OE02-0202 Intelligently Green Plan





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Tackling climate change is the most important issue facing humanity. It requires action on a global, national, local and personal level.

All of us have a role to play in reducing our impact on the environment and making our planet a more sustainable place to live for ourselves and future generations.

We understand this at Wychavon, and that is why we have been taking action to tackle climate change for more than ten years.

The result of our early work on carbon reduction led to our first Intelligently Green Plan in 2012. Why do we call it intelligently green? Because saving the planet doesn't have to be a sacrifice. Yes, it means change and adaptation, but it also means opportunity. It is a chance to grow a new sector of our economy, and this means new jobs and money saved in your pocket too.

Our first plan contained more than 40 actions and included ambitious schemes such as investing in a hydroelectric plant to help power Pershore Leisure Centre, improving the energy efficiency of households and installing electric car charging points, long before we were expected to do so.

This latest version of our Intelligently Green Plan will take us up to 2030 and is even more ambitious than the first one. It sets out how we will contribute to the climate emergency by cutting the carbon emissions of our own council operations by 75% by 2030 and how we will lead the district to cut its own emissions by at least 50% by 2030. These targets are in line with the national targets and the Worcestershire Energy Strategy. If the technology and funding is available to go further than that during this decade, then we will. All of us want to see the Wychavon district, our country and our planet get to carbon neutral status as quickly as possible.

The plan focuses on the things we can directly influence or control. We know there are other challenges out there that need tackling – for example, reducing emissions from flying or changes to agricultural practices. We will be part of the debate on those issues, but we do not have the power to change them.

Even achieving what we have set out won't be an easy task. We will have to introduce new technology to run our waste and recycling collection vehicles and find new ways of powering our leisure centres. We will need to cut the amount of waste we produce, particularly food waste, improve the energy efficiency of our homes, encourage the growth of ultra-low emission vehicles and renewable energy.

We need to encourage and support people to walk and cycle more too. The Covid-19 pandemic has shown us we can do things differently and positive change is possible.

We are also joining ambitious leaders from other, mainly rural, councils by signing up to the Countryside Climate Network and the UK100 pledge. This sets an ambition to make sure Wychavon's towns and villages are powered by 100% clean energy by 2050.

The Government has already signalled its intention to make the recovery from the pandemic a 'green' one. We support that and the opportunities it will provide as we begin to build back better.

We cannot do all this alone. We will need the support of our partners, government and most importantly, all of you

Clir Bradley Thomas Leader of the Council

Clir Emma Stokes Executive Board Member for Environment



Since the industrial revolution, global temperatures have increased by one degree Celsius resulting in damaging climate change, the impact of which is already being felt across the world.

We recognise the need for urgent action to tackle the climate crisis at global, national and local levels. This Intelligently Green Plan is our response to the climate emergency.

The plan builds on our already strong leadership on carbon reduction and environmental stewardship and highlights what we've done to reduce carbon emissions over the last decade or so.

The plan sets out what we will do during the next ten years to reduce our own emissions and how we will encourage businesses and residents to reduce their emissions.

Our vision is to lead the Wychavon district to be carbon neutral as quickly as possible and by 2050 at the latest. We want to make the most of the opportunities that tackling climate change presents to further strengthen and grow our local economy. We also want to increase and improve a range of habitats across the district to support carbon capture and biodiversity.

We've set a target to significantly cut our own greenhouse gas emissions and four district wide targets aimed at reducing carbon emissions generated by homes, businesses and travel.



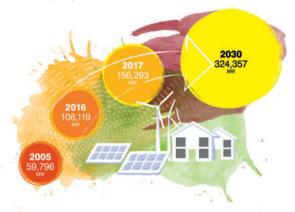
Target 1: Reduce our own greenhouse gas emissions by at least 75% by 2030



Target 2: Halve district wide carbon emissions by 2030



Target 3: Double the size of Wychavon's low carbon economy by 2030



Target 4: Treble renewable energy generation in the district by 2030



Target 5: Capture at least 500 tonnes of carbon dioxide equivalent per year by 2025

The plan contains four priorities. These are energy, low carbon travel, natural environment, and policy and resources. For each of these, we highlight some of the things we have already done and commit to a series of actions aimed at reducing carbon emissions.

We will monitor and report progress on the plan's actions every six months as part of our Signals of Success performance reports.

We will use the following success measures to assess progress towards our vision and targets:

- · Reduce our own greenhouse gas emissions.
- District-wide carbon emissions (under scope of influence of local authorities).
- Size of the low carbon economy.
- Amount of renewable energy generation across the district.
- Amount of carbon captured through council action.

At the end of each financial year we will produce a short annual progress report for our Executive Board. We will publish this on our website. We will review and refresh the Intelligently Green Plan actions in 2025.

We know that we cannot achieve a carbon neutral district on our own. While there is much we can do, significant government intervention is going to be crucial in enabling us to meet our own targets.





1.1 Why we need a plan

Following the creation of the Paris Agreement in December 2015, 195 nations have committed to global action to limit temperatures from rising by more than 1.5 degrees Celsius by 2050. This is the point scientists warn climate change will start to push many natural ecosystems past a dangerous tipping point, which will have far reaching consequences for life as we know it.



In October 2018, the Intergovernmental Panel on Climate Change (IPCC) warned the planet was on course to miss the 1.5°C target. In January 2019, the IPCC published a special report that said limiting global warming to 1.5°C may still be possible with ambitious action from national and local governments, civil society, businesses and local communities. To achieve this goal, the greatest net decrease in carbon emissions must happen in the next decade, and by 2050 emissions produced must be balanced out by carbon capture or offsetting, a position known as net-zero carbon or carbon neutral.

In February 2019, the Worcestershire Local Enterprise Partnership (LEP) published the Worcestershire Energy Strategy. The strategy includes targets to reduce carbon emissions across the county by 50% by 2030 (against a 2005 baseline), tripling renewable energy generation and doubling the low carbon economy.



In May 2019, the UK Committee on Climate Change, setup to advise the Government, called for the introduction of a net zero target for the UK by 2050. The Government agreed to this recommendation in July 2019. The Committee says this target is achievable using known technologies

We recognise the need for urgent action to tackle the climate crisis at global, national and local levels. This plan is our response to the climate emergency.

1.2 Our role

The United Nations and the UK Government have made clear that local authorities have an important role in carbon reduction.

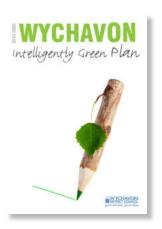
Although local authorities only account for a small proportion of the UK's greenhouse



gas emissions, according to the UK Committee on Climate Change, they have a direct or indirect influence over about 40% of them.

Our Intelligently Green Plan focuses primarily on the emissions within our spheres of control and influence as this is where we can have the greatest impact.

While there is much we can do, significant government intervention is going to be crucial in enabling us to meet our own local targets. This will require national policy decisions and further funding programmes such as the retrofitting of homes with low carbon energy measures. It will also require changes to national planning policy to require low carbon or carbon neutral new development.



1.3 Creating this plan

With our previous Intelligently Green Plan due to expire in early 2020, in September 2019 our Executive Board agreed proposals to develop a new Intelligently Green Plan for the next ten years. In the months that followed we did a substantial amount of work to develop this plan involving research and seeking advice from several experts.

There was extensive input from councillors, managers, other officers, key stakeholders and residents. Hundreds of carbon reduction ideas were generated, which we assessed and refined based on their carbon impact, cost, deliverability and other potential impacts.

2. Vision and targets



2.1 Our vision

Our vision has three strands. These are:



To lead the Wychavon district to be carbon neutral as quickly as possible and by 2050 at the latest.



To make the most of the opportunities that tackling climate change presents to further strengthen and grow our local economy.



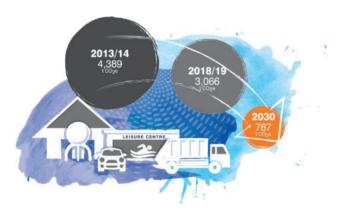
To increase and improve a range of habitats across the district to support carbon capture and biodiversity.

2.2 Our targets

Our vision is underpinned by five targets for the next ten years. These are presented below. Three of these are in line with the Worcestershire Energy Strategy.

Target 1

Reduce our own greenhouse gas emissions by at least 75% from 3,066 tCO₂e in 2018/19 to 767 tCO₂e in 2030.



