic buying will likely have increased food waste during spikes. More home deliveries, may have better data on the areas with highest consumptions or best/worst figures. Opportunity for communication in delivery.	waste tonnage, hence reducing loss of recyclable material.  This will generate 1664.69 tco2e savings	Progress: All the data has now been gathered and will be incorporated into the overall waste strategy.  Food waste collection anniversary thank you to residents for the fantastic results already achieved! Along with Easter recycling messages (packaging/foil recycling tips/food waste etc.).  Communicate importance of not panic buying – no need as supply chains unaffected. Assess alternative uses and communicate these (animal feed etc).  Progress: New milestones		Note: This is out of scope so not included in overall figures		
24.4	Increase & improve facilities for glass recycling  Partner – Sheltered accommodation providers	Supports wider glass usage in goods, meaning less plastic.  Kerbside collections also means less travel for residents.  Significant disruption from covid in assessing suitable sites.	Increase capture rate of glass from general waste through introduction of 50 new specific recycling sites and kerbside collections at sheltered accommodation, making it more convenient for residents and reducing loss of recyclable material.  This will generate 1142.03 tco2e savings	Identify potential new specific and sheltered sites by communicating with parishes & town councils and other private businesses & partners such as FCC. Then install bottle banks once approved and communicate this with site management and residents. Providing kerbside glass collection at sheltered accommodation.  Progress: 5 sites identified with the help of local Cllr's . These included: 1. Sutton Business Park, 2. British Gardens, Winnersh, 3. Rushey Way, Earley, 4. Laurel Park, Earley, 5. Network Vineyard Church, Eastcourt Avenue. However, none materialised due to landowner rejections.	Medium term	1142.03  Note: This is out of scope so not included in overall figures	TBC	



REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
24.5	Proactive approach to partner with housing developers to deliver waste management facilities in new developments	Opportunity to induce better recycling habits amongst new residents. Home working means more domestic waste so this needs to be accounted for in planning. May lead to requests for upgrades for existing homes. Designing this optimally from the start will save time and costs on collections.	Provide good waste and recycling facilities and communicate the system to new residents in new developments. Leading to greater recycling rates and quality.  This will generate 39.86 tco2e savings	Proactively approach and revive working relationship with sales offices in new development	Long term	39.86  Note: This is out of scope so not included in overall figures	TBC	
				Work closely with developers to ensure efficient supply of waste management facilities to residents as they move in.  Progress: Improved and futureproofed guidance for developers. In the process of obtaining new software for greater management of site specifications. Supplying developers with notices/bags etc will restart once safe to do so, while some have begun requesting these without prompting.				
				Regular supply of instruction letters to developers to be included in the induction packs of residents. Improved information in the bin stores including posters on wall and recycling stickers on bins .  Progress: Ongoing with these letters and stickers still being requested alongside new developments.				
T25	Target 25. Zero waste going to landfill by 2050					8944.74		
25.1	Identify, establish & deliver necessary measures to achieve zero waste to landfill from domestic properties	More land available for other uses such as renewable energy.  Closure of recycling centres combined with a surge in waste from lockdown clear-outs will have increased waste and decreased	Reuse, recycle and recover 100% of WBC waste from domestic properties by moving waste up the waste hierarchy and increasing potential savings from landfill diversion.	Comprehensive communications campaign on "Reuse" and "Appropriate Recycling" including website, social media, GreenRedeem and target campaigns to divert as much recycles from waste as possible.	Long term	8944.74  Note: This is out of scope so not	TBC	

REF	Action	Co-Benefits / Covid Lessons	Description / Outcome	Milestone/Progress	Time Scale	Annual Carbon Savings tCO <sub>2</sub> e	Project Cost (£)	RAG
	Partners – Green Redeem, re3	<p>recycling rates. However, going forward people have started to give more to charity shops and find ways to re-use/sell unwanted items rather than disposing of them, while also being more selective of waste on the whole, so as to not overload general waste when limited disposal is available.</p> <p>Reduction in oil demand has caused the relative cost of recycled material to rise, meaning it may be more difficult to recycle everything without legislative actions.</p>	This will generate 8944.74 tco2e savings	<p>Progress: Ongoing campaigns and actions in previous targets are significantly contributing towards a reduction in waste to landfill.</p> <p>Tagging contamination recycling and leave uncollected.</p> <p>Progress: Consultation regarding enforcement is ongoing.</p> <p>Identify alternate markets for hard to recycle items.</p> <p>Progress: Combustion has been identified as one potential avenue of energy generation to minimise existing fossil fuel use.</p>		included in overall figures		

\*Action 25. Note, this action has been removed and it was explored and the decision made not to take it forward. Full details are included in the methodology.

\*\*Action 28 has been removed from the table as it has been incorporated into the carbon savings column and methodology

## New Development

**Carbon savings:** None to report at this time.

The Local Plan Update (LPU) is progressing. The Draft Local Plan was published for consultation in February 2020. The pre-submission consultation was anticipated to follow in the Autumn 2020. Subsequent to the publication of the Draft Local Plan, the emergency planning arrangements around AWE Burghfield were unexpectedly extended to incorporate land in the Grazeley area for the first time.

The strategy proposed by the Draft Local Plan included the establishment of a new garden settlement at Grazeley to accommodate the future, long term development needs. The extension of the emergency planning arrangements made this strategy realistically unachievable, necessitating the consideration of alternative approaches. The programme for the Local Plan Update is in the process of being finalised, but consultation on an alternative strategy is anticipated in Autumn 2021.

Turning to those policy areas which are not impacted by the above, these are being refined with consideration given to feedback received through the consultation. IN addition, specific climate change evidence has been commissioned to support policy development. This is a key part of evidencing that the requirements will contribute towards the goals relating to new development in the Climate Emergency Action Plan.

The council owned development has been assessed and measures to improved energy efficiency, reduce carbon emissions, and when possible, make new buildings net-zero carbon have been introduced.

