

Ide Carbon Plan

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Produced by Ide Climate and Ecology Emergency Working Group

1. Introduction

The 2018 Intergovernmental Panel on Climate Change (IPCC) report on Climate Change which is summarised in wikipedia, states that we have already caused a 1°C rise in global temperature.

The difference between the impacts of global warming of 2°C and 1.5°C is much greater than previously thought and we are currently heading for a catastrophic 3°C rise. We are running out of time and need to get to net zero Greenhouse Gas (GHG) Emissions as quickly as possible.

Growing numbers of parish, town and county councils are declaring a Climate and Ecology Emergency. This is a genuine commitment to work towards a specific measurable target. It might seem that a Parish Council can't really do much, but climate and ecology are relevant to many of our activities.

- Maintaining and improving green and wild space in the village
- Working to improve public transport
- Providing feedback on wider council strategies for transport, housing as well as specific feedback on planning applications.
- All levels of government national, regional and local, have a duty to secure our community from the negative impacts of climate breakdown. Local government should not wait for national government to improve their policies.
- Action on climate and environment can underpin all the council's decisions, declaring a climate emergency provides the framework and justification for Environmental impact to be a factor in every decision we make.

Ide Parish Council (PC) declared a climate emergency on 20th March 2019.

Even before this declaration, the Ide community had already undertaken a range of initiatives to reduce its carbon footprint. We are putting this plan in place to monitor progress and affect further reductions, it is recognised that much has been done throughout the community, and further urgent action is still needed.

2.Quick start

If we want to get stuck in straight way with helping to make the community net zero and sustainable, here is what we can do first.

1. We can measure our carbon footprint, as an individual or a household with a series of questions, looking at gas and electricity metered use in a year, car mileage, other forms of travel, shopping and consumption etc. This is fairly easy with a few recent bills and the ACT Carbon footprint tracker.

<https://actionclimateteignbridge.org/index.php/carbon-calculator/> This will show us the best places to make change.

2. We can change energy supplier and buy a 100% green tariff. Ideally one of the few providers that buys directly from renewable generators or generates its own supply such as Good Energy or Ecotricity.

3. Look at our travel, could we walk or cycle more and enjoy free travel, and health benefits?

4. Reduce, Reuse, Repair, Repurpose, Recycle. Can we cut down the amount of stuff we take from production to waste, and increase how much that stuff does on the way?

3.What has been done already in Ide

A great deal has been done in the village already and should be recognised and celebrated.

- Declared a climate and ecology emergency
- Form a Climate Emergency working group
- The community shop, promoting local goods and reducing residents travel needs.
- Solar Panels on the village hall.
- The Neighbourhood plan contains some good climate and environment policies.
- Influencing planning, e.g. Pynes Farm Carbon plan.
- The Public event in Ide, in 2020.
- Joined the public event in Exeter in 2019 with Transition Exeter.
- Ide Parish Council Signed the Devon County Council declaration.
- Working towards Plastic free community status.
- Parish Council emergency action plan (for flooding snow etc.)
- Pynes orchard community project.
- Parish Council emergency volunteer group.
- Weir Meadow community project.
- Local recycling guide.

4. Where are we now

If we Ide parish is to become carbon-neutral, we need to measure our carbon footprint. It turns out this is quite hard for a village.

We can measure the carbon footprint of a person, or a household with a series of questions, looking at gas and electricity metered use in a year, car mileage, other forms of travel, shopping and consumption etc. This could be done with the ACT Carbon footprint tracker and we encourage residents to try this.

<https://actionclimateteignbridge.org/index.php/carbon-calculator/>

It is difficult to do a carbon footprint tracker for all 283 dwellings in Ide. There are government data sets for energy use, travel etc. that can be used to generate a footprint for a country, or can be broken down by county or as far as district council level, but these national data sets are usually not broken down by parish.

Action for Climate in Teignbridge have done a great deal of work to get more granular footprint data for parishes using publicly available information such as household energy performance certificates, traffic surveys and mapping data. ACT data for Ide is available through the ACT web site in the mapping tool. This data has been used to generate an approximate baseline carbon footprint as follows.