This target focuses on carbon emissions that are in our control. In 2018/19, our operations generated an estimated 3,066, tonnes of carbon dioxide equivalent gases (CO₂e), which is a 30% reduction compared with 2013/14.

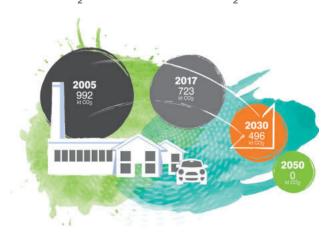
The illustration below shows the sources of those emissions. More than half were generated from our three leisure centres and the lido. Another 29% came from our waste and street cleaning contractor's vehicles and 11% were generated from heating and powering the Civic Centre. The remainder were from our public toilets and other buildings, staff and councillor travel and the waste we produced at the Civic Centre.

sources of our greenhouse gas emissions (2018/19)



Target 2

Halve district wide carbon emissions from 992 kt CO₂ in 2005 to 496 kt CO₂ in 2030.

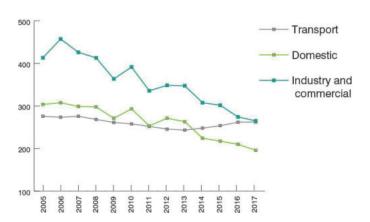


This target is about carbon emissions generated by households, businesses and travel across the Wychavon district. According to the UK Climate Change Committee, we have the ability to influence around 40% of these emissions. In 2005, the Wychavon district generated 992 kilo tonnes of carbon dioxide (kt CO₂). These excluded emissions from heavy industry, agriculture and motorways, which are beyond our direct influence and control.



In 2017, the district generated 723 kt CO₂, this amounts to 5.8 tonnes of CO₂ per person. Industry and commerce accounted for 37% of these emissions, 36% were from transport and 27% were from homes. As the chart below shows, industrial and domestic emissions have fallen steadily over the past decade. However, since 2013 transport-related emissions have increased.

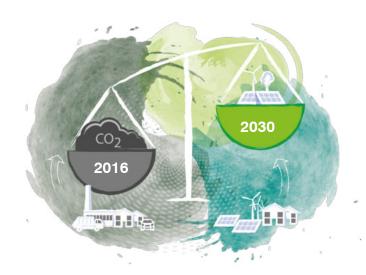
Wychavon district carbon emissions by sector (ktCO2)



There has been a 27% reduction in carbon emissions across the district between 2005 and 2017, which is the last year for which figures are currently available. Some of this will be down to decarbonisation of the National Grid. To reach our target, a further 226.65 kt CO₂ would need to be removed or offset through schemes to reduce emissions and capture carbon.

Target 3

Double the size of Wychavon's low carbon economy by 2030.



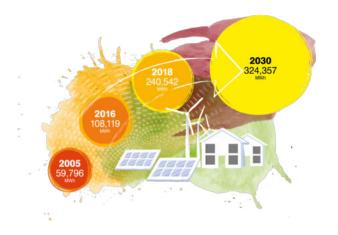
Valued at over £1 billion in terms of sales and growing at some 4.9% a year, it has been estimated that more than 7,600 jobs and over 400 Worcestershire businesses are directly involved in the low carbon and environmental goods and services sector. These activities are spread across a range of industries including advanced manufacturing and agri-food growth sectors.

The low carbon sector is an important part of the current and future make-up of the district's economy. To help develop and grow the green economy we need a better understanding of the sector and where support is needed. The Midlands Energy Hub is commissioning a study to identify and quantify the low carbon goods and services sector for each Midlands Local Enterprise Partnership (LEP) and local authority area. This should provide us with a more definitive picture of Wychavon's local carbon economy by the end of 2020.



Target 4

Treble renewable energy generation in the district from 108,119 MWh in 2016 to 324,357 MWh in 2030.



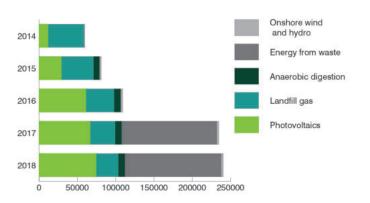
The district has substantial energy resources. The amount of renewable energy generated in Wychavon has grown by 302% from 59,796 MWh in 2005 to 240,542 MWh in 2018. Energy from waste accounts for around 70% of the growth.

As the chart shows, there has been significant growth in photovoltaics and energy generated from other sources such as hydropower and anaerobic digestion has also increased.

There is potential for further development of low carbon energy generation, including solar, wind and geothermal heat.

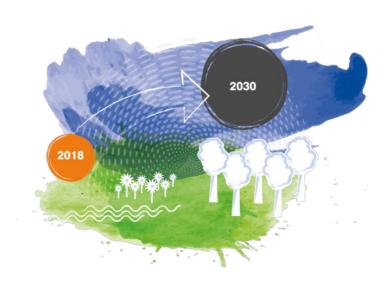
To triple the amount of renewable energy generated by 2030, a further 83,815 MWh of energy needs to be generated from renewables in addition to that produced in 2018.

Renewable energy generation in Wychavon by source (MWh)



Target 5

Capture at least 500 tonnes of carbon dioxide equivalent per year by 2025 through restoring, enhancing and creating a range of habitats across the district.



This target recognises the vital role the natural environment has to play in reducing our carbon footprint. Retaining good quality habitats and creating new high carbon storage habitats, such as grassland, wetland and woodland, are crucial elements of this plan.

Worcestershire County Council, together with us and other partners, is working on a Nature Recovery Map that will identify the best places to create different types of habitat. It is also important to ensure they have the right management to maximise the benefits.





We believe this is an ambitious, yet deliverable plan. It leaves scope for us to do more and move at a faster pace as technological, policy and financial developments allow.

We recognise there will be some people who would like our vision and targets to be even more ambitious. However, we recognise that over half the district's emissions and many of the changes needed to make the district carbon neutral much sooner than 2050 are outside of our control or influence.



3.1 National context

The Climate Change Act 2008 set out a legally binding target to reduce the UK's carbon emissions by 80% against 1990 levels by 2050. In July 2019 the target was updated to reaching net zero carbon emissions by 2050.

To meet these targets, the UK Government has set five yearly carbon budgets that legally restrict the amount of greenhouse gases the UK can emit during the period.

The Clean Growth Strategy, published in October 2017, sets out the Government's proposals for decarbonising all sectors of the UK economy through the 2020s. It explains how the whole country can benefit from low carbon opportunities, while meeting national and international commitments to tackle climate change.



In January 2018, the Government published 'A Green Future: Our 25 Year Plan to Improve the Environment'. This sets out goals for improving the environment in England, within a generation, and details how the Government will work with communities and businesses to do this.

In July 2018, the Government published 'Reducing emissions from road transport: Road to Zero Strategy'. This sets out new measures to clean up road transport and lead the world in developing, manufacturing and using zero emission road vehicles. The document outlines how the Government will support the transition to zero emission road transport and reduce emissions from conventional vehicles during the transition. The Government acknowledges the key role of local authorities in facilitating the development of charging networks, particularly in relation to their responsibilities for local planning policy.

In July 2019, the Climate Change Committee published its latest update report, which acknowledged the progress the UK has made so far and stated there was cause for optimism that the UK could become carbon neutral by 2050. However, the Committee warned most of the country's greenhouse gas emission reductions over the last five years had been achieved in electricity generation, with little progress being made in other sectors.

In October 2019, the Environment Bill was introduced to Parliament. This provides a basis for tackling climate change, biodiversity loss and environmental risks and confirms the UK as one of the leading developed nations in moving towards net zero emissions. Importantly, it sees the role of local government as being essential in responding to environmental challenges locally and the bill includes proposals on resource management and environmental protection. Both of these support the targets and ambitions set out in the Climate Change Act.

In 2019, the Government published proposals for a Future Homes Standard, including proposed options to increase the energy efficiency requirements for new homes in 2020. If introduced, the Future Homes Standard would require new build homes to be future-proofed with low carbon heating and world-leading levels of energy efficiency.

In early 2020, the Government pledged to bring forward a ban on new diesel and petrol car sales from 2040 to 2035.

In July 2020, the Chancellor announced a £2 billion Green Homes Grant scheme in England for projects such as insulation as part of a wider £3 billion plan to cut emissions. Under the Green Homes Grant scheme, the Government will pay at least two-thirds of the cost of home energy-saving improvements.

