

Worcester City Council

ENVIRONMENTAL SUSTAINABILITY STRATEGY FOR THE CITY OF WORCESTER 2020-2030

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1 Executive Summary

By 2030, Worcester will be a carbon neutral city, with energy and transport transformed. Worcester's environment will be resilient to the changing climate with low levels of air pollution and high levels of biodiversity.

This draft strategy sets out the plans of Worcester City Council to help the city achieve the vision above. Worcester City Council cannot achieve this vision alone. It is only with the involvement of everyone in the city, underpinned by key national changes and policies, that this vision can be realised.

Worcester's strategy and the overall timescale for becoming carbon neutral shows a level of ambition matching the urgency of the climate emergency that the world finds itself in.

The strategy is structured around six key themes. The strategy sets out Worcester's current greenhouse gas emissions, proposals for the mitigation of these emissions and adaptation to an already changing climate. Climate change is not the only environmental pressure being faced by the City, and the strategy's Resource Efficiency and Natural Environment themes seek to address these other pressures.

The themes and aims of each theme are as follows:

Carbon Neutral City Council	To reduce carbon emissions from all aspects of the Councils operations and buildings, providing strong leadership on the opportunities for reduction.
Carbon Neutral City of Worcester	To reduce carbon emissions in Worcester in order to work towards becoming a Carbon Neutral City by 2030.
Sustainable Economy	To grow the low carbon economy in the city and ensure sustainability is embedded in business.
Natural Environment	To protect Worcester's natural environment and enhance its biodiversity.
Adaptation to Climate Change	To ensure the city is resilient to the effects of a changing climate.
Resource Efficiency	To reduce consumption of resources.

Within each aim, the Council's proposals for how the aims can be achieved are outlined. Some of the proposals can be implemented quickly, for example, ensuring that all council decisions evaluate overall environmental impact and in particular, impact on carbon emissions. The majority of the others will require more investigation and evaluation before a decision can be made to go ahead with projects. It will be recognised however, that even these proposals will not deliver the vision in full, and therefore more proposals will need to be identified and adopted.

The principles of our strategy are as follows:

- The Council will maximise opportunities to reduce the impact on the environment from areas we have direct control over
- The Council will work closely with local public sector organisations, businesses, residents and all stakeholders to encourage and facilitate action that will minimise and mitigate the impact of greenhouse gas emissions
- The Council will lobby national government for the required national policy changes and funding which are necessary to achieve the goals of this strategy
- The Council will seek to apply for all relevant funding and support others to do the same in order to enable the delivery of this strategy.

As a strategy for the whole of Worcester, the Council will consult openly on these objectives and proposals, and will encourage everyone from residents, to businesses, to the charitable sector and Worcester's active environmental movement, to get involved in this. The Council needs others to help develop this strategy to ensure it can deliver on the pledges made and the growing recognition of the need for action on climate change.

2 Introduction

2.1 A strategy for Worcester

This strategy could not come at a more important time for the environment, locally, nationally and globally. 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 and other greenhouse gases, the resulting changes to the climate will be widespread and catastrophic. In declaring a climate emergency, Worcester City Council has publically recognised the urgency of the situation.

This strategy seeks to eliminate Worcester's contribution to climate change by 2030 by becoming carbon neutral. This is not a task which Worcester City Council can achieve alone. This strategy seeks to bring together partners and stakeholders from across the city, together with residents and resident's groups such as the strong environmental action groups which the city benefits from. It is only together that real change can be achieved.

As Greta Thunberg states, every kilogram of carbon counts¹. The notion that what one person, one household, one city can do is irrelevant can no longer hold true. To mitigate every kilogram of carbon emissions, everyone must take action.

Achieving carbon neutrality is not the only aim of this strategy. As well as the climate emergency, the country also finds itself in a 'nature emergency'. Pressure on the natural environment is high, with biodiversity decreasing and air pollution costing lives. The climate is already changing, and will continue to do so, even with the efforts to end our contribution towards levels of carbon dioxide in the atmosphere. The city must respond to and plan for these existing and future changes. The speed at which we use resources, and the manner in which these resources are disposed of when no longer required, cannot be ignored. This strategy sets out the aims, objectives and proposed means by which Worcester will respond to all of these challenges.

All successful campaigns need a leader. As the local authority, Worcester City Council is the obvious organisation to take the leadership role. As such, the Council must set a strong example of how to reduce emissions, as well as enabling, facilitating and encouraging change across the whole city. The Clean Growth Strategy² (2017), which sets out central Government's direction for tackling climate change, outlines the ambition for the public sector to be a leader in emissions reduction, to demonstrate best practice and be transparent

¹ No One Is Too Small To Make A Difference, Thunberg (2019)

² <https://www.gov.uk/government/publications/clean-growth-strategy>

in emissions reporting. Action in the public sector should catalyse further development of low carbon goods and services.

In order to achieve our vision, significant change must also happen nationally. Without such change, this strategy will not be able to achieve the vision. This is not an excuse for inaction – local and national changes must both happen for success to be realised.

2.2 **Our vision**

By 2030, Worcester will be a carbon neutral city, with energy and transport transformed. Worcester's environment will be resilient to the changing climate with low levels of air pollution and high levels of biodiversity.

2.3 **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 10C 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 states that radical change must be seen over the next 12 years in order to avert catastrophic climate change, and 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 actions necessary to achieve this.³

³ <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

2.4 **Worcester City emissions**

Local authority area emissions are provided in at least two different formats. One tool uses data from the SCATTER project⁴, compiling data on carbon dioxide and other greenhouse gas emissions such as methane (often described as 'CO2 equivalent' or 'CO2e'). The Government Department for Business, Energy and Industrial Strategy (BEIS) also provides a CO2 analysis by local authority area⁵, not including other greenhouse gas emissions. As well as reporting on different units, each of these datasets has a slightly different scope.

Using the SCATTER tool but excluding aviation, Worcester's greenhouse gas emissions in 2017 (most recent data) amounted to 439ktCO2e.

39% of these emissions come from residential buildings, 19% from institutional buildings, 17% from commercial and industrial buildings and 20% from transport. The small residual emissions are from agriculture, waste, wastewater and rail.

A background paper accompanies this strategy, providing a summary of the context behind Worcester's carbon emissions and evaluating the emissions data against related data.

2.5 **Worcester City Council emissions**

The Council is responsible for emissions from its small portfolio of buildings and fleet operations, as well as its grey fleet (employee's own vehicles).

In tonnes, the City Council's emissions in 2018/19 were around 2,500tCO₂e (provisional data, to be confirmed). Therefore, the City Council has direct responsibility for only around 0.6% of the total emissions of the city.

