BURWELL PARISH COUNCIL CLIMATE EMERGENCY ACTION PLAN

1. INTRODUCTION

From both personal experience and from news coverage, we are all aware of the disturbing changes in recent weather. That perception is confirmed by the meteorological data: the five warmest years in the UK since 1884 include 2022, 2023, and 2020, and the ten warmest years have all occurred since 2003.

The international situation is equally worrying. In 2023, two unwelcome records were set: it was the planet's warmest year on record, and Antarctic sea ice coverage dropped to its lowest ever level. *

*"After seeing the 2023 climate analysis, I have to pause and say that the findings are astounding," said NOAA Chief Scientist Dr. Sarah Kapnick. "Not only was 2023 the warmest year in NOAA's 174-year climate record — it was the warmest by far. A warming planet means we need to be prepared for the impacts of climate change that are happening here and now, like extreme weather events that become both more frequent and severe".***

Burwell Parish Council (Burwell PC) recognises the existence of a global climate emergency and acknowledges that we must act now to reduce our carbon footprint. Burwell PC first agreed a climate action plan in February 2020, and this revised version builds on that foundation.

The 2008 Climate Change Act committed the UK government, by law, to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050. That commitment has resulted in legislation and other initiatives that will transform the entire British economy, particularly manufacturing, construction, travel and power generation. Burwell PC is committed to playing its part in that transformation and has set itself the goal of becoming a carbon neutral parish council by 2030.

The purpose of this document is to explain the Council's position on the climate emergency and to outline its action plan up to 2030. It will be used by the Parish Council as a reference document when making its annual and five year plans.

** https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2023/2023-was-second-warmest-year-on-record-for-uk#:~:text=The%20five%20warmest%20years%20in,of%202014's%209.88%C2%B0C.*
*** https://www.noaa.gov/news/2023-was-worlds-warmest-year-on-record-by-far#:~:text=Earth's%20average%20land%20and%20ocean,0.15%20of%20a%20degree%20C).*

2. HOW WILL WE BECOME A CARBON NEUTRAL COUNCIL?

What does Carbon Neutral mean?

Burwell Parish Council is committed to being carbon neutral by 2030, which means…..

> ***…… carbon emissions arising directly from Parish Council activities will be reduced as much as possible and any remaining emissions will be offset locally. The target does not include the village as a whole.***

Examples of offsetting could include the planting of trees and hedges.

What have we achieved so far?

Burwell Parish Council has:

- Acknowledged the climate emergency and created an action plan
- Established a Climate Change Forum that brings together Parish Councillors and representatives from Burwell Environment Group, Wild Burwell, Spring Close Management Group and Pauline's Swamp Trust
- Worked with the local groups above to plant trees to manage the environment for increased biodiversity and climate change resilience
- Converted the Gardiner Memorial Hall's heating to an air source heat pump, installed solar panels on the roof, and upgraded the insulation
- Set up regular Repair Cafes in the village, run by volunteers, reducing the need for landfill, and remanufacturing

In addition, Burwell PC has applied pressure to influence other organisations to act with climate change in mind. For example, we lobbied our MP to support onshore wind farms, requested house builders to favour air source heat pumps over gas boilers, and started negotiations to secure public charging points for electric vehicles. We also supported the campaign to persuade Cambridge County Council to no longer invest its pension funds into fossil fuel companies.

What sources of carbon emissions is the Council responsible for?

Burwell PC can reduce its carbon footprint by:

- Reducing energy usage in its premises: the Gardiner Memorial Hall, Mandeville Hall and Jubilee Reading Room
- Choosing a low-carbon energy provider
- Reducing emissions from vehicles and other equipment used for Council business

Subcontractors working for the Council are not under its control, but there is scope to support them in reducing their own carbon footprint.

Action Plan for Burwell Parish Council to become carbon neutral by 2030

1. Establish the Council's carbon footprint as of February 2020 to establish a carbon emissions baseline against which progress can be monitored
2. Identify and quantify potential carbon reduction measures
3. Select the most effective measures and create a roadmap
4. Implement the roadmap
5. Monitor the Council's carbon footprint and report on progress annually
6. Investigate offsetting and implement as appropriate

3. CLIMATE EMERGENCY CONTINGENCY PLANNING

In 2023, Burwell PC began work on a Community Emergency Plan. When completed, it will cover the local response to a wide range of emergencies, such as another pandemic, an extreme climate event or a serious pollution incident. It will complement the emergency plans already in place at higher levels of government (district, county and national).