3.2 Worcestershire context

Worcestershire LEP's 2014 Strategic Economic Plan outlines the county's growth ambitions and identifies key sectors as opportunity areas, including advanced manufacturing and agri-tech. The plan also contains a goal of reducing carbon emissions while meeting growth ambitions and an ambition to increase local energy generation with geothermal energy development proposed as key means of achieving this.

The 2018-2027 Worcestershire Biodiversity Action Plan identifies 17 habitats and 26 species, or species groups, which are of particular conservation priority in the county. Individual action plans for each of these provide an overview of the current status of the habitat or species in Worcestershire, identify threats to it and current areas of work or activity being undertaken by partners.



In February 2019, Worcestershire LEP published a Worcestershire Energy Strategy. This contains the following vision for the future of energy in Worcestershire:

- By 2030, Worcestershire will have a thriving low carbon economy, which supports the creation of high-value jobs, and stimulates investment and clean growth across the county.
- We will have high quality energy-efficient housing stock and a robust, diverse energy infrastructure, underpinned by low carbon generation which utilises Worcestershire's unique local resources.

The strategy contains a target to reduce the county's carbon emissions by 50% by 2030 (against a 2005 baseline), with an aspiration to work towards a target of net zero carbon emissions by 2040. There are three key targets to be delivered by 2030.

These are:



Reduction in carbon emissions of 50% on 2005 levels by 2030.



Double the size of the low carbon sector between 2016 and 2030.



Tripling energy production from renewable generation by 2030.



Case study Warmer Worcestershire



For over a decade we have been part of the Warmer Worcestershire partnership of public and third sector organisations working towards a shared goal of improving the energy efficiency of homes in the county and helping residents save money on their fuel bills.

We were a leading member from the partnership's inception when a thermal image survey was carried out to highlight heat loss from the roof of properties. Since then the partnership has been successful at levering maximum funding for a range of energy efficiency and fuel poverty initiatives by developing schemes of a large enough size to attract investment.

Low income households have benefitted from grants for a range of measures including replacement boilers, new heating systems, loft and cavity wall insulation, and external wall insulation.

Several thousand Wychavon residents have benefitted from the energy support available to all households that has included a specialist helpline offering advice on keeping warm and ways to reduce energy use, help with reading and understanding fuel bills and switching energy supplier, and referrals for free or discounted energy saving measures such as insulation.

3.2 Wychavon context

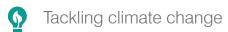
This council has shown strong leadership on carbon reduction and environmental stewardship for over a decade. We first signed up to the Worcestershire Climate Change Pledge in 2005, agreed a climate change action plan in 2008 and adopted our first Wychavon Intelligently Green Plan in 2012. This set out our vision for a greener, more energy efficient and self-sufficient Wychavon.

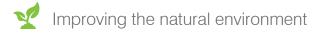
Our strategic commitments to carbon reduction have been matched by practical action. Examples include investing in the Pershore hydropower scheme, installing solar panels on the Civic Centre and public toilets, delivering a wide range of domestic energy efficiency schemes, creating new habitats and installing 24 electric vehicle charging points in our car parks.

In February 2020, we agreed an ambitious new four year strategy for the council that provides the strategic context for this plan

This will focus our spending and people resources over the next four years on three key priorities – Supporting People, Strong Economy and Places and Sustainable Environment. Seven of the strategy's 12 goals are relevant to this plan. These are:







mproving access to local transport

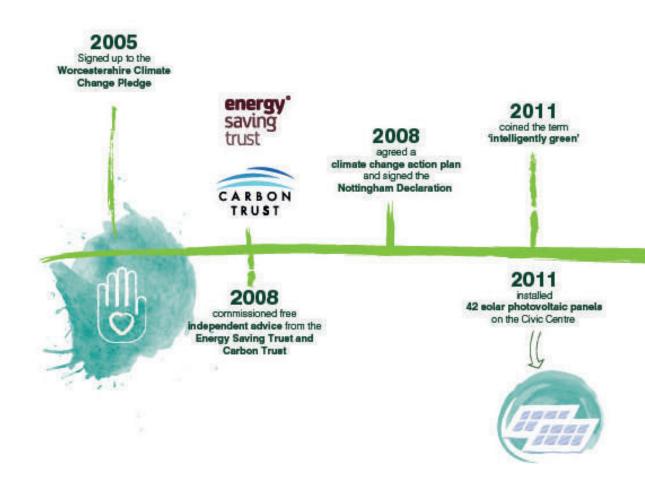
Improving links between places

Encouraging well designed, distinctive and sustainable developments

£ Growing the economy

Minimising waste and keeping the district clean

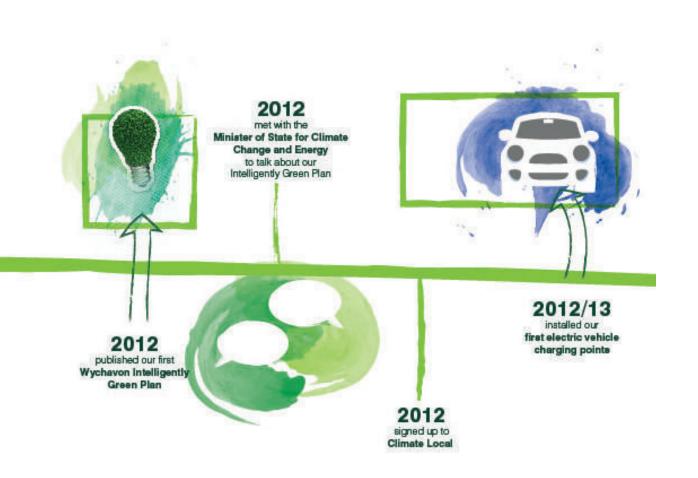
Timeline of our commitment to carbon reduction

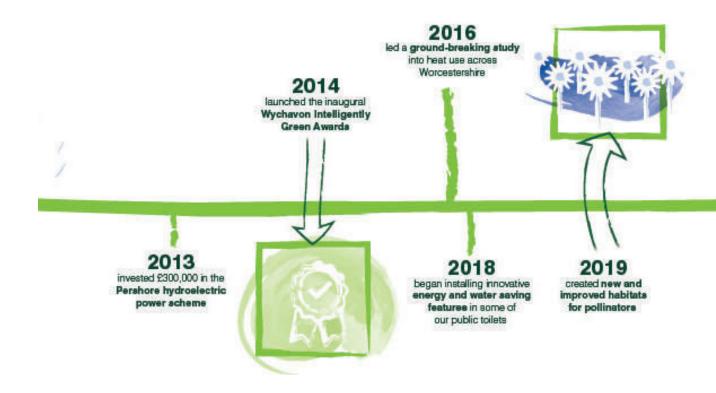


The South Worcestershire Development Plan (SWDP), also known as the local plan, was adopted in February 2016 by the three south Worcestershire councils, which includes Wychavon.

The SWDP deals with both strategic cross boundary matters, including overall housing and employment requirements, and also includes detailed policies that are used in decisions on planning applications on a day to day basis by all three councils. The three councils are currently reviewing the SWDP and are seeking to identify land to accommodate an additional 14,000 dwellings and around 200 hectares of employment land for the period up to 2041.







Case study Ground breaking study

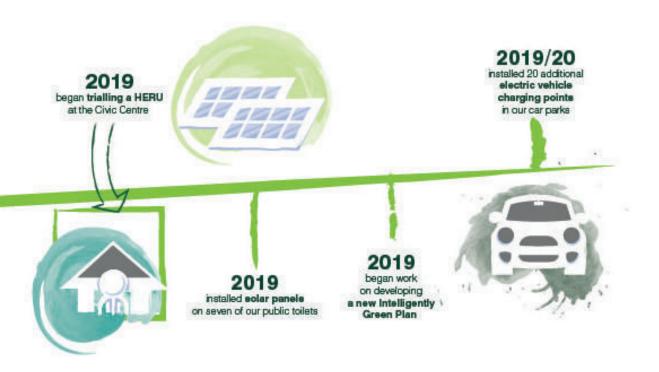
We led a ground breaking and innovative study looking at heat use across Worcestershire and how various methods could be used to meet demand more sustainably. The publication of the report in January 2017 generated extensive media coverage on BBC local radio and a piece on Farming Today.

The study, funded by the Government's Heat Network Delivery Unit (HNDU) and the Worcestershire Local Enterprise Partnership, had a particular focus on



public sector buildings and large scale business use, but could also be used for housing.

