

BUDE CLIMATE ACTION PLAN

March 2020 – Version 1

MESSAGE FROM THE MAYOR

Climate change is posing an immediate threat to our environment and way of life. It requires urgent intervention to prevent a worsening of the situation. The motion at the Full Council on 5th September at the Parkhouse Centre declared a Climate Emergency.

As a result of this Bude-Stratton Town Council (BSTC) has prepared a Climate Action Plan that outlines how we will act in the future to make our fair contribution in response to a problem that affects everyone.

I believe that BSTC has been a responsible council. It has been doing its upmost to improve the environment under its own regulation for years. However, we recognise that we have a leadership role here and must support and encourage everyone in Bude-Stratton to become more climate conscious by responding urgently and effectively to the consequences of a changing climate.

Taking decisive action to confront the climate crisis will be a major challenge for every part of our society, but the benefits are huge – warmer homes less dependent on fossil fuels, cleaner air, a sustainable use of the world's scarce resources, more connected communities, authentic values, and quality jobs in enterprises which can compete in a decarbonised world to name a few.

But we must face up to the scale of the challenge and respond accordingly. We all need to make changes. This is our start.

Bob Willingham
Mayor of Bude-Stratton Town Council

MESSAGE FROM CLIMATE ACTION BUDE

Bude is a lovely town where people take their responsibilities to the environment and future generations very seriously. However, we are part of a world in which, according to the Intergovernmental Panel on Climate Change, we must make “rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and building), and industrial systems” by 2030 in order to limit global warming to 1.5C .

In response, Bude-Stratton Town Council joined Cornwall Council and the Westminster Parliament by declaring a climate emergency, partly in response to a group of residents who formed Climate Action Bude and lobbied the Town Council to take action.

In some other places, the declaration of a climate emergency has been little more than a tick-box exercise with little real resulting action. We are very pleased that this has not been the case in Bude. This Climate Action Plan is a first, and vital, step towards enacting the Bude climate emergency declaration and signals that Bude-Stratton Town Council is determined to show climate leadership to the whole community.

CONTENTS

Foreword – Working Together to Protect Bude	4
Background – About Climate Change	6
Introduction – Our Climate Plan for Bude	7
Version history – Where we are now	11
<i>Appendices</i>	
Blue-Sky Ideas-Workshop Notes	12
Glossary	14
Acknowledgements	19
References	20

WORKING TOGETHER TO PROTECT BUDE

On Thursday, September 5, 2019, Bude-Stratton Town Council voted to declare a climate emergency¹, joining many other town and parish councils across the country – as well as more than two thirds² of district, county, unitary and metropolitan councils, and central government at Westminster³ – in taking positive action to address the climate crisis.

We declared a climate emergency for several reasons, but mainly because the community and many councillors thought it was essential. It's essential not only because Bude needs to join with other parts of the country in reducing and mitigating its own carbon footprint, but also because Bude faces unique climate crisis challenges.

As an exposed coastal community, Bude is at the sharpest edge of the impacts of climate change. We already know the damaging effects that extreme weather can have on our beautiful and precious environment. Our coastline is crumbling because of above average rainfall and winds. Rising sea levels and ever fiercer storm events increasingly threaten our town, although we're working hard to protect ourselves against them.

Bude's vulnerability to climate change is made more extreme by our location. We're further from a railway station than anywhere in the country, which impacts considerably on our ability to reduce our carbon footprint. With no trains and few buses we lack easy access to our nearest hospital, higher education institution, and the municipal and emergency services that other parts of the country take for granted and which assist them in responding to challenges.

Our location and our seasonal economy leave many people in our community facing considerable economic hardship that will not improve if tourism and our way of life is threatened by climate change. Meanwhile, low average wages, high rents and fuel poverty make it difficult for many of our residents to absorb the costs of responding to the climate crisis.

The flipside of Bude's remoteness is the strength, resilience and versatility of our community. It's made us very good at looking after ourselves and we've pioneered many community-led environmental initiatives that have been rolled out nationally and, in some cases, internationally. We're a hub of useful, effective environmental activism that is inspiring to people in many other parts of the country and beyond.