2.6 **Local and regional outlook**

For the county, the LEP's Worcestershire Energy Strategy⁶ is very important, providing an evidence base and priorities for Worcestershire to focus on. The strategy includes plans for 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 number of key projects for Worcester city are identified, including the

⁴ <https://scattercities.com/>

⁵ <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017>

⁶ <https://www.wlep.co.uk/wp-content/uploads/P3695-Worcestershire-Energy-Strategy-Strategy-with-glossary.pdf>

2.7 National outlook

The Government's official independent advisory body on climate change, the Committee on Climate Change, published their report 'Net Zero: The UK's contribution to stopping global warming' in May 2019.

Following this, in June 2019, the UK Government declared a climate emergency, and wrote into law their intention for the UK to become 'net zero' by 2050. Whilst the target timeframe is different to Worcester's, there is still an urgency to change and to develop the necessary policy changes. Worcester is reliant upon Government making significant changes nationwide in pursuit of this goal.

On the 15 October 2019, the Government published its response to the Committee on Climate Change, 'Leading on Clean Growth'. This paper set out the action which has been taken since the publication of the Clean Growth Strategy in 2017.

There are a number of national strategies and plans due to be published in 2020 which will be relevant to the development and delivery of Worcester's strategy, including the National Infrastructure Strategy and the Transport Decarbonisation Plan (building on the Road to Zero (2018) and other plans already published).

National carbon emissions have already fallen by 42% per capita since 1990 (39% between 2005 and 2017). Much of this reduction has come from reductions in the carbon associated with the generation of energy.

In 2018, a total of 33% of the UK's electricity came from renewable sources⁷, and between January and May 2019, more power came from clean energy than from fossil fuels for the first time since the Industrial Revolution. Only six coal fired power stations are still operational in the UK, providing around 3% of our electricity. This has dramatically fallen from 30% of all electricity generated ten years ago. Wind farms, biomass fuel and solar PV are the most significant contributors to the generation of renewable energy.

Many other local authorities and other organisations have also declared a climate emergency, responding to the Paris Agreement, the commitment by the UK Government and the need to limit climate change globally.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/840014/Chapter_6.pdf

Carbon emissions from Worcester's nearest neighbours (councils and areas of a similar size, not geographically closest) have been analysed and compared to Worcester's emissions. Worcester has the lowest emissions per capita at 4.3tCO₂e, and the second lowest level of emissions overall (when compared to a sub set of the nearest neighbours: Cheltenham, Lancaster, Preston, Gloucester and Redditch) Redditch has lower emissions but higher per capita.

2.8 **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 will take note of and be aligned to the UN Sustainable Development Goals, with these goals being particularly relevant:

- 2.8.1 Affordable and clean energy – this goal seeks to ensure access to affordable, reliable, sustainable and modern energy for all.
- 2.8.2 Decent work and economic growth – this goal seeks to promote sustained, inclusive and sustainable economic growth for all.
- 2.8.3 Sustainable cities and communities – this goal seeks to make human settlements inclusive, safe, resilient and sustainable.
- 2.8.4 Responsible consumption and production – this goal seeks to ensure sustainable consumption and production patterns.
- 2.8.5 Climate action – this goal seeks to ensure that we take urgent action to combat climate change and its impacts.
- 2.8.6 Life below water – this goal seeks to ensure that we conserve and sustainably use the oceans, sea and marine resources for sustainable development.
- 2.8.7 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.

2.9 **Carbon neutrality**

Worcester City Council pledged to work towards making Worcester carbon neutral by 2030. It is on this premise that this strategy is based.

Research has given each local authority area a 'climate budget'⁸ (see background papers), the remaining quantity of CO₂ emissions which can be released and global warming kept to 2°C or under, as per the Paris Agreement. Beyond this level, the impacts of climate change will be significantly more devastating.

The climate budget for Worcester has been calculated as 2.4 million tonnes (or 2400kt) of CO₂ for the period of 2020 to 2100. The report notes that at 2017 CO₂ emission levels (based on BEIS LA statistics 2017 CO₂ emissions⁹), Worcester would use this entire budget within 7 years from 2020. The report recommends that we must reach zero or near carbon zero by 2043, with an 80.6% reduction in current emissions by 2030. This target is known as a 'science based target'.

2.10 **Adaptation to climate change**

One of the themes of the strategy is adaptation. This recognises that even with the quickest and most stringent carbon emission reduction strategies, adaptation to climate change will still be required. 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 trends¹⁰.

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 2018-2023¹¹ outlines the vision for local government to play a leading role in local places becoming more resilient to a range of future risks.

2.11 **Relevant local, regional and national strategies**

The following strategies and plans are all relevant to Worcester's strategy and have been reviewed in the development of the strategy:

- Worcestershire Energy Strategy (Worcestershire LEP, 2018)

⁸ Tyndall Centre for Climate Change

⁹ excluding aviation, shipping, process CO₂ emissions from cement production and those from land use, land use change and forestry

¹⁰ <https://www.theccc.org.uk/2019/08/19/no-surprises-our-latest-adaptation-progress-report/>

¹¹ <https://www.gov.uk/government/publications/climate-change-second-national-adaptation-programme-2018-to-2023>

- Worcestershire Strategic Economic Plan (Worcestershire LEP, 2014)
- Worcestershire Transport Strategy (Worcestershire County Council)
- Local Transport Plan 4 (Worcestershire County Council)
- Worcestershire Local Industrial Strategy (LEP, draft)
- Clean Growth Strategy (UK Government, 2017)
- Leading on Clean Growth (UK Government, 2019)
- Sustainability West Midlands Roadmap
- Industrial Strategy
- Worcestershire County Council Energy and Carbon Management Plan
- Worcestershire Fuel Poverty Plan 2017-2022

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3 Structure of the strategy

This strategy has six key themes. Each of these themes is presented as a separate section and each defines our current position and outlines our aims and objectives, as well as discussing some of the intended means by which the Council will work towards achieving these.

3.1 Scope of the Strategy

It should be recognised that this strategy alone will not take the city to a carbon neutral position. The Council will strive to reduce emissions from all areas within direct control and will seek to use its position as a local leader to enable, facilitate and encourage emissions reductions from partners and local stakeholders. The Council will seek to encourage behaviour change to reduce emissions from local residents and provide opportunities to assist residents with emissions reduction. However, the impact of all of this work is still restricted and as a local authority, we remain reliant upon central, national changes – to decarbonise the electricity grid, to provide grants for electric vehicles and to provide funding for mass retrofitting of insulation in residential homes, to name just a few examples.

3.2 Strategy development

The strategy defines where we are now and where we want to be. Interim targets and trajectories will be developed following consultation. The final strategy will recognise the resources required, changing circumstances and identify how we will know when we are there.