The results indicate real opportunities to develop heat networks throughout the county and further feasibility work is likely in key sites including Worcester, Redditch, Bromsgrove and Kidderminster.



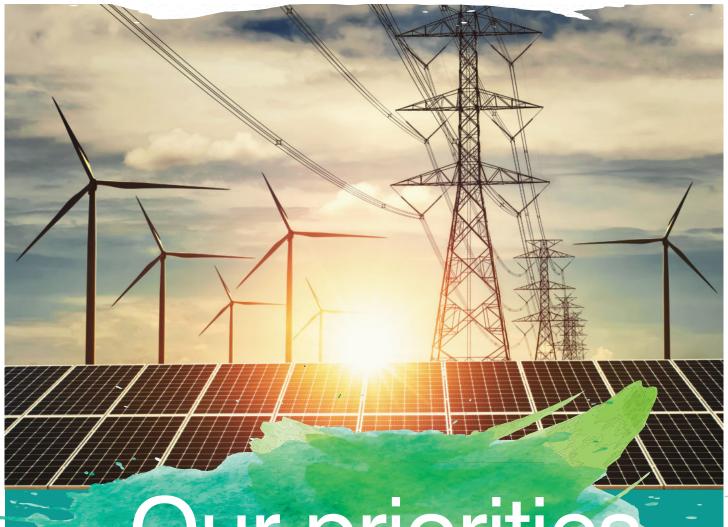
A key part of the study focused on geothermal heat in the south of the county, and in particular how this might support growers in the Vale of Evesham, in particular Offenham. The village is home to several important horticultural companies who all use a substantial amount of heat to grow fruit and vegetables supplying national supermarkets and wholesalers.

The findings indicate real potential in harnessing this sustainable and natural source of heat, which was first understood when boreholes were drilled in the 1980s. Worcestershire County Council commissioned a further study, in line with the report's recommendations, to assess geological data in the Worcester Basin, an area that stretches from the Malverns to the Cotswolds.

This study has reinforced the belief that there is a real opportunity below our feet in parts of the Wychavon district.

A further HNDU application for a full feasibility study is likely to be made by the county council in the near future, looking specifically at the geothermal possibilities on the edge of Worcester and also Offenham, to build on the previous work.





4. Our priorities

This section of the plan contains our four priorities. These are energy, low carbon travel, natural environment, and policy and resources. For each of these we highlight some of the key issues, some of the things we've already done and the actions we are going to focus on during the life of the plan. Appendix one contains a more detailed action plan including estimated carbon savings, deliverability and co-benefits.

4.1 Energy

Energy consumption accounts for almost two thirds of carbon emissions in Wychavon. Industry and commerce are responsible for 37% of the district's emissions and 27% come from homes.

In 2017, industry and commerce consumed 100,700 tonnes of oil equivalent (ktoe) and the domestic sector consumed 79,300 ktoe. As the chart below shows, there was a notable decline in energy consumption between 2006 and 2009. After levelling off in the early to middle part of the past decade, levels of energy consumption gradually started to rise in the second half of the decade.

The steady decrease in carbon emissions from energy consumption mentioned earlier in the plan is primarily down to decarbonisation of the National Grid and the growth in renewables rather than a reduction in energy use.

Total energy consumption in Wychavon (thousand tonnes of oil equivalent (ktoe)

Domestic

Industrial and commercial

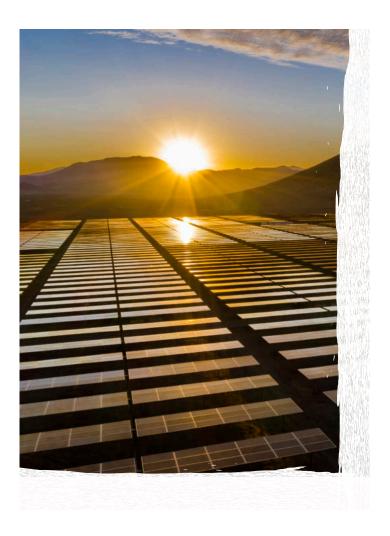
2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

While gas currently makes up a significant proportion of the energy consumed in Wychavon, there is still a relatively high proportion of energy users in both domestic and nondomestic situations that utilise expensive and high carbon fuels such as coal, oil and liquified petroleum gas.

Rural parts of the district off the gas network are more likely to have higher proportions of fuel poor households. In 2018, an estimated 5,416 of Wychavon households (10.3%) were

fuel poor. This is above the Worcestershire average of 9.9%. To help lift households out of fuel poverty and cut carbon emissions we need to focus efforts on both improving energy efficiency standards and encouraging low carbon alternatives to oil and solid fuel heating systems, including heat pumps, bio-gas or hybrid systems.

Levels of renewable generation in the district have increased substantially in the last ten years. In 2018, 240,542 MWh of energy in Wychavon was generated from renewable sources. If additional energy generation resources within the district are to be realised, constraints on the electricity network for the connection of new large-scale demand or generation will need to be overcome.





We have already:

- Reduced energy consumption at the Civic Centre.
- Installed 42 solar photovoltaic panels on the Civic Centre.
- Invested £300,000 in the Pershore hydroelectric power scheme, which provides energy to the nearby leisure centre.
- Invested £52,000 to install solar panels on seven of our public toilets.
- Carried out a thermal image survey of the county to highlight heat loss from properties through the Warmer Worcestershire project.
- Delivered a wide range of energy efficiency schemes in partnership with Act on Energy including loft and cavity insulation, thermostatic radiator valves, draught proofing, water tank jackets, new boilers, energy advice surgeries and campaigns.
- With Rooftop, installed photovoltaic panels on 23 properties in Badsey.
- Delivered 262 solid wall installations under the Green Deal Communities project.
- Supported Rooftop Housing to build the first Code for Sustainable Homes Level 6 development in the district.
- Led a ground-breaking study into heat use across Worcestershire.

We will:

- Reduce energy consumption in all our buildings through active energy monitoring and reporting, energy champions and switch-it-off campaigns.
- Switch to purchasing green electricity for all our buildings when our current energy contracts expire in 2021, and explore whether green gas is a sustainable and viable option for meeting our other energy demands.
- Investigate and implement measures to significantly reduce energy consumption and carbon emissions generated by our three leisure centres and the lido.
- Consider measures to reduce the carbon impact of our other buildings and investigate the costs and viability of making each of our buildings carbon neutral.
- Seek to minimise the carbon impact of investment projects involving new build and refurbishment of existing buildings while maintaining viability and delivering wider community and economic benefits.
- Invest £100,000 over four years to promote the growth of the low carbon economy in Wychavon, including increasing our investment in the Low Carbon Opportunities Programme and apprenticeship grants to businesses working in green technologies.
- Work with partners to help householders install energy efficiency measures and renewable technologies through initiatives such as the new Green Homes Grant.
- Facilitate a domestic bulk solar PV buying scheme.
- Work with social housing providers to deliver carbon neutral housing schemes.
- Run targeted energy efficiency awareness campaigns aimed at residents.
- Promote development of further renewable energy schemes in the district including solar PV and geothermal.
- Consider the development of a biofuel or low carbon oil buying club.
- Lobby power distributors and OFGEM to upgrade distribution networks and increase capacity for renewables.
- Lobby the Government to provide Council Tax or other incentives to drive take-up of home energy efficiency measures.

Case study Flushed with savings



As part of a major refurbishment programme we have installed a series of intelligently green measures in our award-winning public toilets.

The measures include propel air flush toilets, sensor activated urinal flushes, sensor activated LED lighting and Dyson Airblade tap/dryers. These will result in significant reductions in energy and water consumption and estimated cost savings of up to 90% on lighting and 60% on overall costs.

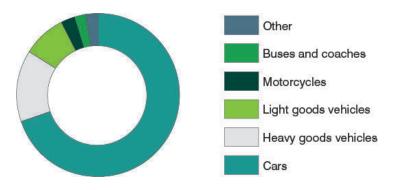
We have also installed solar panels on seven of our toilet blocks at a total cost of £52,000. These are expected to generate a total estimated 20,790KWh of electricity a year with estimated payback times of between 12 and 19 years.

The refurbished facilities have been well received by users and recognised in the national Loo of the Year Awards, run by the British Toilet Association. Three of our toilets scooped the new diamond award and the rest received platinum status.

