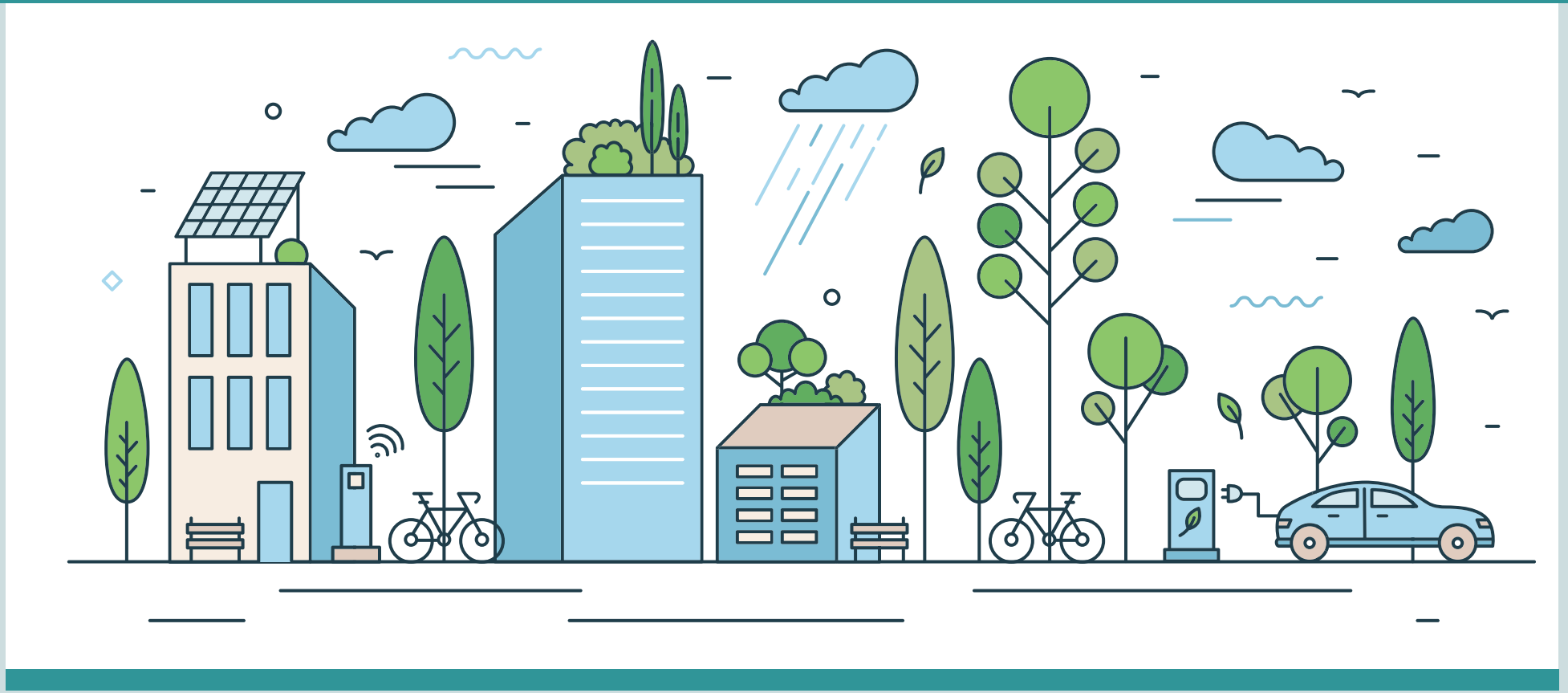
Herefordshire Council

Carbon Management Action Plan

Our path to zero carbon



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Introduction

This document is a companion document to the carbon management plan 2020/21-2025/26. The carbon management plan set out a target of a 75% reduction in carbon emissions from the baseline level in 2008/09, by the end of the financial year 2025/26. This is an interim target on our path to carbon neutral by the end of the year 2030/31. In this action plan we set out the specific actions and projects Herefordshire Council will carry out to reach this ambitious target. This document is dynamic and flexible, as such it should be treated as a 'live' document and will therefore be updated periodically to reflect changes in actions and projects as we react to this very dynamic challenge.

