

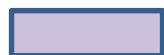
Worcester City Council's Environmental Sustainability Strategy 2020-2030



Worcester
CITY COUNCIL

Finding your way around our strategy

Navigating our strategy has been made as easy as possible. Use these hyperlinks to jump straight to the section or theme that interests you. Return to this page via the 'return to finding your way' link at the bottom of any page.



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Introduction

As was recognised by Worcester City Council in July 2019, the world is now in the middle of a climate emergency. Without rapid action on reducing emissions of carbon dioxide (CO₂) and other greenhouse gases (GHG), the resulting changes to the climate will be widespread and catastrophic.

This strategy seeks to cease Worcester's contribution to climate change by becoming carbon neutral, and will take us through to 2030.

This strategy also seeks to respond to other significant environmental pressures including the biodiversity emergency, also now recognised by the Council, and air pollution.

Achieving carbon neutrality and improving Worcester's environment is not a task which Worcester City Council can achieve alone. This strategy seeks to bring the city together to tackle this challenge: public sector, businesses, residents and community groups all working together towards a shared vision. It is only together that real change can be achieved.

Approach: Key commitments

Vision: By 2030, Worcester will be a carbon neutral city which will be resilient to the changing climate with low levels of air pollution and high levels of biodiversity.

Our strategic approach to achieving the vision is to:

- Use our position as a local leader to influence, facilitate and encourage action on these themes from partners and local stakeholders
- Maximise opportunities in areas where we have direct control
- Work closely with our city partners such as local businesses, residents, other public sector organisations and all stakeholders to position and empower all to take action
- Hold an Annual Summit on the Environment and a more regular City Forum, bringing everyone in the city together to celebrate achievements and plan our next steps
- Encourage national government to make the required national policy changes and provide the necessary nation funding streams
- Seek to apply for all relevant funding and support others to do the same
- Provide funding where there is a clear investment business case

Approach: Funding

We have already:

- Provided £100,000 as an enabling budget to start the delivery of this strategy (agreed in January 2020)
- Agreed the allocation of up to £7,000 from this budget, subject to further support from other city partners, to provide match funding for a heat networks study. A bid will be submitted to the Heat Networks Delivery Unit for the majority of the costs of the study
- Successfully bid for £400,000 from the Accelerated Towns Fund to install a rapid charging hub in St Martin's Gate car park

We will:

- Where there is an investment business case, then funding should be sought from internal sources
- For other projects, external funding opportunities will be pursued to deliver this strategy, for example:
 - We will consider the opportunity to fund further proposals in this strategy from the main Towns Fund and will seek to align funding priorities with this strategy
 - We will submit bids to the Office for Low Emission Vehicles where further funding opportunities are made available for chargepoint infrastructure
 - We will apply for the Defra Air Quality grant to accelerate the take up of zero emission vehicles

Approach: Engagement and partnership working

What is the vision for engagement and partnership working?

Worcester's residents, including young people and those in 'hard to reach' groups, feel engaged and empowered to play a part in the delivery of the strategy. The regular communications means residents know what action they can take and the behaviour changes which are required. Worcester's businesses and organisations play a key role in the delivery of the strategy, partnering with the City Council as the facilitator. The Annual Summit on the Environment provides everyone a chance to celebrate progress and plan next steps. The regular City Forum on the Environment ensures that projects are kept moving and best practice shared. Through this effective engagement and partnership working, real progress on difficult challenges to improve our environment is made.

Priorities:

- Give individuals and organisations opportunities to engage with the delivery of the strategy
- Enable effective partnership working to ensure the visions of the strategy can be realised



We have already:

- Carried out a consultation on the draft strategy via an online survey, webinars, 1:1 meetings and a stand outside the Guildhall
- The response to the strategy was overwhelmingly positive with the vast majority of consultees welcoming the strategy and the Council's intention to show strong local leadership, responding to the climate emergency and other environmental pressures
- Three main findings of the consultation were:
 - A much-repeated request for improved walking and cycling infrastructure which came through very clearly from the survey and the face to face consultation. In addition, promotion of opportunities and incentives for large employers to encourage active travel was a key recommendation from the webinars
 - From the businesses and organisations in the webinar and through individual responses, an endorsement of the City Council taking a leadership role and facilitating projects and partnership working across the city
 - The strength of support for actions relating to our natural environment. Support for this theme and its proposals was the highest of all the themes
- A full analysis of the consultation has been carried out (see Appendix)

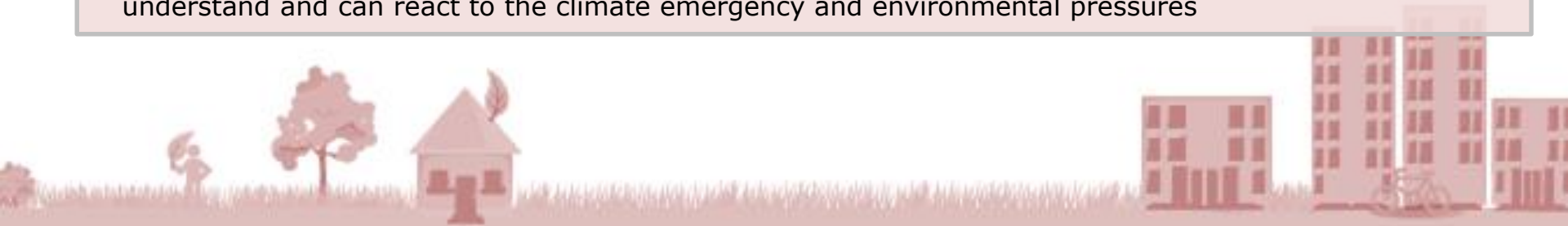
We will:

- Hold a new 'Annual Summit for Worcester's Environment' : a key opportunity for partners to come together and evaluate progress of this strategy
- Establish a City Forum on the Environment to meet regularly, share best practice, update on projects and funding opportunities
- Regularly engage, alongside and through our Community Engagement team and Youth Engagement Officer, with our experienced and proactive community groups, including those focused on the environment, residents associations, allotment holders and the hard-to-reach groups
- Use the communication methods available to us, including City Life and its social media channels, to provide regular features and updates on the delivery of this strategy



With our partners, we will:

- Seek partnership support to run a Climate Emergency Action Day or similar for residents
- Seek further views on and partnerships willing to support the introduction of a Carbon Neutral Youth Forum. The Council recognises the importance of engaging young people. This would provide a key opportunity for young people to effectively engage with the delivery of the strategy
- Seek to work with Worcestershire County Council and education authority to encourage schools within the City to follow the proven Eco Schools programme and support them where possible
- Provide and facilitate the provision of guidance, training and information to ensure other organisations understand and can react to the climate emergency and environmental pressures



Aim: To ensure the delivery of the strategy as effectively as possible

It is vital that quick and effective action is taken in order to address this emergency and the environmental pressures which the Council recognises. Governance of the strategy will ensure that delivery stays on track and that resources are provided when required.

We will:

- Form an internal Project Group of Council officers who will be responsible for delivery of the objectives of this strategy
- Regularly update and discuss the strategy delivery with the Corporate Management Team
- Provide an update report to the Corporate Leadership Team quarterly
- Continue with the councillor steering group comprised of the Chair, Vice Chair and one other member to ensure cross-party representation, from the Environment Committee
- Provide an update report to the Environment Committee at least twice a year
- Provide resources for the delivery of the strategy from across the Council as appropriate for the individual actions and proposals being delivered at the time
- Embed performance measures and risks in our performance management system
- Publish an annual report detailing progress on delivery of the strategy and towards delivering the target and visions
- Review this strategy every two to three years

Approach: Embedding the strategy

This strategy is key to the work of the City Council moving forward and must be fully embedded if our visions are to be realised. As other strategies and plans are developed or revised, they will take note of this strategy and ensure there is no conflict between our actions and policies across the Council.