The climate crisis is a very big challenge for a small community such as Bude, irrespective of our local conditions. There is only so much we can do individually, which is why the Climate Emergency Declaration and our Climate Action Plan are vital contributions to our town's future.

As part of Bude's commitment towards reaching carbon neutrality by 2030, this Climate Action Plan seeks to find and pioneer ways that we – the town council, the community, and

all of us as individuals, families and businesses – can cooperate to harness our skills, strengths and resources to ensure Bude remains a wonderful and special place to live.

By working together we can make a difference locally and play our part in protecting the planet for us, for our children, for our wildlife and for all future generations.

ABOUT CLIMATE CHANGE

This Climate Action Plan fully accepts that we are in a climate crisis. The time has passed for questioning its existence or its causes. By declaring a climate emergency, Bude accepts it must take action now in line with best scientific advice. The UK government's official public guidance makes the point simply in its opening sentence:

*'Climate change is happening and is due to human activity, this includes global warming and greater risk of flooding, droughts and heat waves.'*⁴

We accept that serious problems are already being caused – and will continue to be caused – by changes in the world's climate. In particular, the world is getting warmer as a result of human activity increasing the level of carbon dioxide and other greenhouse gases in the atmosphere. This Climate Action Plan outlines Bude's intended response to the climate crisis by seeking to reduce its damaging effects on our community and mitigating our contribution to climate change.

If you are interested in finding out more about the climate crisis and how it will impact on the area around Bude, as well as elsewhere, the following online sources provide useful information:

UK Government official public guidance – [Climate Change Explained](#)⁵

The Met Office – [Effects of Climate Change](#)⁶

Cornwall Council – [Climate Change Plan](#)⁷ and [Carbon Neutral Cornwall](#)⁸

University of Plymouth – [Rising sea-levels and increased storms pose threat to coastal communities](#)⁹ (part of Marine Climate Change Impacts Partnership's [Report Card 2020](#))¹⁰

Committee on Climate Change – [Preparing for climate change](#)¹¹ and [Publications](#)¹² offering independent advice to the UK government on building a low-carbon economy

Cornwall Wildlife Trust – [Supporting Climate Change Action](#)¹³

Devon Wildlife Trust – [Meeting the threats of the climate emergency](#)¹⁴

Surfers Against Sewage – [Climate Change](#)¹⁵

Opinium – [Two thirds of Britons agree planet is in a climate emergency](#)

OUR CLIMATE PLAN FOR BUDE

Bude's Climate Action Plan is a living document that will be revised and updated as we explore how to achieve our stated aim of carbon neutrality by 2030.

We don't consider this document to be the final word on climate change in Bude or anywhere else. We see it as an organic, evolving forum for conversation about our common journey towards achieving our goals. None of us are experts in the field, so we need time to reflect on what we are learning and where we are going. We need space to review our progress, investigate our understanding of the science, seek out best practice and learn about ways of measuring the effects of our actions.

We hope that in time this Climate Action Plan will become two things. First, a report of what we have done so far to address Bude's carbon footprint. Second and more importantly, a handbook of useful advice, ideas and projects that can be put into action both individually and as a community working towards a common goal.

Assessing the challenge ahead

At the time of this first version, produced in March 2020, Bude is taking the first tentative steps on its climate journey, investigating where we are now so that we have a clear picture of the challenges that we face. Initially this will involve conducting carbon audits of the council's operations (and, we hope, the community as a whole soon thereafter) so that we can see where we need to focus our ideas and actions.

We believe proper carbon audits will inform us about where we can make the biggest initial reductions of our carbon footprint and where best to set our pathway(s) for the future.

We're also currently looking at how to find out where and in which ways the climate crisis poses the greatest economic, social, environmental and cultural risks to our town and community.

Last but not least, we are undertaking an audit of Bude's community-led environmental groups to learn what resources we as a community can already call upon to protect our town, people and wider environment against the climate crisis.

Our three-strand plan

Achieving carbon neutrality by 2030 is a big task for Bude. In order to make it less overwhelming we have split it into three strands or steps:

1. Bude-Stratton Town Council investigates its own carbon footprint and decides how to go about achieving carbon neutrality.
2. The Town Council leads and facilitates community environmental and associated organisations in investigating and devising the community's response to our Climate Emergency Declaration, with the aim of also achieving carbon neutrality.

