



Background

Warrington Climate Emergency Commission was convened following Warrington Borough Council's declaration of a climate emergency in 2019, to lead the local conversation on what this means for the town. As part of our work, we have created a strategy to encourage and guide local action across the borough. This report is our first in a planned series of annual reports to review progress.

The report includes commentary of the international, national and local picture. It also provides an overview of recent local activities and our intended focus in the light of this review.

The problem

An increasing amount of carbon dioxide and methane pollution in our atmosphere is making the world overheat. This overheating is seriously disrupting climatic conditions, causing sea levels to rise, increasing the frequency of extreme weather events and critically, causing crops to fail. This, together with other serious pollution has grave consequences for the impact for humanity and nature both in the oceans and on land.

From an international perspective, the year 2023 may well go down in history as the year when climate breakdown really started to have a severe impact on humanity. Of course, the reality is that changes have been taking place for decades, but the impact over the last 12 months has been truly shocking. Across the world, extreme weather events of all types, including wildfires, torrential rain, violent storms and droughts have led to an enormous loss of property, tree cover, wildlife, crops and human life. Each severe weather event is costing the global economy huge amounts of money. In the USA, the estimated cost of each single event during the last year has been in excess of \$1 billion. To date, climate change is estimated to have cost well in excess of \$2.6 trillion, a figure which, sadly, is likely to escalate very quickly as extreme weather events increase in both frequency and

intensity, and as sea levels rise more quickly. Extreme weather is leading to problems with food supply, and, without action, we are set to see problems of hunger spreading quickly across the globe over the coming years, with corresponding migration of very large numbers of people as well as escalating food prices.

If we don't stop greenhouse pollution rapidly, the situation could quickly get out of hand, turning a global emergency into a catastrophe. It is easy to become despondent about the lack of progress, but at the same time, there is a lot of activity taking place across the globe to address the problem, and a growing realisation from some governments that much more needs to be done, and urgently. What's more, the solutions exist to address the problem and the cost of doing nothing is much greater than the cost of taking the necessary action.

The response

We know what needs to be done and some changes are already underway to stop the 'greenhouse' pollution behind the problem. Much of this pollution comes from burning fossil fuels for heat, power and travel so we are starting to see big changes in these areas.

The international response

Nations from across the globe have signed up to take action to stabilise temperatures in order to avoid disaster. The UN's 'Paris Agreement' is the main framework to guide this work. It seeks to keep "the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels". Under the agreement, nations must develop and report their own

¹The Paris Agreement was adopted by 196 countries at the UN Climate Change Conference of the Parties (COP21) in Paris in 2015 and entered into force in 2016 after being ratified by the required number of nations



action plans. As a result, huge changes have been started both here and elsewhere to cut pollution and adapt to the changes taking place. Already, a number of countries have converted their electricity grids entirely to renewables including Costa Rica, Denmark, Iceland, Norway, Paraguay and Uruguay. Some countries produce more renewable electricity than they need and export their excess. According to the UN, no examples exist of fully renewable-based energy systems that span electricity, heating, cooling and transport, although the foundations are being laid.



In practice, to stabilise temperature rises to 1.5°C means cutting global emissions very rapidly to reach 'net zero'². The current UN ambition to achieve this by 2050 is now looking to be too far into the future due to the continued high emissions since the target was established. Based on the current situation, a recent article in the scientific magazine Nature, suggests that we need to reach net zero by 2034.

The UK response

In line with the Paris Agreement, the UK Government has adopted a legal target to be net zero for greenhouse emissions by 2050. Under the Climate Change Act, the government is required to set out actions to achieve this target. It must indicate how it will stay within a series of five-year 'carbon budgets' on the way to becoming net zero. The Act also requires a regular assessment of risks from the changing climate in the UK and a programme of adaptation, so that we are better able to cope with unavoidable changes. Recent announcements by the Prime Minister have cast some doubt on the government's commitment, leaving questions on how the UK will progress in line with its agreed targets. The net zero target remains but the detail of how it will be achieved is unclear.