This document is based on extensive evidence, research and analysis into how best to approach the challenging target, with a wide variety of key stakeholders having been instrumental in developing and shaping the plan. Achieving early gains in reducing our emissions are key success factors for making carbon neutrality a reality. Delivering a successful management plan requires the council to be realistic in our ambitions, creative in our approach and bold in our decision-making.

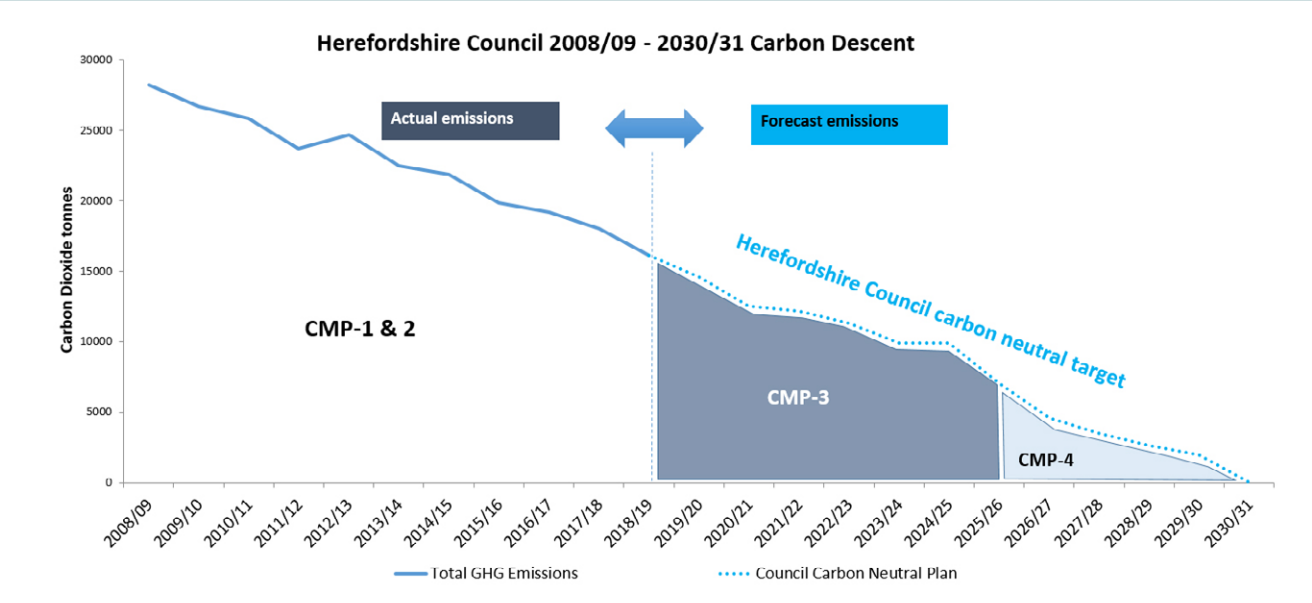
Moving forward beyond this document we intend to push forward with innovation, ambition and drive. We are currently reviewing how we can build greener buildings to the highest standards and where we take on existing building stock retrofit to a standard even higher than we already do.

We will be working with our delivery partners and utilising contracts to ensure that all of the work carried out by and on behalf of the council upholds the same high ambitions and environmental standards to ensure a greener future for the county and its residents.

Our Ambition

We have been measuring our carbon footprint since 2008/09 (the baseline year).

This graph gives an outline of how we intend to meet our 2025/26 target.



Key areas of reductions

This table gives an outline of how we intend to meet our 2025/26 target.