### Our Key Achievements

- Initial assessment to all new council development to assess stage of development and possible interventions to committed buildings.
- Dinton Activity Centre, the first carbon-positive building built in the Borough. The new building will generate all of its own power (using solar panels and heat pumps) and will generate more green energy than it uses.

### Our Partners

The following partners are vital to completing the action listed in the action plan below: Development Management and Delivery, Building Control, Developers, Housing Associations and the highways authority as well as consulting with the local community and stakeholders.

Although much of the targets and goals involved in this section of the action plan are focused on infrastructure and planning, behaviour change remains important for residents to understand the value of these new innovations and interventions in the development sector. The council will continue to communicate about these new technologies and explain how they are part of the solution and why they are important.

### Consumption Emissions

The construction industry is very material focused and thus, has a high level of consumption emissions associated. These emissions are out of scope and not considered at this time.

### Future Opportunities

The council responded to a consultation on the Future Home Standards to ensure the ability for Local Plans to set higher energy performance standards for all new homes. The government has set out plans to radically improve the energy performance of new homes, with low carbon heating and be zero carbon ready by 2025.

These homes are expected to produce 75-80% lower carbon emissions compared to current levels. To ensure industry is ready to meet the new standards by 2025, new homes will be expected to produce 31% lower carbon emissions from 2021. Existing homes will also be subject to higher standards – with a significant improvement on the standard for extensions, making homes warmer and reducing bills.

### SDGs



REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T26	<b>Target 26. Towards the end of 2023, major residential development to be designed and built to achieve carbon neutrality</b>							
26.1	Require major residential development to achieve carbon neutrality	Policy within the new Local Plan will require residential developments of 10 or more dwellings to provide carbon neutral homes. A definition of what carbon neutral means in this context will be provided. Where there is robust evidence that this cannot be achieved on site, the council proposes to accept appropriate carbon offset financial contributions.	A chance for Wokingham Borough Council to take the lead and set an exemplar approach	Prepare climate change evidence base in support of the Local Plan Update (LPU). This will be a key part of evidencing the requirements set out in the draft plan and will contribute towards the goals relating to new development in the Climate Emergency Action Plan.	Short term	Neutral	Nil	
		Policy in place upon adoption of new Local Plan	Cheaper future operational costs for residents	Consult on draft policy as part of the Draft Local Plan.  Publish draft policy as part of the Pre-Submission Local Plan.  Policy included within adopted Local Plan.	Short term	Neutral	Nil	
26.2	Provide guidance to support major residential development to achieve carbon neutrality	A Supplementary Planning Document (SPD) will support the new Local Plan by providing additional detail on how development of all types is expected to demonstrate the achievement of the policy requirements, including carbon neutrality. The SPD will itself be subject to consultation and formally adopted. Adoption can only follow the adoption of the new Local Plan.  Guidance in place upon adoption of new Supplementary Planning Document	Greater clarity to developers and homeowners	Consult on draft Supplementary Planning Document.  Adopt Supplementary Planning Document.	Medium term	Neutral	Nil	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T27	<b>Target 27. From 2023, major non-residential development to be designed and built to achieve the BREEAM excellent standard</b>					Neutral		
27.1	Require major non-residential development to achieve BREEAM excellent standard	<p>BREEAM is an internationally recognised certification scheme. It provides a holistic set of criteria to support the delivery of energy efficient developments, which are resilient to the impacts, and mitigate the effects, of climate change. Development proposals will be expected to demonstrate how they have met this standard (or future equivalent) as a minimum.</p> <p>Policy in place upon adoption of new Local Plan</p>	<p>Less stringent standards than major development will continue to encourage small and medium housebuilders</p> <p>Clarity and consistency using internationally recognised standard.</p>	<p>Consult on draft policy as part of the Draft Local Plan (complete).</p> <p>Publish draft policy as part of the Pre-Submission Local Plan.</p> <p>Policy included within adopted Local Plan.</p>	Short term	Neutral	Nil	
27.2	Provide guidance to support major non-residential development to achieve carbon neutrality	<p>A Supplementary Planning Document (SPD) will support the new Local Plan by providing additional detail on how development of all types is expected to demonstrate the achievement of the policy requirements. The SPD will itself be subject to consultation and formally adopted. Adoption can only follow the adoption of the new Local Plan.</p> <p>Guidance in place upon adoption of new Supplementary Planning Document</p>	Greater clarity to developers and homeowners	<p>Consult on draft Supplementary Planning Document.</p> <p>Adopt Supplementary Planning Document.</p>	Medium term	Neutral	Nil	
T28	<b>Target 28. Establish a spatial strategy and design framework which promotes active and sustainable travel, sustainable design and construction and enables biodiversity gain</b>					Neutral		
28.1	Minimise unnecessary travel from new development, better house design for working from home and better integrated IT capability	<p>The new Local Plan will establish a spatial strategy which secures a pattern of development which allows for more people to live and work where journeys can be undertaken by walking, cycling and public transport.</p> <p>Buildings, services and infrastructure need to be able to respond to new working patterns and needs.</p>	<p>Will help encourage behavioural change from residents to undertake journeys by active means rather than private car.</p> <p>Will be more likely to choose active transport over cars as adults, health benefits from exercise. People have embraced local green spaces.</p>	<p>Consult on draft policy as part of the Draft Local Plan (complete).</p> <p>Publish draft policy as part of the Pre-Submission Local Plan.</p> <p>Policy included within adopted Local Plan.</p>	Short term	Neutral	Nil	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		Policy in place upon adoption of new Local Plan	Increased time freedom due to lack of commute also increases adoption of active transport methods					
28.2	Require development, including the public realm, to be accessible to all and prioritise walking, cycling and other sustainable modes of transport	<p>Development will be expected to include measures to make walking and cycling the mode of choice for shorter journeys, both within and through the site, including links to facilities, services, bus stops and train stations. They will be designed so that they are easily navigable for people of all ages and physical ability.</p> <p>Policy in place upon adoption of new Local Plan</p>	<p>Will help encourage behavioural change from residents to undertake journeys by active means rather than private car.</p> <p>Will be more likely to choose active transport over cars as adults, health benefits from exercise. People have embraced green spaces.</p> <p>Increased time freedom due to lack of commute also increases adoption of active transport methods</p>	<p>Consult on draft policy as part of the Draft Local Plan (complete).</p> <p>Publish draft policy as part of the Pre-Submission Local Plan.</p> <p>Policy included within adopted Local Plan.</p>	Short term	Neutral	Nil	
28.3	Require allocations for major development to secure smart and sustainable approaches that champion climate change resilience and adaptation	<p>Buildings, services and infrastructure need to be able to respond to the impacts of climate change. Part of this ability relates to ensuring that new development is designed to adapt to more intense rainfall, the possibility of flooding, plus heat waves and droughts. The design of developments, including the use of materials, therefore need to carefully consider matters such as shading, insulation and ventilation, surface water runoff and storage and the use of appropriate tree and other planting.</p> <p>Policy in place upon adoption of new Local Plan</p>	Potential to provide exemplary new developments at scale which can facilitate wider green and energy infrastructure improvements	<p>Consult on draft policy as part of the Draft Local Plan (complete).</p> <p>Publish draft policy as part of the Pre-Submission Local Plan.</p> <p>Policy included within adopted Local Plan.</p>	Short term	Neutral	Nil	



REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
28.4	Provide positive policy framework for retrofitting existing buildings	Existing domestic buildings contribute around 34% of carbon dioxide emissions from within Wokingham Borough, whilst existing non-domestic buildings contribute around 20%. A permissive policy approach to retrofitting the existing building stock with measures that enhance sustainability and energy efficiency will assist in reducing emissions.  Policy in place upon adoption of new Local Plan	Limitations in the role of planning policy and decision making to influence existing buildings, but highlighting a permissive approach will assist in raising the profile of retrofit.	Consult on draft policy as part of the Draft Local Plan (complete).  Publish draft policy as part of the Pre-Submission Local Plan.  Policy included within adopted Local Plan.	Short term	Neutral	Nil	
T29	<b>Target 29. Support low carbon and renewable energy generation</b>					Neutral	Nil	
29.1	Provide positive policy supporting low carbon and renewable energy generation	Due to the benefits which low carbon and renewable energy generation bring to tackling climate change, development proposals for these will be supported unless there are unacceptable impacts that outweigh the benefits.  Policy in place upon adoption of the new Local Plan. An increase of renewable energy generation projects being developed across the Borough by local businesses and community energy groups.	Greater clarity and assurance to local groups and businesses wishing to support renewable energy schemes in their areas	Consult on draft policy as part of the Draft Local Plan (complete).  Publish draft policy as part of the Pre-Submission Local Plan.  Policy included within adopted Local Plan.	Short term	Neutral	Nil	
T30	<b>Target 30. From 2023, all new residential and non-residential buildings to be designed and built to be EV ready</b>							
30.1	Ensure new developments make adequate provision for EV	Electric and hybrid vehicle ownership is increasing, and likely to become more prevalent. Lack of charging infrastructure is a principal barrier to increased use of low-emissions vehicles. Therefore, all new developments will be expected to design in electric vehicle charging facilities from the outset.	Improved air quality, reduce NO <sub>x</sub> , PM10s, PM25, cheaper to maintain and run, better driving experience. Also supports more constant energy usage for overall lower emissions from production.	Consult on draft policy as part of the Draft Local Plan (complete).  Publish draft policy as part of the Pre-Submission Local Plan.  Policy included within adopted Local Plan.	Short term	Neutral	Nil	

REF	Action	Description / Outcome	Co-benefits / Unintended consequences	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		Policy in place upon adoption of new Local Plan	Despite covid and traditional car sales declining in the pandemic, EV sales have risen across the board.					
<b>T31</b>	<b>Target 31. From 2021 100% of council new development is built to carbon neutral standards</b>							
<b>31.1</b>	All new council properties non-residential will be built to the highest efficiency standards from 2021	Consult on all future council builds and engaged with developers to ensure that carbon neutrality is consider from the design stage and associated cost is identified.		Initial assessment to all new council development to assess stage of development and possible interventions to committed buildings	Short term	Neutral	Nil	
		The new development has been placed with a consultant to look at carbon neutrality and associated build costs.		Assessment of possible interventions to Arborfield School to new carbon	Short term		Nil	
		Net zero carbon standards to be considered for all new developments. Move away from 'gas provision' to cleaner technology for new build properties when possible.		Assessment - possible interventions to Dinton Activity Centre	Short term		Nil	
				Assessment - possible interventions to Addington scheme	Medium term		Nil	
<b>31.2</b>	All new council homes will be built to the highest efficiency standards by 2024	To develop a council led pilot Passivhaus housing scheme by 2021. Regeneration of urban improvement schemes.  There are around 255 homes in Gorse Ride state regeneration project. Carbon savings will be informed by the feasibility assessment		Gorse Ride development has been for preplanning. It has designed houses to the first the first stage of Passive House. There will be no gas to the domestic houses on the side.	Medium term	Confirmed by feasibility assessment	TBC	

