Bishop's Castle Climate & Ecological Action Plan

Climate Crisis!
Insect apocalypse!
Wildlife loss!
De-forestation!

What can we do about it?

www.bishopscastletowncouncil.gov.uk/climate-action
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www.facebook.com/communityplan

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Bishop's Castle Mayor's Foreword

Bishop's Castle's Town Council has no doubt that the Climate Emergency should underpin every decision we make and every action we take. The aim of this document, our *Climate & Ecological Action Plan* , is to encourage our town and its surrounding hinterland to achieve carbon neutrality. This will need the support of us all: our families, our schools, our businesses, our farms, our community groups, and our visitors, to take every opportunity to tackle the issues that affect the future of our planet, our children and our wildlife. All of us can make a difference. Use your voice, your devices, your lifestyle choices or your time and talents. Our collective action must meet the urgently needed social and environmental change needed. Let the action from our small rural community be a demonstration to the Government that we mean business. We need them to support us and all other Welsh Marches communities to urgently reduce our carbon footprint and our impact on nature. For the sake of our childrens' and the planet's future I commend this Action Plan to you.

Grant Perry
June 2020

Introduction

We already know the planet is facing a life-threatening climate and ecological emergency. While Bishop's Castle may be a *relatively* good place to be for the next 20-30 years, it may also be affected in that time by changes to the Gulf Stream, melting ice caps, other serious climate changes, or the critical loss of pollinator insects with the risk of severe flooding, power outages and food supply problems.

More widely, the UK is being affected – and will inevitably be further affected – by changes elsewhere. Large-scale, climate-led population upheavals and migration will almost certainly cause significant political, economic and social disruption (think of the problems caused by relatively small-scale migration from the Middle East in the last few years). Climate-related crises (drought, forest fires, flooding, crop failures) elsewhere in the world could have serious knock-on effects. This kind of disruption could well occur in the next 2 decades.

Throughout this document we have included ideas for initiatives for individuals and families, community groups and the Town Council. Two responses are needed from all of us as individuals/families/communities and from local authorities:-

- a) Mitigate the worst effects of the emergency. We all need to reduce our impact on climate and the environment in the hope that we can, collectively, avoid the most severe effects of climate change, environmental degradation and species loss.

- b) Adapt, build resilience and prepare for major change. We all need to prepare for inevitable social, economic and political change. In building resilient communities to face problems in the future, we can also build thriving communities that work better now.

This paper sets out actions that the people of Bishop's Castle led by itsTown Council [BCTC] can take in response to the climate and ecological emergency that was declared by the BCTC in September 2019. These actions are designed to reduce our carbon emissions and our impact on the climate and environment and to help build a stronger, more resilient, thriving local community.

These proposals are not complete and will remain under continuous review as conditions change and as we consider priorities and time-scales. For example, time and resources have not allowed the production of chapters on issues such as Transport and Health.
(Nb: the Bishop's Castle Community Partnership's Sustainability Working Group are exploring the installation of an Electric Vehicle charging point).

Section 1: Town Council initiatives

To begin to address these issues, Bishop's Castle Town Council [BCTC] will focus its efforts on the following three approaches:-

1) Put our own house in order;
2) Lead and support action by the community;
3) Work to bring about change at Shropshire Council level.

The Town Council will be supported in implementing this plan by the *Bishop's Castle Community Partnership*, in particular, its *Sustainability Working Group* [SUS WG].
Some outline proposals for getting started appear on the following pages. They draw on and combine suggestions made by other councils and organisations. These are followed by sections which focus on specific themes and which draw on input from a number of local residents. Finally, it should be noted

that this report is only the first of a series. It does not address all of the themes that are needed to provide a comprehensive set of proposals.

a) Mitigate the worst effects of the emergency

BCTC is limited as to what it can do as a council to reduce carbon emissions. As a result it will focus on supporting the local community and encouraging change at county and, where feasible, national level.

1. Put our house in order. Continue to support local planning applications that minimise carbon emissions and other impacts on the environment/climate and actively support local farmers in their efforts to adapt to climate change and develop forms of regenerative agriculture.

i) BCTC will agree and publish a general policy on how it will respond in future to planning applications and other schemes (transport/highways/sewage) – for example, to ensure that new applications do not increase carbon emissions in the town.

ii) BCTC will actively support small and large planning applications for new renewable energy schemes in the area, *provided they meet rigorous low-carbon standards*.

2. Lead and support action by the community. Inform, educate and encourage everyone in the town and surrounding area to reduce their impact on the climate and the environment, with advice on lifestyle choices, etc.

iii) BCTC will commission the BC Community Partnership's SUS WG to get an idea of our town's carbon footprint and to propose targets for the town to reduce its collective carbon emissions.

iv) BCTC will commission the SUS WG (in liaison with neighbouring councils and civic groups) to create a local 'Green Guide 'which will include advice for residents on reducing their carbon footprint and a guide to local suppliers and resources. This 'Green Guide' will serve as an action list and resource for residents. It will need a careful assessment of how to apply current information on food consumption and production, travel, heating, etc. to the particular situation in our area.