The plan will include flooding, storms and drought, which we know are becoming more frequent due to climate change. There is also scope for improving the village's ability to cope with other aspects of climate change such as hotter summers. Burwell PC will liaise with other organisations on initiatives to improve, for example, the insulation and natural shading of houses.

4. REDUCING BURWELL'S CARBON FOOTPRINT

The role of the Parish Council

The first part of this plan established a carbon target for the Parish Council's own operations, but the aim of reducing the carbon footprint of the village itself is a completely different matter.

It is important to make clear that the Parish Council doesn't have the authority or funds to make Burwell a carbon neutral village; neither does it have the resources to monitor the village's carbon footprint. The transition will be mainly driven by government policy in the areas of energy, agriculture, biodiversity and green infrastructure (e.g.for electric vehicles). Product innovation will also be important, making heat pumps and other low carbon technologies more affordable. *Nevertheless, there is a great deal that the Parish Council can influence at a local level through education, communication and leadership.*

What do we know about Burwell's carbon footprint?

No specific data is available to quantify the carbon footprint of individual towns and villages. To fill this gap, online statistical models* are available to help anyone interested in the main drivers of carbon emissions for a specific location. The table below provides the picture for Burwell.

Estimated average carbon footprint of Burwell residents per person per year

Rank	Category	kg CO_2 per person	% of total
1	Flights	2180	20%
2	Cars (13%), vans (3%)	1745	16%
3	Fuel: gas (10%), elec (5%), other (1%)	1699	16%
4	Food and drink	1677	16%
5	Recreation	1419	13%
6	Consumption of goods	1328	12%
7	Consumption of services	764	7%
	Total	**10812**	**100%**

It is important to note that these figures are estimates and averages, so there will be wide variations from person to person. This is can be clearly seen in the figure for flying, since we know that many residents never travel by air. Burwell is not unusual – the top four categories in the table above would be the same for many communities in the UK.

Individual carbon footprints can be a sensitive subject because a person's ability to generate emissions is linked to their income level and how they choose to spend their money. Less affluent people have fewer choices because so much of their income is spent on the basics of life.

It would be inappropriate for the Parish Council to try to lecture residents on their travel plans or other activities, but having declared a climate emergency, it makes sense to publicise any information that helps parishioners make informed choices.

* *https://www.carbon.place* *Morgan, Malcolm, Anable, Jillian, & Lucas, Karen. (2021). A place-based carbon calculator for England. Presented at the 29th Annual GIS Research UK Conference (GISRUK), Cardiff, Wales, UK (Online): Zenodo.* ***http://doi.org/10.5281/zenodo.4665852***

Flights

Emissions from aircraft have a greater impact in terms of greenhouse gases per passenger mile than any other form of transport*, which is why, despite many people never, or rarely, flying, it is the largest single contributor to the carbon footprint of the village. For those of us who do fly, choosing to fly a little less would substantially reduce our personal carbon footprint.

Local transport

Burwell PC recognises the urgent need to improve public transport and to provide safe cycle routes and pavements. In addition to reducing carbon emissions, those changes will bring improved physical and mental health and better safety on the roads.

The Council will work with local environmental groups, the District and County Councils and other bodies to develop a transport strategy that delivers:

- Good local bus services with connections for onward travel
- Quicker transition to electric vehicles - by installing charging points in Burwell [using government grants and commercial partners where possible)
- Car sharing schemes
- Cycle paths and inter-connected cycle routes that enable residents to cycle safely
- Improved footpaths that are safe and accessible for pedestrians and users of wheelchairs and mobility scooters

Energy

Rapid progress is being made in this area, with wind and solar providing more than 40% of UK electricity generation in 2023**. To help residents and local businesses lower their energy usage, Burwell PC will:

- Look into partnerships with energy providers and government to co-develop local renewable energy generation such as onshore wind and solar power (reducing energy costs for the community)
- Encourage all new-builds and conversions to exceed current energy performance standards
- Inform residents about government grants and other initiatives to replace gas boilers with heat pumps and other low carbon heating systems
- Lobby for the acceleration of the national transition to renewable energy
- Support energy efficiency measures such as smart meters and improved home insulation

* *https://ourworldindata.org/travel-carbon-footprint*

** *https://www.nationalgrid.com/stories/energy-explained/how-much-uks-energy-renewable*

Food and agriculture

The impact of food and agriculture on the global environment and climate is a well-studied subject. The quotes below come from The Worldwide Fund for Nature (WWF) publication "*What's in store for the planet: the impact of the UK shopping basket on climate and nature- 2022" **

"The global food system is responsible for more than 30% of total climate change emissions and 60% of biodiversity loss".