## Procurement

REF	Action	Description	Outcome	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
T32	<b>Target 32. By 2022, achieve sustainable procurement practice throughout the council as part of Corporate Procurement Strategy</b>					<b>Neutral</b>	<b>Nil</b>	
32.1	Include a drafted approach to sustainable procurement within review of Procurement Strategy	Goods contracts will consider whole-life costing including disposal. Service and works contracts will include carbon neutrality or reduction measures either directly or indirectly by their design.	Procuring in line with business needs and climate emergency targets	Procurement to draft update to procurement strategy	Short time	Neutral	Nil	
				Procurement to seek consultation of strategy with SLT	Short time	Neutral	Nil	
				Procurement achieve sign off of strategy	Short time	Neutral	Nil	
				Procurement and CEM implementation and communication of strategy	Short time	Neutral	Nil	
32.2	Develop a sustainable procurement culture and associated skills for green procurement	Design of an e-learning module training people in green procurement techniques	All staff members who procure will have completed training	Procurement complete E-learning design	Short time	Neutral	Nil	
				All staff in council who procure to complete training	Short time	Neutral	Nil	
32.3	Assess suppliers on sustainable procurement standards	Evaluation of all suppliers to promote sustainability proportionate to contract and financial constraints	Use of the Standard SQ / inclusion of a pass/fail phase in all contract evaluations	All buyers/commissioners in the council to impose carbon targets on our suppliers including reporting back of carbon production	Short time	Neutral	Nil	
				All buyers/commissioners taking embedded carbon into account when purchasing goods and services	Medium time	Neutral	Nil	
				Performance Team to name the top 20 carbon producers from our suppliers	Medium time	Neutral	Nil	
32.4	Implementation of sustainable procurement KPIs amongst suppliers	Contracts have sustainability KPIs included where suitable to contracts scope	All contracts with sustainability KPIs will be performing within the 'green' threshold (or equivalent) for these KPIs	All buyers/commissioners embed carbon KPI targets into all suitable council contracts	Medium time	Neutral	Nil	
32.5	Informed suppliers of the councils sustainable procurement requirements	Consult local and national business during the development of council's sustainable procurement policy. Provide clear and detailed	Reduce carbon through agreed more sustainable procurement contracts.	CEM and procurement / place commissioning / community, insight and change complete business consultation event	Medium time	Neutral	Nil	

REF	Action	Description	Outcome	Milestone	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
		instructions to suppliers on the council's sustainability requirements						
T33	<b>Target 33. By 2023, the council will consider social value, including carbon neutrality, in all its procurement cycles</b>					Neutral	Nil	
33.1	Introducing a culture of carbon neutrality in all council procurement activities	For environmental social value, include carbon impact into the council's principal business activities: <ul style="list-style-type: none"> <li>Business Needs Analysis and Case Approval.</li> <li>Contract and Specification Design.</li> <li>Bid Submission Evaluations.</li> <li>Contract and Supplier Management.</li> </ul>	Social Value will be considered at all appropriate stages of the procurement cycle relevant to project's scope, risk and value	All buyers/commissioners ensure that the corporate strategy themes of carbon neutrality is embedded in each procurement cycle.  The Street Cleansing team have trialled battery operated kit for maintenance purposes with good results as part of a review.	Short term	Neutral	Nil	
33.2	Adopt a WBC Social Value Policy	Generation of a WBC Social Value policy	Policy links to corporate procurement strategy	Place commissioning / community, insight and change draft social value policy	Short term	Neutral	Nil	
				Place commissioning / community, insight and change (with CEM) complete consultation of policy with businesses	Short term	Neutral	Nil	
				Place commissioning / community, insight and change complete consultation of policy with SLT	Short term	Neutral	Nil	
				Place commissioning / community, insight and change implement communication of policy via CEM	Medium term	Neutral	Nil	
33.3	Engage with businesses to successfully guarantee a transition to the new requirements	Consultation and market event with external stakeholders	Business will be informed in how to successfully meet our requirements; Investigate opportunities from big businesses to train SME and VCSE in bid writing, social value etc.	See target 34.7 milestones	Medium term	Neutral	Nil	
33.4	Promote local skills and employment	Where appropriate, locally-based suppliers will be used for all direct award and quotation processes	Increased local usage of SMEs and tradespeople/businesses to reduce carbon impact from logistics and travel where compliant	All buyers / commissioners to impose SME/local supply targets on suppliers including reporting back of SME/local supplier subcontracting and carbon reduction	Medium term	Neutral	Nil	
		Improve Skills for low carbon transition	Support a just transition for workers by supporting those in traditional 'high carbon industries to retrain	Performance Team name the top 20 suppliers supporting scheme	Medium term			

## Engagement and Behavioural Change

**Carbon savings:** Engagement and behavioural change drives carbon savings through out the other sections of the plan.

This section of the action plan focuses on engagement with the aim of promoting and accelerating the shift to more sustainable behaviours amongst our residents, businesses, schools and community organisations and will feed into the carbon savings achieved elsewhere on this action plan such as increased use of public transport, as well as reducing out of scope emissions from purchases of goods and services. The majority of the actions are therefore listed as 'Neutral' for their carbon savings.

### Our Key Achievements

- Wokingham Borough Council has held its first virtual event with businesses focusing on the road to decarbonisation of business operations.
- The council has held a series of collaborative events with the town and parish council, covering the key priority areas within influence to help tackle the climate emergency.
- Wokingham Borough Council has worked to improve climate emergency messaging in external communication regarding associated projects, such as the completion of the new Dinton Activity Centre.
- Council staff receive monthly internal communications regarding an issue around sustainability in the workplace and how this can be tackled at an individual and organisational level.

### Our Partners

Wokingham Borough Council is keen to engage with as many stakeholders as possible within the borough in order to drive sustainable behaviour change. This includes businesses, community and voluntary organisations, schools and young people, council colleagues and residents more generally. Working in partnership with all stakeholders is vital to tackling the climate emergency which is not possible alone.

Wokingham Borough Council particularly aims to work closely with the borough's Town and Parish councils to further engagement and behaviour change opportunities across the borough and collaborate with associated

community organisations wherever possible going forward. Behaviour change is vital to achieving many of the goals throughout this action plan which rely on uptake of technologies, initiatives and schemes by local residents and businesses in order to result in the associated CO<sub>2</sub> savings.

### Consumption Emissions

The engagement targets below are to reduce overall carbon footprints of our residents which includes all 3 scopes of emissions, including indirect or 'consumption' emissions which includes out of borough travel, goods and services purchased, food choices etc.

### Future Opportunities

Wokingham Borough Council hopes that more opportunities will become available through grant funding in the coming year which can be promoted to or applied in partnership with community or charitable organisations with an environmental focus.

The government's Build Back Better strategy will enable more policy and mean more opportunities will become available for businesses at a local level, particularly in promoting the green sector and the new skills needed to fill gaps in this emerging markets.

