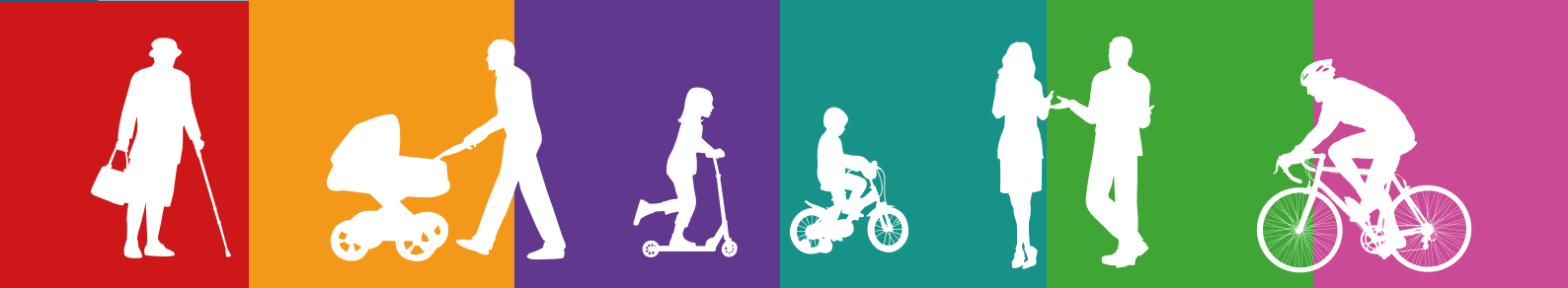
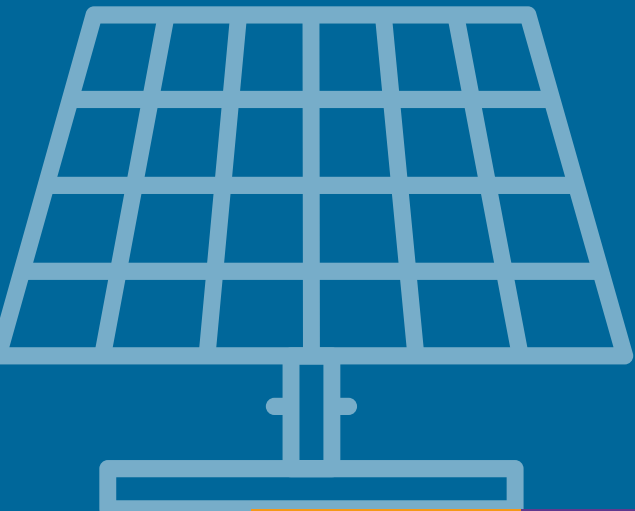


Environment Strategy

Annual Progress Report
(July 2021 – July 2022)



Climate change is one of today's biggest threats. Its impacts are seen globally and locally, some of which are devastating. As a Council we are determined to play our part and help others to take action so that together we continue to reduce our impact. Over the last 2 years the Council has reduced its carbon footprint by 25%. This is great progress and we recognise that our actions have to continue at pace in order to reach our ambitious target of being carbon neutral by 2030. The wider impact across the District of West Berkshire is also reducing and the Council will seek to continue to lead by example and share good practice and ideas to facilitate wider change.

Since the last report on progress delivering our Environment Strategy, the UK has hosted COP26 in Glasgow with local MP, Alok Sharma, carrying out the role of COP President. This was a significant opportunity to showcase the innovation and commitment to climate change which has real momentum in the United Kingdom. Here in West Berkshire there is great evidence of this commitment to tackling climate change amongst residents, businesses and communities. You will read about many examples in this annual report which only touches the surface of what is happening across the District.

As a Council we are focusing on progressing many actions and projects from our Delivery Plan. It is important that we engage with people regarding our climate actions throughout the year but we also value this opportunity to bring together an overview of the past year of delivery. You will read about new mini recycling centres, behavioural change campaigns, planting trees, further plans for flood alleviation schemes, carbon neutral road surfacing, waste reduction education, new active travel routes and much, much more including an award for our innovative green bond.

In these challenging times reducing our carbon impact remains a priority. We will continue to be ambitious and innovative and work in new ways through creative partnerships. It is only by working together that we will see the progress needed to make real change. We encourage you to keep talking with us and sharing your ideas and actions in order that, together, we can make a difference.



Councillor Lynne Doherty
Leader of the Council



Councillor Steve Ardagh-Walter
Executive Member for Environment

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1. Introduction

- 1.1 The challenge we all face with regard to climate change is recognised across the globe, taking no action is not an option for any responsible organisation.

We are the first generation to feel the effect of climate change and the last generation who can do something about it.” —President Obama

- 1.2 On 2nd July 2019, West Berkshire Council (WBC) unanimously declared a Climate Emergency. As part of this commitment to act, we have set a target of carbon neutrality for the Council by 2030 and to support, encourage and facilitate carbon neutrality across West Berkshire. We recognise this is an ambitious target which requires everyone to work together in order to achieve it.
- 1.3 Following the declaration and building on the work already underway, an Environment Strategy was written and

published in July 2020. We published our inaugural annual report on delivery of the Environment Strategy in November 2021, which highlighted the actions, achievements and progress from July 2020 to July 2021. Our annual reports form part of our commitment within the Environment Strategy Delivery Plan to keep everyone informed, as well as to describe the measures we still need to take on our journey towards carbon neutrality.

- 1.4 This report also compares the Council's baseline carbon footprint (from 2019/20) with the latest data for 2021/22. It also provides the most up to date published figures indicating the emissions across West Berkshire District.

Please note, words in bold can be found in our glossary along with a number of other useful terms. The glossary was created as a result of feedback received during our public consultation last year (Spring 2021).