In the development of this draft strategy, a key part has been listening. This continues with the consultation on the strategy, which is a vital part of its development. We want to hear from residents, businesses, partners – anyone who has a stake in seeing Worcester achieve its carbon neutral and environmental sustainability goals.

3.3 Our principles

The principles of our strategy are as follows:

- The Council will maximise opportunities to reduce the impact on the environment from areas we have direct control over
- The Council will work closely with local public sector organisations, businesses, residents and all stakeholders to encourage and facilitate action that will minimise and mitigate the impact of greenhouse gas emissions
- The Council will lobby national government for the required national policy changes and funding which are necessary to achieve the goals of this strategy
- The Council will seek to apply for all relevant funding and support others to do the same in order to enable the delivery of this strategy.

4 Carbon Neutral City Council

4.1 Introduction

The City Council is responsible for only a small part of the City's emissions. Yet, this is the most important area where the City Council can take action. Showing leadership and setting an example in cutting the Council's own carbon footprint is a vital part of this strategy. Without action to reduce carbon emissions from the Council's own operations, our influence as a leader to encourage emissions reduction across the city is greatly reduced. As each unit of carbon counts, whilst a small proportion of emissions, it is just as important for the City Council to reduce its emissions as any other organisation, business or individual.

Eliminating emissions from City Council operations and buildings is therefore one of the key six themes within this strategy.

4.2 Current position

In 2018/19, the City Council emitted around 2,500tCO₂e (provisional data, to be confirmed). The Council was therefore responsible for only 0.6% of the city's emissions.

Around 42% of the Council's emissions come from the operational fleet. This includes the refuse vehicles. The service has made significant improvements to reduce fuel usage, with a decrease of 12% between 2013-14 and 2018-19.

21% of the Council's carbon emissions stem from the electricity usage in buildings.

35% of emissions are from the gas used by the Council, with 79% of these emissions attributable to gas usage at the Crematorium. Reducing this gas usage will be a particular challenge.

Only around 1% of the Council's emissions from travel by employees for work purposes (excluding commuting); this reflects the nature of Worcester as a compact city.

The City Council Greenhouse Gas Emission Report for 2018-19 will be published on the Council website and will outline our current emissions in detail.

4.3 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.

4.4 **City Council buildings**

The City Council's estate comprises of a diverse set of buildings with some specific challenges to overcome. The Museum and Art Gallery, where the majority of staff are based in office accommodation beneath the public areas, is an historic building. The Guildhall is a Grade 1 Listed building built in the 1700s, with offices for staff and civic areas used for a variety of functions. A building houses our Environmental Operations staff on a shared site with Worcestershire County Council and Ringway, the highways contractor. Three leisure centres provide sport and swimming opportunities for the city and the Council owned Crematorium provides an essential service to the city. There are also a number of smaller buildings, for example those located in our parks, and public toilets. A small amount of land and some buildings purchased as investments make up the Council's portfolio.

These objectives and proposals aim to minimise the carbon emissions from our own buildings:

- 4.4.1 We will increase the generation of renewable energy on Council buildings and from Council premises. This will ensure that our buildings are responsible for lower carbon emissions, and by providing our own energy, our dependence on the grid and our vulnerability to increasing energy prices will be reduced. Our buildings will be more resilient to any energy supply problems. All buildings will be assessed for potential for renewable electricity and renewable gas.
- 4.4.2 We will seek to make all buildings within the Councils ownership or used by the Council as energy efficient as possible, reducing carbon emissions and spend on wasted energy.

All Council owned buildings, including those leased to others, will be assessed to identify potential projects. Opportunities for grants towards these projects will be explored. EPC ratings will be made publically available to ensure accountability.

- 4.4.3 We will investigate, trial and adopt where possible new technologies to further reduce emissions and support the emergence and continuing development of low carbon technologies. The Home Energy Resources Unit which is being developed in Worcestershire may be one such technology.

4.5 **Embedding a carbon neutral approach**

The Council will ensure that all Council decision papers and project proposals evaluate the impact on carbon emissions and on the wider environment, through building these sections into the templates where they are not already included, and through support and training to those writing reports. Provision of quality information will enable senior leadership to make informed decisions.

Decisions will be challenged to ensure that where possible, a positive rather than negative or neutral environmental impact is achieved. This will improve how environmental sustainability is embedded throughout all services within the Council. The council will ensure it gives appropriate weight to emissions reduction when assessing the business case of projects. Where projects are approved which will increase carbon emissions, this must be strongly and clearly justified as to why that project must go ahead and an appropriate mitigation methodology should be identified.

- 4.5.1 The Council will seek to reduce the environmental impact of procured contracts through procurement practices and guidance for suppliers to reduce their own environmental impact, for example through the use of electric vehicles.
- 4.5.2 Staff awareness and knowledge of the importance of carbon reduction will be improved, with opportunities such as the staff training portal, staff conferences and staff communications used to ensure that staff are given the necessary opportunities to learn and engage with this agenda.

Staff will also be given opportunities to present their own ideas for how carbon reductions can be achieved and local ownership of actions will ensure buy in.

- 4.5.3 The Council will ensure that all future or reviewed City Council plans are aligned to this strategy.

4.6 **City Council Events**

The Council runs a number of events, such as the Victorian Fayre and the Worcester Show, each year. The Council recognises 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.

- 4.6.1 The Council therefore commits to seek options to run our own events in as sustainable manner as possible: consideration will be given to opportunities to reduce carbon emissions through use of electricity rather than diesel generators for power for example.

4.7 **City Council Transport**

- 4.7.1 The Council will reduce carbon emissions from the Council fleet and from business travel in the grey fleet (employees' own vehicles). The Council will seek to achieve this reduction through the procurement of zero emission vehicles for all Council fleet vehicles as they are naturally replaced as soon as possible, other than where a zero emission vehicle does not exist to meet the needs of the proposed vehicle use or where it would not be economically viable to do so. It is recognised that the availability of suitable vehicles restricts

immediate action in this area. The Council commits to remaining active in the search for suitable zero emission vehicles, seeking funding and opportunities for adoption of electric vehicles, including positioning the Council to trial vehicles as they are developed, as with the existing trials of electric bin lorries in Westminster and Sheffield¹².

Whilst suitable zero emission vehicles are being developed, the existing successful behaviour change programme for fleet drivers (reducing fuel usage and therefore emissions through presentation of data on driving behaviour against best practice) will be continued.

Staff will be encouraged to use the 'Woo' electric bikes for their business travel, and one or more electric vehicles to be used as pool cars will be procured. Staff will be encouraged to avoid travel where possible, using video conferencing as a viable alternative.