Both of these opportunities will be thoroughly built into the upcoming Climate Emergency Engagement & Behaviour Change Strategy. Which is explained in more detail below in Target 34.1 which has been added to the action plan. The intention is to develop and implement an engagement and behaviour change strategy that is specifically targeted towards tackling the climate emergency and will dictate the actions within this section of the plan going forward, once approved and published.

The strategy will ensure that all voices are heard and accounted for and investigate how to overcome the issue of behaviour change which is one of the biggest barriers to tackling the climate emergency with most of us choosing the path of convenience. A key part of this plan will be a visioning project which will work with stakeholders and engage residents via an innovative project which will inspire everyone in the borough to achieve a net zero carbon borough by 2030.

### SDGs



REF	Action	Description /Outcomes	Co-benefits/Unintended Consequences	Milestones/Progress	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
34	Target 34. Raise awareness in the community about the climate emergency agenda							
34.1	Implement a Wokingham Borough Council Climate Emergency Engagement & Behaviour Change Strategy.	Ensure there is a long-term plan for the delivery of sustained communication with all stakeholders in the borough needed to tackle the climate emergency, including residents, businesses, young people, council staff and the Town and Parish Councils.	Ensure this engagement programme is as inclusive as possible.	Options appraisal to inform on different engagement methods.	Short term	Neutral	Budget is not yet set/ allocated	
				Options appraisal has been written.				
				Complete a visioning project to allow for residents, businesses, community organisations and young people to envisage how a net zero carbon borough will look in 2030.	Short term	Neutral – potential for accelerated achievements within this plan		
				Investigate behaviour change programme available for residents to shift to more sustainable choices and be rewarded for forming these new habits.	Short to medium term			
				Draft option appraisal.				
				Draft the Climate Emergency Engagement & Behaviour Change Strategy for approval at Council.	Short to long term			
				Consult with community-based organisations and town & parish council’s on the strategy.	Short term			
Support Town and Parish councils to share best practice and lessons learned to set out a path to net zero carbon in their own operations, where possible.	Short to medium term							
34.2	Actively communicate the progress of the climate emergency initiatives delivered borough-wide	Deliver a sustained campaign to support the delivery of the Climate Emergency Action Plan and ensure ongoing engagement.	Residents receive one clear message from all the workstreams within the climate emergency action plan.	Ensure climate emergency messaging is intertwined with comms plans for projects sat within the climate emergency action plan across the council, such as transport, waste and development projects.	Short term	Neutral	Nil	
34.3	Provide and share information with residents on how to reduce their carbon emissions. Inform on economic incentives ‘Green Bank’ that will	Develop a sustained campaign to provide information, advice, and signposting to promote behavioural change amongst residents to drive engagement with council initiatives.	A greener, healthier borough.	Set up a resident climate emergency newsletter to promote the actions the council are taking and focus on how individual actions can make a big difference.	Short term	Neutral	Nil	



REF	Action	Description /Outcomes	Co-benefits/Unintended Consequences	Milestones/Progress	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
	support the adoption of carbon neutral technologies.	Engage residents with opportunities to improve energy performance of homes and buildings, reduce carbon emissions from transport, adopt new behaviours.						
34.5	Provide communications support to promote sustainable action taking place in schools.	<p>Develop a sustained communications campaign to provide information, advice, and signposting to promote behavioural change amongst schoolchildren and staff and giving more background to link the action to the climate emergency.</p> <p>Residents of the borough will gain a better understanding of why school children and staff are making sustainable changes and will be better informed on how this can be applied to their own lifestyle.</p>	Building stronger relationships with schools and enhancing intergenerational learning.	Align engagement campaigns to the climate emergency programme designed for schools and deliver engagement campaigns to inspire children and school staff to adopt new behaviours.	Short term	Neutral	Nil	
34.6	Support changes in work practices and behavioural change amongst council staff	Wokingham Borough Council staff to be better informed on their impact as an organisation and how to drive this impact down through projects and communications, providing information, advice & signposting to promote behavioural change amongst council employees (e.g. active and sustainable travel, increased plant based food).	<p>Healthier staff living more sustainable lifestyles.</p> <p>Reducing the council's own carbon footprint as an organisation.</p>	<p>Deliver a sustained communications campaign through the council's Green Team to inspire staff to reduce their personal carbon footprints by making sustainable shifts in their daily routines.</p> <p>Investigate and promote the carbon footprint of Wokingham Borough Council as an organisation and workplace and how individual actions of staff contribute towards this.</p> <p>Communicate environmental benefits and carbon savings of the Workplace Reimagined project to ensure staff are fully informed.</p> <p>Investigate a behaviour change platform for business use.</p>	Short term	The first assessment of the council's carbon footprint is 1.7tCO <sub>2</sub> Please see page 16 for full detail.	<p>Nil</p> <p>No budget confirmed</p>	

REF	Action	Description /Outcomes	Co-benefits/Unintended Consequences	Milestones/Progress	Timeline	Carbon Savings tCO <sub>2</sub> e	Project Cost	RAG
34.7	Support changes in work practices and behavioural change amongst local businesses	Provide information, advice, signposting to promote sustainable behaviours amongst local businesses (e.g. remote working, retrofitting buildings, solar PV installation)	<p>The Covid-19 pandemic has put a strain on the economy. Although Wokingham Borough is a relatively resilient economy, there are sectors which have struggled and youth unemployment is up.</p> <p>The economic recovery out of the pandemic has put into green recovery policy at the top of the central government agenda.</p>	Host events to stimulate the conversation around sustainability in business between the council and the business community.	Short term	Neutral	Nil	
		Promote working from home practices to reduce the proportion of staff at corporate sites for more efficient use of the space.		Ensure the conversation is kept going through regular climate emergency articles in the Business Matters newsletter.			Nil	
		Ensure the climate emergency action plan is fully aligned with the Wokingham Borough Council's Economic Recovery Strategy which focuses on enabling local business to Build Back Better. Align the climate emergency engagement with businesses with the government's plan for a Green Recovery to build back better from the economic consequences of the Covid-19 pandemic.		<p>The council held its first Climate Conversations event. A virtual webinar-style event with a discussion panel of local experts. The theme was 'The Road to Decarbonisation'.</p> <p>Assessment of unintended consequences from the national lockdown (COVID-19) and the effects to energy consumption and site occupancy of corporate sites.</p> <p>Incorporate into the Climate Emergency Engagement &amp; Behaviour Change Strategy.</p>			Nil	