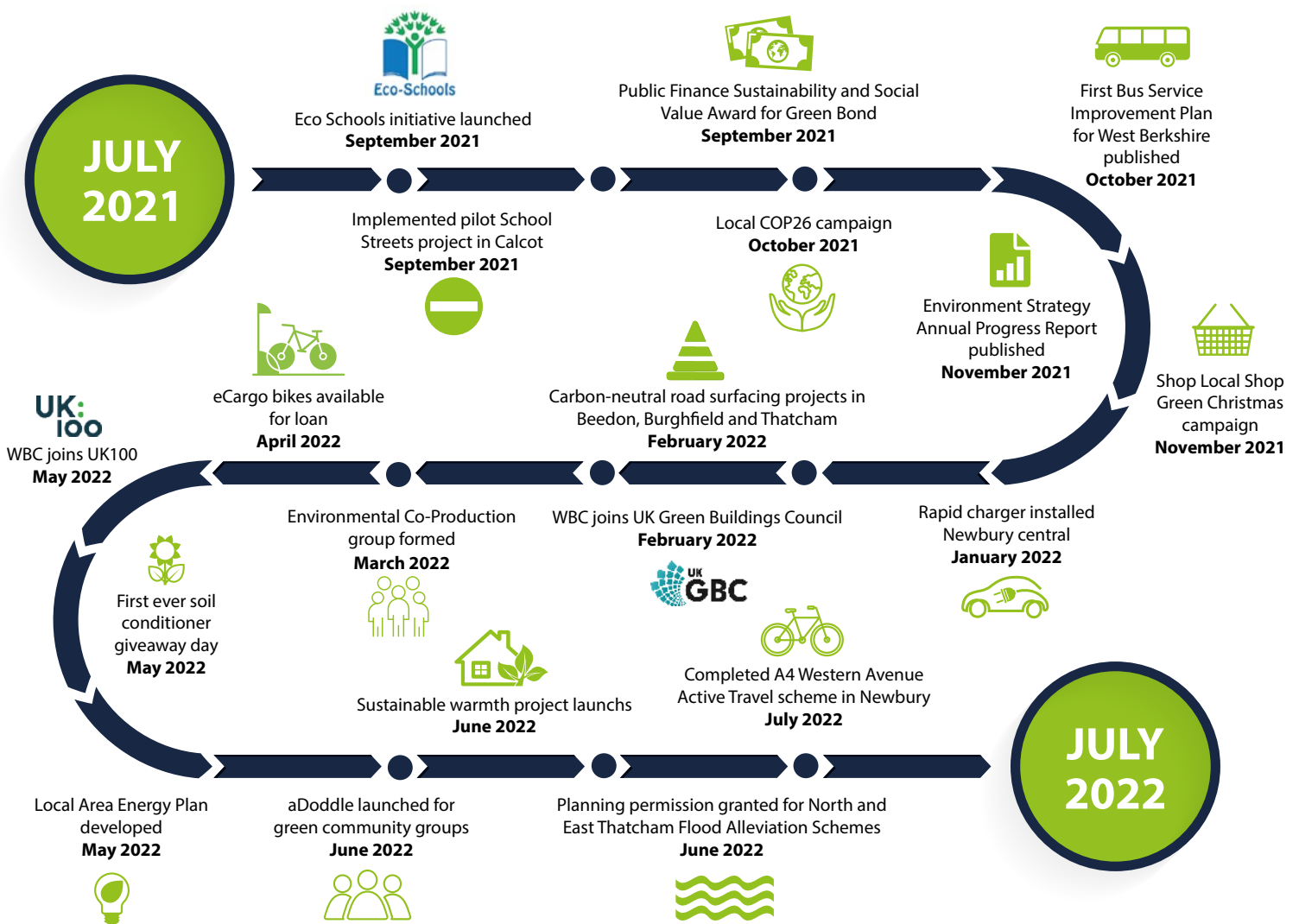
2. Background Information

- 2.1 The Environment Strategy, developed after an extensive period of consultation, describes the vision for West Berkshire's environment and specifically how the District needs to respond to climate change.
- 2.2 Our Environment Strategy Delivery Plan provides a framework of actions, timescales and responsibilities to show how we intend to achieve the aims within the Environment Strategy. These actions have been categorised in accordance with the strategic objectives from the Environment Strategy: Carbon Neutral by 2030; Responsible Economic Growth; Healthy Communities; Resilient to Climate Change and Working with our Communities and Partners.
- 2.3 We are committed to continuous improvement and it's important to note that the Delivery Plan, whilst building on the work from the past, will evolve as we develop partnerships and new opportunities for action arise. The Delivery Plan will act as a basis for us to work from. With this in mind, the plan will remain 'live' and be continuously developing between now and 2030.
- 2.4 As a direct result of the declaration of a climate emergency for West Berkshire an Environment Delivery Team was established to help to deliver and coordinate these actions as well as engage and work with residents, partners, schools, businesses and community groups.
- 2.5 To help monitor progress across the organisation an Environment Delivery Project Board meets regularly involving representatives from key service areas. Its role is to ensure the actions within the Delivery Plan are reported on regularly and progress is monitored accurately. As a direct result of regularly monitoring progress, the Council is able to deliver on its commitment to keep an up to date version of the Delivery Plan published on the website.

3. The Second Year - summary of actions and achievements

3.1 The second year of delivery of the Environment Strategy has seen further action across the Council and within the communities of West Berkshire. This has built upon previous work to improve the environment. Some projects have been delivered in full, others have been started and there has been an element of establishing new groups and ways

of working which will assist the journey towards being carbon neutral. Figure 1 provides a summary of achievements between July 2021-2022. This is followed by summaries of actions and achievements against each strategic objective of the Environment Strategy, including case studies.

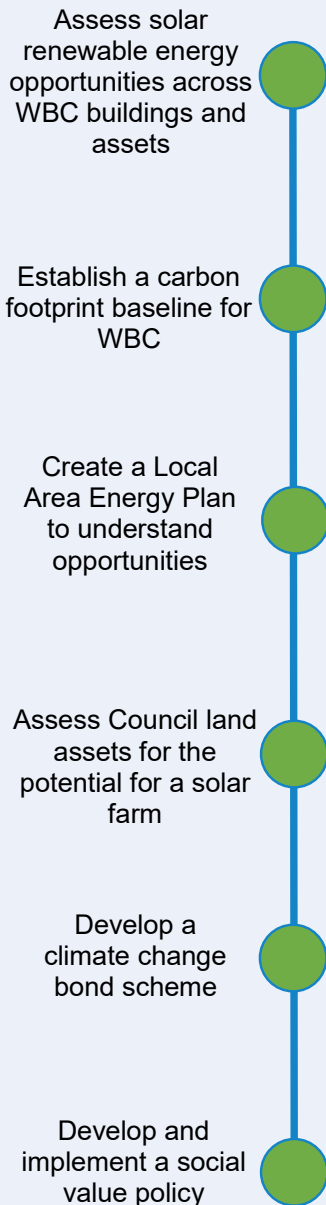



CARBON NEUTRAL BY 2030



44% of short term actions complete

56% of short term actions in progress, on track



 = Complete

This list is a summary. To see our full list of actions, [click here](#).