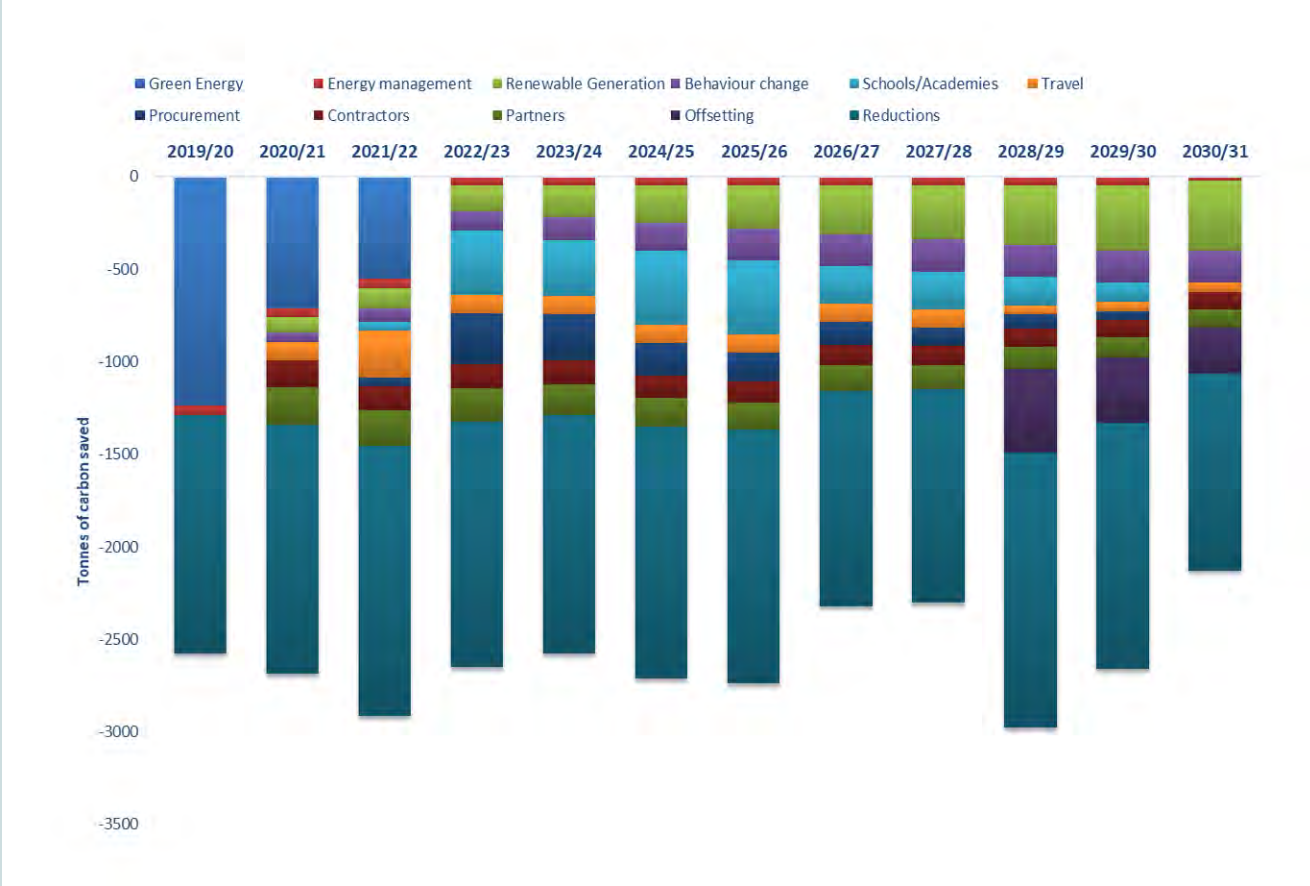
The areas of work are supported by specific activities, many of which are already underway and will be continued, completed and/or ramped up over the coming years.

To detail our thinking we have provided two columns. The first column shows the theoretical maximum savings available whilst the second column shows our current target for 2025/26, whilst still challenging ourselves.

Area of work	Example of planned activities	Estimated maximum reduction (tCO2)	Target reduction (tCO2)
Schools & Academies	Purchase green energy, behaviour change, energy efficiency, renewable energy	-4884	-2271
Partners	Purchase green energy, energy efficiency programme, behaviour change	-2840	-1753
Green energy	Purchase green energy	-2138	-1652
Projects	Energy efficiency and renewable energy programme, pool cars	-563	-563
Contracts	Waste, building management and cleaning, catering, social care, transport	-436	-363
Better ways of working	Behaviour change, staff travel plan, video conferencing, fleet review, property rationalisation	-332	-273
Totals		**-11193**	**-6874**
Percentage reduction from baseline		**-83%**	**-75%**

This graph shows key areas where we will reduce our carbon emissions to 2030/31, the figures are indicative and the areas of focus will remain flexible as reductions are measured across a variety of interventions and as we continue to seek new projects and develop existing projects for 2030/31.