"Currently, the most impactful action we can take to decrease the environmental footprint of our diet is to rebalance our protein consumption toward plant-based sources (such as beans, legumes, nuts) and to eat less animal-sourced foods (meat, dairy and eggs). This is because the current animal agriculture system leads to more direct greenhouse gas emissions and takes up far more land area (in particular for feed production) than plant-based alternatives. Recent research found that if everyone were to adopt a plant-based diet, the amount of land used for agriculture would decrease by 75%: this clearly demonstrates the potential of such a change."

The challenges can seem overwhelming, but it is possible to make a connection between global problems and local solutions. In the UK, supermarket and convenience stores dominate the £222 billion grocery market; (in fact other retailers account for only 4% of sales)**. A positive sign is that five leading UK supermarkets*** , who together account for more than half of UK grocery sales, have pledged to work closely with the WWF to achieve a 50% reduction in the environmental impact of UK shopping baskets by 2030. In practical terms this means, for example, achieving a 50/50 split between plant and animal protein sales by 2030.
It is the shopping habits of Burwell residents that offer the most potential for change. By choosing to buy healthy and sustainable food, Burwell residents can encourage major retailers to do more to protect the environment.

The 4% of food supplied by independent retailers is also important, amounting to £8 billion annually. Residents can save food miles and consume food of known provenance by supporting the Farmers' Market and other local growers. There is also the option to grow your own food, either at home or by taking on an allotment (see Burwell Parish Council website for further information).

* *https://www.wwf.org.uk/sites/default/files/2022-11/WWF-Whats-in-Store-for-our-Planet-the-Impact-of-UK%20Shopping-Baskets-on-Climate-and-Nature-2022-v1.pdf*

** *https://www.kantar.com/uki/inspiration/fmcg/2022-wp-big-four-line-up-changes-as-grocery-price-inflation-accelerates-again*

*** *Signatories are: Co-op, Marks and Spencer, Sainsbury's, Tesco, and Waitrose.*

Local business

Local business can play an important part in climate change adaptation and mitigation by:

- Changing to heating systems that use renewable energy and improving the insulation of their premises
- Encouraging employees to travel to work by walking, cycling, or public transport to reduce air pollution, congestion and carbon emissions
- Installing water-saving devices and promoting water conservation
- Offering incentives or discounts for customers who bring their own reusable bags or containers to reduce plastic waste
- Donating a portion of profits to local environmental causes or providing grants to support green projects in the community.
- Engaging in partnerships with environmental organisations to collaborate on climate change initiatives

Environmental protection and biodiversity

Climate change directly impacts the environment globally and locally. Burwell's Climate Change Forum brings together representatives from the Parish Council, Burwell Environment Group, Wild Burwell, Spring Close Management Group and Pauline's Swamp Trust. The Forum's shared aims include:

- Planting diverse native tree species and protecting mature trees to increase carbon sequestration and enhance biodiversity
- Creating wildflower meadows and other areas to support bees, butterflies and other pollinators
- Campaigning to reduce pollution in local rivers
- Managing meadows, amenity land, grass verges, hedgerows, marshland and wooded areas for the benefit of biodiversity and wildlife habitat
- Developing links with local farmers to support the transition to sustainable agriculture
- Looking for land and funding to create more local woods

Burwell Community Tree Nursery
Priory Meadow

Waste and resources

The waste we all generate contributes to climate change and environmental degradation through increased greenhouse gas emissions, resource depletion, pollution, and habitat destruction. Fortunately, much can be done to reduce waste and its consequences:

- Continue to support Burwell Repair Cafe [Repair Cafes match people who need items repaired with people who like fixing things]
- Urge individuals and businesses to recycle as much as possible using roadside collections and at recycling centres

- Lobby for additional recycling services for Burwell, particularly for electrical goods
- Educate the community about the importance of recycling
- Encourage the use of reusable products and discourage single-use items to minimise the generation of waste.
- Develop environmental consciousness by supporting local initiatives such as litter picking and clothes swapping events

A success story

Burwell Parish Council undertook the refurbishment of the Gardiner Memorial Hall as an important part of its Climate Change action plan. Completed in 2022, the project was a double win: it slashed the building's carbon emissions and also provided the village with a fully modernised community hall.

The reduction in electricity usage was remarkable, falling from 72650 kWh per year before the refurbishment to 14670 kWh per year after completion. In 2023, the 80% reduction in electricity consumption saved 13 tonnes of carbon emissions *.

Solar panels on the roof of the Gardiner Memorial Hall, producing electricity at a rate of 5 kWh on a cold winter's day.

⁎ *https://www.itpenergised.com/new-uk-grid-emissions-factors-2023/*