4.7.2 The Council will reduce carbon emissions from commuting. A salary sacrifice scheme to enable employees to purchase a low or ultra low emission vehicle will reduce emissions from employee's commutes and encourage the use of electric vehicles. Evaluation of the opportunities to provide incentives to staff to travel by public transport could further reduce emissions. The University's electric 'Woo' bike scheme could be used by staff with promotion and support to take up cycling, and the Council will seek opportunities to support West Midlands Railway with their Rail2Ride programme. Improving the cycling facilities available for staff and visitors in Council buildings should also encourage staff to take up active travel options. The Council's emerging Agile Working Policy will seek to reduce employees commuting, further reducing carbon emissions.

4.8 **Performance Measures**

The following performance measures are proposed to measure progress against the objectives:

- 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
- City Council carbon emissions (tCO₂) quarterly
- kWh energy used by City Council buildings
- Number of city council owned businesses with an Display Energy Certificate rating C or above

¹² <https://resource.co/article/sheffield-trials-waste-powered-electric-bin-lorries>

5 Carbon Neutral Worcester

5.1 Introduction

Achieving carbon neutrality across Worcester is a huge task, and not one which the Council can achieve alone. This theme sets out how the Council will work with our partners, stakeholders and all residents to encourage, facilitate and inspire action. The benefits to the city from achieving this level of sustainability would be very significant, helping to achieve the vision set out in the Council's City Plan of a successful, vibrant and sustainable Worcester.

With the University of Worcester having been named as the 2019 Sustainability Institution of the Year at the Green Gown Awards¹³, and Worcestershire County Council recognised as a Beacon Authority on Climate Change a number of years ago¹⁴, the public sector in Worcester has a wealth of experience and knowledge in this area. A significant amount of work is already being undertaken.

It is vital that as the local authority we seek to partner with the other public sector organisations within the city to further reduce emissions, and to ensure the whole city benefits from this experience and the successes seen. There are many opportunities to jointly deliver projects which may not be achievable by one partner alone.

Worcester has a strong environmental grassroots movement and this strategy seeks to recognise and ensure that this movement is central to the efforts of the City to reduce emissions. Lessons from the recent year have shown that it is individuals who can often make the greatest differences in persuading others, individuals and businesses, to change their behaviour and attitudes towards climate change.

Worcester is not an island and must seek to work in partnership not only within the city but also with the other Worcestershire Councils, and with regional organisations such as Sustainability West Midlands. The impact that the Council can have will be improved if time and effort is invested in effective partnership working.

5.2 Current position

As noted in section 2.4, local authority area emissions are provided in at least two different formats. One tool uses data from the SCATTER project¹⁵, compiling data on carbon dioxide and other greenhouse gas emissions such as

¹³ <https://www.worc.ac.uk/about/news/2019-worcester-named-uks-top-sustainable-university>

¹⁴ http://www.worcestershire.gov.uk/info/20235/sustainability/1092/county_strategies

¹⁵ <https://scattercities.com/>

methane (often described as 'CO2 equivalent' or 'CO2e'). The Government Department for Business, Energy and Industrial Strategy (BEIS) also provides a CO2 analysis by local authority area, not including other greenhouse gas emissions. As well as reporting on different units, each of these datasets has a slightly different scope.

It has been decided that this strategy will use the SCATTER data, presenting greenhouse gas emissions, opposed to just carbon dioxide.

Worcester's greenhouse gas emissions in 2017 (most recent data) amounted to 439ktCO2e¹⁶.

39% of these emissions come from residential buildings, 19% from institutional buildings, 17% from commercial and industrial buildings and 20% from transport. The small residual emissions are from agriculture, waste, wastewater and rail.

A background paper accompanies this strategy, providing a summary of the context behind Worcester's carbon emissions and evaluating the emissions data against related data.

With the majority of the city's emissions from the use of energy, this will be a key area to address. Currently, Worcester is a net importer of energy, with very low levels of energy generated locally. Across the county, around £1.2 billion is spent on energy (for domestic, non domestic and transport), representing a huge proportion of the county's wealth leaving the county.

23% of authorities share a similar emissions profile with Worcester (based on BEIS 2016 data), with the domestic sector accounting for the highest share of emissions. In 49% of authorities, it is the transport sector which is responsible for the highest share of emissions, and the industrial and commercial sector in 28% of authorities¹⁷. Worcester's emission profile differs from the majority of other authorities due to the lack of a motorway within the city boundaries.

Clearly, it should be recognised that calculating emissions based on area is limited in the approach – a significant proportion of the emissions within our neighbouring districts emission profiles will be generated by Worcester residents travel.

¹⁶ Excluding aviation

¹⁷ Local Authority Carbon Dioxide Emissions Estimates 2016, Department for Business, Energy and Industrial Strategy

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/719182/Local_Authority_CO2_Emissions_Statistical_Release_2016.pdf

5.3 **Carbon Neutral Worcester aim:**

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

5.4 **Residential Buildings**

Worcester has just over 44,000 households, with 102,000 residents in total. With around 172,000tCO₂e emissions associated with Worcester homes annually, the average carbon emissions per home are 3.9tCO₂e per year.

68% of these emissions are for space heating and hot water, the rest for lighting, appliances and cooking. Gas is by far the most popular energy source for heating and hot water, with 85% of the CO₂e emissions from this activity from gas emissions. This highlights the importance of insulating properties to reduce these emissions, which will not be reduced as the electricity grid decarbonises. Currently on average £1 of every £3 spent on energy is wasted through poorly insulation.

Fuel poverty is a major issue within the city, with 11% of households being classed as fuel poor (Worcestershire Fuel Poverty Plan 2017-2022¹⁸). Significant numbers of houses in Worcester are solid wall properties, which are more difficult and expensive to insulate. The plan aims to improve the energy efficiency standards of as many homes as possible to reach Energy Performance Certificate level C and to engage with over 300 households per district annually to give energy advice.

Our objectives and potential projects to deliver these objectives seek to address these challenges:

- 5.4.1 We will support residents to reduce energy demand from residential properties. Ensuring that our private sector housing standards officers are fully trained to identify fuel poverty and able to support residents to access funding for energy efficiency measures will help some of the most vulnerable in our society, as well as improving energy efficiency of homes. Increased promotion of the successful Warmer Worcestershire campaign will ensure that more residents are signposted towards the support and funding which is available. One newly established local fund, the 'Staying Warm, Staying Healthy' fund will help to fund heating systems where these are required, and demand for this will be closely monitored.

¹⁸ <https://www.wyreforestdc.gov.uk/media/4408974/Worcestershire-Fuel-poverty-Plan-2019-20.pdf>

Encouraging behaviour change from residents through communications, specific applications or programmes to follow and through working with local action groups will contribute towards reductions in energy usage from residents.

Opportunities to work with local estate agents to provide information to homebuyers on opportunities and costs of energy efficiency measures, over and above the information provided in an EPC, will be explored.