Fitting solar PV to our buildings is one way we can reduce our carbon footprint. The solar panels on Leominster Junior school are owned and operated by a community owned renewable energy co-operative 'Leominster Sunrise Co-operative' who provide reduced cost, zero carbon electricity to the school.



We have a high confidence in the early reductions; this reduces as time goes on as uncertainty increases over time. It is important that this document remains "live and dynamic" with the ability to adjust as time moves forward. Our 2018/19 carbon footprint total was 16,119 tonnes of CO_2. Our ultimate aim is to bring this down to zero.

Our approach in the first five years is to focus on behaviour changes, efficiencies, technology and renewable energy. Currently, we anticipate that we will be able to reduce emissions (relative to 2008/09 baseline) by 75% by 2025/26. We then have five more years to get to zero. We believe we will be able to reduce our carbon emissions significantly although there are likely to be some residual emissions which we will not be able to reduce to zero, these residual emissions will need to be offset.

The road to carbon neutral

The table below shows activities we plan to carry out over the coming years, associated savings in tonnes of carbon and when we expect those projects to come online. Alongside this you can see the estimated maximum tonnes of carbon the projects could save, this is a total of the expected in year savings from 2019/20 to 2025/26. Next to the estimated maximum reduction is our target reduction.

As you can see this target is lower than the maximum, 75% vs 83%. The target has been calculated based on our confidence levels of delivering the individual savings with consideration given to the risks involved in delivering the carbon savings.

Area of work	Activity	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	Estimated Maximum Reduction (83%)	Target reduction (75%)
Schools & Academies	Purchase green power		1374					865	2239	1487
Schools & Academies	Purchase green gas							2156	2156	539
Schools & Academies	Schools carbon reduction programme					488			488	244
Partners	Purchase green power			300	474				774	774
Partners	Purchase green power				142				142	142
Partners	Purchase green gas					1643			1643	556
Partners	Halo energy efficiency programme	240	40						280	280
Green energy	Purchase renewable electricity	933	539	-428					1044	1044
Green energy	Purchase green gas							1094	1094	608
Projects	Energy effciency and renewable energy programme		127	428					555	555
Projects	Pool cars		8						8	8
Contracts	Transport tenders		290				73	73	436	363
Better ways of working	Staff travel plan				37	33	30		100	50
Better ways of working	Fleet review	0.5	1.5						2	2
Better ways of working	Property rationalisation			37	166			28	231	221
Total		**1173.5**	**2379.5**	**337**	**819**	**2165**	**102**	**4216**	**11192**	**6874**

Schools CO_2 savings...

Up to 1488 tonnes of CO_2 saved

Up to 539 tonnes of CO_2 saved

Up to 244 tonnes of CO_2 saved

Schools and Academies

- **Up to 2271 tonnes of CO_2 saved**
- **33% of the savings required**
- **This total figure of 2271 tonnes of CO_2 saved breaks down into the below categories.**

Renewable electricity

Maintained and community Schools in Herefordshire who purchase electricity from West Mercia Energy now automatically receive 100% certified renewable electricity for no extra charge. This will saves schools up to 1488 of the 2271 tonnes of CO_2 predicted over the coming period.

Over the coming years the council will be offering community and maintained schools a free solar PV installation in return for the sale of the electricity at a discounted rate to the school. Schools will receive renewable electricity from their own buildings at a rate that is lower than the market rate for electricity. This project is expected to save the equivalent of 428 tonnes of CO_2. However because the schools will already be using renewable electricity this is not a further saving towards our target. You can see to accurately reflect that, the estimated 'saving' of 428 tonnes of CO_2 appears as a positive and negative in the same year.

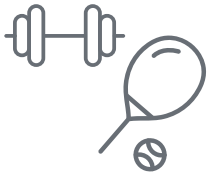
Green gas

As the availability and cost of green gas improves we will seek to support maintained and community schools to switch which will save a further 539 tonnes of CO_2 in the period up to 2025/26.