3. The Town Council and community environmental and associated organisations cooperate in assisting our fellow residents, families, businesses and other organisations to address the climate crisis and move towards carbon neutrality.

First Strand – The Town Council

Bude-Stratton Town Council has already taken its first steps towards addressing its own carbon footprint.

In October 2019, at the first full council after declaring a climate emergency, the council:

- established a Climate Change and Environment Committee
- set a target of 2030 for carbon neutrality in Bude (in line with Cornwall Council’s targets for the Duchy)
- tasked the Climate Change and Environment Committee with producing a Climate Action Plan within six months.

Between November 2019 and February 2020, the Climate Change and Environment Committee held several meetings and informal working groups. As a result of those meetings it has:

- Reviewed the Climate Action Plan work done in other similar towns, such as [Helston](#)¹⁶, [Frome](#)¹⁷, [Shrewsbury](#)¹⁸, [Bridport](#)¹⁹ and [Totnes](#)²⁰
- Facilitated an audit of local interested environmental groups
- Considered ways of assessing all risks associated with climate change on the infrastructure and community of Bude (including physical, economic, social, environmental and cultural risks)
- Asked the Town Clerk to seek tenders for a carbon audit of the council’s own operations and recommended to the council that it approve the funding for an audit
- Devised and agreed this Climate Action Plan and recommended it to full council
- Conducted a blue-sky ideas session of potential schemes that might be in future considered as solutions to help Bude towards carbon neutrality.
- Made contact with Plymouth University’s School of Geography, Earth and Environmental Sciences. This came about after its former Deputy Professor of Environmental Science (now Deputy Mayor of Okehampton) suggested assistance and advice might be available from the university as part of a student dissertation.
- Consulted with the Town Clerk over the review of the [Neighbourhood Development Plan](#)²¹ (NDP) to ensure the removal from the next plan of the proviso that excluded wind turbines from the council’s support of community-owned renewable energy schemes.
- The Chair of the Climate Change and Environment Committee joined the Neighbourhood Development Plan steering group to ensure that future planning decisions always take account of the Climate Emergency Declaration. (Through the NDP, Bude-Stratton residents can influence how the local area might develop in line with the Local Plan. The current review, which will extend the remit of the NDP to 2030, will be subject to extensive public consultation and engagement, and scrutiny by an independent examiner, before being put to a local referendum in May 2021.)
- Made contact with Cornwall Council, which has a stated commitment to provide expertise on the climate crisis to town councils.

- Under the umbrella of Bude Coastal Community Team, the Chair of the Climate Change and Environment Committee led a bid by a group of community-led environmental groups for funding from the National Lottery Community Fund's Climate Action Fund. On Friday February 21, it held a workshop to develop ideas for cooperative schemes to address the climate crisis under the following themes:
 - *Energy – Reducing demand, offsetting, producing our own clean energy*
 - *Transport – Looking at ways of getting around less wastefully*
 - *Consumption – Addressing shopping, food production and waste*
 - *Nature – Protecting our environment & biodiversity, transforming green spaces*
 - *Communication – Ensuring involvement, education and support*
 - *Business Engagement & Green Tourism – Protecting our (seasonal) economy*
 - *Health and Wellbeing – Protecting*

In March 2020, the council agreed to fund and commission a carbon audit of its assets, operations, behaviours and purchasing procedures. *[assumes agreement in this week's extraordinary full council meeting]*

As soon as possible after receiving the carbon audit report, the Climate Change and Environment Committee will:

- assess the report
- investigate how the council can reduce its own climate impact
- set realistic targets
- make recommendations to full council that will put BSTC on the path towards carbon neutrality.

Second Strand – Involving Community Groups

Local environmental groups such as Climate Action Bude have already held public meetings to discuss the community's response to our Climate Emergency Declaration. The second step of our Climate Action Plan strategy is for the council to provide leadership and work with community-led organisations to develop the next stage of this Climate Action Plan in cooperation with the community.