4.2 Low carbon travel

With low levels of access to public transport outside of the three towns and few dedicated cycle paths, much of the district is highly reliant on road transport. In fact, transport is responsible for 36% of the district's carbon emissions. While there was a 12% fall in transport related emissions between 2005 and 2013, since then emissions have grown steadily and are now 8% higher than in 2013. Encouraging people to swap their petrol or diesel vehicles for low emission vehicles and to use more sustainable modes of travel, such as walking, cycling, public transport or car-sharing, is critical to reversing this trend.

There are currently 107,700 vehicles on the district's roads. 46% of these are fuelled by diesel and just 474 (0.4%) are ultra low emission vehicles, although this is more than a 500% increase since 2011. By 2030, it is estimated there will be 38,577 electric vehicles on Wychavon's roads, saving more than 69,439 tonnes of carbon emissions.



by 2040. However, the speed of uptake could be hampered by a lack of infrastructure, particularly in rural areas.

In its 'Road to Zero' strategy, the Government acknowledges the key role of local authorities in facilitating the development of charging networks, particularly in relation to their responsibilities for local planning policy.

We want there to be a comprehensive network of reliable and affordable electric vehicle (EV) charging facilities right across Wychavon so that nowhere in the district is any further than five miles from an easily accessible charging point.

There are a number of ways we can support the growth of low emission vehicles, from the direct provision of EV charging points and incentivising others to install them, to requiring new developments to incorporate EV infrastructure and identifying sites for potential EV filling stations. We will also need to engage with taxi drivers to encourage and support them to switch to low emission vehicles.

The district is reasonably well served by train services and now has a total of six stations. Provision of public bus services across the district is limited and has reduced in recent years. Across Worcestershire the number of bus passenger journeys has fallen by more than four million over the last decade. Community transport solutions and car-sharing clubs are increasingly likely to become more viable ways of meeting local transport needs than new commercially run bus services.

Prior to Covid-19, less than 2% of adults travelled by bicycle three or more times a week for non-leisure purposes. During the Covid-19 lockdown, levels of cycling and walking appeared to increase significantly and we are keen to retain some of this modal shift going forward.

There is growing interest, and demand for, electric vehicles in the UK, prompted by increasing concern about air quality and climate change and by the Government's announcement that it will ban new petrol and diesel vehicles





We have already:

- Installed 24 electric vehicle charging points in our car parks across the district.
- Provided an electric pool car for staff travel.
- Encouraged the inclusion of electric vehicle charging points in community facilities funded through New Homes Bonus and Community Legacy Grants.
- Funded community-led transport schemes including Norton-juxta-Kempsey community minibus service.
- Completed a combined footpath and cycle way at Corporation Meadow, Evesham.

We will:

- Reduce council-related staff travel through agile working and switch to lower emission vehicles for our small fleet.
- Work with our waste and street cleaning contractors to move all their fleet to low emission vehicles when technology and energy infrastructure permits.
- Work with the other Worcestershire district councils to develop a taxi licensing policy to encourage the take-up of electric and other low emission vehicles and to discourage higher polluting older vehicles.
- Deliver a programme of funding, mentoring and advice to improve and increase the range of community-based transport options available across the district, including the ticket to ride project, by 31 March 2023.
- Ensure that cycling and walking options are an intrinsic part of all plans for new settlements in Wychavon.
- Increase car parking provision at Droitwich Spa, Honeybourne and Pershore railway stations by 31 March 2024.
- Install more bike racks in town centre car parks and public spaces.
- Improve connectivity between the railway stations and the towns and between Worcestershire Parkway and the surrounding areas by improving signage and piloting one or more bike hire schemes by 31 March 2022.
- Promote an already established carpooling scheme, such as BlaBlaCar.
- Appoint an active travel project officer to lead work with partners on new cycle routes and the development of cycling and walking plans by 31 March 2023.
- Investigate a workplace parking levy offering discounts for low carbon transport initiatives, such as EV charge points, bike scheme, car sharing and renewable energy installations.
- Promote the development of at least one electric forecourt in the district.
- Review EV charging points in our own car parks and encourage and incentivise others to install them, including making installation of EV charging points a condition of grant funding for new community buildings and encouraging businesses and tourist destinations to consider installing EV charge points and to convert to lower emission vehicles.
- Encourage Worcestershire County Council and other relevant bodies to support the delivery of safe cycling and walking routes and provision of appropriate local transport options to meet needs.

Case study Boosting electric vehicle charging

The number of electric vehicle charging points in Wychavon's public car parks soared at the start of 2020 thanks to our £150,000 investment.

We installed a total of 20 new 7kW chargers as part of our commitment to supporting the growth of the ultra low emission vehicle market, to help reduce the district's carbon footprint.

The new charging points are located in car parks in Broadway, Droitwich, Evesham and Pershore and take the total number of electric vehicle chargers in our public car parks to 24.

The project was part funded by a grant of £64,000 from the Government's Office of Low Emission Vehicles and was supported by the Energy Saving Trust.

We are also investing in a new all electric vehicle for staff to use while on council business, as a replacement for the hybrid vehicle we bought back in 2012.

Cllr Emma Stokes, Wychavon Executive Board Member for Environment, said: "We have already seen the number of ultra low emission vehicles on Wychavon's roads increase by more than 500% since 2011 and it will continue to increase over the coming years. This investment will help ensure we are playing our part in supporting the growth of the electric vehicle market and, along with all our other low carbon initiatives, contribute to our ambition to reduce the district's carbon footprint."

We are using our influence to increase the provision of electric vehicle charging infrastructure. The adopted South Worcestershire Development Plan includes a policy encouraging transport projects and development that promotes the use of new vehicle technology.

Our Community Legacy Grant scheme requires applications for new community buildings, or significant refurbishments of community buildings that include car parking facilities, to incorporate provision of one or more publicly accessible electric vehicle charging points.



4.3 Natural environment

The district's natural beauty comes from its diversity of habitats. Our ancient woodlands are home to brown hairstreak butterflies flying high in the canopy where once nightingales sang. Traditional management techniques like coppicing reveal sunny glades and grassy rides, perfect for butterflies and people alike.

The steep wooded flanks of the Cotswolds and Bredon Hill give way to gnarled ancient trees, hiding the violet click beetle beneath their bark and casting their shade over swathes of orchid filled grassland.

The horticultural heritage of the Vale has given us a legacy of traditional orchards, where the nationally rare noble chafer beetle still thrives amongst the tumbledown trees. Through this working landscape, the River Avon meanders across its rich floodplain, dotted with marshy wet meadows sheltering lapwing and curlew and lone black poplars weep into the water where otters raise their cubs amongst their tangled roots.

By day, club-tailed dragonflies patrol the reeds along the river's banks, but as dusk falls, bats emerge feasting on insects over the water and along hedgerows. Water voles, once common, have been pushed into smaller streams, only a small number remain in what should be a perfect place for them.

Wychavon's traditional flower meadows are a national treasure. Flooded meadows that bloom with summer scarlet pompoms of great burnet and frothy white meadowsweet dry to the explosion of colour of a heritage hay meadow, filled with knapweed and scabious. These relics of a centuries old farming system are alive with wildlife, from barn owls to bees.

Purple heather crowns the red sandstone in the far north of our district, mixed with acid grassland, where adders bask on sandy paths sliding beneath the prickly protection of golden gorse when danger threatens. Many species have ventured into towns in search of safety. You're as likely to see an otter or a bat in an urban environment as you are in the countryside. Our gardens are havens for hedgehogs and slow worms, while parks, canal side towpaths and abandoned industrial sites offer sheltered spots for the grizzled skipper to sunbathe.

No matter where you are in the district, nature is all around and it is as threatened by climate change as we are. The natural environment also has a key role to play in reducing our carbon footprint and sustaining our wellbeing and way of life. When eco-systems are joined up and work as they are intended to, they have the potential to capture and store significant amounts of carbon. They also offer a host of other benefits that can alleviate some of the impacts of climate change such as flooding or drought.