Ide Parish has 582 people, 283 dwellings and 32 companies.

It has 68ha of woodland in 676ha total area.

Domestic emissions account for 1017 tons CO₂ equivalent (tCO₂e)

Road traffic emissions account for 4438 tCO₂e based on road traffic data 2017.

Domestic energy and emission from meter reading data

Fuel	Meters	Energy (GWh)	Emissions (t CO ₂ e)
Gas	210	2.99299	598.732
Electricity	255	1.23695	314.725
Other Fuels		0.472292	103.585
Total		4.70223	1017.04

Road Traffic Statistics 2017

Vehicle Type	Emissions tCO ₂ e
Pedal Cycles	
Two Wheeled Motor Vehicles	12.58
Cars and Taxis	2654.0
Buses and Coaches	60.49
Light Goods Vehicles	853.46
Heavy Goods Vehicles	857.82
Totals	4438.35

The road traffic figure above allows comparison of vehicle types, but the total is large due to the A30 passing through parish, largely outside community control. For the parish footprint below, we have used the CFT tool offered by ACT instead which is less skewed by traffic surveys and relies instead on adjusted average data.

For food, goods and services (that you buy, use, consume or throw away) and large expenditure items (e.g. cars and extensions) we also use the CFT tool.

The “Land Use, Land Use change” section is taken from the ACT GIS tool, rather than the CFT tool which does not include this category. There is a danger of “double counting” when mixing sources, however it is important to put natural sequestration into context.

This is the best data we have at this stage, with thanks to Fuad of ACT for his assistance in this area. We expect to continue improving the quality of the parish footprint.

	t CO2e total Ide PC annual (consumption) emissions from the ACT CFT tool (2019 factors)	specific notes and assumptions
Buildings	1,141.12	CFT: adjusted GIS data
Transport	930.62	CFT: 3,000 mi/person/p.a. private car + one 3,000 mi flight/person/p.a.
Food	1,280.40	CFT: Average UK diet & spend
Goods	1,485.85	CFT: Average UK expenditure
Services	758.93	CFT: Average for all UK services
LULUCF (natural sequestration)	401.58	ACT GIS tool (2017 factors)
Total	5,998.49	
per-capita	10.31	For 582 people
per household	21.20	For 283 households

5. Big Landowners

Ide is a rural community, and the land use and agricultural practice choices of the surrounding countryside can greatly impact our ability to face the challenges posed by climate change. Improving agricultural practices that store carbon in the plant biomass and healthy soils can help mitigate climate change for the Parish as a whole.

Government policy is changing fast. It is not yet clear how future publicly funded agricultural payment schemes will incentivise sustainability and encouraging diversity over intensification.

We hope landowners will be encouraged with 'public money for public goods' ecosystem services, such as carbon sequestration of healthy soils and water catchment sensitive farming practices.

We hope to maximise opportunities for landowners and the parish alike.

Any possible moves by local farms towards organic status would also be welcome.

6. Target Date

We would like to set a target date for Ide to aim for carbon neutral. In the Interim Devon Carbon Plan, research is quoted putting the approximate total cost for Devon at around £26,000 million and £20,000 per resident.

For context, this year, the UK spending on the Covid emergency is £280 billion, that's about £4200 per resident per year. Almost a quarter of the total cost of becoming carbon neutral already spent on Covid. <https://www.bbc.co.uk/news/business-52663523#:~:text=This%20year%20the%20government%20is,its%20impact%20on%20the%20economy.>

Much of the work needed in the parish is closely linked to county and national, we hope to align an Ide target with that of Devon if possible.

It is important to realise that the total GHG emissions are much more important than the target date. It is important to make big savings early to reduce the long-term impacts.

Based on the Devon Climate data, Ide's 582 residents, and assuming a steady reduction in GHG gives the following table

Target Date	Years	Cost/year			Total Cost		Total Emissions	
		per head	region	of GDP	/ head	region	/ head	region
		£	£1000s	%	£	£1000s	tCO2e	1000 tCO2e
2030	10	1,992	1,159	6.6	19,920	11,593	60	34.92
2040	20	1,007	586	2.7	20,140	11,721	120	69.84
2050	30	661	385	1.5	19,830	11,541	180	104.76

These figures are approximate and in choosing a date we should also consider...