Our progress so far:

- In September 2020, we established our carbon baseline, which quantifies the greenhouse gas GHG emissions generated by the Council's assets and activities, as well as the GHG emissions associated with the district as a whole. We have since used this baseline to help us calculate our 2021/22 progress with our carbon reduction target to date.
- In March 2022, we applied for planning permission for a solar farm near Grazeley. Plans will see more than 60,000 solar panels installed on up to 75 acres of land we already own. This would generate enough electricity each year to power the equivalent of approximately 7,282 homes. This is a major step forward in our plans to increase renewable energy in the district and will save an estimated 2578 tCO₂e in its first year of operation.
- We are committed to sourcing the Council's energy from renewable suppliers as soon as possible. We currently have 'Blue' energy – which is sourced from nuclear energy and is a low carbon alternative to using fossil fuels.
- Our Local Area Energy Plan is now complete and will help us to plan and prioritise our energy needs and low carbon energy projects throughout the District in the following years.
- Since summer 2021, our Natural Solutions Delivery Partnership (NSDP) have worked with local expert organisations in developing an approach to increase natural solutions across the district. The Partnership's work will inform a spatial strategy and plan. As part of this process, engagement has taken place with local Landowners which included a district wide Natural Solutions Landowner event to explore opportunities for biodiversity improvements and carbon sequestration on private land.
- In June 2022, we launched an exciting new project called 'Trees for Schools' to supply all West Berkshire maintained and academy schools in the District with between one and five trees to plant on their school sites. This will be a fantastic way to encourage the future generation to play their part in tackling Climate Change. So far, we have 22 schools signed up and they've committed to planting nearly 100 trees.
- In March 2022, we formed a co-production pilot group to deliver a community energy guide for West Berkshire communities. West Berkshire Council is working towards a more inclusive decision making environment through Co-production, inviting residents and stakeholders to join the conversation.
- In September 2021, West Berkshire Council won the Public Finance Sustainability and Social Value Award for our Community Municipal Investment. This recognised our innovative approach to funding our climate action whilst benefitting investors.

CASE STUDY: Newbury Library LED lighting upgrade

In November 2021, we reported our estimated savings for the new energy efficient LED lighting we installed at Newbury Library. It is estimated that each year the new lights will save £2,632.43 in energy costs and 15.03 tonnes of CO₂ (based on energy costs from November 2021).

The system also includes autism friendly 4 colour full spectrum adjustable lighting in specific areas of the library, designed to give a glow of colour and facilitate a calm and softly lit environment to make Newbury Library more accessible as an autism friendly environment.

The overall cost of the project was £65k including a grant of £4.5k from the West Berkshire Autism Partnership Board.

[Find out more and take a virtual tour of the library here.](#)





RESPONSIBLE ECONOMIC GROWTH

100% of short term actions in progress, on track

Our progress so far:

- Following the Local Plan Review Regulation 18 Consultation feedback, a strong theme came through around carbon emissions within buildings and improving energy efficiency. We have responded to this by undertaking some work with external experts to review policies within the draft Local Plan Review relating to energy efficiency and carbon emissions within buildings. A number of options have been examined with the agreed approach currently being drafted into an updated policy which will be available at Regulation 19 Consultation.
- Work is underway on our next Local Transport Plan (LTP4) which will be key in reflecting the aims of the Environment Strategy and setting the local scene to support Government agendas such as the decarbonisation of transport. The LTP will link closely with the Local Plan Review.
- Our Waste Management Team have been visiting schools to educate pupils on waste reduction, reuse and recycling. We have also planned an event for local secondary schools in autumn 2022 to promote and encourage green careers.
- In December 2021, we showcased 22 local independent businesses which are helping to get us closer to our carbon neutral goal, through our 'Shop Local, Shop Green' magazine.
- In March 2022, we awarded our COVID recovery grant, known as the ARG (Additional Restrictions Grant) Challenge Fund. One of the criteria for accessing funding was sustainability improvements, and successful applicants included solar panels for pubs, ground source heatpumps for restaurants and energy efficiency improvements for a local café. We are also providing green business support on our [new business website](#).
- In June 2022, the Executive approved a LRIE Project Refresh report, setting out the next stages for delivering regeneration on the London Road Industrial Estate (LRIE). The approach focuses on attracting investment in employment space and jobs that aligns with carbon net zero ambitions; a commitment to working in partnership with leaseholders and potential partners to grow current LRIE businesses in a sustainable way and encourage new businesses; and a sustainable design-led approach to place-making to create an appealing destination for businesses that includes seeking external funding for public realm improvements. This is a move away from the residential-led approach set out in the 2020 Development Brief but has responsible economic growth at the heart of the project.

- Reflect environmental aims with the Local Plan
- Develop the next Local Transport Plan for the district
- Work with local Education providers to increase climate change awareness in schools
- Lobby for high environmental standards and engage with consultations
- Refresh the Highways Asset Management Plan taking into consideration the Environment Strategy

● = In progress, on track

This list is a summary. To see our full list of actions, [click here](#).










CASE STUDY: Carbon Neutral Road Surfacing


In February 2022, we finished a road resurfacing programme aimed at improving local roads whilst remaining carbon neutral. This was one of the first projects of its kind in the district. Working with our term contractor, Volker Highways and supply chain provider Miles Macadam, the project used an innovative new material which has a lower-carbon footprint than other similar products. The overall carbon footprint of the project was reduced by 38% which, along with the planting of 152 trees to offset the remainder, has been delivered in a carbon-neutral way. The roads resurfaced as part of the programme were in Beedon Hill and Old Oxford Road in Beedon, Hose Hill in Burghfield, Reading Road in Burghfield, and Floral Way in Thatcham.




HEALTHY COMMUNITIES



- Develop the Local Cycle and Walking Infrastructure Plan 
- Deliver Cycle Hubs in Theale and Newbury, and investigate further locations 
- Continue to provide cycle training for children 
- Pilot a 'School Streets' initiative 
- Implement a new sustainable travel policy for staff 
- Work with local businesses to promote sustainable travel by staff 
- Encourage the take up of emerging sustainable transport technologies 
- Increase the cycle storage capacity at all secondary schools 
- Invest in walking and cycling routes and provide safety training 

 = In progress, on track

 = Complete

This list is a summary. To see our full list of actions, [click here](#).

44% of short term actions complete

60% of short term actions in progress, on track

Our progress so far:

- In February 2022, we started our cycle and footway construction along the A4 Western Avenue between Newbury and Speen. The works involved: improvements to existing walking and cycling paths, as well as crossings and pedestrian refuge islands, construction of new cycle tracks and footway and safety improvements for pedestrians and cyclists.
- Our Public Protection Partnership team started a behaviour change campaign aimed at tackling idling drivers to improve air quality. Working with consultants WSP, a baseline report has been undertaken, to identify current behaviours, idling hotspots and data patterns. We are now finalising our intervention proposals for September 2022.
- We have continued to provide Bikeability Family courses, with 80 families taking part in the 2021 summer holidays. We received positive feedback from attendees and the training has been offered again for the 2022 summer holidays.
- In order to give schools greater flexibility to access road safety training, we have moved our Road Rangers (KS1) and Safer Steps (KS2) training online. We have also carried out a study on barriers to active travel with 3 of our local schools, the results of which we will use to influence future projects.
- In August 2021, our new car club provider (Enterprise) started offering electric vehicles for residents to hire. It currently operates in Newbury with the hope of expanding across the district.
- In April 2022, we started offering new eCargo bikes to local businesses as part of a new sustainable transport scheme. These bikes are equipped with 700 litre cool boxes and are a great alternative for local deliveries and business promotion.