Wychavon's key habitats and priority species



Ancient and veteran trees



13 Bats



Arable farmland



Black poplar



2 Canals



4 Brown hairstreak



2 Fen and marsh



4 Common clubtail



8 Grassland



3 Farmland birds



7 Hedgerows



2 Great crested newt



Ponds and lakes



3 Grizzled skipper



4 Reedbed



2 Nightingale



7 Rivers and streams



ς Noble chafer



13 Road verges



4 Otter

Shad



1 Scrub





ℓ Traditional orchard



Violet click beetle



√ Wet grassland



Water vole



Wet woodland



o Woodland

Action natural environment

We have already:

- Established Avon Meadows wetlands in Pershore in partnership with the town council and designated it as a local nature reserve.
- Worked with others to create and manage Stoulton woodlands
- Supported and contributed funding for community gardens, allotments and woodlands.
- Created new and improved habitats for bees, butterflies and other insects in council managed green spaces with more to follow.
- · Created a pollinator garden at the Civic Centre.
- Purchased Shorthorn Woods to be managed by the local community, safeguarding it as a haven for the brown hairstreak butterfly.
- Helped define B-Lines for Worcestershire, part of a nationwide network for pollinators developed by Buglife.



We will-

- Review all council owned land and assess the suitability for natural habitat restoration and creation.
- Consider purchasing strategic land to create additional high carbon storage habitats such as woodland or wetlands.
- Shape and adopt emerging national and local policies on biodiversity and green infrastructure as they emerge and integrate those that develop through the life of this plan.
- Eliminate the use of herbicides and pesticides in all our parks and open spaces by 31 March 2024 and trial less carbon intensive machinery.
- Map and deliver a Wychavon Nature Recovery Network, as part of the wider Worcestershire Nature Recovery Strategy, which identifies and prioritises areas for habitat restoration, creation and connectivity.
- Work with other organisations to enhance the natural environment and natural carbon capture and storage.
- Create ten hectares of new wetland and work with the Heart of England Forest and other partners to restore, enhance and create 30 hectares of Wychavon's characteristic Biodiversity Action Plan habitats (including traditional orchards, species-rich/wet grassland and broadleaved woodland) by 31 March 2024.
- Help deliver the Worcestershire Pollinator Strategy including creating new and improved pollinator habitats on our own land, promoting parish pollinator packs and signposting to existing advice for residents to encourage more wildlife friendly practices.
- Work with town and parish councils to identify new opportunities for developing allotments in areas of high demand.
- Lobby and seek to influence farming and other land use practices that reduce carbon emissions or create carbon capture opportunities and deliver wider environmental benefits.

Case study Places for pollinators

Pollinating insects are in severe decline in Britain, so we're working to create vital habitats in our parks and green spaces filled with plants and flowers that are rich in nectar and pollen.

In 2019, we became one of the beneficiaries of the 'Places for Pollinators' campaign following the planting of a new demonstration garden at the Civic Centre. The garden is one of ten Places for Pollinators that West Midlands Butterfly Conservation is helping to create in the region. The garden contains a selection of plants like bugle, red valerian, sweet rocket, phlox, scabious, cranesbill and buddleia, which are very attractive to many species of insect.

We have also created pollinator areas in Droitwich Community Woods, Addyes Way Open Space, Rebekah Gardens, Vines Park and in St Peter's Fields, with others to follow in Evesham, Pershore and surrounding villages. We are experimenting with various pollinator seed mixes including wildflowers such as ox-eye daisy, white clover, buttercup, cranesbill, selfheal, vetch, yarrow and yellow rattle.



With pollinating insects in serious decline, we hope projects like these will inspire people to create habitats in their gardens or at work places that are filled with plants and flowers rich in nectar and pollen. Doing this in an area like the Vale of Evesham is particularly important, given its reliance on insects to pollinate the plants that provide much of the food grown here.

4.4 Policy and resources

Creating the policy and planning environment to support the infrastructure and innovation needed to tackle carbon emissions and help communities build resilience to the impacts of climate change are essential parts of our leadership role. Where we spend our resources and how we influence our partners and suppliers is also important.



1% a year by 2030. Encouraging people to consume less, reuse more and recycle as much of their waste as possible is crucial to the global effort to tackle climate change. At a local level, it is much more difficult to measure the impact of waste minimisation on carbon emissions as many of them will be generated higher up the supply chain. However, minimising

In 2019/20, the average household in Wychavon threw nearly 470kg of waste away. Over a third of this is likely to have been food waste. Just over 44% of household waste was sent for reuse, recycling or composting. Without significant behavioural change, household waste is expected to rise by

We need to ensure the homes we are planning now are fit for the future. This means that not only must carbon emissions be minimised during construction, they must be designed in ways that can protect people from the impacts of climatic changes, such as excessive heat or more frequent flooding.

The South Worcestershire Development Plan (SWDP) includes detailed policies that are used in decisions on planning applications. The adopted SWDP seeks to ensure that all new development sources at least 10% of its energy requirements from renewable or low carbon energy technologies. As part of the review of the SWDP, we are proposing that the requirement for renewable or low carbon energy be increased to at least 20% of a development's predicted energy requirements. The plan also requires all new development with over one hundred dwellings to examine the potential for a heat network.

The SWDP review provides an opportunity to create an environment to encourage low carbon and sustainable development, but there are challenges as the National Planning Policy Framework does not currently support councils to be ambitious in setting local plans that actively support the reduction of emissions.

waste will have some positive impact on emissions from our waste contractor's vehicles.





We have already:

- Adopted a renewable and low carbon energy policy within the South Worcestershire Development Plan.
- Adopted Supplementary Planning Documents on water management and flooding, and renewable and low carbon energy.
- Issued a call for sites for potential large scale renewable and low carbon energy projects as part of the review of the SWDP.
- Responded to the Government's consultation on elements of the proposed Future Homes Standard, stating our strong support for higher energy efficiency standards in new development.
- Appointed a new urban designer to lead work on delivering well designed development.
- Run the Wychavon Intelligently Green Awards every two years since 2014 to celebrate and promote local green projects and activities.
- Introduced household recycling collections for batteries, textiles and small electrical items.
- Trialled a HERU here at the Civic Centre. The appliance can heat hot water with everything from waste nappies and plastics to coffee cups and food.
- Introduced new recycling points for coffee pods, water filters and crisp packets.
- Run a three-year campaign to reduce litter and single use plastics.

We will:

- Include a climate change chapter in the SWDPR that brings together all the policies in the plan that relate to carbon reduction and new policies to promote development which seeks to minimise carbon levels.
- Encourage low carbon development and design measures to improve resilience and adaptation to climate change.
- Support the development of an eco-settlement in the district.
- Ensure that all new council strategies, polices, plans and major projects encourage and incentivise carbon emission reductions wherever possible.
- Strengthen our procurement policies to allow additional weight to be given the carbon cost in competing bids and require contractors to report on their carbon emissions.
- Explore more sustainable options for disposing of green waste from our own activities and land.
- Work with developers for the SWDP strategic allocations to consider how energy for the development could be provided from a decentralised source and ensure consideration for climate change adaptation is at the heart of their proposals.
- Seek to influence the Worcestershire Pension
 Fund investment strategy to make impact-driven
 sustainable investments.
- Review and refresh the Wychavon Intelligently Green Award scheme with greater community involvement and a focus on carbon reduction.
- Work with one or more high schools to help them develop their own Intelligently Green Plans.
- Run a four-year campaign to reduce litter and single use of plastics involving a package of measures including education, litter picks enforcement action and engaging with schools.
- Reduce the average household black bin waste by at least 10% (2018/19 baseline) by 2024 through targeted waste reduction campaigns and incentivising at least five communities to set up community fridges to reduce their food waste.
- Pilot on-the-go recycling facilities for plastics and cans in one or more towns.
- Lobby the Government to require all new homes to be carbon neutral as soon as possible and to urgently update national planning policy to minimise carbon emissions.
- Lobby our MPs and the Government on any other issues that arise over the lifetime of the plan that we see as important in realising our vision and targets.

Case study Revolutionising rubbish



In 2019, we took part in technical field trials for a revolutionary energy solution that gives households the power of generating hot water from everyday items such as coffee cups, nappies, plastics and food that were previously discarded as waste.

Developed in Wychavon, the Home Energy Resources Unit (HERU) has been hailed by the BBC as potentially 'The Next Dyson'. The dishwasher-sized appliance enables a household to become a micro energy generation centre, producing hot water and gas that can be used in a domestic boiler and reducing household fuel bills by up to 15%. A single cycle of the HERU can produce a 30°C temperature rise for around 70 to 120 litres of water a day, which is equivalent to a full bath.