(cf. Shrewsbury 'Green Guide')

3. Work to bring about change at county level. Working with the other Town and Parish councils in South Shropshire BCTC will use its influence to achieve changes in Shropshire Council's policy and practice on public transport, energy efficiency, pollution, verges and use of chemical insecticides, etc.

v) BCTC will press for changes to ensure that *all* planning applications are amended to minimise carbon emissions and other impacts on the environment/climate,

vi) BCTC will ask Shropshire Council to audit and report its current carbon footprint and year-by-year reduction targets.

vii) BCTC will encourage Shropshire Council to *set and actively enforce stringent* standards on all planning applications.

viii) BCTC will encourage as many Shropshire schools as possible to participate in one of the range of Green school projects (which offer support and resources for students and teachers to work together on whole-school projects to reduce the school's carbon footprint and increase environmental awareness).

b) Adapt, build resilience and prepare for major change

1. Put our house in order. Use our communications to make the Town Council a focal point for the community.

ix) BCTC's existing Town Council web-site will be used to lodge information about the CAP activities (including this plan) and the TC will encourage residents to use it and the BC Community Partnership's Facebook page. These will be used to share information, resources, ideas and news; to offer help and lifts; to organise bulk purchases, etc. This will be a current community resource and an active preparation site for more self-sufficiency/resilience in the future.

x) BCTC will commission the SUS WG to undertake a *Climate and Environmental Impact Assessment* to identify the range of possible impacts on, and opportunities for, our community and prepare local scenarios.

2. **Lead and support action by the community.** Help set up and support local farmers and new initiatives to grow food locally, encourage car-sharing, support wildlife, build links between farmers and others, etc.

xi) BCTC will support community-led efforts to reduce and, eventually, eliminate the use of chemical pesticides and insecticides in the parish.

xii) BCTC will actively support projects where the community/residents seek to buy/repurpose land/field(s) in the parish for use as allotments/orchard/forest garden.

3. **Work to bring about change at county level.** BCTC **will** use its collective town/parish council influence to press Shropshire Council to look beyond carbon control measures and put in place policies and practices on food, transport, housing and employment that help to build sustainable, self-reliant local communities, create sustainable and regenerative agricultural practices at landscape level, and build a better co-ordinated green transport infrastructure for residents and tourists.

xiii) BCTC will encourage Shropshire Council to join the Rapid Transition Alliance (a coalition of councils and other organisations working to make rapid, transformative changes to prevent climate breakdown and create the conditions for people to thrive together).

xiv) BCTC will press Shropshire Council to stop using neonicotinoid pesticides which are responsible for serious decline in the insect population (including bees and other pollinators) AND glyphosate herbicides (like Roundup – carcinogenic and dangerous to the insect population). [NB: currently Shropshire Council uses both.]

xv) BCTC will encourage Shropshire Council to disclose all its loans and investments, then press it to: 1) implement an ethical banking and investment policy and, 2) divest from all companies and funds that extract, **process** or profit from fossil fuels.

xvi) BCTC will press Shropshire Council to support and implement – through its own obligations, actions and influence externally – sustainable economic growth (i.e. an approach that sustains the local economy and ecology, conserves natural heritage, resources and biodiversity and results in minimal carbon footprint). This should include: 1) first, defining and then supporting sustainable tourism and, 2) implementing an effective and efficient local transport network for residents and tourists alike.

xvii) BCTC will encourage Shropshire Council to initiate a county-wide project to improve management of the county's rivers/streams to reduce pollution, improve water quality, increase biodiversity and limit the impact of flooding.

xviii) BTCT will press Shropshire Council to launch an Ecological programme to support and extend sustainable and regenerative agriculture, reduce pollution and reliance on chemical pesticides, restore soil quality, grow more food locally, and increase biodiversity.

Section 2: Personal initiatives

The UK government is legally committed to reduce net carbon emissions to zero by 2050 and local councils (including Shropshire Council and Bishop's Castle Town Council) have formally recognised that a Climate and Bio-diversity Crisis exists and are committed to reaching net carbon zero by 2030. While the most important carbon reduction measure will have to be taken by central governments, individuals can make significant contributions which will, in many cases, also save them money. The table below is an an example of a personal plan that could be used by individuals to make such contributions. (The first item in the table isn't a direct carbon-saver but collecting the information needed will give the user a good idea of where action would be most productive and it's best to do this early on.)

ITEM	ACTION	COMPLETION DATE (ENTER YOUR CHOICE)
1	Do a household energy audit and calculate the household carbon footprint (see overleaf for useful websites)	
2	Switch to a green electrical supply (100% renewable source)	
3	Reduce holiday flying to nil/once* per year (*delete as appropriate	
4	Reduce household energy consumption (see Note below)	
5	Install Solar PV and/or Solar thermal panels	
6	Don't eat beef or lamb more than one/twice* a week (*delete as appropriate)	
7	Don't cook a chicken more than once a fortnight	
8	Reduce car use, share car journeys and drive more economically; walk, cycle or use public transport more	
9	Reduce purchases of new clothing	
10	Buy local, seasonal produce whenever possible	
11	For people with wood-burners store wood & burn stoves efficiently [for guidance see http://www.lightfootenergy.org.uk/wood-the-renewable-fuel/#]	
12		
13		
(Add more items in the blank rows to suit your particular circumstances)		

Note: Below is a selection of ways to reduce household energy consumption
Improve insulation, fit draught excluders, turn central heating thermostat down, wear warmer clothing, use tumble driers less, shower instead of having baths, switch off lights and heating in unoccupied rooms, fit LED lights, don't leave devices on standby, etc

Home Energy Audits and Household Carbon Footprint Calculations

A **Home Energy Audit** involves looking at all the ways your building uses (and loses) energy with a view to identifying those which most affect the building's energy efficiency. Ideally, the audit should be carried out by a qualified energy assessor but a DIY survey, giving a less comprehensive result, is easy and quick to do. A Home Energy Audit is descriptive and little or no calculation is needed. Here are two useful websites which explain what's involved:

https://www.expertsure.com/ultimate-guide-to-energy-efficient-home

https://homeheatingguide.co.uk/energy-efficiency/what-is-a home-energy-audit

A **Household Carbon Footprint Calculation** involves identifying all household activities which result in the consumption of carbonaceous materials and calculating the carbon content of each item to get a figure for. the total amount of carbon used per year - "the household carbon footprint". The calculation will be as accurate as the available information permits, but will inevitably require making some assumptions. Two useful websites are given below – the first one is far simpler to use, but the result is necessarily not very reliable.

http://footprint.wwf.org.uk

https://www.resurgence.org/resources/quickcalc.html
This gives access to a quick carbon calculator, but also contains the link to the more detailed "Full" calculator.