## Appendix 1. Data Sources

Table 5: Summary GHG inventory table Breakdown of building emissions, tCO<sub>2</sub>e as split by SCATTER

SUB-SECTOR	DIRECT tCO <sub>2</sub> e	INDIRECT tCO <sub>2</sub> e
Residential buildings	187,968.61	78,875.18
Commercial buildings & facilities	11,254.16	42,841.08
Institutional buildings & facilities	8,831.41	9,301.94
Industrial buildings & facilities	32,229.12	52,294.99
Agriculture	2,804.37	0.52
Fugitive emissions	23,738.05	-
On-road	305,851.95	IE
Rail	11,438.37	IE
Waterborne navigation	NO	IE
Aviation	NO	IE
Off-road	3,058.52	IE
Solid waste disposal	6,664.21	-
Biological treatment	NO	-
Incineration and open burning	NO	-
Wastewater	9,888.15	-
Industrial process	44,871.97	-
Industrial product use	0.00	-
Livestock	9,383.60	-
Land use	-15,861.55	-
Other AFOLU	NE	-
Electricity-only generation	NO	-
CHP generation	132.57	-
Heat/cold generation	NO	-
Local renewable generation	2.01	NO
Notation keys:		
NO - Not Occurring	IE - Integrated Elsewhere	NE - Not Estimated

Table 6: Summary GHG inventory table Breakdown of building emissions, tCO<sub>2</sub>e as split by SCATTER

Wokingham Carbon footprint 580 KtCO <sub>2</sub> e	KtCO <sub>2</sub> e
Industry and Commercial Electricity	93.71
Industry and Commercial Gas	39.75
Large Industrial Installations	0.01
Industrial and Commercial Other Fuels	17.30
Agriculture	3.92
Domestic Electricity	71.47
Domestic Gas	177.23
Domestic 'Other Fuels'	10.17
Road Transport (A roads)	85.51
Road Transport (Minor roads)	88.73
Transport Other	8.30
LULUCF Net Emissions	-15.19

### Notes:

- BEIS data (right-hand table) and SCATTER data are compiled using different methodologies. The SCATTER model (Setting City Area Targets and Trajectories for Emissions Reductions) operates on 2016 data. BEIS data is from 2017. See page 52 for further notes on why the data differs between SCATTER & BEIS.

## Data Sources – Frequently Asked Questions

### What do the different emissions categories mean within the SCATTER Inventory?

Direct = GHG emissions from sources located within the Local Authority Boundary (also referred to as Scope 1). For example petrol, diesel or natural gas.

Indirect = GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the city boundary (also referred to as Scope 2).

Other = All other GHG emissions that occur outside the city boundary as a result of activities taking place within the city boundary (also referred to as Scope 3). This category is not complete and only shows sub-categories required for CDP / Global Covenant of Mayors reporting. Other Scope 3 emissions are however explored within Sections 2 and 3.

The BEIS Local Emissions Summary does not differentiate between direct/indirect/other (or the various 'scopes')

### What do the different sectors and subsectors represent within the SCATTER Inventory?

- The Direct Emissions Summary and Subsector categories are aligned to the World Resource Institute's Global Protocol for Community-Scale Greenhouse Gas Emission Inventories ("GPC"), as accepted by CDP and the Global Covenant of Mayors.
- The BEIS Local Emissions Summary represents Local Authority level data published annually by the Department for Business Energy & Industrial Strategy (BEIS).
- Stationary energy includes emissions associated with industrial buildings and facilities (e.g. gas & electricity).
- IPPU specifically relates to emissions that arise from production of products within the following industries: Iron and steel, Non-ferrous metals, Mineral products, Chemicals. These are derived from DUKES data (1.1-1.3 & 5.1).
- Waterborne Navigation and Aviation relate to trips that occur within the region. The figures are derived based on national data (Civil Aviation Authority & Department for Transport) and scaled to the City of Oxford region.

### Why does the BEIS summary differ from the SCATTER summary?

- The BEIS summary represents CO<sub>2</sub> only; SCATTER also includes emissions factors for other greenhouse gases such as Nitrous Oxide (N<sub>2</sub>O) and Methane (CH<sub>4</sub>). These are reported as a CO<sub>2</sub>'equivalents (e)'.
- The BEIS summary does not provide scope split; SCATTER reports emissions by scope 1, 2, and 3 (i.e. direct, indirect or other categories).
- The BEIS summary categories are not directly consistent or mapped to the BEIS LA fuel data which is available as a separate data set. SCATTER uses published fuel data and applies current-year emissions factors, whereas the BEIS data calculations scale down national emissions in each transport area. Specifically with regard to road transport, BEIS data splits total emissions across road type; SCATTER uses fuel consumption for on-road transport per LA.
- Different treatment of 'rural' emissions i.e. Agriculture, Forestry and Other Land Use (AFOLU) and Land Use, Land Use Change & Forestry (LULUCF) categories are derived from different underlying data sets and have been explored further within section 3 of this report.