Ultimately, Bude's response to the climate crisis needs to be decided and managed by its residents and other stakeholders. The council is committed to facilitating and supporting this process while addressing its own carbon footprint and its commitment to work towards achieving carbon neutrality in Bude by 2030. However, this document does not commit the Council to any direct funding beyond the costs arising from addressing the carbon footprint associated with its own operations, assets and services.

To give it time to digest the carbon audit report of the council's own activities and the audit of Bude's environmental groups, the Climate Change and Environment Committee intends to call the first meeting of community-led organisations on Earth Day, **Wednesday April 22**.

In time, we hope that a community-council partnership will take over Bude's Climate Action Plan. To achieve that aim, we need to decide whether we need to establish a new body to

coordinate this partnership or whether one of the existing organisations – such as, for instance, Climate Action Bude, Transition Bude or Greener Bude – could take on the task.

If the Town Council approves this first version of the Climate Action Plan at its full council on Thursday, March 5, 2020, we will immediately make it available to the public and set up the April 22 public meeting to set in motion the second, community-focused, strand of Bude's climate crisis response.

We hope that future versions of this document will be produced in part or entirely by the community, with the town council overseeing and contributing in those areas that impact upon its responsibilities or its own operations as well as assisting the community with its future work on the Climate Action Plan, when required.

Third Strand – Spreading the Word

Carbon neutrality in Bude will be achieved more through the cumulative power of lots of small steps by the community at large than through a few large, obvious initiatives by the council or community-led groups.

Consequently, the third and most crucial step is to involve and work with Bude's wider community – individuals, families, businesses and organisations, including schools, health centres and other local councils in the Bude Area Community Network Partnership – and back up the government chain.

Achieving carbon neutrality is all about working together in cooperative support and encouragement, such as finding ways to help people reduce their dependence on their cars, supporting and promoting local growers, helping low-income families improve home insulation, or planting orchards and woods on public and private land.

As part of reaching out to the wider community, this Climate Action Plan has been included in the Bude-Stratton Strategic Programme ²²(BSSP), which makes it one of several projects that have the joint support of Cornwall Council, Bude-Stratton Town Council, Bude Coastal Community Team, and the Cornwall and Isles of Scilly Local Enterprise Partnership.

We'll be looking to cooperate with other communities and have already established contact with neighbouring parish councils in the Bude Area Community Network Panel and we've had informal interactions with members of Okehampton and Holsworthy town councils.

WHERE WE ARE NOW

On **Thursday, February 20**, an extraordinary meeting of the full council approved funding for a carbon audit (Scope 1 and 2) of Bude-Stratton Town Council's assets and operations. That evening, an extraordinary meeting of the Climate Change & Environment Committee voted to recommend this Climate Action Plan for approval by full council on **March 5**, after which it was published and made available for download on the BSTC website. This is the first significant step in the council's response to Bude's Climate Emergency Declaration.

Simultaneously, under the auspices of Bude Coastal Community Team, a group of community-led environmental groups is working towards the **March 27** final-stage application deadline for up to £200,000 funding from the Lottery Community Fund's Climate Action Fund. If successful, this money would enable Bude to embark on a series of initiatives and feasibility studies to address the community's response to Bude's Climate Emergency Declaration.

Next steps

Community

The first next step is for the community to inform the Town Council how it wants to organise and structure its role in Bude's response to the climate crisis. Among other considerations, it needs to decide whether to use an existing Bude environment organisation, whether to form a new community body, and whether to invite Bude-Stratton and/or Cornwall Councillors to be members of that body.

Climate Change & Environment Committee

To assist the community in meeting and deciding its response, the Climate Change & Environment Committee will lead a meeting of Bude residents and Bude community-led environmental organisations on the evening of Earth Day, **Wednesday April 22**.

Town Council

Having agreed the funding and commissioning of a carbon audit, the Town Council is awaiting the results. When they are known and have been assessed by the Climate Change & Environment Committee, the full council will consider the Committee's recommendations.

BLUE-SKY IDEAS-WORKSHOP NOTES

After its first meeting, the Climate Change & Environment Committee convened a workshop to explore the potential scope and direction of a Bude Climate Action Plan. As part of this workshop, participants were encouraged to brainstorm ideas for potential schemes that might be considered as future solutions to help Bude towards carbon neutrality.