Section 3: - Food and Water –

Supporting local food production
An important part of our journey to carbon neutrality is around food – the food we eat, how and where it is produced, and how it gets to our table. Agriculture contributes substantially to our total carbon emissions, but most of the food we eat comes from much further afield, contributing to transport-related carbon emissions too. There are additional problems around how food is grown and produced, and the impact that agriculture can have on soil, water, and wildlife. When we consider that 10 million tonnes of food is wasted nationally every year, while some people in our constituency live in poverty, it is clear that food offers the potential for transformational change.

Whilst we have thriving Farmers' Markets in Bishop's Castle and Lydham, we need to do more to localise food production: making local food accessible and affordable to local people, through community growing initiatives, community support for agriculture, and making use of surplus food that would otherwise be wasted. In growing food together and supporting our local producers, we also 'grow' our community's cohesion and, importantly, local resilience. Local food projects will also help facilitate a just transition to a zero carbon future, in which no one gets left behind.
The *Committee on Climate Change* calculated that agriculture in the UK is responsible for 10% of economy wide emissions. However, direct emissions from agriculture are only part of the picture. To understand the full impact of food and farming, we have to account for the contributions of the food system in:-

- Processing and packaging
- Waste
- Transportation and Refrigeration (When estimates are extended to include emissions from the wider food chain, they increase to around 20% of UK emissions.)
- Land-use change overseas- the deforestation and cultivation of pasture for production of commercial commodity crops and animal feeds that the UK consumes. (Up to 70% of deforestation results from growing commercial food crops, such as soy, maize, sugar cane and palm oil). Such food is often produced to lower worker standards, and has impacts on the individuals and communities where food is produced.

What we can do as a Community?

i) To find out more about our local food needs we should carry-out an ***'Audit of Food Choices'***.
A questionnaire circulated in the Town Newsletter, with an on-line equivalent, could be used to identify food choices local people make. This might include dietary choices, preferences for organic food, buying locally produced products, reliance on pre-prepared meals, supermarkets (including home delivered), growing your own, eating out/take a way etc. (See draft questionnaire at Annex 1)
It would also be useful to understand what barriers may prevent an individual from adopting a lower Green House Gases [GHG] approach to food choices: such as cost, availability, lack of confidence in preparing unprocessed foods.
ii) To encourage and enable us to buy locally-grown food we should produce a ***Directory of Local Producers*** *and Suppliers.* This can be circulated and kept up-to-date as part of the proposed 'Green Guide'.
iii) Set-up an online local **'Produce Marketplace'** to serve as a platform from which to inform our community about how their food is grown and produced, to celebrate seasonal produce and local producers that have adopted organic, regenerative agricultural practices.
iv) **Improved routes to market**. Explore how to provide more frequent outlets for producers, which would create a more reliable income stream and encourage more local producers to sell locally rather than out of the region.
iv. Introduce a **Community Fridge** to provide a store for surplus food
v) Set-up a **Community Composting** facility
vi) Establish a **'Pick & Share' team** to help pick surplus fruit and vegetables for sharing and to prevent waste.
vii) Encourage publicly-funded organisations to keep public money circulating in the local economy by supporting local and community-owned food businesses.
viii) Develop a **cookbook** of favourite, seasonal recipes using locally available food.

TO DO:-

- Establish a Local Food Group to pursue food resilience (see '*Marches Grow Local* on the Mid-Marches CLT web-site <*https://middlemarchescommunitylandtrust.org.uk/*>)
- Talk to the Town Hall about increasing the frequency of Farmers' Markets.

What we can do as individuals?(Individual choices **can** impact on local actions to reduce greenhouse gas):-

i) Try to avoid buying **air freighted food.** For the climate, air freighted food is a disaster. The CO_2 emissions of transporting one ton of food for one mile is roughly: 25g by train, 48g by boat, 297g by lorry and 1,527g by plane.

ii) As much as possible **Reduce food waste** One-third of the food produced worldwide is thrown away. This means wasted CO_2 from production and extra methane from landfill. Wasted food is also bad for your finances. Save money and emissions by **shopping carefully, cooking up leftovers, storing food properly, freezing it where appropriate, and giving away any excess.** In the United Kingdom, 8.3 million tons of food is wasted by households each year. We all throw away uneaten food every day; mouldy bread, off milk, rotting vegetables, black bananas, scraps from our plates. This wasted food is doubly bad for the climate. First, the CO_2e released through producing that food has gone to waste; with 30% of global greenhouse emissions coming from food growing and processing, that's a serious problem. Second, most of that food waste goes straight to landfill or the Battlefield incinerator. Decomposition from landfill produces methane, a major greenhouse gas. Wasted food is also pretty bad for your family finances. Why buy something just to throw it away unused?

iii) **Buy locally-produced** food (see list below) Find a source near to home, a Farmers' Market, community supported agriculture scheme or your own garden.