The local response

Many of the changes initiated in the wake of international and national plans require action at a local level. The Commission was established to lead the local conversation on this response. The result of this conversation has been the creation of a new climate emergency strategy for the borough. This is designed to set the direction of travel we need to take locally and encourage wider action across our community to help ensure that Warrington plays its part.

Current progress

Whilst major changes are taking place in response to the climate emergency, they have yet to deliver the emissions reductions needed.

²Net zero means reducing emissions from our activities so they are as close as possible to zero with any remaining residual emissions absorbed naturally or through artificial means



International progress

Global carbon dioxide emissions are still rising, but it is probable that they will peak in the next couple of years.

The action plans developed by countries under the Paris Agreement so far fall short. If ambition and action does not improve, we will end up in a much more dangerous situation.

Already this year, there have been unprecedented increases in temperatures, both on land and in the oceans. These will have been impacted to some extent by the appearance of El Niño currents in the Pacific Ocean, but are still extremely concerning.

At the halfway point of the 2030 Agenda, the World Meteorological Organisation reports that the science is clear – the planet is far off track from meeting its climate goals. This undermines global efforts to tackle hunger, poverty and ill-health, improve access to clean water and energy and many other aspects of sustainable development.

According to the IPCC, stabilisation of the climate below 2°C can only be achieved with immediate actions that lead to deep and rapid cuts in global emissions of greenhouse gases to reach net zero. Human induced climate change is already causing adverse impacts on people and nature and these adverse impacts will increase with increased warming. The IPCC emphasize the urgent need to adapt to adverse climate impacts as well as reach net zero. Progress is not where it needs to be.

UK Progress

The government's independent Climate Change Committee has reported that UK greenhouse gas emissions have so far fallen 46% from 1990 levels. At COP26, a stretching 2030 commitment was made to reduce them by 68%. In only seven years, the recent rate of annual emissions reduction outside the electricity supply sector must therefore now quadruple.

Time is now very short to achieve this change of pace. Glimmers of the net zero transition can be seen in growing sales of new electric cars and the continued deployment of renewable capacity, but the scale up of action overall is worryingly slow. The government continues to place their reliance on technological solutions that have not been deployed at scale, in preference to more straightforward encouragement of people to reduce high-carbon activities. The Committee has again flagged the risks of a policy programme that amongst other things is too slow to plant trees and roll-out heat pumps.

The Climate Change Committee suggests that the UK Government has sent confusing signals on its climate priorities to the global community. Support for new oil and gas exploitation and the decision to consent a new coal mine in Cumbria have raised global attention and undermined the careful language negotiated by the UK COP26 Presidency in the Glasgow Climate Pact.

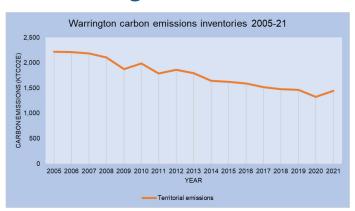
The committee highlight government support is lacking for decarbonising industry in a new era of global competition. The committee also highlights rapid reform to infrastructure planning is necessary. In a range of areas, the deployment of essential upgrades to the electricity grid and other net zero infrastructures is being stymied by existing regulations.



The government does not expect to make a strategic decision on the role of hydrogen in heating until 2026. Its advisors indicate it must overcome this uncertainty by accelerating deployment of electric heating and pressing ahead with low-regret energy infrastructure decisions. Instead, current commitments are being watered down.

The overall message from The Climate Change Committee is that more needs to be done, and more quickly.

Latest progress locally



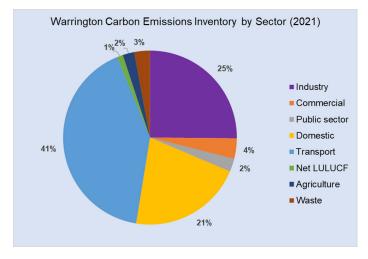
The orange line in the chart above depicts carbon emissions within Warrington's territorial boundary, reflecting the latest annual greenhouse gas emissions data published by the Government's Department of Energy Security and Net Zero.