The Masterplan for the city is a key document which must align with this strategy, as there will be many areas which overlap, such as new housing developments and economic development and skills.

The strategy links to other key strategies for the city and county, particularly the Worcestershire Energy Strategy. This strategy focuses on how the county will reduce emissions, increase local energy generation and maximise the growth opportunity from investment in the low carbon and renewable energy sector.

A list of all of the strategies and plans which our strategy takes note of, both local and national, is provided in the appendix.

Sustainable Development Goals

The UK is signed up to the UN's Sustainable Development Goals, which are the "blueprint to achieve a better and more sustainable future for all". The goals address the global challenges being faced, including environmental challenges, poverty, inequality, peace and justice.

This strategy is aligned to the following UN Sustainable Development Goals:

- Affordable and clean energy – this goal seeks to ensure access to affordable, reliable, sustainable and modern energy for all
- Decent work and economic growth – this goal seeks to promote sustained, inclusive and sustainable economic growth for all
- Sustainable cities and communities – this goal seeks to make human settlements inclusive, safe, resilient and sustainable
- Responsible consumption and production – this goal seeks to ensure sustainable consumption and production patterns
- Climate action – this goal seeks to ensure that we take urgent action to combat climate change and its impacts
- Life on land – this goal seeks to ensure sustainable use of terrestrial ecosystems, sustainably managed forests, desertification combated and biodiversity loss halted

The timeframe of this strategy fits with the timeframe for the achievement of the Sustainable Development Goals, with the UN aiming for these to be achieved by 2030.

<https://sustainabledevelopment.un.org/>

Overview of the themes and aims

Worcester City Council's
Environmental Sustainability
Strategy 2020



Carbon Neutral City Council

Aim: To reduce carbon emissions from all aspects of the Council's operations and buildings, providing strong leadership on the opportunities for reduction



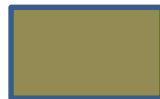
Carbon Neutral Worcester

Aim: To reduce carbon emissions in Worcester in order to work towards becoming a Carbon Neutral City by 2030



Sustainable Economy

Aim: To grow the low carbon economy in the city and ensure sustainability is embedded in business



Natural Environment

Aim: To protect Worcester's natural environment and enhance its biodiversity



Preparing for Climate Change

Aim: To ensure the City is resilient to the effects of a changing climate



Resource Efficiency

Aim: To reduce the consumption of resources

[Return to 'Finding your way' page](#)

Carbon Neutral City Council

Worcester City Council's
Environmental Sustainability
Strategy 2020

Aim: To reduce carbon emissions from all aspects of the Council's operations and buildings, providing strong leadership on the opportunities for reduction

What does a carbon neutral City Council look like?

Worcester's zero emission refuse trucks whizz round the city with all council vehicles now electric or hybrid options. Building heating requirements are reduced through improved energy efficiency, and green gas is purchased for the remaining use. All electricity used by buildings and operations is green. Staff are encouraged to consider their need for travel, with effective video conferencing facilities available. When travel is required, many staff walk or cycle to work, with others driving electric vehicles they have been able to purchase through a salary sacrifice scheme or the council's own electric pool cars.

Priorities:

- Reducing emissions from council buildings
- Reducing emissions from council owned vehicles
- Reducing emissions from staff commutes or business travel



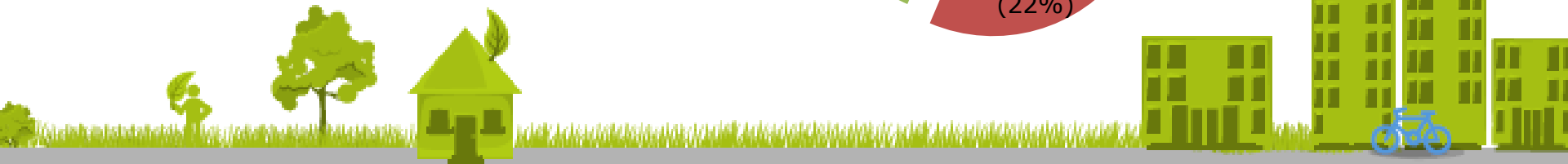
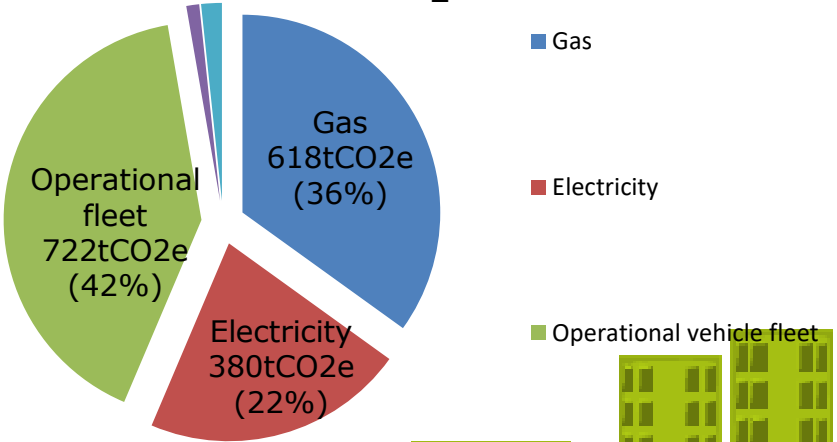
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Where we are now:

Total annual emissions from the Council's operations and buildings are in the region of 2,500 tCO₂e. The Council was therefore responsible for only 0.6% of the city's emissions.

As of April 2020, the Council purchases only renewable, green electricity for all its operations.

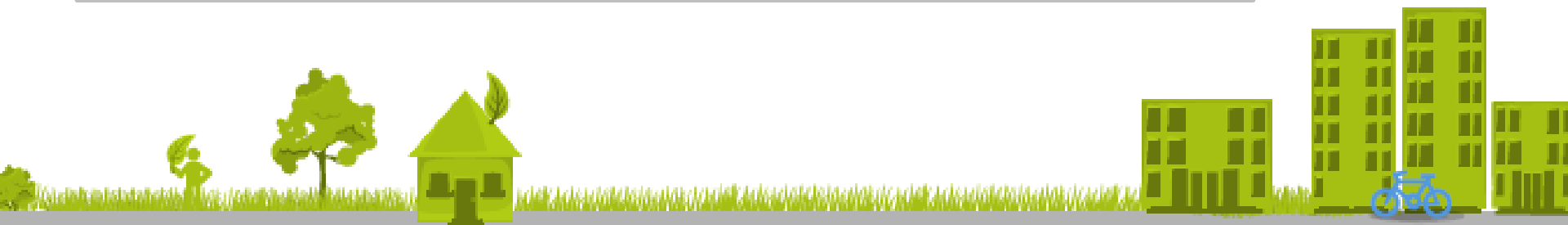
2018-19 Greenhouse Gas Emissions from Worcester City Council in tCO₂e



City Council buildings

We have already:

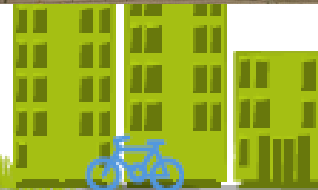
- Committed to purchasing renewable electricity from April 2020 for all buildings and operations
- Installed a solar photovoltaic (PV) array on the top deck of St Martin's Gate car park
- Completed a variety of energy efficiency measures in the Guildhall including energy efficient lighting and insulation



City Council buildings

We will:

- Continue to purchase green electricity and regularly review the pricing and opportunity to purchase green gas
- Increase the generation of renewable electricity and renewable heating on Council buildings and from Council premises where it is cost and environmentally effective to do so
- Seek to make all buildings within the Council's ownership or used by the Council as energy efficient as possible, investigating the costs and viability of carbon neutrality for each building
- Assess all Council owned buildings, including those leased to others, to identify potential projects
- Make Energy Performance Certificate ratings publically available
- Investigate, trial and adopt where possible new technologies to further reduce emissions and support the continuing development of low carbon technologies