During our trial, waste from the Civic Centre café was disposed of directly into the appliance rather than going to landfill. Our involvement helped develop proof of concept and provided a raft of data to help support the HERU on its journey to market.

The HERU is one of a number of projects in the district to benefit from Worcestershire's Low Carbon Opportunities Programme. The programme supported the development of the HERU with free consultancy support and a £42,000 grant. The grant helped fund the manufacture and build of the units to be used in the trial phase and the costs of the trial itself.

5. Implementation

We are recruiting a shared carbon reduction officer with Malvern Hills District Council. This officer will work with our Intelligently Green Group to manage delivery of the plan and keep track of its progress.

Reducing emissions requires action by all staff and councillors. The carbon reduction officer will work across the council to ensure that carbon reduction is embedded in relevant policies, service delivery and procurement decisions.

We will monitor and report progress on the plan's actions every six months as part of our usual Signals of Success performance reports.

We will use the following success measures to assess progress towards our vision and targets:



CO₂ Our own greenhouse gas emissions



District-wide carbon emissions (under scope of influence of local authorities)



Size of the low carbon economy



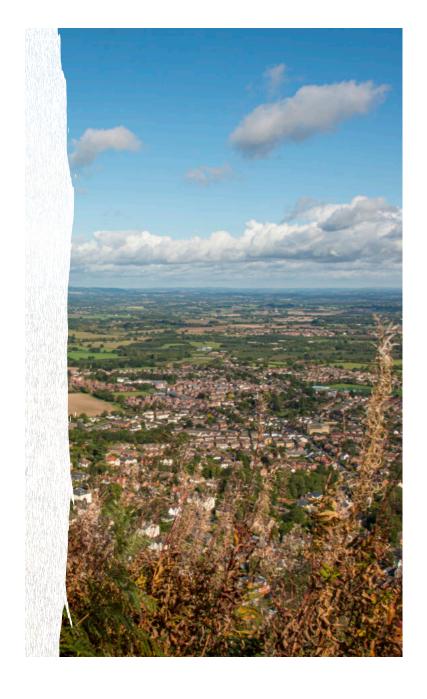
Amount of renewable energy generated across the district



Amount of carbon captured through council action

At the end of each financial year we will produce a short annual progress report for our Executive Board. This will also highlight any changes in technology and relevant national policy developments. We will publish the annual update on our website and include a summary in our annual report.

We will carry out a review and refresh of the Intelligently Green Plan actions in 2025.



6. Appendix one

Data sources

Carbon capture toolkit

Greenhouse gas reporting: conversion factors 2019.

Department for Business, Energy & Industrial Strategy.

Licensed vehicles by body type and local authority: United

Kingdom.

Department for Transport.

Licensed ultra low emission vehicles by local authority:

United Kingdom.

Department for Transport.

Renewable electricity by local authority.

Department for Business, Energy and Industrial Strategy.

South Worcestershire Development Plan.

Adopted and published 25 February 2016.

<u>Sub-national total final energy consumption in the United</u> Kingdom (2005-2017).

Department for Business, Energy & Industrial Strategy.

Sub-regional fuel poverty, 2018 data.

Department for Business, Energy & Industrial Strategy.

UK local authority carbon dioxide emissions estimates within

the scope of influence of local authorities 2005-2017.

Subset dataset. Department for Business, Energy and Industrial Strategy.

Worcestershire Biodiversity Action Plan 2018-2027.

Worcestershire Energy Strategy.

Worcestershire Local Enterprise Partnership.

Wychavon greenhouse gas emissions calculated in accordance with Environmental reporting guidelines: including Streamlined Energy and Carbon Reporting requirements. Department for Environment, Food & Rural Affairs and Department for Business, Energy & Industrial Strategy.

z. Appendix two

Action plan

This action plan starts to outline in more detail how each of the plan's four priorities will be achieved. It indicates which actions will impact on carbon emissions within our spheres of control, influence and concern. It also sets out estimated carbon impact and costs where known, factors that could affect deliverability and co-benefits. The timescales, which are defined below, indicate how soon an action will be started, not necessarily when it will be completed by. As projects are worked up on a case by case basis we will be able to firm up estimated carbon impacts, likely costs, deliverability and co-benefits.

Timescales

Short: started within two years Medium: started within five years

Long: started before 2028

Ongoing: throughout the life of the plan/as opportunities arise

Energy actions

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
1. Reduce energy consumption in all our buildings through active energy monitoring and reporting, energy champions and switch-it-off campaigns.	Control	Up to 10% reduction	Minimal – can be met from existing budgets	Financial savings	Short
2. Switch to purchasing green electricity for all our buildings when our current energy contracts expire in 2021, and explore whether green gas is a sustainable and viable option for meeting our other energy demands.	Control	100% reduction in emissions from electricity consumption, a small amount will still be attributed to transmission and distribution Green gas – to be determined	Will depend on tariffs available at the time Green electricity: 1p per kWh additional cost Green gas: unknown	Contributes to Wychavon promise to reduce our greenhouse gas emissions	Short

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
3. Investigate and implement measures to significantly reduce energy consumption and carbon emissions generated by our three leisure centres and the lido.	Control	10 to 20% reduction	£5,000 to £20,000 per leisure centre for energy reduction measures, potentially higher costs for installing renewable technologies	Contributes to Wychavon promise to reduce our greenhouse gas emissions Financial savings from reduced consumption	Short
4. Consider measures to reduce the carbon impact of our other buildings and investigate the costs and viability of making each of our buildings carbon neutral.	Control	Up to 100%	Unknown	Potential financial savings longer term	Short
5. Seek to minimise the carbon impact of investment projects involving new build and refurbishment of existing buildings while maintaining viability and delivering wider community and economic benefits.	Control	No net gain	Unknown	Potential reduction in running costs	Ongoing
6. Invest £100,000 over four years to promote the growth of the low carbon economy in Wychavon, including increasing our investment in the Low Carbon Opportunities Programme and apprenticeship grants to businesses working in green technologies.	Influence	Unknown	£100,000 approved as part of 20/21 budget. There is also the potential to leverage in significant additional funding.	Wychavon promise Economic benefits	Short/ medium
7. Work with partners to help householders install energy efficiency measures and renewable technologies through initiatives such as the new Green Homes Grant.	Influence	0.5 tonne per household	Costs will vary depending on property age, type and condition. Likely to range from less than £1,000 to £5,000+ per house. Some grant funding is already available and more is likely to be available in the future.	Health, fuel poverty and financial benefits	Ongoing
8. Facilitate a domestic bulk solar PV buying scheme.	Influence	1 tonne per household	Minimal – can be met from existing budgets	Health, fuel poverty and financial benefits	Medium
9. Work with social housing providers to deliver carbon neutral housing schemes.	Influence	No net gain	None	Health, fuel poverty and financial benefits	Ongoing

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
10. Run targeted energy efficiency awareness campaigns aimed at residents.	Influence	10% reduction	Low – can probably be met from existing budgets.	Health and financial benefits	Ongoing
11. Promote development of further renewable energy schemes in the district including solar PV and geothermal.	Influence	140,000 tonnes (very approximate)	Low costs of promoting		Medium
12. Consider the development of a biofuel or low carbon oil buying club.	Influence	1,250 tonnes assuming 50% up take and 50% fuel mix	Low – can probably be met from existing budgets	Health, fuel poverty and financial benefits	Short
13. Lobby power distributors and OFGEM to upgrade distribution networks and increase capacity for renewables.	Concern	Unquantifiable	None		Ongoing
14. Lobby the Government to provide Council Tax or other incentives to drive take-up of home energy efficiency measures.	Concern	Unquantifiable	None		Ongoing

Low carbon travel actions

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
Reduce council-related staff travel through agile working and switch to lower emission vehicles for our small fleet.	Control	Fleet vehicles: 5 tonnes Staff travel: 10-40% reduction	To be determined	Contributes to Wychavon promise to reduce our greenhouse gas emissions	Short
2. Work with our waste and street cleaning contractors to move all their fleet to low emission vehicles when technology and energy infrastructure permits.	Control/ influence	25% to 100% reduction 100% would be full EV or hydrogen, or biodiesl 100% mix	Significant costs to install the necessary infrastructure	Contributes to Wychavon promise to reduce our greenhouse gas emissions Air quality benefits	Long