Warrington Carbon Budget

The Warrington Climate Emergency Strategy adopts the Tyndall Centre's recommended carbon budget for the borough. This details an emissions reduction of 13.7% is needed every year from 2020 to stay within a Paris Agreement aligned target.

In 2020, Warrington's territorial carbon emissions were 1,319.6 ktCO₂e. This is a significant drop compared with the previous year (1,459.4 ktCO₂e), largely due to the impact of the COVID pandemic restrictions.

In 2021 emissions rose again to 1,439.7 ktCO₂e, as lockdown restrictions lifted. This rise means Warrington is currently overspending on its carbon budget. The chart below shows the breakdown of emissions by sector.



LULUCF - land use, land use change & forestry



Commission's recent activities

It was satisfying to publish the new Warrington Climate Emergency Strategy and publicly launch it with an event in Golden Square in September 2022. The Commission's focus is now on encouraging wider action in support of the strategy. To this end, it has been encouraging to see the council respond by developing a new action plan in support of the wider strategy which it adopted in 2023.

The climate challenge demands a much a wider response. To reflect this the membership of the Commission has itself been widened. It now includes a range of partners from across the borough including the NHS, Cheshire and Warrington Local Enterprise Partnership (LEP), Culture Warrington, University of Chester, Warrington & Vale Royal College, Cheshire Wildlife Trust, and Natural England. All partners are doing their own work in this important area and join the council, Warrington Community Energy, and Warrington Chamber of Commerce on the Commission.

The Commission's workplan is now being directed towards wider engagement across Warrington, to encourage others to translate the strategy into action. Whilst the council's new plan is a welcome early development, it will also be up to local businesses, community organisations and individuals to play their part as far as they can too if we are meet our obligations locally.

To help achieve this, the Commission is now looking to organise events across the town to help spread the message. There are many actions that can be taken by individuals, some without any expenditure and which can often help save money. In a cost-of-living crisis, such actions clearly make a lot of sense.

To encourage wider engagement the Commission has worked to increase its communications activity. This has included the launch of a social media presence including Facebook, LinkedIn, and Twitter accounts, as well as establishing webpages for the Commission where key documents can be

accessed, including the minutes of our meetings. It is planned that this will be expanded further with a new website created to share information.

At the time for writing, we have been finalising preparations for the first ever local Climate Emergency Forum to take place in Warrington. This is due to take place in November/December 2023 and will consist of a number of climate related events to encourage conversation, learning and action. We hope this becomes an annual programme.

To illustrate how different organisations are helping to bring the local strategy alive, the following section gives a brief overview of recent work reported to us:

Warrington Borough Council

- Adopted a climate and sustainability policy confirming support for the new strategy and the boroughwide emissions objective to be near zero by 2041.
- Developed and adopted a Climate Emergency Action Plan setting out its planned actions as an organisation. including those in support of the strategy
- Adopted an EV strategy and developed a new EV charging facility at the forge car park along with the launch of new on street chargers in central Warrington.
- Completed work on the new bus depot project which is now occupied by Warrington's Own Buses ahead of the replacement of its diesel bus fleet with 105 electric buses due to start in Spring 2024.
- Introduced a new in-house carbon literacy training course for staff and councillors leading to more than 200 people undertaking training. The council has gained bronze accreditation in Carbon Literacy and is now halfway towards its goal of attaining silver status.
- Secured funding towards an innovation project - Warrington Carbon Culture - to progress carbon literacy and enhance its impact.



- Secured funding towards the replacement of end-of-life gas boilers with ground source heat pumps at both the Town Hall and Walton Hall.
- Developed a joint solar group buying opportunity along with neighbouring Cheshire local authorities.
- Operates three solar farms which now generate more than the council's total requirement for electricity.
- Worked closely with Warrington's Own Buses to develop and implement a "Better by Bus" scheme that is attracting increasing numbers of passengers and reducing car travel as a consequence.