City Council transport

We have already:

- Implemented five electric vans for use by our environmental operations team
- Taken on two of the 'Woo' electric bikes under the University of Worcester team for use by members of staff and councillors to travel to meetings
- For many years offered the cycle to work scheme for members of staff to purchase a bike by salary sacrifice, saving on tax



City Council transport

We will:

- Seek to procure zero emission vehicles where possible for all Council fleet vehicles when they need replacing (recognising that the availability of suitable vehicles restricts immediate action in this area)
- Seek funding for adoption and trial of zero emission vehicles, as with the existing trials of electric bin lorries in Westminster and Sheffield
- Encourage the further use of the 'Woo' electric bikes for business travel
- Procure one or more electric vehicles to be used as pool cars
- Encourage staff to avoid travel where possible, using video conferencing facilities instead. Also post-Covid, staff can continue to work flexibly and from home or other locations at least some of the time, reducing the need to travel into the office
- Adopt a salary sacrifice scheme to enable employees to purchase low or ultra low emission vehicles
- Investigate the provision of incentives to staff to travel by public transport
- Invest in the cycling facilities available for staff and visitors to Council buildings

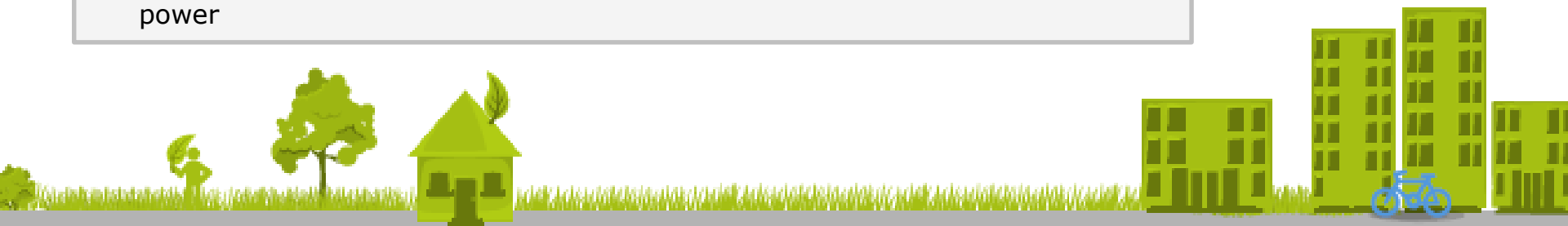
City Council Events

We have already:

- Recognised the importance of events in showing community leadership: we can use events to demonstrate best practice and also provide an opportunity to communicate environmental messages to the public and local businesses

We will:

- Seek options to run our own events in the most sustainable manner as possible: for example, consideration will be given to opportunities to reduce carbon emissions through use of electricity rather than diesel generators for power



Embedding a carbon neutral approach throughout the City Council

We will:

- Ensure that all Council decision papers and project proposals provide thorough and quality information on the impact on carbon emissions and on the wider environment, enabling senior leadership and members to make informed decisions
- Seek a positive environmental impact from each decision or activity
- Give appropriate weight to emissions reduction when assessing the business case of projects, seeking appropriate mitigation where a project with an environmental cost is approved
- Seek to reduce the environmental impact of procured contracts through procurement practices and guidance for suppliers
- Utilise the staff training portal, staff conferences and staff communications to ensure staff awareness and knowledge of carbon reduction opportunities
- Encourage staff to present their own carbon reduction ideas
- Ensure that all future or reviewed City Council plans are aligned to this strategy

We will measure our performance on becoming a carbon neutral authority by:

- City Council carbon emissions (tCO₂) quarterly
- Staff survey – questions could be asked in the annual staff survey to assess impact of measures on staff travel choices for their commute
- Fuel usage by operational vehicle fleet
- Business mileage
- kWh energy used by City Council buildings
- Number of City Council owned businesses with an Display Energy Certificate rating C or above



Carbon Neutral Worcester

Aim: To reduce carbon emissions in Worcester in order to work towards becoming a Carbon Neutral City by 2030.

What does a carbon neutral Worcester look like?

Visitors arriving in the city in their zero emission vehicle are provided with ample opportunities to charge their car. Visitors arriving into our key public transport hubs have a choice of electric taxi, e-bike or pedal cycle to continue their journeys. Commuters, when they do need to travel into work, have the same choices. Walking and cycling around the city is safe, convenient and is the mode of choice for many. New developments are all low carbon in construction and use, ensuring these buildings are comfortable and future proofed. The thermal energy of the River Severn is used to heat many city centre buildings through a heat network. Homes are much more energy efficient, comfortable to live in and affordable to heat with low carbon heating sources.

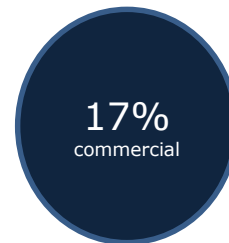
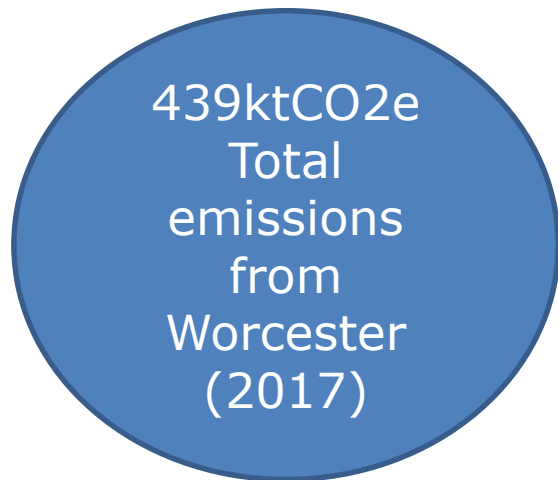
Priorities:

- Reduce emissions from homes through improvements to energy efficiency and through the decarbonisation of gas heating
- Facilitate and encourage the transition to zero emission vehicles (public and commercial)
- Enhance and improve walking and cycling infrastructure

Carbon Neutral Worcester

Worcester City Council's
Environmental Sustainability
Strategy 2020

Where we are now:



Data from the SCATTER dataset, excluding aviation

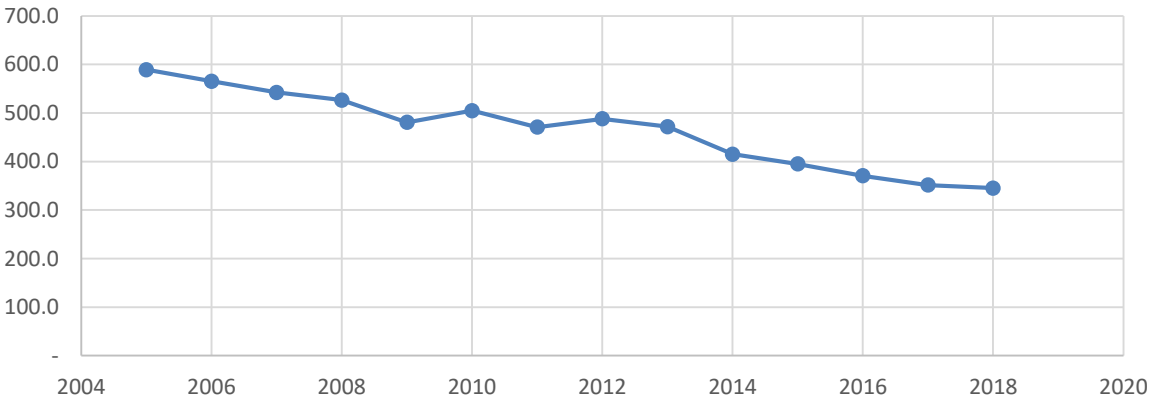


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Carbon Neutral Worcester

Where we are now:

Worcester's CO₂ emissions 2005-2018 in ktCO₂ (from BEIS dataset)



Totals are lower than on previous page as this only shows CO₂, not CO₂e which includes other greenhouse gases

↓
Worcester:
41% CO₂
emissions
reduction
2005-2018

↓
National:
35% CO₂
emissions
reduction
2005-2018

National outlook: the CO₂ emissions per unit of electricity has fallen by 55% between 2005-2018



Where we are now:

At no other time in history has the urgency to take action on the environment been greater. The pressures of the climate and nature emergencies are very real and require urgent action.