## Appendix 2. Glossary

<b>Term</b>	<b>Definition</b>
<b>Carbon Baseline</b>	The year against which target decreases in emissions are measured. <sup>4</sup>
<b>Carbon dioxide (CO<sub>2</sub>)</b>	Carbon dioxide is a gas in the Earth's atmosphere. It occurs naturally and is also a by-product of human activities such as burning fossil fuels. It is the principal greenhouse gas produced by human activity.
<b>Carbon Budget</b>	A tolerable quantity of greenhouse gas emissions that can be emitted in total over a specified time. The budget needs to be in line with what is scientifically required to keep global warming and thus climate change "tolerable."
<b>Carbon dioxide equivalent (CO<sub>2</sub>e)</b>	Six greenhouse gases are limited by the Kyoto Protocol and each has a different global warming potential. The overall warming effect of this cocktail of gases is often expressed in terms of carbon dioxide equivalent - the amount of CO <sub>2</sub> that would cause the same amount of warming. For consistency in this climate emergency action plan, the figures on carbon dioxide emissions have been presented in tonnes tCO <sub>2</sub> e
<b>Carbon footprint</b>	The amount of carbon emitted by an individual, organisation, geographical area or during the manufacture of a product in a given period of time.
<b>Carbon neutral</b>	A process where there is no net release of CO <sub>2</sub> . For example, growing biomass takes CO <sub>2</sub> out of the atmosphere, while burning it releases the gas again. The process would be carbon neutral if the amount taken out and the amount released were identical. A company or country can also achieve carbon neutrality by means of carbon offsetting in limiting quantities not all together.
<b>Carbon offsetting</b>	A way of compensating for emissions of CO <sub>2</sub> by participating in, or funding, efforts to take CO <sub>2</sub> out of the atmosphere. Offsetting often involves paying

	another party, somewhere else, to save emissions equivalent to those produced by your activity.
<b>Carbon Sequestration</b>	The process of storing carbon dioxide. This can happen naturally, as growing trees and plants turn CO <sub>2</sub> into biomass (wood, leaves, and so on). It can also refer to the capture and storage of CO <sub>2</sub> produced by industry.
<b>Climate Change</b>	A pattern of change affecting global or regional climate, as measured by yardsticks such as average temperature and rainfall, or an alteration in frequency of extreme weather conditions. This variation may be caused by both natural processes and human activity. Global warming is one aspect of climate change.
<b>Climate Change Act (2008)</b>	At the core of the Act is the 2050 target to reduce UK greenhouse gas emissions by at least 80% relative to 1990, and the system of carbon budgets that provide five-year stepping stones to the 2050 target <sup>5</sup> . In 2019 this target was altered to achieve net zero emissions by 2050 <sup>6</sup> .
<b>Climate Emergency</b>	A situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it. <sup>7</sup>
<b>Climate Emergency Declaration</b>	The recognition of the urgency of the Climate Emergency by organisations, businesses or government at any level, often resulting in setting a target date to become carbon neutral.
<b>The Committee on Climate Change (CCC)</b>	An independent, statutory body established under the Climate Change Act 2008 whose purpose is to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions and preparing for and adapting to the impacts of climate change. <sup>8</sup>
<b>Decarbonise</b>	To replace fossil fuels as fuel source with a fuel that is less harmful to the environment such as solar power. See Renewable energy.
<b>Emission Trading Scheme (ETS)</b>	A scheme set up to allow the trading of emissions permits between business and/or countries as part of a cap and trade approach to limiting greenhouse gas emissions by businesses or countries buying or selling allowances to emit greenhouse gases via an exchange. The volume of allowances issued

<sup>4</sup> <https://www.bbc.co.uk/news/science-environment-11833685>

<sup>5</sup> <https://www.theccc.org.uk/2014/03/04/the-climate-change-act-a-retrospective/>

<sup>6</sup> <https://commonslibrary.parliament.uk/insights/acting-on-climate-change-the-plan-for-net-zero-emissions-in-the-uk/#:~:text=Net%20zero%20is%20a%20statutory,emissions%20by%2080%25%20by%202050.>

<sup>7</sup> <https://www.oxfordlearnersdictionaries.com/>

<sup>8</sup> <https://www.theccc.org.uk/about/>

	adds up to the limit, or cap, imposed by the authorities. The best-developed example is the EU's trading system, launched in 2005.
<b>Fossil fuels</b>	Natural resources, such as coal, oil and natural gas, containing hydrocarbons. These fuels are formed in the Earth over millions of years and produce carbon dioxide when burnt.
<b>Global warming</b>	The steady rise in global average temperature in recent decades, which experts believe is largely caused by man-made greenhouse gas emissions. The long-term trend continues upwards, even though the warmest year on record, according to the UK's Met Office, is 1998.
<b>Grandfathering</b>	A form of carbon budgeting which allocates a higher carbon budget to those organisations or regions, which emit at a higher levels. In other words, high emitting areas will be allowed to emit at higher levels than those with lower existing emissions.
<b>Greenhouse gases (GHGs)</b>	Natural and industrial gases that trap heat from the Earth and warm the surface. The Paris Agreement, following The Kyoto Protocol restricts emissions of six greenhouse gases: natural (carbon dioxide, nitrous oxide, and methane) and industrial (perfluorocarbons, hydrofluorocarbons, and sulphur hexafluoride).
<b>The Intergovernmental Panel on Climate Change (IPCC)</b>	A scientific body established by the United Nations Environment Programme and the World Meteorological Organization. It reviews and assesses the most recent scientific, technical, and socio-economic work relevant to climate change, but does not carry out its own research. The IPCC was honoured with the 2007 Nobel Peace Prize.
<b>Kyoto Protocol</b>	A protocol attached to the UN Framework Convention on Climate Change, which sets legally binding commitments on greenhouse gas emissions. Industrialised countries agreed to reduce their combined emissions to 5.2% below 1990 levels during the five-year period 2008-2012. It was agreed by governments at a 1997 UN conference in Kyoto, Japan, but did not legally come into force until 2005. A different set of countries agreed a second commitment period in 2013 that will run until 2020.
<b>Land Use, Land-Use Change, and Forestry (LULUCF)</b>	Activities in this category provide a method of offsetting emissions, either by increasing the removal of greenhouse gases from the atmosphere (i.e. by planting trees or managing forests), or by reducing emissions (i.e. by curbing deforestation and the associated burning of wood).