A bullet-point list of ideas and suggestions was compiled by the Town Clerk for possible future discussion or reference. They ranged from realistic, necessary and achievable, through ambitious, to suggestions that might be regarded as quite fanciful. We agreed not to exclude any ideas from our discussions for any reason whatsoever as the session was intended to be as openminded as possible.

The ideas below are listed in no particular order of priority or likelihood of adoption:

- Carbon audit of town council activities – To establish base position
- Mapping of green assets and green community groups – To strengthen group working and identify gaps
- Community envisioning day – To bring groups together and swap ideas
- Physical and digital maps of activities and providers – To illustrate what a sustainable community looks like
- Promote Bude as destination for sustainable tourism – To ensure Bude's future prosperity.
- More allotments
- Education on growing food
- Eco-electric bus on Exeter -Bude route
- Electric bike scheme
- Bike-borrow scheme – Recover old bikes, employ apprentice to recondition and then lend to tourists in exchange for parking car
- Shared electric car scheme
- Bike dynamo phone chargers
- Green taxi scheme
- The Pasty Connection (Bude branch) – lift-sharing website to link people with common journeys out of area
- Travel audit/survey/diaries
- Extend public rights of way, improve cycle and footpaths – wheels to work
- Hopper bus around town and wider district
- Widemouth to Bude monorail
- Tourist/campsite road train
- Park and Ride scheme for shoppers and visitors
- Sustainable-living demonstration building – Showcase solar photovoltaic and solar thermal panels, water harvesting, ground and air-source heat pumps
- Sustainable employment policy – Staff travel issues
- Examine Council's procurement policy – Ethical sourcing

- Examine Council's investment policy – Ethical investing
- Council Digester for green waste and methane production
- Methane-run vehicles
- Community heat scheme
- Combined heat and power generation
- Reduce grass-cutting frequency on council properties
- Soil creation composter – Free soil for local food co-ops
- Food waste collection from local business – Find better method of recycling
- Library of Things – Reduce consumption by sharing tools and other useful or frequently required items
- Community-owned wind turbine
- Hydro and tidal power – Could waterflow in river and/or canal produce energy?
- Lobby for better insulation of homes
- Review tree-planting policy on council land
- Launch tree-planting scheme for public
- Public education/Simple steps programme – save money and the planet
- Youth group involvement
- Switch council power tools from petrol-powered to electric when replaced
- Social housing/Community Housing Trust
- Address fuel poverty
- Business community involvement
- Map showing suitable renewable energy locations – Suitably orientated roofs for PV panels and a survey of locations where ground source heat pumps are viable.

GLOSSARY

Adaptation – Actions to cope with the effects of climate change. For instance, the construction of barriers to protect against rising sea levels, or conversion to crops that are better suited to higher temperatures and drought.

Afforestation – Planting of trees on land that historically has not been forested. The opposite of deforestation.

Anthropogenic climate change – Climate change resulting from human activity, as opposed to climate change from natural processes, such as the solar cycle, volcanoes and changes in Earth's orbit.

Baseline for cuts – The year against which countries measure their decrease of emissions targets. Like most countries, the UK adheres to the Kyoto Protocol, which uses a baseline year of 1990. Some countries use later baselines, for instance the United States, which uses a 2005 baseline.

Biodiversity – The variety of plant and animal life (terrestrial and aquatic) in the world or in a particular habitat. A high level of biodiversity is considered to be important and desirable for the support of life on Earth.

Biofuel – A fuel obtained from renewable living sources. Crops such as maize and sugar cane make bioethanol for petrol vehicles. Vegetable and animal oils (partly from chip fryers) are used to make biodiesel, and green diesel comes from algae and other plants. Some forms of waste decompose to make methane biogas.

Biomass – Living materials used for energy production. Primarily wood for burning in power stations and domestic heating systems, but also cereal crops for making biofuels. Biomass releases carbon dioxide into the atmosphere but is considered carbon neutral (or even carbon negative in some cases) because the carbon dioxide is reabsorbed by crops planted to replace biomass sources.