CASE STUDY: School Streets

The council is committed to improving walking and cycling for everyone, making it healthier and safer. As part of phase 2 of the government's Active Travel Fund, a grant was awarded to encourage Active Travel, part of which enabled the council to introduce a pilot 'school streets' scheme at Calcot Infants and Junior schools, launched on 2 September 2021. The scheme involves restricting non-essential traffic outside the school for set periods of time at the start (drop off) and end (pick up) of the school day.

The benefits include:

- Greater road safety
- Cleaner air
- Better opportunities for active travel.

Since the pilot was introduced, sustainable journeys to these schools have increased significantly with an 88% increase in pedestrian movement and a 33% in cycle and/scooter use. This scheme will now be made permanent and we have begun communicating with other schools in the district.



RESILIENT TO CLIMATE CHANGE




100% of short term actions in progress, on track

Our progress so far:

- Our wildflower verge project in partnership with BBOWT (Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust) is a long term 'natural' project which aims to encourage the wildflowers already present on our rural verges to establish themselves whilst reducing the vigour of grass and weeds. You may have seen wildflower verges on the A4 from Thatcham to Theale and from Newbury to Hungerford. There are other examples on the rural verges around Kintbury and Inkpen, particularly around Coombe Gibbet. This project is now in its third year and continues to prove popular with residents and the local wildlife!
- Over the past year, the four trial recycling banks (installed in March 2021) have collected 29 tonnes of plastic pots, tubs and trays which diverted this plastic away from energy from waste or landfill facilities and into recycling. Plans are in place to provide two more sites across the district for plastic pots, tubs and trays these will be located at Theale and East Garston.
- Key representatives from the Council's Highways team attended a 'Carbon Management in Infrastructure' Training Course to gain a better understanding about how to reduce and monitor carbon emissions from our highways projects.

- Review and update our Flood Risk Management Strategy with influence from the Environment Strategy
- Undertake feasibility assessment of highway verges for Wild Flower projects
- Work with partners to develop Natural Flood Management projects
- Reuse, recycle and compost at least 60% of municipal waste we handle by 2030
- Review our Sustainable Drainage policy to ensure it reflects the aims of the Environment Strategy
- Further reduce the frequency of hedgerow cutting in areas where this does not affect safety

 = In progress, on track

This list is a summary. To see our full list of actions, [click here](#).

CASE STUDY: Flood Alleviation Schemes

Planning approval was granted for two more flood alleviation schemes in North Thatcham off Bowling Green Road and Heath Lane, and East Thatcham off the junction of A4 and Floral Way.

The schemes form part of the Surface Water Management Plan (SWMP) for Thatcham published in 2010 following the widespread surface water flooding in 2007. The flood defences in the SWMP form a strategic network of basins and reservoirs around the northern perimeter of Thatcham that will prevent surface water from the fields above Thatcham causing floods in the future. The schemes can therefore be regarded as future climate resilience for Thatcham.



WORKING WITH OUR COMMUNITIES AND PARTNERS



Develop good communications to ensure our communities have the information they need



Use our website effectively to provide relevant and up to date information for the community



Develop strategic partnerships and affiliations with stakeholders and organisations



Separate food waste collections to all eligible households by 2025




The continuation of the provision of separate garden waste collections from households



Maximise the opportunities for reducing carbon emissions via Government funding for home owners



 = In progress, on track

This list is a summary. To see our full list of actions, [click here](#).

82% of short term & ongoing actions in progress, on track

Our progress so far:

- Since October 2021, six new Parish Councils have signed up to the Greening Campaign and have successfully launched the scheme with residents in their communities. This campaign provides a tailored action plan for each community so that everyone is involved in the effort to go green. Talk to your Parish or Town Council about signing up and [find out more here](#).
- Since spring 2022, we have been working to launch the Sustainable Warmth scheme across West Berkshire. This scheme aims to raise the energy efficiency ratings of low-income and low EPC-rated homes, through measures including insulation, double glazing and low carbon heating technologies. This scheme will continue throughout 2022 and into 2023, and we will be engaging with local communities to help reach eligible residents.
- In March 2022, we launched a survey about the upcoming separate weekly food waste collection service. We received 3,053 responses with 82% of respondents thinking it is extremely or very important to recycle food waste. 73% of respondents state they will use the new food waste service when it starts. The responses are being used to shape our communications and service where possible.
- In March 2022, our Waste team began school visits to educate pupils on reducing, re-using and recycling their waste. So far, we have interacted with over 600 pupils. We also held 7 drop in sessions at local libraries where waste officers were present to talk to members of the public about waste reduction.
- In March 2022, we relaunched the Real Nappy trial packs with pick up locations at all libraries across West Berkshire. So far, 45 packs have been distributed.
- In May 2022, we launched our first ever soil conditioner give-away with Veolia at our Integrated Waste Management Facility at Padworth. This saw 25 tonnes of soil conditioner collected by residents. There was a high demand for the material, which is a fine grade, peat free soil conditioner, made from garden and food waste collected from households across West Berkshire.
- In June 2022, we launched our partnership with [aDoddle community mapping](#) to showcase our fantastic environmental groups in the district. This platform is a great way for groups to improve their presence online and allows residents to find their local group and volunteering opportunities.
- We've continued to send out monthly Environment Newsletters and have now gained over 4250 subscribers. If you'd like to hear more on environmental action and community [updates click here to sign up](#).
- We've been continuing our West Berkshire Parish Climate Forum to engage our local Town and Parish Councils. This forum has helped provide support and expert advice as well as the opportunity for communities to get involved in local work.
- Over the past year we have been improving our response to waste issues, such as fly tipping. We have already seen a 12% decrease in total number of fly tips in the past year. We are currently expanding the teams which will enable more enforcement activities to take place.
- Plans are in place to open two new mini recycling centres in Theale and East Garston. The new sites will have banks for plastic pots, tubs and trays and cans, textiles, small electricals, food and drink cartons (including paper tubes with metal ends) and cardboard/paper. This will make recycling more convenient for our residents.

WORKING WITH OUR COMMUNITIES AND PARTNERS



CASE STUDY: Trees for Schools project

In June 2022, we launched an exciting new project to supply schools in the District with trees to plant on their school sites. We hope this will be a fantastic way to encourage the future generation to play their part in tackling climate change and experience the positive impact of nature on both their physical and mental health.

Encouraging children to be closer to nature and tree planting as a carbon sequestration measure are both identified in the Council's Environment Strategy.