iv) Join a **vegetable box scheme** (see Little Woodbatch on list below)

v) **Grow more** fruit and vegetables in your garden.

vi) **Get an allotment** on the Town Council's Love Lane site [http://bishopscastletowncouncil.gov.uk/allotments/]

vii) Buy and use a local, **seasonal** cookbook

viii) **Support local growers** when choosing your perennial plants

ix) Transform an under-used community area into a **forest garden** (see diagram below)

*x) Support schemes that make use of waste food in your community (help us set-up a **Community Fridge, Join our Pick & Share team,** or let us know if you have surplus fruit & vegetables)*

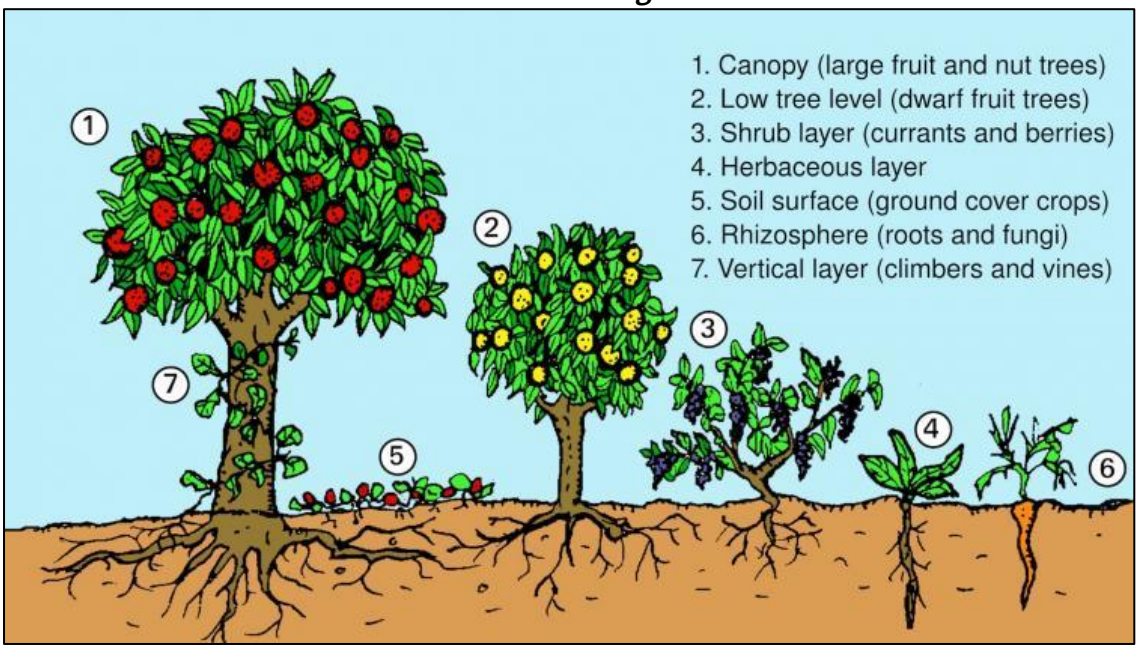
xi) *Find out as much as possible regarding food issues. Food for health, diet choices etc. (There are links to relevant sites below.)*

Directory of Suppliers of locally-produced foods (This list is not definitive and will be expanded)

- *Bishop's Castle Farmers' Market*. Held in the Town Hall every 3rd Saturday of the month. *http://bishopscastletownhall.co.uk/*
- *Little Woodbatch Market Garden* is a family-run business growing fresh, local vegetables on a 1 acre market garden in Bishop's Castle and running a weekly veg box from late April to October. *https://www.littlewoodbatch.co.uk/*
- *Andrew Pugh's butchers shop* supplies locally-sourced meat, vegetables and bread. *https://www.ajpughbutchers.co.uk/*
- *Harvest Wholefood* in Lydham supplies vegetarian, wholefoods, dairy and locally produced vegetables and fruit. *https://www.bigbarn.co.uk/producer/lydham-bishops-castle/harvest-wholefoods-21/*
- *Harehill Farm, Edgeton:* ocal market garden growers in Edgton now organising home deliveries starting in April www.harehillfarm.co.uk, Email: alice@harehillfarm.co.uk, Mobile: 07896 413894

A list of websites for further information can be found in Annex 3: Useful Links:-

Forest Gardening



Section 4: <u>Transforming Our Green Spaces</u>

A recent report (Nov 19) by Conservationists for the *Wildlife Trusts* says we may have lost 50% or more of our insects since 1970. A headline in the Guardian read "*Insect apocalypse poses risk to all life on Earth*", and quotes scientists saying that insects are essential for all ecosystems, as pollinators, food for other creatures, and recyclers of nutrients. The "unnoticed insect apocalypse" should set alarm bells ringing, without a halt there will be profound consequences for humans and all life on Earth.

Green spaces make us feel better, mentally and physically. They help us to feel part of nature. We are well placed here in south Shropshire for many of our children and young people to develop a deep knowledge and love of nature. But, for them to have the opportunity, the degradation of our environment must be reversed.

The *Wildlife Trusts* report tells us that insect populations can be rescued by introducing firm targets to cut pesticide use and making urban parks and gardens more wildlife friendly. This is our town and our countryside and we, the present generation, are the trustees. We have a responsibility for protecting our environment, both for reasons of survival and to ensure our children have a chance to know and experience the wonders of the natural world as we have done.

Some activities have already taken place, such as the 'bee café' by the Town Hall, the insect-friendly flower garden in the Playing Fields, and the wildflowers planted on the crossroads below the Community College.