Behaviour change

The council has released a schools energy resource pack. The pack helps schools to audit their energy use and follow a series of activities to help them save energy, carbon and money. The more engaged the school is with the activities the more they will save. All members of the school can participate and should be encouraged to do so, the more that participate the more successful the school will be. Most of the activities are absolutely free and will help the school save in excess of 10% of their annual fuel bill. Additional information is also provided on adopting more efficiency technology such as LED lighting and solar panels as well as ways to finance these investments. Through behaviour change schools are estimated to save up to 488 tonnes of CO_2 over the coming years.

Partners
CO_2 savings...



Halo
CO_2 savings...

Up to 1098 tonnes of CO_2 saved

Up to 280 tonnes of CO_2 saved

Partners

- **Up to 1753 tonnes of CO_2 saved**
- **25% of the savings required**

The council's partners are key to delivering vital services such as the public realm contract delivered by Balfour Beatty Living Places (BBLP), our care services provided by a number care providers, our leisure services by Halo and cultural services by the Courtyard Theatre. We include our partners' emissions within our own carbon reporting as part of our services that are delivered to residents. Our partners reflect our own values in terms of sustainability and have their own high ambitions and ambitious targets.

The total figure of 1753 tonnes of CO_2 saved is broken down under our following partners.

Halo

- **Up to 1378 tonnes of CO_2 saved**

Purchase green electricity and gas

Through the purchasing of green electricity and gas Halo expect to save 1098 tonnes of CO_2 by 2025/26.

Energy Efficiency programme

In 2015 the council in partnership with Halo installed solar PV on the Hereford and Leominster leisure centres. Since this date Halo have undertaken a series of energy efficiency projects to further reduce their carbon emissions. Halo have installed a more efficient air handling unit as well as some LED lighting in the Hereford Leisure Pool site.

Up to 158 tonnes of CO_2 saved

Up to 116 tonnes of CO_2 saved

Up to 100 tonnes of CO_2 saved

Care Facilities

The Hillside Care Facility is managed by Herefordshire Council while Orchard House, Waverley House Home, Woodside Resource Centre and Leadon Bank care sites are operated on behalf of the council by Shaw Healthcare. These sites purchase 100% renewable electricity.

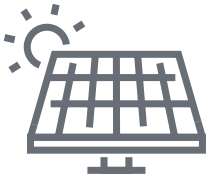
Courtyard

Through the purchasing of green electricity and gas The Courtyard expect to save 116 tonnes of CO_2 by 2025/26.

Balfour Beatty Living Places (BBLP)

In 2019 BBLP met their 2020 carbon targets a year early. The target was a 51% reduction over the baseline year, 2010. BBLP have switched their electricity to 100% renewables earlier in 2020 which will save up to 100 tonnes of CO_2. BBLP plan to purchase green gas when it is viable to do so meaning all energy consumption will be 100% renewable for their operations in Herefordshire.

Switching to renewable energy sources is a key way to reduce carbon emissions.



Renewable energy purchase CO_2 savings...

Council Projects CO_2 savings...

Up to 556 tonnes of CO_2 saved

Up to 8 tonnes of CO_2 saved

Purchase Renewable Energy for Council Estate

- **Up to 1652 tonnes of CO_2 saved**
- **24% of the savings required**

In January 2020 the council switched its electricity supply to 100% certified renewable energy. We are looking into sources of 'green gas' meaning all of the council's energy needs will be met with renewables. We expect this area of work will save us in the region of 1652 tonnes of CO_2, this represents 24% of the savings we are aiming to make over this period.

Council Projects

- **Up to 563 tonnes of CO_2 saved**
- **8% of the savings required**

Retrofit Programme

We have a number of retrofit projects planned over the coming years which will enable us to generate our own renewable energy or reduce our energy consumption. These projects include:

- LED lighting installations have been completed at Widemarsh Children's Centre and Ross Library, we are now looking to Shirehall and Ryefield Centre.
- More efficient air handling have been installed in Plough Lane and a more efficient boiler will be installed in Shirehall.
- Solar PV on Hillside Care Facility and Plough Lane.
- As new technologies emerge, innovative technologies including battery storage will be considered.