Tree planting also adds to the character and biodiversity of our district. There are also links to the national Eco-Schools programme, another initiative we are running with schools in the district.

Contact your school to encourage them to take part!



CASE STUDY: 'The Hickson Hedgerows' rewilding and community planting project

Since February 2022, we have been working on the Hickson Hedgerows project after being approached by a Great Shefford resident regarding the potential environmental enhancement of two areas of nearby Council owned land.

The areas of land were unused and were mown periodically by West Berkshire Council contractors. The local community wished to enhance these areas for the benefit of everyone living locally. Residents and WBC representatives and Great Shefford Parish Council worked together to make the project a reality.

The project has been named 'Hickson Hedgerows' in memory of long time Great Shefford residents, Jean and Lister Hickson who lived in the village for over 30 years and were very much at the heart of the community. The couple loved gardening and bee keeping.

The following activities have taken place at Hickson Hedgerows:

- The planting of three Tai Haku cherry trees provided by West Berkshire Council
- Creation of a bug hotel to be furnished by the local under 5s group and Primary School
- The creation of a laid hedge and workshop by Newbury Environment and Wildlife Team (NEWT)
- The creation of a dead hedge
- Mown paths created by Great Shefford Parish Council
- Creation of flower beds and planting
- The area has become more attractive to local wild life



This is a fantastic example of a community group enhancing their natural environment with support from the Parish and District Council.

WORKING WITH OUR COMMUNITIES AND PARTNERS

Berkshire
Buckinghamshire
Oxfordshire



We partner with Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT) to deliver an array of projects to enhance wildlife, biodiversity and access to green spaces in West Berkshire. Over the 2021/22 period, BBOWT delivered a range of access improvement projects. Read some of the case studies below.

CASE STUDY: Greenham Common

Greenham Common is one of the main accessible greenspaces in Newbury and the surrounding areas, providing open space that can be used by a range of stakeholders such as families, cyclists, dog walkers and nature lovers alike.

To help us manage this increased visitor pressure, we spent £15,577 resurfacing 0.4ha (4000sqm) of the car parks at Crookham and the Control Tower. Furthermore, to ensure that once people had arrived on site we could encourage them towards the less sensitive wildlife areas, we installed a new 30m stretch of footpath that is suitable for wheelchair use. Improving entrances and car parks provides visitors with the sense of a well-managed facility that encourages people to act in a positive and responsible way when visiting Greenham Common.

The photos below show before and after the path was installed, encouraging users to walk out into the roam zones.



Before



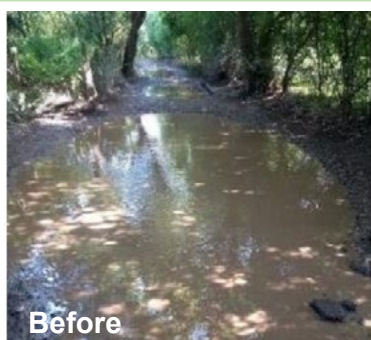
After

CASE STUDY: Thatcham Nature Discovery Centre

The Nature Discovery Centre is a popular visitor attraction bringing in an estimated 120,000 visitors a year. The circular walk round the lake is a local favourite, however there were sections of the path that were not fully accessible by wheel chair as well as areas of the path that were starting to erode.

To address these issues, we spent £19,263 on 250m of track improvements and resurfacing, improving accessibility to and from the car parks. Where the paths had become eroded or needed resurfacing we carried out 50m of footpath improvements.

Additionally, our team of volunteers spent over 400 hours undertaking weekly task days through the winter laying a 250m stretch of hedgerow. By laying the hedge along the main footpath we have significantly enhanced the feel of this part of the site, and hopefully helped increase visitor's connection with the countryside in a largely suburban area. We have opened up the darker areas of the path by removing dense blackthorn, widened the path in places by pushing back the vegetation, and created an attractive landscape feature using traditional hedgerow management techniques.



Before



After

4. You asked....we did

4.1 The Council seeks to listen and respond positively where possible to suggestions made by residents, businesses and community groups. There are formal ways of receiving requests such as through consultation exercises and more informal ways such as through general engagement work or conversations with officers working on particular projects.

4.2 Opportunities for engagement are welcomed and below are some examples of how the Council has been able to respond positively to requests and suggestions that were made through a consultation on active travel.

You asked for safer ways to walk and cycle along Reading Road between Mortimer and Burghfield

We have supported Stratfield Mortimer Parish Council, to enable the Parish to procure a consultant to assess scope and costs for a dedicated pedestrian and cycle route between the two villages.

You asked us to make it safer for pedestrians walking through Mortimer village

We have carried out work to improve a section of the footway between Mortimer village and St Mary's Primary School, making this section wider and safer for pedestrians.

You asked for improved cycle facilities at Mortimer Station

We have submitted a funding bid to Great Western Railway to provide additional cycle parking at the station, with the intention that any additional racks should be covered by existing CCTV.

You asked for improved secure bike parking at Aldermaston Station

We have submitted a bid to Great Western Railway to install CCTV at the station, so that users can feel safe parking their bike when using the trains.

You asked for more bike parking at Pangbourne

We have installed a cycle stand adjacent to Pangbourne Co-op to help residents choose more sustainable ways to travel.

You asked for better pedestrian and cycle facilities along the B4000 between the A4 and Stockcross village.

After a successful bid to the Department for Transport, we received £280k in March 2022 to construct a shared pedestrian and cycle route between Stockcross and the A4/A34/B4000 roundabout. This scheme is currently in design.

You asked for vehicles to be slowed down on the A4 by Tesco and B&Q, so that it is safer for cyclists and pedestrians

We constructed raised tables and provided markings as part of the A4 cycleway scheme.

You asked for Public Rights of Way improvements to the West Mills Towpath in Newbury so that the footway could be improved

We have devised a scheme and identified £70k of funding to improve the section from Mallard Court to Monkey Bridge.

5. Update on the Council's carbon footprint

- 5.1 After the declaration of a climate emergency in 2019, the Council worked on establishing its own carbon footprint. This was reported on for the period April 2019 – March 2020 and forms our baseline. A specialist contractor assisted in quantifying the **greenhouse gas (GHG) emissions** generated by the Council's assets and activities.
- 5.2 For the purposes of this report, we have defined the Council's **operational control** as a boundary to isolate our carbon emissions, therefore, if the Council has control of an asset, it has been included within our calculations.
- 5.3 Those GHG emissions that extend beyond our control are categorised in different scopes. These are as follows:
- **Scope 1 emissions** (aka direct) come from sources that are owned or controlled by the Council e.g. our vehicles
 - **Scope 2 emissions** (aka indirect) come from the generation of electricity/ heat etc. used in our buildings
 - **Scope 3 emissions** (aka indirect) come from goods/ services that the Council utilises but are not directly responsible for, e.g. investments, activities of our contractors
- 5.4 It is mandatory to report on Scope 1 and 2 emissions and Scope 3 emissions are optional. We have included the Scope 3 emissions from our largest contracts

(waste (Veolia) and highways (Volker Highways)).