Here are some ideas and activities that, if adopted, could start the recovery of our green spaces.

Community Nature Recovery Programme

I. **Green Spaces Map**

In addition to our gardens (see ii. below), we should 'map' the green spaces that are accessible for 'greening' purposes. This ***Bishop's Castle Green Spaces*** map will identify land under the control of community bodies, e.g. County Council, Town Council, Enterprise House, Community College, Churches, Industrial park, etc.
In working on this, we should liaise with bodies such as the Shropshire Hills AONB, Mid-Marches Community Land Trust, and the Shropshire Wildlife Trust.
Once the Map is completed, we should carry-out a review of the areas identified to consider what 'greening' activities would be appropriate. These would include:-

- Increase wild plant and animal habitat, promote planting of pollinator-friendly flowers, shrubs, trees and grasses where residents and visitors can find rest, pleasure and recreation close to wildlife; create a tree planting initiative local schools & NHS / care home sites for example
- Create wildlife havens in public spaces that will encourage gardeners to join in this Nature Recovery program;
- Encourage take up of RSVP project (restoring shropshires verges project)
- Plant herbs, fruit trees and other edible plants;
- Endeavour to become a pesticide free town, removing less desirable plants manually, and accepting most plants which we have come to call 'weeds' as an essential part of our Natural Landscape;
- Lobby Shirehall to dump Glyphosate across Shropshire (Roundup)
- Encourage the clearance of litter, and be mindful of the dangers of plastic waste, including micro-plastic waste, to all species as well as ourselves;
- Prevent pollution, particularly of water;
- Improve soil health;
- Plant and manage new woodland to soak-up carbon dioxide and alleviate flooding risks;
- Plant and manage new hedgerows and reduce the cutting of existing hedgerows and verges;
- Establish wildlife corridors;
- Organise a community compost scheme.
- Engage and involve schools
- Create a Town Tree Warden role

To Do:-

1: Produce Bishop's Castle Green Spaces map
2. Review & recommend 'greening' activities
3: Seek funding for 'greening' activities
4: Recruit a volunteer team to carry-out the activities

ii. Create and manage new woodland

Wood is 50% carbon, so trees are a great carbon store. Their respiration also converts CO_2 into oxygen. They build soil, stabilise local climates, help wildlife, provide food and wood. They are great for birds, insects, mammals, soil, air quality and micro-climates and, importantly, trees benefit physical and mental well-being.
For all these reasons, we all need to value the trees more and look to increasing the number in all appropriate spaces. It's important that trees are managed after they have been planted. More trees means more protection from rain and flood, and more shade from the hot sun, as well as more wildlife

in foliage and branches. Small trees may be more suitable than large in many urban spaces, and fruit and nut trees are frequently ideal, offering the benefit of food for us townsfolk as well as for animals and birds.

To Do:-
All public bodies to encourage land-owners to allocate land for tree-planting and on-going management;
Work with Mid-Marches CLT, Shropshire Hills AONB, National Trust, Shropshire Wildlife Trust to progress tree planting;
Build a team of volunteers to help with the work;

Domestic Nature Recovery Programme
Gardens are a vital source for shelter and food for insects and birds, some claim they are often more important than our increasingly denuded countryside. A key resource is the soil in our gardens. Soil is the world's second largest carbon sink (after the oceans). The healthier the soil, the more carbon it can store. Soil health can be improved by feeding organisms in the soil, protecting soil from erosion, avoiding pesticides, providing permanent leaf cover, and reducing tillage and soil disturbance.
Here are some nature-beneficial activities that all gardeners can take up:-

- Plant a tree for shade, fruit and biodiversity;
- Plant a wide range of flowering plants, shrubs, herbs and wildflowers;
- Install a water barrel or tank to harvest rainwater from your roof;
- Make compost, to reduce waste and help build soil health;
- Avoid peat-based garden products;
- Weed manually, stop using pesticides;
- Install bird, insect and hedgehog boxes;
- Allow an area of the garden to go 'wild';
- Install a pond.
- Join a local organisations such as:-
    - Mid-Marches Community Land Trust [*https://middlemarchescommunitylandtrust.org.uk/]* "… owned and managed by local people to protect, conserve, restore and enhance our environment through the stewardship of land."
    - Shropshire Hills AONB, [*https://www.shropshirehillsaonb.co.uk/*]
    - Shropshire Wildlife Trust [*https://www.shropshirewildlifetrust.org.uk/]*
    - Carding Mill Valley & The Long Mynd National Trust. *[https://www.nationaltrust.org.uk/carding-mill-valley-and-the-long-mynd]*
    - RSVP (Return Shropshire's Verges Project) is re-introducing wildflowers to our verges,

For more, see Annex 'Useful links'

Section 5: Reducing Consumption and Waste

What can the Town Council do to look after its own activities with regard to Consumption and Waste?

1. Introduce and Environmental Purchasing Police - to have regard to the environmental consequences of all purchases. e.g. always to use recycled paper
2. Ensure printer is default set to double sided printing
3. Monitor what waste is produced within the Town Hall
4. What waste recycling takes place in contracts placed by the Council? Check suitable wording for the future
5. Introduce a check on the energy requirements of the Town Hall and any other Council buildings (e.g public toilets) to spot if any excess spikes are observed

What can the Town Council encourage the community to do?