Whilst it is recognised that any significant home insulation programmes will necessarily need to be initiated and funded by central Government, the Council will ensure that any available funding for residents is widely communicated and efforts made to ensure strong local uptake.

- 5.4.2 The Council will seek to support registered housing providers operating in the city to improve the energy efficiency of Worcester's social housing stock, for example supporting funding bids to any available sources.
- 5.4.3 The Council aims to see an increase in installation of domestic renewable energy systems, such as solar PV. Simple actions such as promoting case studies to ensure residents understand the potential opportunity renewable energy presents could increase installations.
- 5.4.4 The Council will 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. This would result in improvements to the most energy inefficient of the private rented housing stock.
- 5.4.5 The Council will investigate opportunities to ensure that new homes built have the lowest possible emissions: with maximum possible energy efficiency standards and with microgeneration from renewables built in. The proposed Future Homes Standard should provide a high standard for energy efficiency in new homes, but is also likely to remove the right of local authorities to set their own higher standards for energy efficiency.
- 5.4.6 The Council will assess additional opportunities to further embed sustainable development at the heart of the South Worcestershire Development Plan (SWDP). The Preferred Options Consultation for the SWDP proposes increasing the current requirement of 10% of energy demand from new development to be met by renewable energy sources to 20%.

5.5 **Institutional buildings and operations**

Major institutional emitters in the City include Worcestershire County Council, the University of Worcester, the Worcestershire NHS Acute Hospitals Trust and

the Worcestershire NHS Health and Care Trust. Many of these organisations, as previously described, are forerunners in their efforts to reduce their impact on the environment. Even so, the emissions from this sector comprise around 19% of the emissions of the whole city. This is a key area where public sector leadership and partnership working may make a significant difference and enable new projects to flourish.

These objectives and delivery proposals map out the Council's key priorities from this sector:

- 5.5.1 The Council will facilitate a reduction in emissions from institutions based in the city by supporting and encouraging behaviour change through strong environmental leadership and utilisation of existing partnership networks.
- 5.5.2 Deliver successful partnership working in order to drive the adoption of increased renewable energy generation and energy efficiency measures.
- 5.5.3 Successful delivery of one or more heat networks in the city involving public sector organisations would reduce the carbon emissions from heating in the city and opportunities to introduce a district heating network should be given thorough consideration when they arise. The Worcestershire Heat Mapping Study, summarised in the Worcestershire Energy Strategy, identified significant opportunities for Worcester City through use of deep geothermal heat present under the city.

5.6 **Commercial and Industrial Buildings**

Worcester has around 54,000 total employee jobs, with over 2,000 businesses at the micro level (0-4 employees). Only 25 large enterprises are located within the city (employees above 250) and 50 medium (between 50-249 employees). 271 non domestic buildings with Energy Performance Certificates (EPCs) have ratings below the Minimum Energy Efficiency Standard (currently an E).

As would be expected, a number of the larger employers in the city are also significant users of energy, for example Worcester Bosch and Mazak.

These objectives consider where the City Council can impact on or influence this sector:

- 5.6.1 The Council seeks to facilitate all commercial and industrial buildings and processes to become energy efficient. The Council will seek to promote the existing successful programmes (eg. the Business Energy Efficiency Programme¹⁹) to businesses in conjunction with partners such as the Worcester

¹⁹ <http://www.business-central.co.uk/beep/>

BID, Business Central and the Chamber of Commerce. The Council will identify best methods to work with commercial landlords and to seek mechanisms by which landlords are incentivised to install energy efficiency measures in buildings where the tenant businesses pay the energy bills.

Opportunities for encouraging action through the Council's existing business grant programmes will be evaluated; 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. Other sustainability metrics could be evaluated in the scoring systems of other business grants. Information provided to businesses on energy efficiency improvements will be improved.

- 5.6.2 The Council will encourage the widespread adoption and installation of renewable energy systems across industrial and commercial buildings. As with energy efficiency measures, existing funding programmes will be promoted (eg. the Low Carbon Opportunities Programme²⁰) and support given to businesses if required to apply for such funding.
- 5.6.3 A reduction in carbon emissions from heating city businesses will be sought, and could be delivered through the successful delivery of a district heat network scheme, as with reductions to emissions from institutions.
- 5.6.4 The Council will seek to reduce carbon emissions from city businesses through behaviour change initiatives and will 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.
- 5.6.5 The Council will seek to utilise the existing regulatory frameworks to improve and maintain energy efficiency in non domestic rented properties. As with the domestic sector, minimum energy efficiency standards for non domestic rented properties exist but it is the role of local authorities to enforce these standards. Doing so could mean the most inefficient buildings are brought up to an acceptable standard, with landlords able to use the existing grant programmes to assist with the costs of these works.
- 5.6.6 The Council will seek to work with partners 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.

²⁰ <https://www.business-central.co.uk/locop/>

5.7 Transport

The proportions of emissions from vehicle use on A roads and from minor roads in Worcester City is broadly similar. Current levels of electric vehicle ownership are low, giving plenty of opportunity for increasing these levels. Emissions from transport have fallen considerably since 2005, but with an increase seen in years 2014-2016, with the lowest emissions seen in 2013. 49% of residents live and work in the city, and 10% of people travel by car to work despite travelling less than 2km. 17% of people travel between 2 and 5km to work using their car²¹.

Whilst much of the decarbonisation of transport will come from the widespread adoption of electric vehicles, in order to manage demand on the electricity grid, it is important that significant mode shift to active travel options also takes place. Increasing walking and cycling rates has the potential to provide considerable public health benefits. Journeys of under 2 miles should be targeted for conversion to walking or cycling. The Council will seek to reduce emissions from employees commuting to city businesses, through incentives and encouragement for those businesses. The Council will investigate potential schemes (including assessing any possible negative impacts) such as incentivising employers to install electric vehicle chargepoints, electric bike schemes and implement active travel plans.

Our objectives are as follows:

- 5.7.1 The Council targets an increase in zero emission vehicle ownership and use in the city. The Council will encourage this widespread adoption of electric vehicles (as the main zero emission vehicle technology currently available) through the provision of charging infrastructure across city centre car parks, and facilitating rapid charging opportunities for drivers of electric taxis. Consideration will be given to other opportunities to encourage and incentivise adoption of electric vehicles, such as reduced cost overnight parking permits.
- 5.7.2 The Council is aiming to see an increase in the use and viability of public transport options as an alternative to vehicle use within the city.
- 5.7.3 A further objective is to see an increase in take up of active travel options such as cycling and walking. The Council will work with partners such as Worcestershire County Council to ensure that new road project prioritise improvements for walkers and cyclists. The existing 'Woo' bike scheme can receive greatly increased promotion, and based on uptake of demand for this, could be extended across the city, potentially providing the opportunity for commuters and visitors to 'park and cycle'.