Climate change and other environmental pressures such as air pollution have a significant impact on people.

The value of the environment cannot be understated. As a society, the value of our natural capital – land, air, water – and of the ecosystem services provided has rarely been calculated or accounted for. Yet natural capital impacts on every aspect of society.

The evidence to show that climate change is already happening is undeniable. The average global temperature has risen by around 1°C since the pre-industrial period. 17 of the 18 warmest years on record have occurred in the 21st Century. These temperature changes are not just happening elsewhere, the UK is affected. Nine of the warmest years on record have occurred since 2002. Natural fluctuations will of course mean that unusually cold years will still occur. However, these events will be less likely.

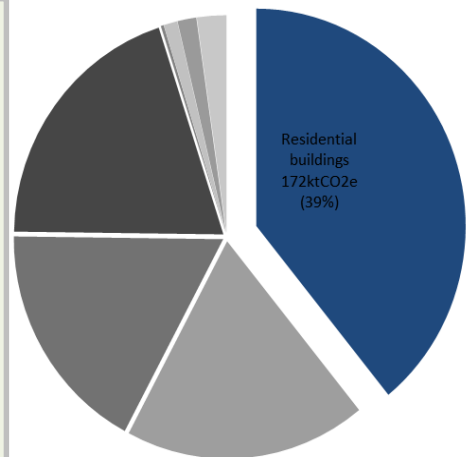
The Intergovernmental Panel on Climate Change (IPCC) released a special report in October 2018 detailing the impacts of global warming of 1.5°C above pre-industrial levels. The report stated that radical change must be seen over the next 12 years to 2030 in order to avert catastrophic climate change. It highlights a number of climate change impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C, and the necessary actions to achieve this.

Carbon Neutral Worcester

Residential Buildings

Where we are now:

- Worcester has 44,018 households in total with 102,000 residents
- Emissions from housing comprise **39%** of the City's carbon footprint
- **Heating and hot water** accounts for **68%** of the emissions from Worcester households
- Emissions from **electricity** use accounts for a much smaller proportion at **32%** and will continue to fall as electricity becomes cleaner
- Nationally, on average £1 of every £3 spent on energy is wasted through poor insulation
- **11.1%** of Worcester City households are **fuel poor** (2017, 4,890 households). 1.6% drop since 2016
- Around **25,000** homes in Worcester have an **EPC rating of D or below**



Residential Buildings

We have already:

- Played an active role in the County 'Warmer Worcestershire' partnership
- Procured energy advice agency 'Act on Energy' to provide energy support and access to funding for Worcester residents
- Partnered with the University of Worcester and others on the 'Energize Worcester' project
- With the County Council taken part in a 'Staying Warm, Staying Healthy', project, funding heating systems where existing systems are broken and health conditions exacerbated



Residential Buildings

We will:

- Improve the knowledge of our housing stock to ensure best targeting of measures to reduce emissions from power and heating
- Widely communicate and promote government initiatives and funding opportunities to residents, such as the Green Homes Grant vouchers
- Seek opportunities for city wide decarbonisation of heating through the use of hydrogen, seeking to capitalise on the local development of hydrogen boilers
- Ensure that our private sector housing standards officers are fully trained to identify fuel poverty and are able to support residents to access funding for energy efficiency measures
- Increase promotion of the successful 'Warmer Worcestershire' campaign to signpost more residents towards the support and funding which is available
- Encourage behaviour change from residents through communications, specific applications or programmes and through working with local action groups
- Explore working with local estate agents to provide enhanced information to homebuyers on opportunities and costs of energy efficiency measures, over and above the information provided in an EPC
- Enable and support local generation opportunities, such as a bulk buying solar PV scheme

Residential Buildings

With our partners, we will:

- Support our local registered housing providers, including Platform Housing Group, Sanctuary, Rooftop and others, to improve the energy efficiency of their social housing stock in Worcester, for example by identifying projects and supporting funding bids
- Seek to utilise the existing regulatory frameworks to improve and maintain energy efficiency in residential properties, for example by enforcing the minimum energy efficiency standards for private rented homes
- Investigate opportunities through the SWPD review to ensure that new homes built have the lowest possible emissions: with maximum possible energy efficiency standards and with microgeneration from renewables built in
- Continue working with the University of Worcester, participating in the 'Energize Worcester' project to research and reduce household energy usage

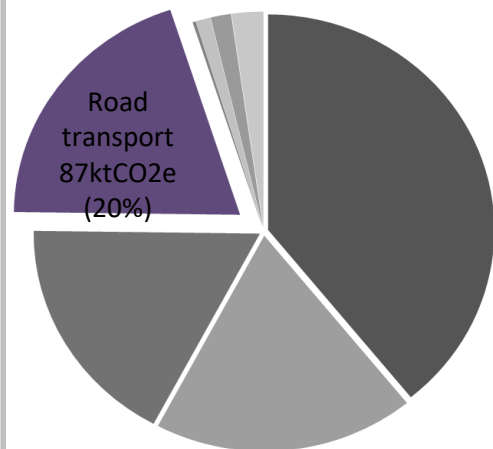


Carbon Neutral Worcester

Transport

Where we are now:

- Transport accounts for 20% of the city's emissions
- National agenda to decarbonise transport is focused on zero emission vehicles (currently electric) and encouraging active travel
- 20 public electric vehicle chargepoints in Worcester City
- 3 electric vehicle chargepoints within City Council control
- Around 200 electric vehicles registered to addresses in the city
- 2399 total spaces within City Council car parks
- 10% of people commuting to work by car travelled less than 2km
- Walking and cycling rates are low but anecdotally increased during Covid-19 pandemic, opportunity to sustain change in behaviour



Transport

We have already:

- Through partnership working and funding, three electric chargepoints (one rapid) have been available for public use for 5+ years in St Martin's Gate
- Progressed the proposal for a rapid charging hub for electric vehicles, submitting this as a request to fund through the Accelerated Towns Fund

Others have already:

- Successfully bid for funding from the Office for Low Emission Vehicles for a project including another two electric vehicle chargepoints (Worcestershire County Council)



Transport

We will:

- Improve walking and cycling safety and connectivity across the city, seeking to increase the percentage of journeys under two miles undertaken via active travel means (walking or cycling). A key milestone being the creation of Kepax Bridge
- Provide additional safe and secure cycle parking across the city centre
- Encourage the adoption of electric vehicles and other zero emission vehicles, through local incentives and infrastructure, making use of the green number plates initiative
- Enable residents without off-street parking to own an electric vehicle through affordable and accessible charging provision in council owned car parks (in line with current County Council policy, on street chargepoints are not proposed in this strategy)
- Work with local taxi operators to facilitate the transition to zero emission taxis and introduce a new licensing strategy to support this
- Investigate support and incentives for employers to install electric vehicle chargepoints, electric bike schemes and implement active travel plans

Transport

With our partners, we will:

- Consider opportunities to improve access to bikes, extending and further promoting the existing 'Woo' bike scheme led by the University of Worcester
- Work with the County Council to seek further improvements to walking and cycling safety and connectivity across the city
- Work with partners such as Worcestershire County Council to ensure that new road projects prioritise active travel routes for walkers and cyclists
- Work with local bus operators on their plans to transition to zero emission buses
- Encourage local bus and train operators to facilitate commuters to choose a low carbon commute combining public transport and bike and seek full establishment of the Rail2Ride programme with West Midlands Railway