1. Support the Plastic Free Town Group
2. Support the setting up of a Repair Café in the Town Hall or elsewhere, to include a community tool pool project and skills-sharing workshops
3. Encourage Zero Waste Events – any events asking for a grant should be encouraged to say how they are working towards zero waste events. e.g. The fledging plans for Michaelmas Fair
4. Encourage a clothes swap – up cycling workshop for fashion, etc
5. Promote the Bishop's Castle Freegle site

What influence on others can the Town Council have?

1. Persuade Shropshire Council to introduce a Tetracycle recycling scheme
2. Consider investigating with Shropshire Council – waste bins that have a recycling element to them

Section 6: Reducing Energy Demand and Producing Our Own Clean Energy

Currently 30% of electricity in the UK is from renewable sources and the Government target is for at least 50% by 2030. Therefore, each town and parish council should be aiming to generate 50% of its electricity from renewable sources within the parish/Town by 2030. As shown in the table above, our direct energy demand (i.e. excluding consumption) is roughly equivalent to 16.7 million tonnes of CO_2e equivalent per annum. This calculation only covers our domestic heating, power and private transport demands, excludes commercial activities. If resources are forthcoming, BC Sustainability Working Group will be promoting projects to help reach carbon neutrality in each of these areas. These will focus on facilitating and promoting the following:-

- the reduction of our household energy and power demands;
- switching our sources of energy from fossil fuels to renewables;
- encouraging the reduction of emissions of CO_2 and methane from agriculture and land use - drawing down existing CO_2 from the atmosphere

What we all can do: Every individual household can do a number of things to reduce this demand (see also Section 2: 'Personal Initiatives'):-

- Switch appliances off at the wall, rather than leaving them on standby
- Switch off lights and change bulbs to LEDs
- Buy your energy from a renewable supplier
- Draw the curtains at night in winter
- Only heat the house where and when needed
- Put on a jumper instead of tuning the thermostat up
- Properly insulate your home (loft, walls, floors, windows, hot water tank)
- Replace oil boilers with sustainable heating, such as heat pumps that use electricity and energy from the environment

- Burn only seasoned logs that have been dried to less than 25% moisture http://www.lightfootenergy.org.uk/how-to-use-a-stove-2/
- Burn woodstoves at the manufacturers' recommended temperature, and do not 'slumber' burn;

Some of these need no more than a change in attitude. It only takes a minute or two to go around your home and turn off your appliances at the wall when not in use. But done regularly, this can save up to 12% of your electricity demand. Similarly, cost comparison websites can help households switch to renewable energy suppliers in just a few minutes. The renewable energy suppliers are generally cost-competitive with the 'Big Six' suppliers.

What we can do as a Community:-
The Town Council and other publicly-funded bodies should:-

- Switch their source of power to a renewable energy supplier;
- Monitor their energy use within the buildings directly under their control. This will then allow the setting of energy reduction targets
- Improve the energy performance of building including reducing drafts, insulation of walls and roofs and then windows and floors, iInstallation of more efficient heating systems and replacing of lighting with the currently most efficient diode lighting. (Salix funding may be available https://www.salixfinance.co.uk/loans/parish-councils).
- Introduce policies in the Neighbourhood Plan for all new buildings within the Town to be Carbon Neutral or low carbon.
- Introduce polices in the Neighbourhood Plan to support installation of PV and battery storage on housing with the Town.
- Actively support small and large planning applications for new renewable energy within theTown boundary.
- Review street lighting to ensure lights are fitted with energy-efficient LED bulbs;
- Support farmers and landowners to diversify and build anaerobic digesters to use farm waste and/or silage to create biomethane to inject directly into the gas grid network, replacing fossil fuels.

We will also promote the Net Zero Buildings Commitment. While it is currently not possible for Bishop's Castle Town Council to require new buildings to be sustainably built, objections based on insufficient consideration for climate impact will be noted on planning applications for new builds, as a means of highlighting to Shropshire Council and national government that suitable legislation is required.

Producing our own clean energy
The Sustainability Working Group will explore with Lightfoot Energy seeking grant funding for the following:-

- ***Household Energy Surveys [HESs]*** *Lightfoot Energy Services carried out a large number of HESs on domestic, business and community buildings in our local area. The household surveys were free until funding for this work ran out and now cost £60 A key target of the BC Sustainability Working Group, will be to work with Lightfoot to explore a new source of funding to both re-start the energy surveys, and to review the energy-savings arising from the earlier surveys to suggest what further improvements are possible.*
  (The Lightfoot web-site [http://www.lightfootenergy.org.uk/] remains a valuable source of information on all aspects of energy-saving.)

- Local renewable energy schemes, such as the Sharenergy **c**ommunity owned shared loop ground source heat pump project.
- Solar panels, installed on roofs and on the ground
- Wind turbines
- Use of heat pumps for heating buildings

- Replacement of domestic boilers with wood boilers and stoves/furnaces fuelled by locally produced coppice wood or sustainably-sourced wood chips

Ground based solar photovoltaics using some of the available green space within Bishop's Castle and its hinterland could provide almost all summer electricity needs. The use of non-green space sites for solar pv, such as the solar 'roof' at Enterprise House, has been a success. We will look at expanding these to other roofs (Church, SpArc?). Additionally, wind turbines could produce a substantial proportion of the winter clean energy demand, with some from solar and potentially other sources also contributing through energy storage
Producing our own electricity may increase demands on a national grid already struggling to keep up with demand. This may necessitate the setting up of localised energy grids in the years ahead, and we should be prepared to adjust to this in any community-led energy project

We will work to promote changes to help bring about a reduction in household energy demand. Helping people calculate household carbon footprint and identify areas where they can make useful changes - Advising on grants and subsidies for things like: boiler replacement, loft insulation, other insulation including external cladding, solar panels for electricity and heat - Providing smart meters - Connect vulnerable members of the community with volunteers who are willing to help, for example by clearing a loft prior to new insulation being installed

Reform Local Planning Bishop's Castle Town Council will promote the Net Zero Buildings Commitment. While the council is unable to prevent inefficient housing from being built directly (this may change in time), objections based on insufficient consideration for climate impact will be noted on planning applications for new builds. This will highlight to developers, Shropshire Council, and national government that suitable legislation is required.