Culture Warrington

 Has committed additional resource to sustainability issues and to the Sky Garden Project – a community garden on the roof of Golden Square. Part of this will involve planning 2024 public engagement with the environment through adult mental health & wellbeing courses and increased school participation. A team of local volunteers has also been recruited to work in the Sky Garden.



- Is reviewing and updating its climate change and sustainability policy this year, using best practice, guidance and support from the sector leader 'Julies Bicycle'.
- Is offering board members and the senior management team Carbon Literacy training in December 2023 as part of a wider Museums Development NW agenda around Carbon Literacy Action day/ COP28.
- Is exploring funding to add a weather data collection system and bee hives to the Sky Garden to monitor conditions in a green area within an urban centre.
- Is exploring Food Literacy Network connections with Warrington Borough Council to increase local access to free, fresh produce to reduce food carbon miles and improve public health and wellbeing.
- Was successful in securing Arts Council 'Wild Escape' funding to deliver a climate-themed arts day.



 Organised a family friendly programme in Queens Gardens/Parr Hall, with six drop-in workshops led by local artists seeing over 800 children and their families attend. The workshops were themed around being kind to our planet and included; Upcycling clothing, making your own plant pot using recycled materials, pollination zines and cardboard structures. Outside, a life-size inflatable sperm whale with engaging theatre performances and a new aerial dance piece for early years called Sunflower was presented.



- Organised the "Wake me up before you DoDo" museum exhibition: Our planet is home to an amazing variety of creatures but many of them are at risk of extinction. This new family friendly exhibition allowed children to find out about the importance of biodiversity and what we can do to help. The exhibition featured sculptures by creative recycling artist Val Hunt, paintings by young CBEEBIES conservationist Aneeshwar Kunchala alongside items from the museum's collection.
- Will be looking to expand the number of community gardens (which is currently ten) it works alongside during the coming year.



Warrington Community Energy

- Has worked in partnership with Warrington Disability Partnership to submit a joint grant funding bid under the Energy Redress Scheme, which was successful, and has led to the employment of four energy advisors who have enabled the launch of a new scheme providing energy advice across Warrington.
- Has provided capital grant funding to install LED lighting at the Centre for Independent Living and work is underway to install a 39.13kW solar PV system on the centre's roof.

Lymm Community Energy

 Secured funding from the Rural Community Energy Fund to assess the feasibility of constructing and operating a 5 MW solar farm. The preliminary analysis shows that the farm could produce enough annual electricity for about 1,470 homes saving 1,130 tonnes of carbon dioxide emissions each year.

Warrington and Vale Royal College

- Has developed a sustainability road map which outlines its actions and commitment to initiatives on its journey to reach net zero emissions.
- Has been successful in securing external funding sources to invest in energy efficiency, sustainability and biodiversity.
- Is installing solar panels with a 435 kW array across the college's 6 buildings. This will generate about 325,500 kWh of electricity per year, which will be equivalent to 27% of the College's electricity consumption.
- Installed new building management systems controlled centrally to reduce energy usage.
- Installed LED lighting throughout the site both external and internal.
- Has created areas to attract wildlife including bird boxes, wildflower garden and native fruit-bearing trees.
- Has adopted an highly innovative 'digital first' culture embracing new and flexible ways of working.



University of Chester

- Has 126 students and staff certified carbon literate.
- Had its 2021 Carbon Baseline for scopes 1 and 2 emissions externally validated
- Is working to ensure the university's targets and decarbonisation journey align with the Paris Agreement.
- Ran an event bringing the arts and sciences together to tackle climate change that has earned the university and Storyhouse a finalist place for a <u>national Green Gown award</u> in the category of creating impact.
- Developed the `Let's Talk Transport' group which provides a space for staff and students from across the institution to voice their opinions on sustainable travel provision at the University and inform change.
- Is increasing biodiversity at Remond House in the town centre of Warrington, by creating wildflower planting schemes to create space for nature.