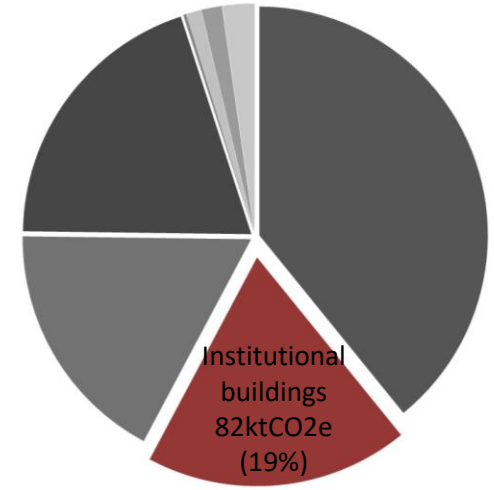


Carbon Neutral Worcester

Institutional buildings and operations

Where we are now:

- The emissions from this sector comprise around 19% of the emissions of the whole city
- In contrast to residential homes, emissions from this sector are lower from heating and hot water (48%) than from electricity use (52%). This reflects the inclusion of street lighting in this category, as it is provided by Worcestershire County Council

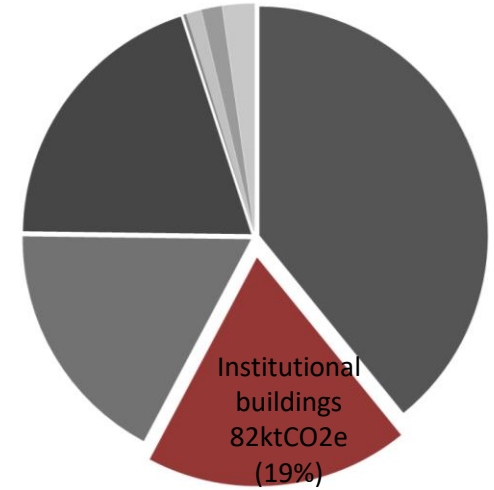


Carbon Neutral Worcester

Institutional buildings and operations

We have already:

- Supported the establishment of the new Public Energy Efficiency Programme providing funding for measures in public buildings
- Worked in partnership with the University of Worcester and Worcestershire County Council on a number of projects



Carbon Neutral Worcester

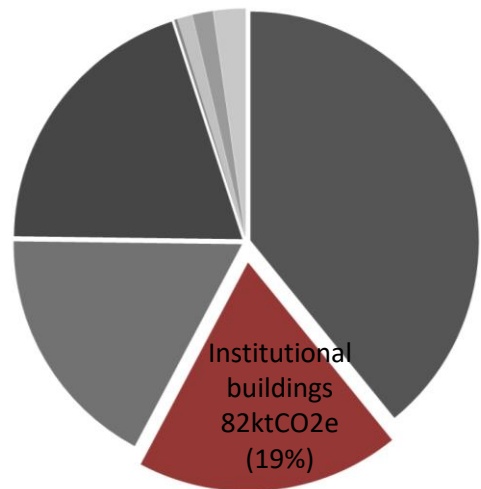
Institutional buildings and operations

We will:

- Support and encourage behaviour change through strong environmental leadership and utilisation of existing partnership networks

With our partners, we will:

- Deliver successful partnership working in order to drive the adoption of increased renewable energy generation and energy efficiency measures
- Provide funding to investigate the opportunities and feasibility of a renewables-based or low carbon district heat network in the city
- Through the Worcestershire Energy Strategy, seek support for an Energy Innovation Zone in the city (heat and power)



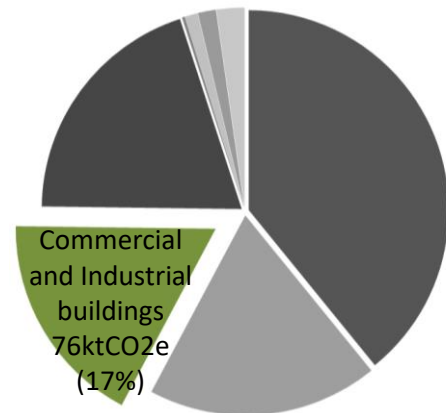
Carbon Neutral Worcester

Worcester City Council's
Environmental Sustainability
Strategy 2020

Commercial and Industrial Buildings

Where we are now:

- Emissions from the business sector, commercial and industrial emissions, comprise 19% of the City's carbon footprint
- Electricity accounts for 58% of emissions
- Of a total of just over 3,000 businesses, nearly $\frac{3}{4}$ are micro-SMEs with 4 or fewer employees
- Only 25 large enterprises (more than 250 employees)
- 50 medium enterprises (50-250 employees)
- 65% of commercial building Energy Performance Certificates are a D rating or below



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Commercial and Industrial Buildings

We have already:

- Promoted the existing European Regional Development Fund projects run by County Council to Worcester businesses, providing funding for energy efficiency measures and installation of renewables



Commercial and Industrial Buildings

We will:

- Continue to promote funding opportunities for businesses to improve their energy efficiency and install renewables, encouraging the widespread adoption of such measures and technologies
- Identify the best methods to work with commercial landlords and seek mechanisms by which landlords are incentivised to install energy efficiency measures in buildings where the tenant businesses pay the energy bills
- Encourage action through the Council's existing business grant programmes; in particular where grants are being given for bringing vacant premises back in use, as this is an ideal opportunity to install energy efficiency measures
- Seek to reduce carbon emissions from City businesses through behaviour change initiatives. Investigate options for a City wide behaviour change programme or sustainability 'charter', allowing businesses to compete and employees to learn about changes they could implement
- Seek to utilise the existing regulatory frameworks to improve and maintain energy efficiency in non domestic rented properties

Commercial and Industrial Buildings

With our partners, we will:

- Improve our information on emissions from this sector, mapping the emissions of large institutions and employers where possible
- Work with Western Power Distribution to ensure that essential infrastructure upgrades such as the Warndon Substation Upgrade take place as soon as possible. This project will unlock the current constraints on energy generation in Worcester
- Investigate the viability of a district heat network (as with institutional emissions)
- Work with Cadent to investigate other options for low carbon heating across the city and reducing emissions from heating
- Through our Delivery Group and Annual Summit, ensure sharing of best practice on energy efficiency, renewables and new technologies



Community

Where are we now:

- Worcester has an engaged and environmentally aware population; this section of the strategy seeks to recognise and maximise the opportunities this brings about

We have already:

- Engaged with a number of key groups through our consultation process and established the grounds for future partnership working
- Supported Transition Worcester over a number of years with carbon reduction campaigns and projects across the city
- Held events to officially mark World Car Free Day and promote alternative transport
- Engaged residents through City Life with a wide range of carbon reduction messages



Community

We will:

- Support community groups and charitable organisations to run projects aimed at residents and businesses
- Support community groups seeking to start renewable energy projects
- Ensure externally organised events are as sustainable as possible by providing and encouraging organisers to follow best practice guidance
- Encourage the involvement of the community in taking ownership of Worcester as a sustainable city to further drive forward environmental change and emissions reduction
- Encourage local food growing through our allotments and in community gardens
- Listen carefully to suggestions and ideas that might further the work of the Council in reducing its environmental impact and which may enable it to facilitate residents and its partners to reduce their emissions



We will measure our performance on becoming a carbon neutral city by:

- Annual carbon emissions for the district (as calculated by the Scatter database and BEIS' database)
- Percentage reduction in emissions from gas and electricity usage
- Number of electric vehicles in the city
- Number and usage of electric vehicle chargepoints
- Walking and cycling rates and reported safety of walking and cycling around the city
- Number of residents receiving funding towards energy efficiency measures (through the Green Homes Grant scheme, ECO or ECO flex)
- Percentage of homes with an Energy Performance Certificate (EPC) rating of E, F or G
- Percentage of non domestic premises with EPC of E, F or G
- Number and percentage of businesses participating in the Business Energy Efficiency Programme and Low Carbon Opportunities Programme, and the carbon emission reductions achieved by these businesses

Sustainable Economy

Aim: To grow the low carbon economy in the city and ensure sustainability is embedded in business

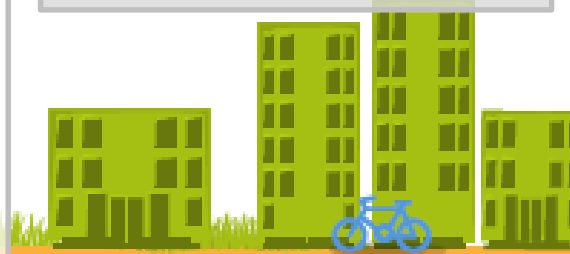
What does a sustainable economy for Worcester look like?