The council has commissioned a study to decarbonise the heat it uses for its own building stock, as the results of the study become available and next steps formalised that study will feed into this action plan.

Pool Cars

As vehicles have become more efficient our carbon emissions from staff commuting and business mileage have decreased. We are working to accelerate this decline in carbon emissions by providing low carbon pool cars for all staff to use. Thirteen vehicles to date are electric hybrid or fully electric representing 29% of the fleet and 31% of fleet mileage. In 2026 when the corporate fleet is re-procured non fossil fuel powered vehicles will be the default choice before fossil fuel powered vehicles are considered.

Contracts CO_2 savings...

Committment to become carbon neutral by 2030

Strategic review of the council's waste management service

Contracts

- Up to 363 tonnes of CO_2 saved
- 5% of the savings required

The savings forecast related to contracts are associate with transportation contracts that are due to be retendered over the coming period, this work is forecast to save the council around 363 tonnes of CO_2 per annum by 2025/26 which would represent 5% of the emissions reduction required to meet our target.
As contracts are renewed across the council, contractors will be expected to be committed to reducing their own carbon emissions in line with the council's commitments. This will become a requirement in forthcoming procurement tenders as environmental indicators are added to all procurement exercises through the work the council is currently carrying out regarding social value in procurement. Specifically contract providers will be required to be on a journey to zero carbon emissions, they should minimise residual waste to landfill and maximise reuse and recycling and they should provide ecological net gain of at least 10% locally.

Throughout 2020 a cross-party task and finish group met regarding the climate and ecological emergency. The group made a recommendation to ensure all strategies, plans and decision going forward properly consider their contribution to the 2030 carbon neutral target early on in the process. These changes mean that when new contracts are signed for the provision of services, these operations are giving proper consideration to the overall target of carbon neutral by 2030.

A task and finish group on waste was conducted in 2020. The group carried out a strategic review of the council's waste management service. The review will inform future policy development by providing findings and recommendations to the cabinet member for contracts and assets, the wider executive and the waste management team[1].

The government's Resource and Waste Strategy 2018[2] encourages a move towards a more sustainable circular economy, protecting natural resources and maximising the life of materials. In waste this means doing all we can to prevent waste, encourage reuse, recycle materials and use what's left to recover energy. New services to collect food waste and increase recycled material quality are expected. These measures are likely to see a requirement for additional vehicles to collect waste differently from how we do now. This could result in an increase in Scope 3 emissions, however our move to a more circular economy will help reduce use of natural resources and reduce county-wide carbon emissions overall.

[1]https://councillors.herefordshire.gov.uk/ielssueDetails.aspx?IId=50034892&Opt=3
[2]https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england

BWOW CO_2 savings...

Better Ways of Working (BWOW)

- **Up to 273 tonnes of CO_2 saved**
- **4% of the savings required**

In March 2020 it was announced that the council would consolidate its offices from three main offices down to two. This reduction in the number of buildings we operate means we will greatly reduce our energy consumption. To achieve this reduction in offices, our Plough Lane office will adopt more flexible working and meeting spaces. This versatility of our buildings goes hand in hand with encouraging employees to work from home for one to two days a week where appropriate.

Later in March 2020 all employees were asked to work from home in light of the emerging Covid-19 pandemic. This has had a large and unexpected effect on the way the council works. In the months following, most council employees have worked from home successfully and attended meetings via video conferencing. This had had a knock on effect of massively reducing employees' commuting and business mileage. Thanks to the council's move over the last few years to enable employees to work effectively and flexibly under BWOW, the transition to majority home working has worked very well. This has showcased that working from home can be very effective.

Moving forward the council will continue to monitor the situation around Covid-19 and consider the best way of facilitating staff to carry out their jobs, safely, effectively and in a sustainable manner using the flexible working tools and practices we have developed over the preceding years and months.

49% CO_2 reduction so far...

Progress to date

In 2019/20 the council reduced its emissions by a further 10% for a total reduction over the baseline year (2008/09) of 49%. This 49% reduction compares well against our target of a 38% reduction for 2019/20.

For more information please refer to our greenhouse gas emissions summary for 2019/20
https://www.herefordshire.gov.uk/downloads/file/18648/greenhouse-gas-emissions-summary-report-2019-20

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