²¹ <https://roadtraffic.dft.gov.uk/local-authorities/69>

5.8 **Community**

Worcester has an engaged and environmentally aware population and this section of the strategy seeks to recognise and maximise the opportunities this brings. The Council aims to:

- 5.8.1 Reduce emissions in the community by supporting community groups and charitable organisations to run projects aimed at residents and businesses.
- 5.8.2 Increase renewable energy generation in the community. The Council will support community groups seeking to start renewable energy projects.
- 5.8.3 Reduce emissions from externally organised events to be as sustainable as possible by encouraging organisers to follow best practice guidance.
- 5.8.4 Encourage the involvement of the community in taking ownership of Worcester as a sustainable city to further drive forward environmental change and emissions reduction
- 5.8.5 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.

5.9 **Performance measures**

There are many performance measures which can be used in order to measure progress against these objectives, these are some proposals:

- Number and percentage of businesses participating in the Business Energy Efficiency Programme and Low Carbon Opportunities Programme
- Non domestic Energy Performance Certificate (EPC) data – percentage of premises at each rating
- Number of residents receiving ECO or ECO flex funding
- Percentage of homes with an EPC of F or G / All EPC ratings
- Percentage reduction in emissions from gas and electricity usage

6 Sustainable Economy

6.1 Introduction

The Government's Clean Growth Strategy sets out that clean growth means growing national income while cutting greenhouse gas emissions.

This theme of our Strategy addresses the same need: recognising that as efforts locally and nationally to reduce carbon emissions pick up speed, the economy needs to adapt and change to maximise opportunities from the flourishing low carbon economy. The measures which need to be adopted, including increasing adoption of renewables, of energy efficiency measures, driving zero emission vehicles will grow the low carbon economy at a much greater rate than the rest of the economy, as is already being seen, with predictions of growth four times faster than the rest of the economy²².

The Worcestershire Energy Strategy's vision for 2030 is that the county will have a thriving low carbon economy, supporting the creation of high value jobs, stimulating investment and clean growth.

It is vital that this strategy reflects both the national and local strategies relevant to this area.

In July 2019, Council members requested 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. Members also directed that the Council's business, skills and economic development programme should be directed towards a transformative Green New Deal, supporting local opportunities in the low carbon economy and green job creation.

6.2 Current position

Estimations of numbers of low carbon businesses in Worcester are hard to come across. The latest data at LEP level was published in 2011-12²³, showing there were 411 companies operating in this sector at the time.

The Low Carbon Opportunities Programme is a county-wide, European Regional Development Fund programme to support businesses to grow and diversify in the low carbon economy. Small to medium enterprises can receive 40% funding towards projects to develop a new low carbon technology or to diversify their business to take advantage of the low carbon economy. This programme

²² <https://www.theccc.org.uk/publication/uk-energy-prices-and-bills-2017-report-supporting-research/>

²³ <https://www.gov.uk/government/publications/low-carbon-and-environmental-goods-and-services-2011-to-2012>

previously ran from 2016-2019 and was very successful, although with low numbers of businesses from Worcester. As the programme is running for another three years, there is a good opportunity to increase the numbers of businesses taking advantage of this funding.

6.3 **Aim, objectives and proposals**

The Council aims to grow the low carbon economy in the city and ensure sustainability is embedded in business, with the following objectives and proposals:

- 6.3.1 Encourage green business start ups and support those already set up. The Council will review opportunities through its business support and grants programme to achieve this objective, such as information for people considering starting a business. Opportunities for partnership working with the Kiln, the University of Worcester, the Enterprising Worcestershire programme and the Low Carbon Opportunities Programme will be explored: one idea is to establish a 'green hub' which would encourage more low carbon technology start ups and ensure those established survive.
- 6.3.2 The Council will seek to improve opportunities for residents and local businesses to build skills for the low carbon economy through work with education and training providers such as the Heart of Worcestershire College. Gaps in existing training provision will be assessed.
- 6.3.3 The Council will review opportunities to encourage growth in low carbon skills through the apprenticeships programme.
- 6.3.4 The Council will seek further growth in this area of the economy through encouraging action with promotion of exemplar leadership and projects. A 'Green Award' or a 'Green Kitemark' are ideas to be explored further to generate interest and a competitive element.

6.4 **Performance measures**

More performance measures to monitor growth of the low carbon economy will be considered.

- Number of 'green' retailers in the city
- Applications to the Green Award

7 Natural Environment

7.1 Introduction

The natural environment in Worcester is a great asset to the City. The city benefits from the River Severn flowing through the heart of the city, with the structure of the city having evolved around it. The Worcester & Birmingham Canal is another important part of the green infrastructure of the city. Three major parks and other green spaces enhance public access to leisure opportunities.

There are however challenges within the natural environment in the city. Air quality is a key challenge, with high levels of air pollution meaning that the whole city was recently declared to be an 'air quality management area'²⁴. The river floods on an increasingly frequent basis, often with relatively little impact on the city but occasionally with a very significant impact.

Nationally, the State of the Environment report found that biodiversity levels have declined alarmingly, and it is expected that this is no different in Worcester. The national 25 Year Environment Plan²⁵ sets out the national policies and ambitions to address this.

7.2 Aims, objectives and proposals

The Council aims to protect Worcester's natural environment and enhance its biodiversity, with the following objectives and proposals:

- 7.2.1 The Council will increase the total tree cover in Worcester. Opportunities to increase tree cover on land owned and managed by the Council will be maximised. The Council will also investigate options and the feasibility of providing free or subsidised trees to residents for them to plant in their own gardens. New community orchards will be supported and schools/community groups supported to take up offers of free trees available for organisations through the Woodland Trust.
- 7.2.2 The Council targets improvements in biodiversity across the city, seeking a 'net gain' in biodiversity in Council projects and an extension of the successful wildflower planting projects. The second phase of the re-development of Perdiswell is a key opportunity to improve biodiversity in this area.
- 7.2.3 Improvements to air quality with reduced emissions of harmful pollutants will be sought. The Council will seek to deliver this through implementation of the

²⁴ <https://worcsregs services.gov.uk/pollution/air-quality/air-quality-management-areas.aspx>

²⁵ <https://www.gov.uk/government/publications/25-year-environment-plan>

recommendations of the task and finish group for air quality, and through working with partners to encourage the use of electric vehicles. Case studies of the success of electric vehicle use in our own organisation and others will be written to generate interest and give information as to the wide ranging benefits of electric vehicles.

7.2.4 The Council will seek to minimise the use of products or substances harmful to the environment, in particular the use of compost containing peat will be phased out.

7.2.5 The Council seeks to improve and enhance our green 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 that we 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.