Innovation is at the heart of Worcester's economy, with new and existing businesses encouraged and supported to innovate in new technologies, particularly relating to the hydrogen economy, electric vehicle charging infrastructure, energy efficiency measures and renewable generation. A flexible, low cost, dynamic product innovation and development space within the city enables innovation in low carbon products. Drawing in businesses from across the region, this hydrogen centre of excellence establishes Worcester at the heart of the low carbon economy.

Manufacturers in the city have transitioned to produce low carbon, durable products or products which directly support the transition to carbon neutrality such as energy efficiency measures or renewable energy technologies. Clean growth is supported through the Council's grant and business support programmes, from entrepreneurs up to the 25 large enterprises resident in the city. Low carbon skills are fundamental to our education system, with excellent access to and take up of STEM subjects and close links between the university and other education providers and businesses. Businesses are supported to take advantage of a changing climate and a need for a low carbon economy to grow and create new job opportunities.

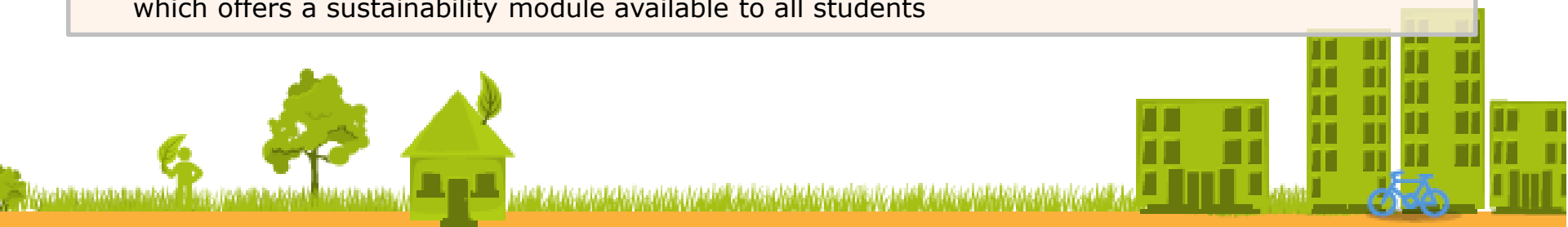
Priorities:

- Support local businesses to transition into the low carbon economy
- Establish a green hub for technology start ups
- Use all opportunities to re-skill people for the green economy



Where we are now:

- Identification and classification of low carbon and environmental goods companies is challenging, however the latest data at LEP level in 2011-12 showed there were 411 companies operating in this sector
- Worcester Bosch are a key employer in the city and have significantly invested in the low carbon economy, developing a hydrogen – ready boiler
- A small number of Worcester businesses have been supported by the Low Carbon Opportunities Programme which aims to support businesses to grow and diversify in the low carbon economy
- Many Worcester schools are eco-schools and/or part of a STEM programme
- Education providers offer some low carbon skills options, including the University of Worcester which offers a sustainability module available to all students



We have already:

- Committed to a review of the Council's investment strategy with the aim of reducing any involvement in fossil fuels and increasing investment in renewables and green jobs
- Directed the Council's business, skills and economic development programme towards supporting local opportunities in the low carbon economy and green job creation
- Contributed match funding to and promoted the Business Energy Efficiency and Low Carbon Opportunities Programmes being run across the county

Our partners have already:

- The Midlands Energy Hub have recently (July 2020) commissioned a study into the regions low carbon economy, with data expected at a local authority level. This will improve our knowledge of this area of Worcester's economy, strengthening our ability to respond to its needs and ensure its long term growth



We will:

- Encourage green business start ups and support those already set up through our business support and grants programme
- Assess gaps in existing training provision for low carbon skills by working with education and training providers such as the Heart of Worcestershire College and the University of Worcester
- Seek to ensure the apprenticeship programme responds to the need for low carbon skills
- Encourage action with promotion of exemplar leadership and existing national or regional award programmes for recognition and promotion
- Explore options for funding further low carbon skills training and ensuring local suppliers can take advantage of opportunities in the low carbon economy, such as energy efficiency installation and electric vehicle chargepoints



Sustainable Economy

With our partners, we will:

- Establish a 'green innovation' hub for low carbon product development with a flexible, low cost shared innovation space
- Seek to maximise opportunities for the city which may arise from the work of Worcester Bosch on the development of hydrogen-ready boilers, hydrogen for heating and transportation uses
- Explore further opportunities for partnership working with the Kiln, the University of Worcester, the Enterprising Worcestershire programme and the Low Carbon Opportunities Programme



Natural Environment

Aim: To protect Worcester's natural environment and enhance its biodiversity

What do we want Worcester's natural environment to look like in 2030?

Worcester's green infrastructure is managed for wildlife, with particular emphasis on notable species such as bats, otters and slow worms. Insects, especially pollinator species, flourish across the city due to the changes made to allow native wildflowers bloom. This supports in turn a healthy bird population, with increased numbers of songbirds. Deaths from pollution are greatly reduced due to Worcester's excellent water quality and the improved air quality. Increased numbers of trees and plentiful green open spaces provide important habitat for wildlife and for people to enjoy, as well as help with improving air quality and reducing flooding due to surface run-off.

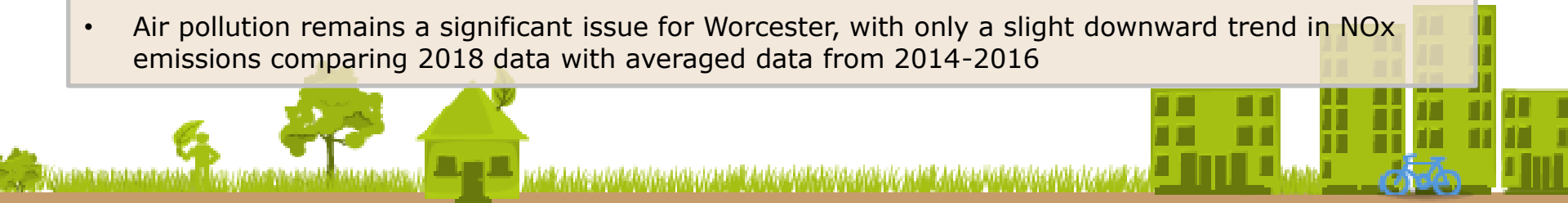
Priorities:

- Tackle air pollution by increasing the number of zero emission vehicles, and by encouraging modal shift to walking and cycling and public transport
- Increase the total tree canopy in the city
- Develop the value of all infrastructure in the city for biodiversity



Where we are now:

- The natural environment in Worcester is a great asset to the city. The city benefits from the River Severn flowing through its heart, with the structure of the city having evolved around it. The Worcester & Birmingham Canal is another important part of the 'blue' infrastructure of the city. Three major parks and other green spaces enhance public access to leisure opportunities
- 25 local nature reserves and wildlife sites are dotted around the city, with an integrated network of woodlands, meadows and wetland habitats present in Warndon Villages
- Nationally, 41% of our insect species are threatened with extinction
- The Council has formally declared a biodiversity emergency (September 2020)
- We have a number of notable species present in the city including otters, bats and slow worms
- Air pollution remains a significant issue for Worcester, with only a slight downward trend in NOx emissions comparing 2018 data with averaged data from 2014-2016