Advantages of a later target

- Additional cost due to using less mature technologies - difficult to quantify, and not reflected in the estimates.
- Additional costs associated with accelerating a project to complete it in less time. - difficult to quantify, and not reflected in the estimates.
- Additional cost of finding the money sooner. In the table above we have assumed the money is borrowed at PWLB interest rates to deliver the funding sooner and increased the costs of shorter targets accordingly. The effect of the interest payments is very small.
- The danger of too short a target is that it is not achievable. We commit to only 10 years of trying instead of 20 or 30. After we have failed, do we set a new target and try to maintain enthusiasm? For example, the 2025 target in Teignbridge will be counterproductive.

Advantages of an earlier target

- Investment in green infrastructure projects, creating work and profit opportunities and increasing economic activity in the short term. Not reflected in these figures. Such vigorous investment would leave the economy larger, in the short to medium term, and no smaller in the long term.
- Medium term cost savings e.g. wind power is much cheaper than nuclear, good public transport cheaper than running private cars, cycling is free. Get these things online sooner and have the benefits for longer. Not reflected in these figures.
- Longer term improvements to health, reduced flood risk, improved air quality etc., again harder to quantify in cash value, but very important and not reflected in these figures.
- Borrowing to accelerate the projects would result in businesses being formed and grown in Devon, which would later transition to selling their services to neighbouring areas that adopted a longer target. As a result, Devon would win out economically over neighbours by choosing a shorter target. A substantial argument for a shorter target giving a larger economy in the long term as well as the short.
- Massive improvement on cumulative emissions and carbon budget as shown above.

Action for Climate in Teignbridge are calling for a target of 2030 based on the analysis done by the Tyndall Centre which they have looked at in conjunction with the last IPCC report. They concluded that this is the date we need to get very close to net-zero GHG emissions if we are to stay within our fair share of Nationally Defined Contributions. That is our territorial proportion of the remaining GHG budget allocated to the UK to avoid runaway Climate Change.

The Climate Emergency working group welcome feedback on what target date we should choose and await with interest the decision from Devon.

7. Assessment of initiatives

In order to define scope, initiatives may be summarised as:

Internal	Under direct control by the Parish Council	e.g. Bus shelters, Allotments, Churchyard and other land owned or managed by the PC.
Indirect	Indirect or community Control, where the PC can give support.	e.g. Planning and consultations, supporting activities in the community.
Local	PC can influence local outcomes by lobbying or supporting third parties.	e.g. working with other parish councils, district and county councillors, local MPs or other external organisations.
National	PC can support national and international movements to bring about change.	e.g. supporting environmental campaigns.

Benefit / Effort matrix	Low Effort and cost	Large or extended effort
Large benefit	Quick win	Large /long term project
Small benefit	Small project	Currently uneconomical

8.Current and possible future Initiatives

We identify and assess a variety of initiatives that might be possible for the parish council and community. This is a living document and should be updated from time to time. We do not expect that all these are all possible or expected.

Ref	Title	Scope	Impact / Effort	Status
1	Climate Emergency Web site	Direct	Quick win	Complete
Set up a web page to coordinate and communicate the Climate Emergency actions.				
5	Recycling guide	Direct	Quick win	Complete
Write a recycling guide with local information				
4	Public Event	Indirect	Large	Complete
Organise a public event with speakers to engage community, and get feedback via a questionnaire				
2	Solar Shop	Indirect	Large	Complete
Siting solar panels on the village hall to power the freezers in the community shop				
6	Apple scrumping	Indirect	Small	Annual
A Community project to harvest surplus apples across the village, juice them and sell the e back to the community.				
3	Planning feedback	Internal	Quick win	In progress
Use Planning feedback to signal the need for better, lower impact buildings.				
8	Rewilding	Indirect	Quick win	In progress
Rewilding small areas of land to promote biodiversity				
7	Set a target Date	Internal	Small	In progress
Set a carbon neutral target date for our climate emergency declaration				
9	Carbon Neutral buildings	Local	Small	In progress
Carbon Neutral new buildings, influence through planning feedback				