7.2.6 The Council recognises the value of allotments to engage residents and for biodiversity and will ensure that this recognition is reflected in decisions made about the allotments.

7.2.7 The Council will consider ways in which value of the natural environment can be incorporated into decision making, for example through use of natural capital accounting.

7.2.8 Flood risk will be reduced where possible. One measure to do this would be to increase the use of permeable driveways and ways of ensuring that new developments use permeable surface materials should be considered. Sustainable Urban Drainage systems should be encouraged through our planning policies and pre-application planning guidance.

7.2.9 The Council will 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. For residents, this may be through improvements to their own gardens. The Council will do this through its communications with residents, providing information on simple changes which can be implemented. Other national initiatives can be promoted and engaged with.

7.3 **Performance measures**

Measures to enable effective monitoring of progress against the aim and objectives are to be developed.

8 Adaptation to Climate Change

8.1 Background

The National Adaptation Programme 2018-2023²⁶, the second such plan, addresses the risks outlined in the latest Climate Change Risk Assessment, published in 2017 by the Government.

The Programme outlines six priority areas of climate risks for the UK. These are as follows:

- Flooding and coastal change risks to communities, businesses and infrastructure
- Risks to health, well-being and productivity from high temperatures
- Risks of shortages in the public water supply for agriculture, energy generation and industry.
- Risks to natural capital including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity.
- Risks to domestic and international food production and trade.
- New and emerging pests and diseases and invasive non-native species affecting people, plants and animals.

Our climate is already changing. The National Adaptation Programme outlines that eight of the top ten warmest years on record have all occurred since 2000. Extremely warm summers are now expected to happen twice a decade, compared to twice a century in the early 2000s. Extended periods of extreme winter rainfall are much more likely.

The UK Climate Projections²⁷ outline that the UK is likely to continue to see warmer, wetter winters, with hotter, drier summers.

It is vital that the Council seeks to improve the resilience of the city of Worcester to these changes. In Worcester, flooding is a common issue and the climate projections tell us that more frequent and extreme flooding must be expected in the future. How the city manages and responds to these floods will be of particular importance.

Many of the severe weather events which are likely to become more frequent will increase demand on public services and have a significant impact on

²⁶

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727252/national-adaptation-programme-2018.pdf

²⁷

<https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/research/ukcp/ukcp-headline-findings-v2.pdf>

residents. For example, significant numbers of excess summer deaths have been identified during heatwaves in recent years²⁸.

The Local Adaptation Advisory Panel²⁹ was set up to facilitate dialogue on climate adaptation between central government, local government and other delivery bodies. The panel is to agree climate change adaptation principles across local authorities, which when available, the Council will seek to adopt.

8.2 **Aims, objectives and proposals**

The City Council aims to ensure the city is resilient to the effects of a changing climate, by delivering on the following objectives:

- 8.2.1 The Council will seek to ensure adequate planning and management of climate risks. Climate risks will be incorporated into the Council's risk register, meaning that the risks receive appropriate management.
- 8.2.2 The Council will improve resilience to health and wellbeing impacts. Recognising that as the climate changes, the most vulnerable in society are likely to be most affected; the Council will seek to improve the resilience of our society to these changes. This may be through simple changes such as increasing access to free water when people are enjoying the city's parks or town centre in hot weather, to
- 8.2.3 Work to mitigate the economic impact of climate change on businesses and residents. The Council's work to transition the city's economy to a sustainable one will help to deliver this objective. In addition, through the provision of information and opportunities to discuss climate impacts through the proposed annual stakeholder events, businesses will be helped to understand the impacts on their business (changing products etc) and work together to adapt to these changes.
- 8.2.4 Improve the resilience of our natural environment to climate change, including ecological resilience, by protecting and improving our sites of important wildlife habitat, ensuring plants chosen by the Council are resilient to the changing climate and by reducing other pressures such as from invasive non native species. The Council will seek to manage the impact of flooding on homes and businesses and reduce where possible this flooding through use of Sustainable Urban Drainage systems for instance.
- 8.2.5 Council buildings to be more resilient. As the buildings where Council officers work from, in order to ensure that the Council can stay operational in times of

²⁸ <https://www.gov.uk/government/publications/phe-heatwave-mortality-monitoring>

²⁹ <https://www.gov.uk/government/publications/local-adaptation-advisory-panel-laap>

extreme weather events, the Council's buildings must be resilient to the impacts of climate change. This means, for example, ensuring that our buildings will not be impacted by surface water or river flooding and that the buildings can be ventilated to ensure that they do not over heat.

8.2.6 The Council will, through its Annual State of the Environment report, seek to continually evaluate the impacts of the changing climate and review this adaptation strategy.

8.2.7 Opportunities from climate change to be maximised. The Council will seek to ensure that opportunities arising from the changing climate are recognised and that the economy and city can take advantage of these.

8.3 **Performance measures**

Measures to enable effective monitoring of progress against the aim and objectives are to be developed.

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9 Resource Efficiency

9.1 Background

The Government's strategy for waste management and reduction in England, 'Our Waste, Our Resources'³⁰, outlines the wasteful approach we take to resources currently. As a society, we do not recognise the true value of our resources. Our economy works on a linear, rather than circular approach, meaning that resources are wasted rather than safeguarded.

The Government's strategy is to ensure that the value of resources is maximised, alongside reducing waste and minimising the impact of that which is produced.

Food waste is a major issue. A fifth of UK greenhouse gas emissions are associated with food and drink³¹, 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 in the production were for nothing. Tackling food waste is therefore very important. As a city, Worcester has few emissions associated with agriculture, however, the role of the city in the consumption and subsequent waste of food cannot be ignored.

9.2 Aims, objectives and proposals

The City Council aims to reduce consumption of resources by:

- 9.2.1 Enforcing the policy excluding the use of single use plastics across the city council. The Council will ensure that all staff are aware of the council's commitment and work with officers to resolve any problem areas.
- 9.2.2 The Council will strive to encourage city businesses and institutions to minimise use of single use plastics, through spreading awareness of the options to eliminate single use plastics, opportunities for businesses and institutions to discuss and work with one another on this agenda and promote alternatives.
- 9.2.3 The Council will seek to reduce single use plastics use from residents by promoting the alternatives to single use plastics (eg. reusable bottles and cups, purchasing meat and other products in reusable containers, buying loose fruit and vegetables, and using reusable nappies rather than single use disposables).