We have already:

- Supported the work of community groups, including Transition Worcester, Worcester Environment Group, Bramblewood Forest School and Worcester Canal Corridor Group, to carry out environment enforcement activities
- Secured funding from the Urban Tree Challenge to increase the number of trees in specific locations in the city
- Begun work to develop a plan to tackle Ash Dieback
- Trialled a number of wildflower areas on islands and verges around the city, assessing the potential to create wildflower-rich road verges across the city
- Supported the Plastic Free Worcester and the Surfer's Against Sewage 'Sending a Message in a bottle' campaign
- Enhanced a section of the Duck Brook and restored wildflower-rich meadows
- Begun investigating opportunities to enhance Barbourne Brook using natural flood management techniques
- Agreed to do further work to enhance wildlife and biodiversity at Perdiswell Park
- Planned a project to enhance the biodiversity of the Riverside Park
- Supported Worcestershire County Council's bat highway, with bat friendly lighting on the A4440
- Worcestershire County Council committed in 2015 to making Worcestershire a pollinator friendly county; a strategy for 2020-2025 has been published

We will:

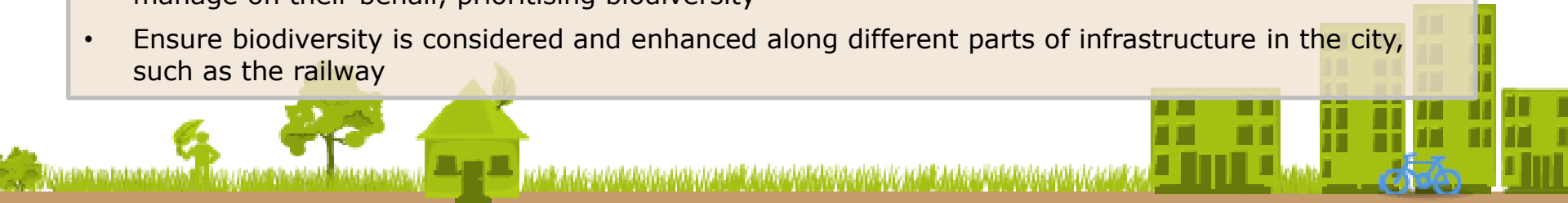
- Write and implement a 'Biodiversity Action Plan' for the city
- Embed a culture of biodiversity-first across all our environmental operations work
- Increase the total tree cover in Worcester. Opportunities to increase tree cover on land owned and managed by the Council will be maximised
- Investigate options and the feasibility of providing affordable trees to residents for them to plant in their own gardens
- New community orchards will be supported. Schools/community groups also supported to take up offers of free trees available from the Woodland Trust
- Implement the recommendations of the Natural Networks report to develop roadside verges in Warndon / Warndon Villages and St Johns / Lower Wick into roadside habitats
- Working with our new service standards, targeting improvements in biodiversity across the city, seeking a 'net gain' in biodiversity in Council projects and an extension of the successful wildflower planting projects

We will:

- Educate widely on the need for insect-rich habitat such as wildflower meadows and the value of these, amongst staff and the public
- Improve air quality through measures to encourage and facilitate the use of zero emission vehicles (linked to proposals in Carbon Neutral Worcester: Transport)
- Encourage and facilitate access to public open spaces across the city
- Seek to minimise the use of products or substances harmful to the environment
- Recognise the value of allotments to engage residents and enhance biodiversity, ensuring that this is taken into account when making decisions about the allotments
- Consider ways in which value of the natural environment can be incorporated into decision making, for example through use of natural capital accounting
- Seek to maximise opportunities for residents and community groups to be involved with the natural environment and to enhance the quality of the natural environment in Worcester
- Improve water efficiency and act to reduce water wasted across the city, by Council operations, households and businesses

With our partners, we will:

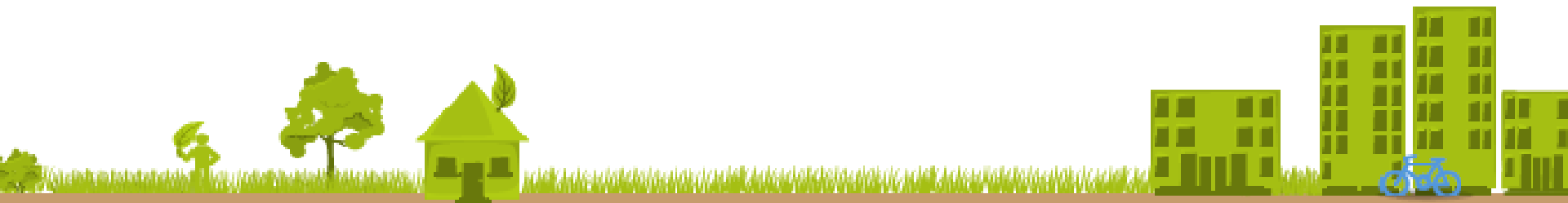
- Seek to improve and enhance our green and blue infrastructure including the river, canal and other watercourses. The value of the River Severn and other watercourses can not be underestimated and the Council will ensure they play a full and active part in improvement projects such as 'Wild Worcester' and the 'Natural Networks' project on Barbourne Brook. The Council will also continue to work with the Canal and Rivers Trust and the Environment Agency on the 'Unlocking the Severn Project'
- Support the implementation of the Natural Networks report on the biodiversity of the canal
- Implement a strategic approach with the County Council for management of the verges which we manage on their behalf, prioritising biodiversity
- Ensure biodiversity is considered and enhanced along different parts of infrastructure in the city, such as the railway



Natural Environment

We will measure our performance on improving our Natural Environment by:

- High tree canopy cover on a ward by ward basis
- Total number of trees planted annually
- Presence of notable species



Preparing for climate change

Aim: To ensure the City is resilient to the effects of a changing climate

What does a resilient Worcester look like in 2030?

Vital infrastructure is protected, ensuring resilience of the city in extreme events. Flooding, whilst common, is less disruptive to the city and residents directly affected are prepared and long term damage is minimised. The natural environment is also resilient and provides nature based solutions to climate change, with the increased number of trees and vegetation across the city helping to reduce the urban heat island effect and reduce run off in flood events. The role that businesses and individual households can play in improving the resilience of our society and environment to climate change is much more understood and adaptation is embedded within businesses' risk assessments and action planning. Vulnerable residents are better protected through emergency and long term planning.

Priorities:

- Reduce the risk of and damage caused by flooding
- Improve the resilience of Worcester's natural environment
- Assess the risk to and protect vulnerable residents



Preparing for climate change

Where we are now:

The Committee on Climate Change notes that global average temperature is already around 1°C above pre-industrial temperatures, and rising. Not only do we need to plan adaptation strategies for 2°C, but also for 4°C, which could still be reached based on extrapolations of future global emissions consistent with recent trends.

The national 'Clean Growth Strategy' also recognises that some climate adaptation will be required, even if emissions are reduced as planned. The 'National Adaptation Programme' for 2018-2023 outlines the vision for local government to play a leading role in local places becoming more resilient to a range of future risks.