Black carbon – The soot that results from the incomplete combustion of fossil fuels, biofuels, and biomass such as wood and animal. It is the most damaging climate-warming substance released into the atmosphere. Whereas greenhouse gases trap only infrared radiation (heat) in the Earth's atmosphere, black carbon particles absorb all wavelengths of sunlight and then re-emit this energy as infrared radiation.

Business as usual – A scenario used by some countries to justify not reducing total greenhouse gas emissions. It projects future emissions against the current rate of increase, thereby enabling the argument that although emissions are increasing, they are increasing by less than they would have done if emissions had continued unchanged.

Carbon capture and storage – The collection and transport of concentrated carbon dioxide gas from large emission sources, such as power plants. The gases are then injected into deep underground reservoirs. Carbon capture is sometimes referred to as geological sequestration.

Carbon dioxide (CO₂) – A gas that occurs naturally in the Earth’s atmosphere, maintaining warmth through the greenhouse effect and comprising one of the essential building blocks for plant growth through photosynthesis. Burning fossil fuels releases in a comparatively very short time carbon dioxide that was stored over millions of years by plants. Atmospheric CO₂ concentration has increased by up to 80 percent, impacting significantly on the planet’s average temperature. It is the principal greenhouse gas produced by human activity.

Carbon dioxide equivalent (CO₂e) – Six greenhouse gases are limited by the Kyoto Protocol, each of which has a different global warming potential. The individual warming effect of each gas is often expressed in terms of carbon dioxide equivalent - the amount of CO₂ that would cause the same amount of warming.

Carbon footprint – The amount of carbon emitted by an individual or organisation in a given period of time, or the amount of carbon emitted during the manufacture of a product.

Carbon neutral – A process or activity in which there is no net release of CO₂. For instance, growing biomass removes CO₂ from the atmosphere, while burning it releases the captured gas back into the atmosphere. Individuals, companies or countries can claim carbon neutrality through carbon offsetting.

Carbon offsetting – A way of compensating for CO₂ emissions by participating in, or funding, efforts to remove greenhouse gases from the atmosphere equivalent to those produced by a particular activity. Offsetting is frequently criticised as it doesn’t change damaging behaviours and because of disagreement over the true equivalent of offset activities.

Carbon sequestration – A natural or artificial process by which carbon dioxide is removed from the atmosphere and held in solid or liquid form. A natural example is the absorption of carbon dioxide by plants through photosynthesis to enable growth of biomass (wood, leaves, and so on). It can also refer to the capture and storage of CO₂ produced by industry. See Carbon capture and storage.

Carbon sink – Any process, activity or mechanism that removes carbon from the atmosphere. The largest carbon sinks are the world's oceans and forests, which is why ensuring their continued healthy existence is a vital part of the climate crisis response.

Climate – The weather conditions in a particular area generally, or over a long period of time. The temperature, rainfall or windspeed on any one day is the weather, not the climate. The average temperature, rainfall or windspeed over a year (and the amount by which it varies) is the climate, not the weather.

Climate change – A pattern of change in global or regional climate, measured against yardsticks such as average temperature and rainfall, or a change in frequency of extreme weather conditions. This variation may be caused by both natural processes and human activity. Global warming is one aspect of climate change.

CO₂ – See carbon dioxide.

Deforestation – The permanent removal of standing forests, which leads to increases in atmospheric carbon dioxide because of less carbon sequestration and often the burning of timber. The opposite of afforestation.

Feedback loop – In a feedback loop, rising temperatures change the environment in ways that affect the rate of warming. Feedback loops can be positive (adding to the rate of warming), or negative (reducing it). Melting Arctic ice is an example of a positive feedback process, whereby there is less white ice (by area) to reflect solar heat back into space and more dark open water to absorb solar heat. A vicious spiral ensues in which the water heats up further, and the remaining ice melts faster.

Fossil fuels – Natural resources, such as coal, oil and natural gas, containing hydrocarbons formed from the remains of living organisms that absorbed carbon dioxide and water millions of years ago. When burned, they release vast deposits of carbon dioxide in a very short time.

Global average temperature – The mean surface temperature of the Earth measured using three methods: satellites; a network of more than 3,000 terrestrial temperature-observation stations; and sea surface-temperature measurements taken from merchant and naval ships and data buoys.