³⁰ <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

³¹

<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environment-food-and-rural-affairs-committee/food-waste/written/38003.html>

- 9.2.4 Recognising the significant contribution of food waste to carbon emissions, the Council aims to see a lower percentage of food waste in general waste collections (residential and commercial). The Council seeks to reduce food waste through communications and support for County Council initiatives such as community fridges and the 'Love Food, Hate Waste' campaign.
- 9.2.5 The Council seeks an increase in recycling percentage across the city when compared to general waste. An increase in overall recycling tonnage will not be sought, as if efforts to reduce single use plastics is successful, this could reduce the amount of plastics being recycled.
- 9.2.6 Through the Councils trade waste and trade recycling services, the Council will seek to increase the recycling rate from commercial operations. By offering a cost effective commercial recycling option, recycling should be a natural choice for local businesses.
- 9.2.7 The Council will strive to reduce general waste tonnage from residents. Council communications and campaigns will be used to encourage reuse and repair of items which may have previously been thrown away.
- 9.2.8 Minimise general waste from Council buildings and operations. General waste from the Council buildings and operations is relatively low, however the Council will identify options to reduce this wherever possible. Waste audits will identify the various waste streams and alternative options where these exist, for example, the Council will investigate options for composting food waste from Council premises.
- 9.2.9 City Council run events to be as zero waste as possible. In line with our commitment under the Carbon Neutral City Council theme, the Council will strive to reduce all waste from council run events, ensuring the events are truly as sustainable as possible. A key initiative to be explored to enable this will be the purchase of reusable, branded cups which can be given out on a deposit basis and used at many events, eliminating the use of single use options.
- 9.2.10 Externally organised events to be as zero waste as possible. Through the provision of guidance and information to event organisers, the City Council seeks to ensure that all events run by other providers across the city are also zero waste.

9.3 **Performance measures**

- Tonnes of waste and recycling collected from City Council buildings
- Residential and business waste tonnages
- Recycling ratios
- Water usage

10 Communication and engagement with stakeholders

10.1 Public sector organisations and business

It has been acknowledged throughout this strategy that the Council has limited direct control over carbon emissions and other environmental pressures affecting this city, and is therefore reliant on others to play their part. To ensure that as many partners as possible engage with this work, it is proposed that the Council will establish an Annual Summit on the Environment.

In addition to the annual summit, the Council will investigate setting up a Carbon Neutral City Forum, to monitor the work to reduce carbon emissions in particular.

10.2 Action Groups

Worcester benefits from a strong and active environmental movement which has significant experience of working with residents and others to facilitate change. The Council is keen to ensure that this experience and knowledge is recognised and the movement is heavily involved in the delivery of the strategy.

The Council is also keen to engage with other groups, such as residents associations, allotment holders and the wider community sector.

10.3 Residents

The Council will consider a range of measures and activities to ensure that residents are fully engaged and given opportunities to understand what personal changes they can make to help achieve the targets.

In particular, the Council will use communication methods such as City Life and its social media channels, which should all include regular features and updates on the delivery of this strategy. Use of the Council tax booklet could be considered.

The Council will also consider a residents engagement event, such as a Climate Emergency Action Day or similar.

10.4 Young people

The number of young people who are passionate about seeing environmental change should not be ignored. They are the citizens of the future and can also drive change across the other generations.

The Council will seek to establish ways in which young people can effectively engage with the delivery of the strategy. For example, a Climate Emergency Youth Forum could be established.

Whilst Worcestershire County Council is the education authority, this Council recognises the success of the Eco Schools programme in ensuring that schools weave environmental issues throughout their curriculum and seek to minimise their own environmental impact. Therefore the Council will encourage schools within the city to follow the Eco Schools programme and support them where possible.

10.5 Green Great Britain Week

The Council will participate in the Green Great Britain Week, which was announced in the Clean Growth Strategy. The aim of this week is to engage as many people as possible in the importance of tackling climate change. This will be a week of high profile activity, bringing together all parts of society.

10.6 Consultation on the draft of this strategy

In line with the Council's Consultation Strategy, it is very important that the Council gives those who will be involved in delivering the strategy a voice. This means that the consultation must be open to all residents, businesses and organisations within the city.

The consultation on the strategy will take place following approval of the draft Strategy at Environment Committee in January 2020.

Consultation and involvement of residents in decision making in relation to the environment should continue beyond the approval of the final version of this strategy.

11 Delivery, Monitoring and Governance

11.1 Project Group

A Project Group will be formed of the Council officers who will be responsible for delivery of the objectives of this strategy. It is vital that quick and effective action is taken in order to address this emergency and the environmental pressures which the Council recognises.

11.2 Officer and Member Governance

Governance of the strategy will ensure that delivery stays on track and that resources are provided when required. It is intended that an update report will be provided to the Corporate Leadership Team (formed of the Managing Director, the Directors and the Deputy Director for Governance) every quarter.

In addition, the Council's Corporate Management Team (comprised primarily of service managers) will be regularly updated and asked to identify priorities, resources and capabilities for an effect response, to jointly understand the risk, to regularly identify options and review progress.

The Member Steering Group which was set up to assist with the development of the strategy will be continued and the following terms of reference are proposed:

- Ensure the plan for consultation on the draft strategy is comprehensive and thorough
- Assist with the subsequent development of the strategy and agreement of this strategy at the Environment Committee in May 2020
- Regularly review progress against the action plan, once developed and agreed
- Assist the Environmental Sustainability Officer with prioritisation of actions (subject to the Council's standard governance and decision making procedures)
- Seek out good practice and establish best practice amongst other Local Authorities, organisations and sectors as appropriate
- Report to the Environment Committee on progress on a quarterly basis (or as required)

11.3 Reporting

Appropriate performance measures will be incorporated into the Council's performance management system, Pentana.

The Environmental Sustainability Officer will be responsible for publishing an annual report analysing progress against this report and the action plan, which will be taken to the Environment Committee.

11.4 **Review**

It is expected that this strategy will be reviewed after five years, recognising that national policy and direction may have changed significantly by this time, and these changes will impact on the strategy for Worcester.

12 Sources of funding

12.1 **Funding from initiatives within the strategy**

Depending on investigations and decisions, there are a few proposals within this strategy which could provide funding for other initiatives.

12.2 **Public sources of funding**

There are a number of sources of public support for projects. For energy efficiency or renewable energy projects within Council buildings or on Council land, the public loan scheme through Salix may be useful. Until 2022, the European Regional Development Fund's Public Sector Energy Efficiency Programme, being run by Worcestershire County Council, will provide up to 40% grant funding towards projects.

Other funding streams will be investigated when they are available; it is a principle of the strategy that the Council will seek to apply for and benefit from support. For example, the Office for Low Emission Vehicles has previously had opportunities for councils to apply for funding towards the installation of chargepoints.

Should additional help be required, the UK Municipal Bonds Agency may be an option.

12.3 **Private investment**

There may be opportunities for private sector investment in projects. It may also be appropriate and possible to negotiate Section 106 agreements or use of Community Infrastructure Levy monies to deliver projects.

13 Background papers

Worcester City emissions – context

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