Preparing for climate change

The Council and our partners have already:

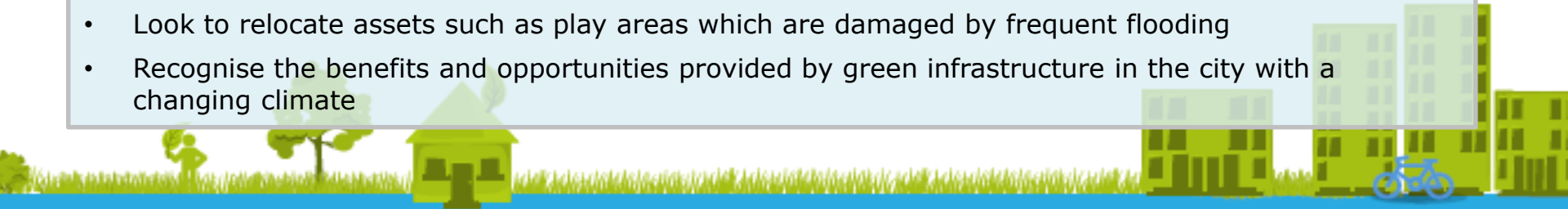
- Carried out flood alleviation projects for Duck Brook and Barbourne Brook, in partnership with Worcestershire County Council and the Environment Agency
- Raised the level of New Road to reduce closures and facilitate flow of traffic during severe river flooding
- Improved the Council's emergency plans for flooding, ensuring that all services know how and when to respond



Preparing for climate change

We will:

- Seek to ensure adequate planning and management of climate risks
- Flood risk will be reduced where possible through our planning policies and pre-application planning guidance, for example through ensuring the incorporation of Sustainable Urban Drainage systems in new developments
- Manage the impact of flooding on homes and businesses and reduce this flooding where possible
- Seek to improve the resilience of the most vulnerable people within our society to these changes
- Work to mitigate the economic impact of climate change on businesses and residents, providing information and opportunities to local businesses and work in partnership to adapt to these changes
- Look to relocate assets such as play areas which are damaged by frequent flooding
- Recognise the benefits and opportunities provided by green infrastructure in the city with a changing climate



Preparing for climate change

We will:

- Improve the resilience of our natural environment to climate change, including ecological resilience, by protecting and improving our sites of important wildlife habitat
- Manage our public open spaces taking account of the increased risk of extreme weather and seek to ensure the availability of green open spaces for people in extreme hot weather conditions
- Ensure council buildings are resilient to flooding and extreme temperatures, meaning the council can stay operational at all times
- Continually evaluate the impacts of the changing climate and review this adaptation strategy
- Maximise opportunities from climate change within the natural environment and the local economy

With our partners, we will:

- Initiate further flood alleviation projects on watercourses in the city including Barbourne Brook
- Review the risk to our most vulnerable residents and identify specific projects and actions to reduce impact on these residents
- Work with other public sector organisations and businesses to establish how climate change will impact on their business practices and operations, to ensure that those operations are as resilient as possible

Resource Efficiency

Aim: To reduce the consumption of resources

What does a resource efficient Worcester look like?

Worcester is transformed into a low waste society with 'reduce, reuse, recycle' at its heart. Using circular economy principles, local businesses, especially manufacturers, have a significantly reduced their waste streams and benefit from the resulting cost savings.

Reusable products and minimal or zero waste packaging are widespread. The majority of fruit and vegetable waste is composted and food waste of all types is greatly reduced. Community compost facilities are common. Single use plastics are only used for specialist functions having been replaced wherever possible by reusable alternatives.

These changes have been primarily driven through education and promotion of alternatives, ensuring that materials are valued, not discarded. This value is embedded within the school curriculum, as well as throughout our community through partnership working.

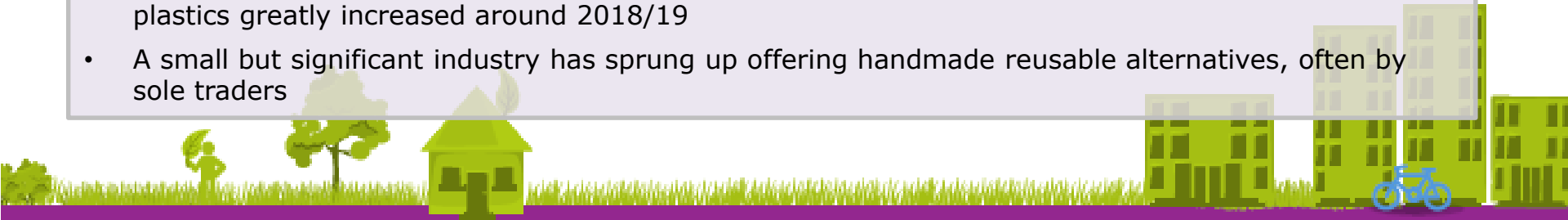
Priorities:

- Promote and embed 'reduce, reuse, recycle' within society
- Continue to promote, in partnership with relevant supermarkets and businesses, reusable alternatives to plastics



Where we are now:

- A fifth of UK greenhouse gas emissions are associated with food and drink, mostly created during production (agriculture and manufacturing). If this food is wasted, not only are more emissions associated with the disposal, but the emissions created during production and transportation were for nothing
- Across the county, 43.3% of what is collected from kerbsides from households is sent for recycling
- Waste disposal contributes significantly to the county's carbon emissions, accounting for 67% of Worcestershire County Council's emissions, equating to over 32,000 tonnes of CO₂e
- Public awareness of the destinations of recycled materials and of the damage from single use plastics greatly increased around 2018/19
- A small but significant industry has sprung up offering handmade reusable alternatives, often by sole traders



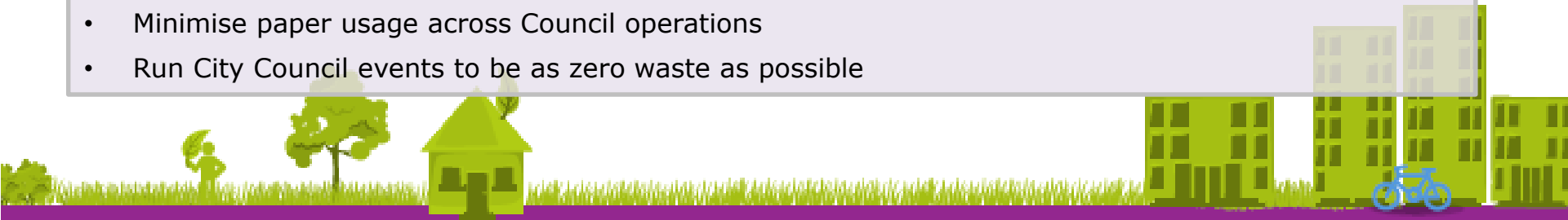
We have already:

- Achieved single use plastic free community status and established a working group
- In 2019, three City Councillors took part in a waste reduction challenge, writing a blog of their experiences
- Most of the waste we collect now goes to energy from Waste rather than landfill, meaning that energy is recovered
- Launched a comprehensive recycling service for our commercial customers
- Promoted the County Council offering subsidised compost bins, as well as water butts, with c.200 sold each year in Worcester
- Played an active role in the 'One Waste Worcestershire Group' which was established 2018/19
- Established composting bays for leaves and grass cuttings in two parks with interpretation boards to educate and encourage people to compost
- Designed a 'Don't drop your litter' campaign to trial in two parks, launching Autumn 2020
- Introduced separate 'recycling on the go' bins in the city centre and four parks, with more to follow if successful

Resource Efficiency

We will:

- Install recycling bins across the city centre and in city parks and open spaces
- Increase the amount of waste recycled from houses and businesses
- Strive to reduce the amount of waste generated following the waste hierarchy of reduce, reuse/repair then recycle
- Reduce single plastic use by promoting alternatives
- Build on and enforce the Council's commitment to our no single use plastics policy
- Minimise general waste from Council buildings and operations
- Minimise paper usage across Council operations
- Run City Council events to be as zero waste as possible



Resource Efficiency

With our partners, we will:

- Through the Joint Municipal Waste Management Strategy, work with Worcestershire County Council to reduce domestic waste and reuse and recycle more
- Continue to encourage City businesses and institutions to minimise use of single use plastics
- Reduce food waste through communications and support County Council initiatives such as community fridges and the 'Love Food, Hate Waste' campaign
- Externally organise events to be as zero waste as possible through the provision of guidance and information to event organisers



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