Cheshire Wildlife Trust

- <u>Transformed Greenwood Community</u>
 <u>Centre</u>, providing and delivering a series of Nature Tots sessions. The Trust are also helping residents set up their own groups to maintain the space.
- Has supported six school grounds renovations, installing new ponds, raised beds, planters, orchards and meadows for children to access across Warrington. These were Dallam, Our Lady's, Brook Acre, St Andrews, St Ann's and St Alban's.
- Is working with four schools in Warrington to deliver teacher training on their school grounds to improve their confidence teaching outdoors and supporting them through the steps to become part of the National Education Nature Park.
- Cobbs Infant school, Dallam and St Philip Westbrook Church of England Primary School have joined the new Wilder Schools Network, which gives them priority access to funded projects, a half-termly newsletter with seasonal resources and advice for outdoor learning, school grounds improvements and free teacher training.

Cheshire and Warrington Local Enterprise Partnership (LEP)

- Has been working with local authorities and the Department for Energy Security and Net Zero funded North West Net Zero Hub to coordinate a Cheshire and Warrington climate group to share good practice and commission joint activities This builds on the work of the recent Sustainable and Inclusive Growth Commission and informs the development of the Cheshire and Warrington Sustainable and Inclusive Economic Plan.
- Work underway or complete includes:

 a feasibility study into the decarbonisation of agriculture via anaerobic digestion; a study into how to deliver the £30bn investment case for the NW industrial decarbonisation cluster plan and a housing decarbonisation and retrofit study to inform strategy and investment planning.
- Supports the Net Zero North West and the North West Hydrogen Alliance.

NHS Warrington

Local NHS Trusts have been given the following carbon reduction goals:

- Net zero carbon by 2040 for the emissions controlled directly – known as our Carbon Footprint, with an 80% reduction by 2028-2032.
- Net zero carbon by 2045 for those emissions we can influence – known as our Carbon Footprint Plus, with an 80% reduction by 2036-2039.
- Our local Trusts (Bridgewater, Mersey Care and Warrington and Halton Hospital) have created an action plan to deliver these goals with a particular focus on:
 - Estates and Facilities
 - Travel and Transport
 - Workforce and Leadership
 - Digital Transformation
 - Sustainable models of care



Progress in each of the trusts includes:

Bridgewater Community Healthcare

- Lighting being moved to LED and windows being replaced.
- Electric vehicles (EV) have been introduced and EV charging infrastructure is a focus.
- Digital strategy supporting changes to models of care to increase home based working and reduce travel.
- Waste segregation and process management.
- Green electricity contracts i.e. generated from green sources. REGO certified
- Only recycled paper procured for printing.

Warrington and Halton Hospitals

- Significant building upgrades including retrofitting insulation.
- Staff led initiatives to identify areas of improvements / new models of care.
- Introduced sustainable quality improvement training including a robust methodology and a standard approach to measuring impact.
- Green space and biodiversity:
 - created natural spaces throughout the site
 - added bird boxes throughout the site
 - introduced a gardening group for staff to encourage them to grow their own vegetables.

Conclusion and next steps

The Commission is pleased that all the foundations are now in place to make progress, but it is clear that we need to go faster and further.

Widening engagement in the community and with businesses will be key to achieving local objectives. Our forthcoming Climate Forum will be an important part of this, but we will need to ensure that there are carbon literate residents across the borough in a range of organisations who will be able to help spread the messages and progress action.

The Commission is developing a new communications network and will now be producing a regular e-bulletin that residents can subscribe to.

In closing, it is satisfying to see so many actions taking place across the borough, but if we are to achieve the goals we have established, we need every resident, every community group and every business to play their part too.

The Commission's strategy provides a great starting point to doing this as it indicates a wide range of potential actions that can be taken.

Make your pledge to take action by putting together your own action plan. The future of our children and grandchildren depends on this.

You can follow us on social media at:

Linkedln: Warrington Climate Emergency Com-

mission



Warrington Climate Emergency Commission Annual Report 2023



WARRINGTON CLIMATE EMERGENCY COMMISSION

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