Community Energy Project: We will facilitate the production of clean energy in community-based projects. We will try to maximise the engagement of our community in these projects. For example, a solar PV array installed on a school roof is likely to generate much more public engagement than an installation on a commercial premise on an industrial estate. However, we will consider facilitating and promoting any community-led projects that contribute to the production of clean energy.

Section 7: Community Resilience

<u>Definition of Community Resilience.</u>

Community resilience is the sustained ability of a community to utilise available resources (energy, communication, transportation, food, etc.) to respond to, withstand, and recover from adverse situations (e.g. economic collapse to global catastrophic risks). - WIKIPEDIA

Resilience could also be said to be the development of a suite of inter-compatible, differing strategies that aim towards attaining some or all of the goals specified. Having the widest possible variety of different, tested strategies allows a community to be flexible in the face of externally imposed shocks. Rigidity leads to systemic failure if all parts of it are essential to maintaining the integrity of the system.

Clearly the time to initiate and test a variety of alternatives is when the system is fully functioning, not when it has begun to collapse. In the case of local community resilience, we are endeavouring to find ways to maintain a good standard of living in the face of short- and long-term shocks.

Specifically, we need to address the areas of:-

- food-source (this also addresses agricultural practice and biodiversity loss),
- water-source and storage,
- accommodation (including heat and power) including design of the built environment
- transport
- emotional/communitarian resilience.

At one remove, we need to look at the long-term impacts of the climate and ecological emergency on the local area and identify what changes we are seeing? What changes do we anticipate in the next decade? And in the longer term? What actions are being taken to mitigate these changes locally (this will inevitably be largely in the arena of biodiversity loss), and what are being taken nationally and internationally? What can only be done at the nation scale and how can we ensure these are carried out?

Resilience is a set of behaviours and our current set of behaviours and assumptions are NOT resilient. Local resilience is a long-term objective not a short-term gain. So, resilience is a progression rather than a one-off. It depends on community cohesion and a common sense of purpose that is built progressively over time.

This Chapter aims to note the long-term resilience needs but will focus on those that are achievable in the shorter term whilst recognising that further reports will need to be produced. It is also important for the Council to make a start on the long-term aims now rather than defer decisions and actions to some arbitrary time in the future.

Identifying the scale of problems that resilience will cover is important. These will range from temporary - just a few hours or days of major disruption - to years or even permanent change. From temporary shortages of some food items to significant societal breakdown, where we will be forced to fend for ourselves. Obviously we need to focus first on those temporary problems - which could start to occur in the very near future - and consider the major problems later but, given the rate at which the climate and ecological emergency is accelerating, we will almost certainly have less time than we think to put in place all the measures necessary to cope with it.

Resilience is a major factor in all of the areas that the Chapter covers: It also partners with security in all of them plus other topics which are not currently covered.

Given the timescale we are working to and the scope of the topic this initial report will focus solely on Food resilience. Subsequent reports on resilience will cover:-

Energy Production
Water Supplies
Health Provision - Physical, Emotional, Mental and Spiritual
Transport
Biodiversity Abundance

We have started the process by talking to a number of local farmers. We have asked them all the same set of questions and from their responses we have drawn-up Resilience Plans with them (see end of

Chapter).We have attempted to identify their priorities relating to the production of food for local consumption and protection of their water supply.

How can the Town Council help?

- Educate local people about the Climate Emergency and what they can do to help e.g. getting involved in local groups, publicise what the council is doing to mitigate the effects of the changing climate and what it is doing to reduce its own CO_2 emissions. Encourage people to put together their own resilience plan (see example below). Get people thinking about it.
- Look at its own food procurement process (if it does procure food) and look to autonomy in doing so in order to use local produce wherever possible.
- Set up a local 'Food and Farming Trail' as per BC pubs trail to attract more visitors and so boost the local economy.
- Guide the narrative on local food use.
- Carry out a community food assessment to diagnose the current situation and identify a 'best practice' outcome - and (really important) how to get there. (Daphne du Cons has volunteered to do this - it's what she's trained to do).
- People have power! Advise them on how to use it to push for availability of local food by supporting local producers.

Resilience Plan - local food producer Daphne du Cros

Daphne runs a small market garden on the outskirts of Bishop's Castle

- planning more water catchment and retention, already has own deep borehole
- saving seeds for self-reliance, where possible (uses *The Real Seed Company*)
- putting solar panels on new house extension
- installing Ground Source Heat Pump to reduce energy usage
- looking at feasibility of installing a small wind turbine (Council support would help)
- building the soil fertility to reduce reliance on any outside fertiliser - using plenty of own compost albeit still buying compost/manure from a local supplier
- no-till growing to preserve soil health and improve yields
- adaptability - as a small producer Daphne is able to respond to changing conditions more easily than large producers - and will do so if circumstances dictate
- producing a diverse range of vegetables to avoid 'all eggs in one basket' risk

Ideas to improve local resilience for all local food producers:

- access to a local market more than just one day a month - needs premises to host;
- set up an online network of small, local producers;
- a local online hub - showing residents who produces what locally - meat, veg, milk, fruit etc;
- set up 'click and collect' online ordering for pickup at a local collection point;
- popup food stalls provided by BC Town Council;
- prescribing of social engagement in food production to improve people's health;

- On her own, Daphne would not be able to meet all of the vegetable needs of BC residents so we need more local, small-scale growers (when time permits and she is more experienced in market gardening, Daphne would be willing to mentor new startups).