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
3. Work with the other Worcestershire district councils to develop a taxi licensing policy to encourage the take-up of electric and other low emission vehicles and to discourage higher polluting older vehicles.	Influence	9.25 tonnes assuming 10,000 miles a year per taxi	To be determined	Health and air quality benefits	Short/ medium
4. Deliver a programme of funding, mentoring and advice to improve and increase the range of community-based transport options available across the district, including the ticket to ride project, by 31 March 2023.	Influence	Unknown	£50,000 per year for three years agreed as part of 2019/20 budget Additional £105,000 secured through Business Rates Retention bid with Malvern Hills District Council for the Ticket to Ride community connectedness project.	Wychavon promise Social isolation benefits	Short
5. Ensure that cycling and walking options are an intrinsic part of all plans for new settlements in Wychavon.	Influence	0.125 tonnes for every person who cycles or walks 10 miles a week instead of driving		Health benefits	Ongoing
6. Increase car parking provision at Droitwich Spa, Honeybourne and Pershore railway stations by 31 March 2024.	Influence	Unknown		Wychavon promise	Medium
7. Install more bike racks in town centre car parks and public spaces.	Influence	0.125 tonnes for every person who cycles 10 miles a week instead of driving		Part of Covid-19 town centre recovery plans	Short
8. Improve connectivity between the railway stations and the towns and between Worcestershire Parkway and the surrounding areas by improving signage and piloting one or more bike hire schemes by 31 March 2022.	Influence	0.125 tonnes for every bike used for 500 miles a year	One off budget of £20,000 approved as part of 20/21 budget.	Wychavon promise Health benefits	Short
9. Promote an already established carpooling scheme, such as BlaBlaCar.	Influence	0.375 tonnes for every person who car shares for 30 miles a week instead of driving	Minimal – could be met from existing budgets		Medium

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
10. Appoint an active travel project officer to lead work with partners on new cycle routes and the development of cycling and walking plans by 31 March 2023.	Influence		£50,000 per year for two years. Approved as part of 20/21 budget.	Wychavon promise Health benefits	Short
11. Investigate a workplace parking levy offering discounts for low carbon transport initiatives, such as EV charge points, bike scheme, car sharing and renewable energy installations.	Influence			Health and air quality benefits	Long
12. Promote the development of at least one electric forecourt in the district.	Influence	Energy supplied 13,140 MWh pa		Assuming at least ten chargers	Medium
13. Review EV charging points in our own car parks and encourage and incentivise others to install them, including making installation of EV charging points a condition of grant funding for new community buildings and encouraging businesses and tourist destinations to consider installing EV charge points and to convert to lower emission vehicles.	Influence	For every 10 chargers 140 MWh energy supplied		Assuming 7 kW workplace chargers	Medium
14. Encourage Worcestershire County Council and other relevant bodies to support the delivery of safe cycling and walking routes and provision of appropriate local transport options to meet needs.	Concern	0.125 tonnes for every person who cycles or walks 10 miles a week instead of driving		Health and air quality benefits	Ongoing

Natural environment actions

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
Review all council owned land and assess the suitability for natural habitat restoration and creation	Control	Dependent on type and size of habitat*		Biodiversity and health benefits	Short
Consider purchasing of strategic land to create additional high carbon storage habitats such as woodland or wetlands.	Control	Dependent on type and size of habitat*	Arable land £20,000 per hectare Pasture land £15,000 per hectare	Biodiversity and health benefits	Medium

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
3. Shape and adopt emerging national and local policies on biodiversity and green infrastructure as they emerge and integrate those that develop through the life of this plan.	Control			Biodiversity and health benefits	Ongoing
4. Eliminate the use of herbicides and pesticides in all our parks and open spaces by 31 March 2024 and trial less carbon intensive machinery.	Control			Wychavon promise Biodiversity and health benefits	Medium
5. Map and deliver a Wychavon Nature Recovery Network, as part of the wider Worcestershire Nature Recovery Strategy, which identifies and prioritises areas for habitat restoration, creation and connectivity.	Influence	Dependent on type and size of habitat*		Wychavon promise Biodiversity and health benefits	Medium
6. Work with other organisations to enhance the natural environment and natural carbon capture and storage.	Influence	Dependent on type and size of habitat*		Biodiversity and health benefits	Ongoing
7. Create ten hectares of new wetland and work with the Heart of England Forest and other partners to restore, enhance and create 30 hectares of Wychavon's characteristic Biodiversity Action Plan habitats (including traditional orchards, species-rich/wet grassland and broadleaved woodland) by 31 March 2024.	Influence	Dependent on type and size of habitat*	Indicative costs: Arable land £20,000 per hectare Pasture land £15,000 per hectare	Wychavon promise Biodiversity and health benefits	Medium
8. Help deliver the Worcestershire Pollinator Strategy including creating new and improved pollinator habitats on our own land, promoting parish pollinator packs and signposting to existing advice for residents to encourage more wildlife friendly practices.	Influence	Dependent on type and size of habitat*		Wychavon promise Biodiversity benefits	Medium
9. Work with town and parish councils to identify new opportunities for developing allotments in areas of high demand.	Influence	To be determined	None / could fund through Community Legacy Grants	Biodiversity, health and food benefits	Medium
10. Lobby and seek to influence farming and other land use practices that reduce carbon emissions or create carbon capture opportunities and deliver wider environmental benefits.	Concern	Unquantifiable	None	Biodiversity and health benefits	Ongoing

*Indicative carbon capture figures (per hectare/per year)



Orchard: 4 tonnes CO2e including soil when restoring from arable or intensive grass



Grassland: 4 tonnes CO2e when restoring from arable or intensive grass again, could be higher for example if wet grassland



Woodland: 10-13 tonnes CO2e including soil

Policy and resources actions

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
1. Include a climate change chapter in the SWDPR that brings together all the policies in the plan that relate to carbon reduction and new policies to promote development which seeks to minimise carbon levels.	Influence		None		Short
2. Encourage low carbon development and design measures to improve resilience and adaptation to climate change.	Influence		None	Health and resilience benefits	Ongoing
3. Support the development of an eco-settlement in the district.	Influence				Medium
4. Ensure that all new council strategies, polices, plans and major projects encourage and incentivise carbon emission reductions wherever possible.	Influence		Low		Ongoing
5. Strengthen our procurement policies to allow additional weight to be given the carbon cost in competing bids and require contractors to report on their carbon emissions.	Control	Unlikely to have a significant impact on our direct carbon emissions as many of them are generated higher up the supply chain	Some procurement decisions may end up costing more, but there could be lifecycle savings made on the costs of running more energy efficient equipment for example		Medium
6. Explore more sustainable options for disposing of green waste from our own activities and land.	Control	Unknown	To be determined		Medium
7. Work with developers for the SWDP strategic allocations to consider how energy for the development could be provided from a decentralised source and ensure consideration for climate change adaptation is at the heart of their proposals.	Influence	To be determined	None		Ongoing

Actions	Sphere	Estimated carbon impact	Estimated costs	Co-benefits and other factors	Timescales
8. Seek to influence the Worcestershire Pension Fund investment strategy to make impact-driven sustainable investments.	Influence	To be determined	None		Short
9. Review and refresh the Wychavon Intelligently Green Award scheme with greater community involvement and a focus on carbon reduction.	Influence	Low	Low – can be met through sponsorship and existing budgets		Short
10. Work with one or more high schools to help them develop their own Intelligently Green Plans.	Influence	Unknown	Low – could be met through existing budgets		Ongoing
11. Run a four-year campaign to reduce litter and single use of plastics involving a package of measures including education, litter picks enforcement action and engaging with schools.	Influence	To be determined, likely to be low.		Wychavon promise	Medium
12. Reduce the average household black bin waste by at least 10% (2018/19 baseline) by 2024 through targeted waste reduction campaigns and incentivising at least five communities to set up community fridges to reduce their food waste.	Influence	To be determined	£60,000 per year for four years. Approved as part of 20/21 budget.	Wychavon promise	Medium
13. Pilot on-the-go recycling facilities for plastics and cans in one or more towns.	Influence	To be determined, likely to be low.		Wychavon promise	Short
14. Lobby the Government to require all new homes to be carbon neutral as soon as possible and to urgently update national planning policy to minimise carbon emissions.	Concern	No net gain	None		Ongoing
15. Lobby our MPs and the Government on any other issues that arise over the lifetime of the plan that we see as important in realising our vision and targets.	Concern	Unquantifiable	None		Ongoing



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