Global warming – The steady rise in global average temperature in recent decades, which the vast majority of scientists agree is caused mostly by manmade greenhouse gas emissions. It is a major component of climate change.

Greenhouse gases (GHGs) – Natural and industrial gases that trap solar radiation (heat from the sun) in the Earth's atmosphere, thereby increasing the average temperature of Earth's climate system. The Kyoto Protocol restricts emissions of six greenhouse gases: natural (carbon dioxide, nitrous oxide, and methane) and industrial (perfluorocarbons, hydrofluorocarbons, and sulphur hexafluoride).

Greenhouse effect – The insulating effect of certain gases in the atmosphere, which allow solar radiation to warm Earth's climate system but then prevent the heat escaping. See also Natural greenhouse effect.

IPCC – The Intergovernmental Panel on Climate Change is a scientific body established by the United Nations Environment Programme and the World Meteorological Organisation. It reviews and assesses the most recent scientific, technical, and socio-economic work relevant to climate change, but does not carry out its own research.

Kyoto Protocol – A protocol attached to the United Nations Framework Convention on Climate Change. It sets legally binding commitments on greenhouse gas emissions. It was agreed by governments at a 1997 UN conference in Kyoto, Japan, but did not legally come into force until 2005. A different group of countries agreed a second commitment period from 2013–2020.

Methane – After carbon dioxide, the second most damaging greenhouse gas. Sources include the natural world (wetlands, termites, wildfires) and human activity (agriculture, waste dumps, leaks from coal mining).

Mitigation – Action that reduces manmade climate change, either by reducing greenhouse gas emissions or by absorbing greenhouse gases already in the atmosphere.

Ocean acidification – The ocean absorbs about a quarter of manmade CO₂ from the atmosphere, helping to mitigate climate change, but also increasing acidity because carbon dioxide dissolves in seawater to make carbonic acid. In the industrial era, carbon dioxide absorption has lowered seawater pH by 0.1. Ocean acidification reduces the ability of marine organisms to build shells and skeletal structures and it kills coral reefs, with serious consequences for fishing grounds.

Passive house – A type of building construction that provides high levels of occupant comfort while using very little energy for heating or cooling. Built with meticulous attention to detail and rigorous design and construction principles developed by the Passivhaus Institute in Germany. Passive houses can be certified through an exacting quality assurance process.

Per-capita emissions – The amount of greenhouse gas emitted by a country or community per unit of population.

Pre-industrial levels of carbon dioxide – The level of atmospheric carbon dioxide before the Industrial Revolution, estimated to be about 280 parts per million by volume. The current level is around 400ppm.

Renewable energy – Power from resources that can be easily replenished in a short period of time. The five most-used renewable energy sources are biomass (such as wood and biogas), water movement, geothermal (heat from below ground), wind and solar.

Resilience – The ability of a social or natural system to absorb challenges while retaining the same basic structure and ways of functioning.

Sequestration – In this context, the process of storing carbon dioxide. See carbon sequestration.

Solar cycle – A natural variation in the Sun's activity, which typically follows an 11-year cycle. The current scientific consensus, including by the IPCC, is that the solar cycle has only a very small effect on global climate change. The warming effect of recent solar variation is much smaller than the effect due to greenhouse gases. Average solar activity in the past

decade has been no higher than in the 1950s, whereas average global temperatures have risen markedly over the interim.

Tipping point – A threshold beyond a change is difficult to reverse. Scientists say it is urgent that we reduce global carbon dioxide emissions by half within 50 years to avoid triggering irreversible changes to the climate.

Vulnerability – The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change.

Weather – The state of the atmosphere with regard to temperature, cloudiness, rainfall, wind and other meteorological conditions. It is not the same as climate which is the average weather over a much longer period, such as a year.

ACKNOWLEDGEMENTS

This first version of the Bude Climate Action Plan was informed and shaped by discussions and workshops involving members of the Climate Change and Environment Committee of Bude-Stratton Town Council. Many thanks to all Bude-Stratton town councillors and non-councillor committee members who made valuable contributions.