- 5.5 As indicated above, West Berkshire Council's carbon reporting cycle aligns with the financial year, i.e. 1st April to 31st March, annually. Therefore, activity data within the period 1st April 2021 – 31st March 2022 has been used to update the carbon footprint and to compare against the baseline data and position reported last year.
- 5.6 Using the data available the Council's carbon emissions (or carbon footprint) are calculated using the following formula:

$$\text{ACTIVITY DATA X EMISSIONS FACTOR} = \text{EMISSIONS (tCO2E)}$$

Activity data is data associated with West Berkshire Council's activities (e.g. diesel consumption in litres).

The emission factors are the amount of GHG emissions associated with the activity data (e.g. the emissions from the combustion of a litre of diesel).

tCO2e stands for **tonnes of CO2 equivalent** and is a metric measure that is used to compare emissions from various greenhouse gases on the basis of their GWP Global Warming Potential by converting amounts of other gases to the equivalent amount of CO2.
<https://coolerfuture.com/en/blog/co2e>

Table 1: West Berkshire Council's Carbon Footprint 2019/20 – 2021/22

Emissions Scope	Emissions Source	2019/20 (Baseline)		2020/21		2021/22		difference CO ₂ e (tonnes) between baseline and 21/22	% difference between baseline and 20/21
		CO ₂ e (tonnes)	% of total emissions	CO ₂ e (tonnes)	% of total emissions	CO ₂ e (tonnes)	% of total emissions		
1	Stationary Combustion (e.g. energy use)	3,502	30%	3,219	33%	3,586	41%	84	2%
	Mobile Combustion (e.g. vehicles)	664	6%	354	4%	553	6%	-111	-17%
	Sewage Processing and Refrigerants	146	1%	120	1%	137	2%	-9	-6%
	Total Scope 1	4,312	37%	3,693	38%	4,276	49%	-36	-1%
2	Purchased electricity	3,496	30%	2,947	30%	968	11%	-2,528	-72%
	Total Scope 2	3,496	30%	2,947	30%	968	11%	-2,528	-72%
3	Contractor Emissions	2,575	22%	2,397	25%	2,359	27%	-216	-8%
	Leisure Centres	1,229	11%	691	7%	1,066	12%	-163	-13%
	Business Travel	8	0%	0	0%	8	0%	0	5%
	Total Scope 3	3,811	33%	3,089	32%	3,434	40%	-377	-10%
All Scopes		11,620	100%	9,728	100%	8,678	100%	-2,942	-25%

5.7 Table 1 shows the data for the 2019/20 baseline and data for 2020/21 and 2021/22 with the percentage differences between the latest position and the baseline calculated for each scope. The overall position is that the latest 2021/22 figures show a 25% reduction in emissions from the baseline. The top 2 areas with the biggest reduction in terms of percentage change are purchased electricity and mobile combustion. Comments on each of these are below

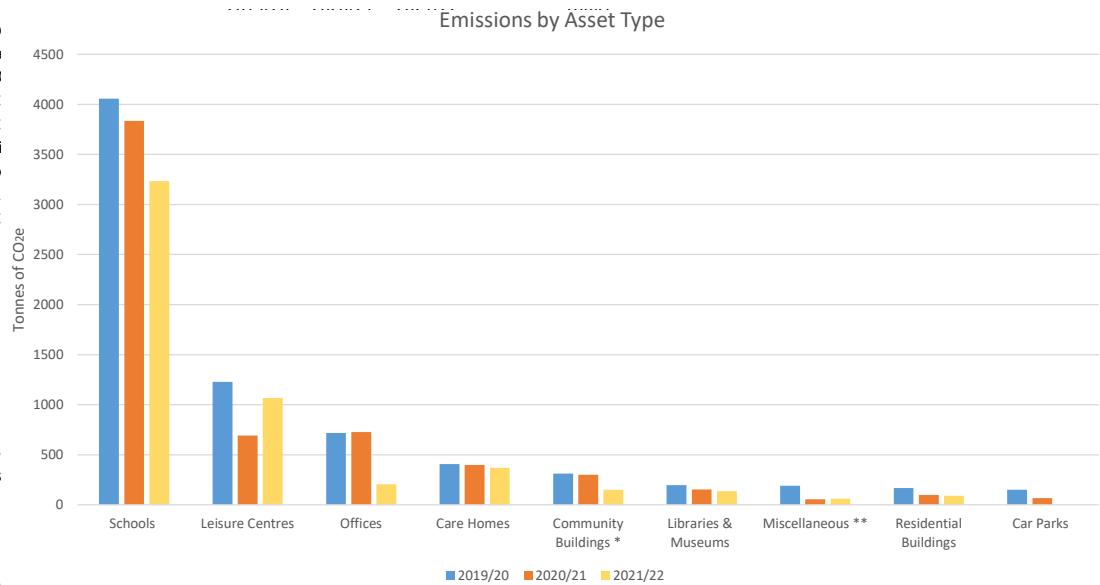
Purchased electricity: Following initial discussions with the Central Energy Contract electricity supplier and the Council's Environment Board, for financial year 2021/22 the Council changed its existing electricity supply to 'Blue'. This means that all the electricity supplied through the Central Energy Contract came from 'Zero' carbon nuclear sources. As a result, the 'Scope 2' carbon emissions associated with electricity consumption have

significantly reduced.

The Council recognises that as an organisation it is still consuming electricity at significant levels and will continue to implement policies and actions that follow the Energy Hierarchy (reduce / efficiency / renewables) to lessen its impact.

Mobile Combustion – This is a measure of the emissions associated with transporting people, materials or goods in connection with Council work activities. This dropped significantly in 2020/21 as a result of the Covid19 pandemic and lockdown restrictions. It has increased again in 2021/22 but not to the previous level of the baseline. There has been a 17% reduction overall. This can be explained by the greater use of online meetings, virtual training events and conferences replacing the greater travel activities that would have taken place before these more efficient ways of working became commonplace.

**Figure 2:
Council
emissions by
asset type**



* Includes Community Buildings, Day Centres & Family Hubs.