<b>Mitigation</b>	Action that will reduce man-made climate change. This includes action to reduce greenhouse gas emissions or absorb greenhouse gases from the atmosphere.
<b>Net zero carbon</b>	A target to achieving net zero carbon dioxide emissions by balancing carbon emissions with carbon offsets and/or eliminating carbon emissions altogether.
<b>Paris Agreement (2015)</b>	The Agreement's central aim is to strengthen the global response to the threat of climate change by 21 countries agreeing to keep the global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius <sup>9</sup> .
<b>Per-capita emissions</b>	The total amount of greenhouse gas emitted by a country per unit of population.
<b>Renewable energy</b>	Energy created from sources that can be replenished in a short period of time. The five renewable sources used most often are: biomass (such as wood and biogas), the movement of water, geothermal (heat from within the earth), wind, and solar.
<b>SCATTER</b>	Standing for Setting City Area Targets and Trajectories for Emissions Reductions, SCATTER is a local authority focussed emissions tool, built to help create low-carbon local authorities. SCATTER provides local authorities and city regions with the opportunity to standardise their greenhouse gas reporting and align to international frameworks, including the setting of targets in line with the Paris Climate Agreement.
<b>Tyndall Centre</b>	A partnership of universities bringing together researchers from the social and natural sciences and engineering to develop sustainable responses to climate change, working with leaders from the public and private sectors to promote informed decisions on mitigating and adapting to climate change <sup>10</sup> .
<b>The United Nations Framework Convention on Climate Change (UNFCCC)</b>	One of a series of international agreements on global environmental issues adopted at the 1992 Earth Summit in Rio de Janeiro. The UNFCCC aims to prevent "dangerous" human interference with the climate system. It entered into force on 21 March 1994 and has been ratified by 192 countries.

<sup>9</sup> <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>

<sup>10</sup> <https://tyndall.ac.uk/about>










## Appendix 3. Sustainable Development Goals

The 2030 United Nations Agenda for Sustainable Development<sup>11</sup>, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are 17 Sustainable Development Goals (SDGs), which act as an urgent call for action to all countries - developed and developing – to work as a global partnership. They recognize that ending poverty and deprivation must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – at the same time as tackling climate change and working to preserve our oceans and forests.

### Wokingham Borough Council and the Sustainable Development Goals



The Local Government Association (LGA) passed a motion in July 2019 declaring a climate emergency. At the same time offering a unified voice for local government to assist in delivering the UN's 17 Sustainable Development Goals (SDGs). In the table below each goal has been assigned an SDG number. For example, Good Health and Wellbeing is SDG3 and links back to the appropriate action in the Climate Emergency Action Plan demonstrating how Wokingham Borough are supporting the UN's 17 Sustainable Development Goals.

Wokingham Borough Council recognises that, as a local authority, we are in the best position to raise awareness and to influence in the delivery of the Sustainable Development Goals.

No poverty SDG1	Although Wokingham is an affluent borough, we will work hard to ensure the Climate Emergency action plan creates a sustainable, carbon neutral economy that will achieve economic justice as well as economic growth.	
Zero hunger SDG2	As a rural borough, sustainable agricultural practice is of high importance as well as promoting sustainable eating in the borough through the action plan which focuses on cutting down on meat consumption.	
Good health and wellbeing SDG3	We will be encouraging sustainable transport such as cycling and converting to electric vehicles through our action plan to ensure we maintain our high level of well-being across the borough	
Quality of education SDG4	The youthful population are a large part of our action plan to meet our 2030 net zero carbon target and we aim to promote sustainable lifestyles throughout our schools and ensure we hear the voices of our children.	
Gender equality SDG5	We hope the women and girls in the borough will take part to make the action plan the most effective in everyday situations like reducing waste and single use plastics.	
Clean water and sanitation SDG6	There is a strong focus on reducing water waste in the Borough which will comply with the sustainable management of water targets sat beneath this SDG.	
Affordable and clean energy SDG7	We are determined to roll out sustainable energy generating methods through the implementation of solar panels, particularly in our SDLs, which are both clean and affordable in the long term.	

<sup>11</sup> [Resolution adopted by the UN General Assembly on 25 September 2015.](#)

Decent Work and economy growth SDG8	Wokingham Borough benefits from a below average unemployment rate and bringing more sustainable enterprises to the borough will only enhance our working population further.	
Industry, innovation and infrastructure SDG9	A large section of our action plan is dedicated to ensuring our new developments are net zero carbon through sustainable infrastructure and that we promote sustainable leaving within these new communities.	
Reduce inequalities SDG10	The UK suffers from vast disparities in wealth but this can also be seen on a local scale within the Borough. We aim to work the Climate Emergency action plan with economic development in mind to ensure we achieve economic equality throughout the borough.	
Sustainable cities and communities SDG11	Wokingham Borough is lucky to have an existent community that is resilient, inclusive and safe. We aim to build on this and strengthen this through the action plan to promote the same characteristics for the communities created in the new developments.	
Responsible consumption and production SDG12	The themes of this goal are woven throughout the action plan to promote and encourage a change in lifestyle of the residents in the borough starting with the council staff through the work of the Green Team.	
Climate action SDG13	By working towards our 2030 net zero carbon borough target we have been able to put in place Officer groups and projects that reflect the targets under our action plan and enforce action to combat climate change.	
Life below water SDG14	Protecting our bodies of water is essential for us as they are facilities for residents to enjoy in green space for non-polluting recreational activities	

Life on land SDG15	Protecting our greenspace as a rural borough is of huge significance and is reflected in the action plan, as we aim to preserve the land as a carbon sink or sustainably develop on land in a way that allows the whole borough to reap the sustainable rewards.	
Peace, justice and strong institutions SDG16	As an influential institution in the borough, we take our role in combating climate change very seriously and will show our respect of our communities through public consultation and incorporating resident's ideas throughout our action plan.	
Partnerships for the goals SDG17	Creating partnerships are an essential aspect of our action plan, especially one which is tackling such a global problem. Partnerships, especially with the businesses in the borough, will allow us to achieve more.	