10	Churchyard	indirect	Small	In progress
Change the management of the churchyard to promote wildflowers and habitat				
11	School Solar	Indirect	Large	In progress
Solar panels on the school				
12	Plastic free	Indirect	Large	In progress
Plastic free community award from SAS				
13	Personal Footprints	Indirect	Large	In progress
Encourage Personal Footprints using the ACT Carbon tracker. Encourage sharing these				
14	Active travel	Local	Large	In progress
Promote active travel (walking and cycling) routes and feasibility				
15	Street lighting	Local	Quick win	0
Work with DCC obtain lower energy lighting and reviewing hours.				
16	Car sharing	Indirect	Small	0
Car sharing initiatives				
17	Buy local	Direct	Small	0
Explicitly promote local purchasing, Ide Community Shop, West Town Farm, Shillingford Organics, etc.				
18	replacement trees	Local	Small	0
Policies for replacement tree planting and follow up with local Tree warden				
19	Local food group	Indirect	Small	0
Support a local food group				
20	Garden planting	Indirect	Small	0
Advent windows was a big success, we could do something similar tied into Ide in Bloom. About summer solstice, get people to plant up a wildflower or habitat area.				

21	Use Green Energy	Local	Small	0
Encourage residents to use green energy suppliers.				
22	Verges	Local	Small	0
Manage road verges to increase biodiversity				
23	Improve monitoring	Indirect	Large	0
Improve the quality of data at parish level.				
24	Bus services	Indirect	Large	0
work to improve bus services				
25	Public Event	Indirect	Large	0
Another public event in Ide				
26	Co-car	Indirect	Large	0
Co-car				
27	Energy Supply	National	Large	0
Decarbonise the energy supply, by lobbying for national changes.				
28	EV charging	Indirect	Large	0
Facilitate wider use of electric vehicles in Ide. Especially for those without driveways.				
29	Local Renewables	Local	Large	0
Support local renewable energy projects				
30	Neighbourhood plan	Internal	Uneconomical	Not viable
Update Neighbourhood plan to bring in stronger climate measures. This would be feasible if the plan were due for review, but while it is not, it is uneconomical to change, and it does not prevent any of the proposed actions.				
31	A30 Traffic	National	Uneconomical	Not viable
Reduce traffic on the A30 passing Ide. This is near impossible to do and we should instead focus on reducing traffic in general by the other means outlined.				

32	Trees in northern fields	Direct	Small	Future
Tree planting in part of the northern fields				
33	Tenancy of Northern Fields	Indirect	Small	Future
If part of the Northern fields are rented or leased out for agricultural use, ensure that the terms and the choice of tenant further these aims.				
34	Environmental projects	Indirect	Small	Future
Consider parts of the northern fields being used for Environmental projects such as a community vineyard.				
35	Ide renewables	Indirect	Large	Future
Consider enabling some renewable energy generation on the northern fields or elsewhere. This is not currently feasible.				

9.References and Resources.

Government advice for parish councils

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/218799/tackling-climate-change.pdf

ACT Town and Parish resource pack

<https://actionclimateteignbridge.org/index.php/resources-pack-for-town-and-parish-councils/>

ACT Links

<https://actionclimateteignbridge.org/index.php/links/>

A Councillor's Workbook on Climate Change

http://teignenergycommunities.co.uk/wp-content/uploads/2019/10/A-Councillors-workbook-on-acting-on-climate-change_3.pdf

Kingsteignton action Plan

<https://actionclimateteignbridge.org/wp-content/uploads/2020/03/KTC%20Climate%20Emergency%20-%20Strategy%20-%20Jan2020.pdf>

Interim Devon carbon plan:

https://www.devonclimateemergency.org.uk/interimcarbonplan/?cat_id=2572

most recent reports: the 2020 [CCC 6th Carbon Budget](#)

the [2018 IPCC report](#)