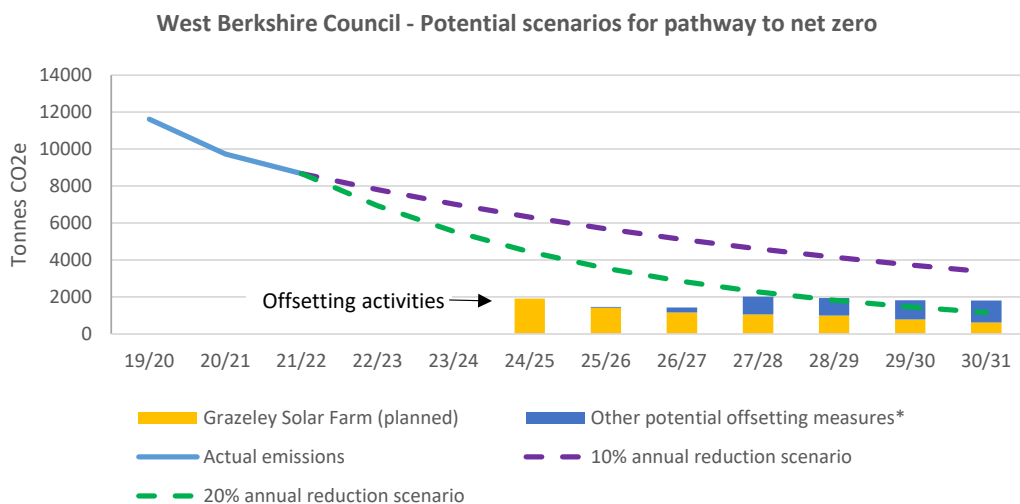
** Includes Miscellaneous buildings, Land, Retired Buildings, Industrial Buildings & Sewage works

5.8 The Council has significant numbers of buildings and other assets that all contribute to the carbon footprint. Figure 2 above shows the changes in emissions in relation to the Council's assets reported by asset type. The impact of the Covid19 pandemic can be seen in the data for leisure centres where there is a reduction for 2020/21 and then an increase from that position to 2021/22. This reflects the fact that leisure centres were closed for periods within 2020/21 and normal activities were not able to take place causing a significant drop in emissions for that year. Emissions have increased again as normal activities resumed in 2021/22 but there is still an overall reduction when compared to the baseline position.

5.9 There have been a few years now of gathering data to report on the Council's carbon footprint. What does this tell us about our journey to net zero carbon and what we need to do in future years to be on track to reach our target? As our collected data grows, we can start to plot our progress and look at possible future scenarios. Figure 3 starts this process and is a tool we will develop as our knowledge of impacts from our projects and actions grows and as our plans for future investment are further developed.

5.10 The graph at figure 3 shows our actual emission figures as the blue line for the first 3 years of collecting data. The purple and green lines indicate the two scenarios if the Council's carbon footprint reduced by 10% or 20% each

**Figure 3:
Potential
scenarios for
pathway to net
zero**



*measures include further renewable energy generation, tree planting and other natural carbon sequestration projects (see text for additional explanation)

year. We recognise that progress would not be uniform like this and is more likely to have some steeper drops in places and then some smaller changes for other years. These are therefore simply indicative scenarios. We have been undertaking some work to look at the measures in our Delivery Plan and assess what their carbon impacts could be over the period to 2030. This is not relevant for all projects and actions but we plan to develop the graph at figure 3 with this information to add a scenario which is an extension of the blue line. This will help inform us where we calculate our existing planned measures will take us on the pathway to net zero and identify the gaps requiring further action. The graph is therefore work in progress and you can expect to see further versions in future progress reports informed by our continuous process of improved data collection and future scenario planning.

5.11 The Environment Strategy recognises that alongside actions to reduce our emissions there will need to be some offsetting activity to enable us to reach a position of net zero carbon by 2030. This offsetting is shown in figure 3 in the yellow and blue bars. Some offsetting projects are already planned such as Grazeley solar farm and the impact of this is shown in yellow. There are still options in terms of the solar farm and detailed planning of the project will determine which option is delivered. The minimum benefits from the solar farm development have been used in figure 3 to present a conservative picture.

5.12 There are other offsetting activities discussed in the Environment Strategy that are still in the investigation and planning stages. These are represented in the blue bars and are indicative amounts at this stage. For example, there is a commitment to generate at least 21.5MW through renewable energy projects so the generation in addition to Grazeley solar farm is included in the blue bars. Alongside this the other potential offsetting measures include estimates of carbon sequestration through projects that might include tree planting and wetland habitat creation for example. The nature of these projects and amounts of carbon able to be sequestered will become clearer as we work alongside our partners and organisations especially through the Natural Solutions Delivery Partnership.

5.13 This figure is therefore very much a work in progress and is intended to be a helpful tool in demonstrating the progress being made and the gaps that remain which can help to direct future investment.

6. Update on the District's emissions

- 6.1 The carbon emissions for the District as a geographical area are reported using data published by the Government. Each year the Government provides data at local authority level which is 'per capita carbon dioxide emissions in tonnes'.
- 6.2 Two sets of data is produced – a 'full set' and a 'sub set'. Both sets of data report on the overall emissions from the following activities: transport, industry & commercial, domestic and agriculture. The 'sub set', however, removes data over which the local authority has no control. For example, in relation to transport this would remove the travel associated with the strategic road network (M4 and A34) as these roads are managed by National Highways and not the Local Highway Authority.
- 6.3 There is a 2 year period between when the emissions occur and when they are confirmed and reported by BEIS (Department for Business, Energy & Industrial Strategy). Data is reported per calendar year. The latest year for reporting is 2020. These figures are included in Table 2 along with the two previous years. When BEIS publish the figures for each new year they also review their previous methodologies for earlier years and make any necessary revisions. This is why you may see changes in previously reported year's figures within Table 2.
- 6.4 The overall reduction in emissions for the full set over the last two reported years is 22%. The reduction for the sub set is 18%. The latest published figures will include any impact of the Covid19 lockdown restrictions. It is expected that the 2021 figures may not show a further reduction but could increase slightly reflecting the significant change in activities which the lockdown forced for 2020.
- 6.5 Continuous action is needed across the District to reduce emissions and the Council recognises its role in encouraging and influencing communities, businesses and residents as well as ensuring the policies and plans it sets align with carbon reduction aims. Actions within the Delivery Plan highlight the need to work with businesses, local communities and landowners and farmers to help all those who live and work in West Berkshire to have a positive impact and help to address the climate crisis. Further work in these areas will be progressed as we continue on this journey towards net zero.