Many thanks also to the many Bude residents and community groups who offered guidance and advice, whether formally, informally, directly or indirectly. These included Transition Bude, Climate Action Bude, Connect Bude, Bude Food Bank, Extinction Rebellion Bude, Good Mud, The Pantry, and A Greener Bude, which is a partnership of 15 environment-focused organisations based mostly in or around Bude. A Greener Bude's members are 2-Minute Foundation, Beach Care, BRAG (Bude Rubbish Action Group), Bude Friends of the Earth, Bude Marine Group, Bude Refill Shop, Bude Repair Café, Cleaner Seas, CRAP (Crooklets Recycling and Picking), Morsbags, Plastic Movement, ReFill, Wave of Waste, Westcountry Rivers Trust, Widemouth Task Force.

Having avoided listing anyone by name, a special mention of thanks to two people. First, Ian Saltern, Community Projects Manager at Bude Coastal Community Team. His advice and assistance, and BCCT's support, were invaluable in compiling and coordinating the bid for funding from the National Lottery Community Fund's Climate Action Fund. Second, Town Clerk Keith Cornwell and his team in the council office. Their considerable assistance at a time when they are already operating at full capacity is much appreciated and valued.

This version of the Climate Action Plan was written by the Chair of the Climate Emergency and Environment Committee, Robert Uhlig. The next version of this plan will hopefully be improved by a more attractive layout and contributions from community environmental groups. If you're a graphic designer who can volunteer time, however little, to help, please get in touch: cllr.ruhlig@bude-stratton.gov.uk

REFERENCES

-
- ¹ https://en.wikipedia.org/wiki/Climate_emergency_declaration
- ² <https://www.climateemergency.uk/blog/list-of-councils/>
- ³ <https://climateemergencydeclaration.org/united-kingdom-bipartisan-uk-parliament-declares-a-climate-emergency/>
- ⁴ <https://www.gov.uk/guidance/climate-change-explained>
- ⁵ <https://www.gov.uk/guidance/climate-change-explained>
- ⁶ <https://www.metoffice.gov.uk/weather/climate-change/effects-of-climate-change>
- ⁷ <https://www.cornwall.gov.uk/media/40176082/climate-change-action-plan.pdf>
- ⁸ <https://www.cornwall.gov.uk/environment-and-planning/climate-emergency/>
- ⁹ <https://www.plymouth.ac.uk/news/rising-sea-levels-and-increased-storms-pose-future-threat-to-coastal-communities>
- ¹⁰ <http://www.mccip.org.uk/impacts-report-cards/full-report-cards/2020/>
- ¹¹ <https://www.theccc.org.uk/tackling-climate-change/preparing-for-climate-change/>
- ¹² <https://www.theccc.org.uk/publications/>
- ¹³ <https://www.cornwallwildlifetrust.org.uk/climatechange>
- ¹⁴ <https://www.devonwildlifetrust.org/what-we-do/defending-wildlife/meeting-threats-climate-emergency>
- ¹⁵ <https://www.sas.org.uk/our-work/climate-change/>
- ¹⁶ <https://www.cornwall.gov.uk/media/41106932/helston-climate-action-plan-september-2019.pdf>
- ¹⁷ <https://www.frometowncouncil.gov.uk/your-community/resilience/climate-emergency/>
- ¹⁸ <https://www.shrewsburytowncouncil.gov.uk/sites/default/files/Agenda%208%20-%20Developing%20a%20Climate%20Emergency%20Action%20Plan.pdf>
- ¹⁹ <https://www.bridport-tc.gov.uk/wp-content/uploads/2019/11/Climate-Emergency-Action-Plan-FINAL-v5-following-Full-Council-approval.pdf>
- ²⁰ http://www.totnestowncouncil.gov.uk/Climate_Emergency_22424.aspx
- ²¹ <https://www.bude-stratton.gov.uk/neighbourhood-plan/>
- ²² Loosely speaking, the Bude-Stratton Strategic Programme is an agreed list of priority economic, social, cultural and environmental projects being considered and developed in the Bude area. Technically speaking, it is Schedule 1 to a Memorandum of Understanding signed by the four parties that have agreed to work together on the Programme's projects: Bude-Stratton Town Council; Bude Coastal Community Team; Cornwall Council; Cornwall and Isles of Scilly Local Enterprise Partnership.