Resilience Plan - local food producer Joy Greenall - Cow Hall Farm

Cow Hall Farm is an organic farm producing beef, lamb and mutton. Climate breakdown is making it hard for them and even harder for their neighbours who are considering what measures they should take to help fight it.

- All feed (apart from some corn bought in from a local farmer at lambing time and some grass-based feed nuts) is grown on the farm.
- Water comes from the Clun river and their own springs so not reliant on Severn Trent Water
- They have old, unploughed meadows which means their grass is resilient, with deep roots, and able to cope well with drought and excess rain.
- They are considering installing a wind turbine.
- Willing to consider helping young people get into farming by starting up at Cow Hall Farm.

Annex 1: Questionnaire: Sourcing food and drink locally for businesses in the community.

Q1. Where on this scale best describes the proportion of your ingredients that are sourced locally?

0% ----------50% ----------100%

Q2. Do you buy organic ingredients ?

- ○ Yes, always when possible
- ○ Yes, if not too expensive
- ○ No
- ○ I don't think about it

Q3. Tick what applies to your business

- ☐ I'd like to buy more locally sourced products, but can't afford to.
- ☐ I'd like to buy more locally sourced products, but can't find a supplier.
- ☐ I prefer to buy organic products even if it means I have to source them elsewhere.
- ☐ I have my own arrangements that I'm satisfied with

Other (please specify) _____

Q4. When buying a product which of the environmental considerations listed below do you consider?

- ☐ The miles that product has travelled.
- ☐ The mode of transporting the product (air, sea, rail etc)
- ☐ The seasonality of the product.
- ☐ The environmental impact the product has had in its country of origin.
- ☐ The overall Carbon Footprint of the product.

Other (please specify) _____

Q5. Would you consider being part of a local food and drink buying co-operative?

- ☐ Yes
- ☐ No
- ☐ Possibly

Q6. Do you consider packaging when buying ingredients?

- ☐ Yes
- ☐ No
- ☐ Possibly

Q7. Tick all that apply regarding what happens to your waste.

- ☐ The food waste is composted on the premises
- ☐ The food waste is collected by the Council
- ☐ The majority of the packaging is separated and sent to recycling.
- ☐ The majority of the packaging is sent to landfill.
- ☐ Our commercial waste is not collected, we must take it to the nearest collection points.

Q8. Have you any other comments regarding waste?

Q9. Would you be interested in having an audit done, by a local volunteer, so you can give your products a Carbon Footprint Score?

- Yes
- No
- Possibly

Q10. Please add any other comments and ideas.

Annex 2: Farming Community questionnaire

The questions below are an example of the sort of information we could gather from our farming community.

1. Do you have a resilience plan to enable you to continue to produce food in the event of:
   shortage or large increase in the cost of purchased animal feed or fertilizer, soya pellets etc.
   Adverse weather for a prolonged period - too much/too little rain, heatwaves, unseasonal heat/cold.
   Water shortages.
   Energy shortages.

2. Do you supply locally? Do you know where your meat/dairy/crops end up?
3. Would you like to have a local market for your produce? What stops you having one?
   What could your local county/town/parish council do that would facilitate local markets for you?
4. Are you aware of the term 'Regenerative Farming'? If so, what are your thoughts about it? Is it something that you are considering trialling?
   Is diversification of your food production something you have considered or would consider.
5. Do you have any ideas about how Bishops Castle and its surrounding area could become more resilient in terms of food,- both in the short- and long-term?
6. Have you considered the impact of climate breakdown on your ability to continue farming?

7. Do you have any unused/fallow/marginal land? If MMCLT were interested in rewilding it, OR if there were young people interested in growing food on it, would that be something you'd support?
8. Do you know of anyone else locally we should speak to?

Annex 3: Useful Links

List of websites for further information:-
The 52 Climate Actions partnership, promoting permaculture based solutions to climate change https://www.52climateactions.com/food
Landworkers Alliance works with landowners and land workers to produce sustainable food, case studies can be found at : https://landworkersalliance.org.uk)
The Farming and Climate Research Network has studies that demonstrate organically produced food is more nutritious and helps the environment by: eliminating chemical based fertilizers, pesticides and herbicides, improving biodiversity, improving soil systems so that they can sequester more carbon. More case studies and on-line courses can be found at: https://www.fcrn.org.uk
The Food Foundation puts pressure on Governments and industry to ensure all can access a sustainably produced, health and affordable diet. Case studies can be found at: https://foodfoundation.org.uk
The Sustainable Food Trust works to promote and support transition to sustainable food production. https://sustainablefoodtrust.org
Indoor Growing: Innovative farming technologies mean that plants can now be grown in indoor environments without sunlight.
https://www.lighting.philips.com/main/products/horticulture/city-farming

Guerrilla Gardening: For those interested in neglected public spaces for growing food.
http://guerrillagardening.org/
Space for food growing: Guidance for community groups wanting to start a food project.
https://www.gov.uk/government/publications/space-for-food-growing-a-guide

Woodland Trust, for those interested in planting trees
<https://www.woodlandtrust.org.uk/plant-trees/
The Permaculture 52 Actions Partnership, lots of good ideas for climate change actions
https://www.52climateactions.com/