Table 2: Full Set and Sub Set Per Capita Carbon Dioxide emissions (tonnes) for West Berkshire

	Full Set	Sub Set
2018	7.3	5.6
2019	7.0	5.2
2020	5.7	4.6

7. Conclusion

- 7.1 This second year of delivering our Environment Strategy has seen most of the restrictions associated with the Covid19 pandemic lifted and activities start to settle into what might be called a 'new normal'. There has been a focus on recovery and renewal and it has been encouraging to see local businesses and organisations include 'green' practices in their plans for recovery and growth. This has been supported by the ARG Challenge Fund that the Council was able to distribute, supporting local recovery ambitions.
- 7.2 The projects and activities included in this annual report are part of the ongoing journey to reduce the Council's impacts and lead by example in our local area. There are many other organisations in West Berkshire who are also leading by example and we hope to feature some of their stories in our next progress report and in our Environment Newsletters published each month.
- 7.3 As we continue on this journey we are looking ahead to what the next year will bring with the introduction of our separate food waste collections, the development of a new Local Transport Plan, further progress on our solar farm project, the progression of some pilot habitat creation projects through the Natural Solutions Delivery Partnership and further support for greening the taxi trade and supporting the transition to electric vehicles.
- 7.4 Our 'co-production' work this year has demonstrated again how important engagement is. As we continue on the path to net zero as a District we look forward to the many engagement opportunities this will bring and the greater impact we can have by working together.

Glossary

This glossary provides an explanation of terms used in this annual report along with some additional terms which may also be of general interest relating to climate change and our environment.

Abbreviation	Term	Explanation
	Anaerobic Digestion	A process in which organic matter is broken down by micro-organisms in an oxygen free 'tank' to produce fuels.
AONB	Area of Outstanding Natural Beauty	Area of countryside designated for conservation in recognition of its national importance.
	Baseline	A fixed point of reference used as a starting point for comparison purposes.
	Biodiversity	The variety of plant and animal life.
	Carbon budget	The maximum amount of greenhouse gases that can be emitted over a certain period.
CCS	Carbon capture and storage	Trapping carbon at its emission source, and then storing it long term.
CO2e	Carbon Dioxide Equivalent	A term used to describe different greenhouse gases in a common unit. For any greenhouse gases and their amount, it is the amount of carbon dioxide which would have the equivalent warming impact.
	Carbon footprint/carbon audit	The total greenhouse gas emissions caused by a person/event/organisation/product, expressed as the carbon dioxide equivalent.
	Carbon neutral/ carbon neutrality	The act of reducing a person's/events/organisations/products carbon footprint to zero through energy efficiency measures and external emission reductions projects.
	Climate change	The long-term shift in the planets weather patterns and temperatures.
CCA	Climate Change Act 2008	Provides the framework for the UK's climate change policy
	Climate Change Bonds	Fixed income bonds, linked to climate change solutions.
	Climate Emergency Declaration	The Declarations vary for each organisation. The Council's Declaration is set out in the Introduction section of the Environment Strategy.
	CO2 emissions within the scope of influence of Local Authorities	The UK produces a breakdown of carbon dioxide emissions by Local Authority area as a subset of its annual inventory of greenhouse gas emissions. The emissions deemed to be within the scope of Local Authorities exclude large industrial sites, railways, motorways and land-use.
CCC	Committee on Climate Change	Independent body to advise the government on climate change.
CIL	Community Infrastructure Levy	A charge which can be levied on new developments within the Local Authority's area. It helps deliver required infrastructure.
	Delivery Plan	The Council's plan on how the objectives of the Environment Strategy will be achieved.

	Economic Development Board	Newly formed Economic Board which will oversee the Economic Development Strategy, implementing an action plan to fulfil its objectives.
EU ETS	European Union Emissions Trading System	The first and largest greenhouse gas emissions trading system in the world. It works on a 'cap and trade' principle where allowances are set. Allowances are auctioned off or allocated for free. Emitters must ensure they have enough allowances to meet their emissions or purchase more. Those who reduce their emissions and have spare allowances can sell off their credits.
GWP	Global Warming Potential	The potential of a Greenhouse Gas to trap additional heat in the atmosphere relative to Carbon dioxide. Specifically, it is a measure of how much energy the emissions of 1 tonne of a gas will absorb over a given period of time, relative to the emissions of 1 tonne of carbon dioxide. The larger the GWP, the more that gas warms the Earth compared to CO ₂ over that time period.
	Green energy	Definitions would usually mean the gas or electricity were from 100% renewable sources.
GHG	Greenhouse gases	Gases in the atmosphere that absorb and re-emit heat. They occur naturally in the Earth's atmosphere but human activity increases these, leading to increased warming and climate change.
GDP	Gross Domestic Product	The total monetary/market value of the finished goods and services produced within a country's borders in a specific time period.
	Health and Wellbeing Board	A partnership that brings together West Berkshire's leaders of the health and social care system.
KPIs	Key Performance Indicators	A measurable value/outcome to gauge how well an organisation is meeting its key objectives.
LULUCF	Land Use, Land Use Change and Forestry	A greenhouse gas sector defined by the United Nations Framework Convention on Climate Change.
LCWIP	Local Cycling and Walking Infrastructure Programme	Sets out the Council's long-term approach to developing local cycling and walking networks
	Local Plan	The plan is part of the overall Development Plan for West Berkshire, setting out our local planning policies.
LTP	Local Transport Plan	Aims to deliver effective transport solutions for all by increasing choice and minimising congestion.
NAEI	National Atmospheric Emissions Inventory	The Inventory is compiled by Ricardo. It is the standard reference inventory for the UK and includes emission estimates for a wide range of important pollutants.
	Nature Recovery Plan	The plan defines the objectives and key actions required to improve biodiversity and wildlife in the district
	Net zero	There is no commonly agreed definition. However it is the intention that the activities of the Council should result in no net impact on the climate from greenhouse gas emissions.
	Per capita	The district's emissions divided by the number of people to give a value per person. This can be useful in comparing other areas of differing population size.

	Operational Control	A method of providing a boundary for an organisation to isolate its carbon emissions. This method describes where an organisation has functional operational control of an asset it will be included in calculations.
	Scope 1 Emissions	aka direct emissions, come from sources that are owned or controlled by an organisation, e.g. vehicles
	Scope 2 Emissions	(aka Energy indirect) come from the consumption of electricity used in an organisation's buildings
	Scope 3 Emissions	(aka other indirect) emissions come from goods/ services that an organisation utilise but are not directly responsible for e.g. investments.
SME	Small medium enterprises	Small or medium businesses are generally defined as businesses with less than 250 employees.
SuD s	Sustainable drainage systems	Systems designed to manage the drainage of surface water.
	Thames Valley Berkshire Local Enterprise Partnership	An organisation bringing together business, public sector, education and community together to drive the local economy.
	Thames Valley Local Resilience Forum	A Forum to help prepare, respond and recover from emergency incidents.
	The National Adaptation Programme	This sets out the actions that the UK government and others will take over the next five-yearly cycle to adapt to the challenged of climate change.
ULEV	Ultra low emission vehicle	A vehicle that emits no more than 75g/km CO ₂ , based on the NEDC test, at the tailpipe. This includes pure electric, hydrogen, range-extender and plug in hybrid vehicles.
	Whole life carbon	The emissions created for every stage of an item/ buildings production, use and disposal.

