



BEECH CLIMATE ACTION

Status update for 20th March BPC meeting

Plan

1. Repeat CO2 Self Assessment of home energy emissions in January
 - a. Finalise CO2 Self assessment form (see next page)
 - b. Print by end of December, cost approx. £30
 - c. Update website
 - d. Distribute paper form with Beech Newsletter in early January
 - i. Email chaser to 2022 participants
 - ii. Nextdoor post
 - iii. 2nd email chaser to 2022 participants
 - e. Compile responses and publish summarized results on our website by end of February
 - i. Add examples of actions and results
 - ii. Publish ‘most improved’ absolute / percentage
2. Run Climate Action workshop 26th March 1300 to 1700
 1. Share best practice and learning
 2. Take input and ideas on further actions

Status

As of 14th March we have received 21 responses to the 2022 survey of which 20 had a CO2 assessment

Participation

- This represents 9% of the homes in the parish (8% reported CO2 emissions)
- This is a significant decline in response from the previous year of 54

CO2 results

The average CO2 emissions from home energy consumption of the participants in the survey has reduced by 36% from 8,274 kg to 5,296 kg.

Data

This is the summary data by Energy Performance Certificate (EPC)

House EPC	Count	Count of	Count of	Average of		Average of		KG	KG2
		2021 CO2 self assessment	2022 CO2 self assessment	Min of 2021 CO2 self assessment	2021 CO2 self assessment	Max of 2021 CO2 self assessment	Min of 2022 CO2 self assessment		
		KG	KG	KG	KG	KG	KG	KG	KG2
B	8	1		4457	4457	4457			
C	30	9	6	5516	9532	23700	330	4494	7248
D	47	12	3	4351	8694	19600	4351	5501	6430
E	18	3	1	2390	6901	11093	6996	6996	6996
F	9	1	1	11800	11800	11800	8440	8440	8440
G	1								
(blank)	123	28	9	1882	7847	17306	890	5224	11025
Grand Total	236	54	20	1882	8274	23700	330	5296	11025
		23%	8%					-36%	

Assessment



BEECH CLIMATE ACTION

1. The 2021 assessment with 54 participants representing 23% of households was reasonably representative given the average of 8,274 kg was similar to the IMPACT tool assessment of 8,600 kg.
2. The 36% reduction in 2022 CO2 emissions from respondents is a very positive message that significant reductions are possible in Beech homes with current technologies.
3. The 2022 assessment is not a representative survey, we cannot conclude that the overall number of CO2 emissions has reduced by 33%.
 - a. 21 participants or 9% of households is too small to be representative.
 - b. The survey encouraged 'positive' reporting.
 - i. The majority of respondents indicated they had made major changes.
 - ii. A small number of respondents assumed their results were the same as last year because they had not made any changes but they had not performed the assessment.
4. In considering the overall CO2 reductions in 2022 we need to take account of several factors
 - a. Impact of the changes made by residents
 - i. As a minimum 8% of residents reduced their emissions by 36%
 - b. Impact of electricity generation % renewables
 - i. Approx 22% of home energy CO2 emissions was from electricity in 2021. The renewable mix in electricity improved by 8% in 2022, hence the average CO2 home energy emissions would reduce by 2%
 - c. Impact of weather
 - i. Whilst December was colder than normal 2022 was the warmest year on record. On this basis we would expect CO2 emissions from home heating to be lower in 2022 than 2021
 - d. Impact of energy costs
 - i. Given the very significant increases in the costs of electricity, gas and oil we would expect very significant reductions in usage and transfer to wood burning.

Actions taken by participants

The majority of the 21 respondents reported having taken actions to reduce their CO2 emissions. The table below summarises the category of actions taken.

Action take	% of respondents	
Other	13	62%
Smarter heating controls	5	24%
Solar panels	5	24%
Draught proofing	4	19%
Loft insulation	3	14%
Solar battery	3	14%
Boiler upgrade	2	10%
Double glazing	1	5%
Air source heat pump	1	5%
Ground source heat pump	0	0%

Most respondents lowered boiler and/or thermostat temperatures which is coded as ‘Other’ in the table, and this equated to a 20-30% reduction in CO2 emissions.

Where respondents reported more major changes such as installing solar panels and/or changing the type of fuel the reductions were much larger in the 30 -70% range:

YtY change in CO2 emissions	2022 actions taken									
	Draught proofing	Loft insulation	Double glazing	Smarter heating controls	Boiler upgrade	Air source heat pump	Ground source heat pump	Solar panels	Solar battery	Other
-95%								1	1	1
-75%						1		1		
-74%										
-40%	1	1	1	1	1			1		
-37%	1	1		1						1
-36%								1	1	
-31%										1
-31%										1
-29%									1	1
-29%										1
-28%								1		1
-26%				1						1
-25%										1
-23%	1									1
-16%	1			1						1
-8%										
0%										

Climate Action workshop

Sunday 26th March 1300 to at Beech Village Hall

Cost is approx. £100 for hall hire

Focus on home energy

Alton Energy will attend

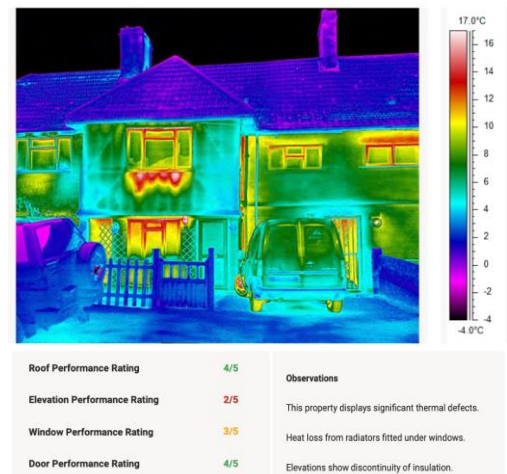
No response from EHDC

Signage for Nextdoor and village hall noticeboard:

Climate Action workshop 1300 – 1700, Sunday 26th March How to save money and reduce CO2 emissions by 36%?

1. Discuss options with specialists from **Energy Alton**
2. Talk to other villagers about their experience
 - Solar panels and batteries
 - Air source heat pumps
 - Ground source heat pumps
 - Secondary glazing
 - New builds
 - Heating controls

Beech Village Hall
1300 – 1700 with Beech Coffee and Cake!!



Beech Parish Council / www.beechpc.com



BEECH CLIMATE ACTION

Home Energy, CO2 Emissions Annual Self-Assessment

(please respond by 31st January 2023)

Beech Parish Council aims to support the residents of Beech to reduce CO2 emissions by 50% by 2030 and to be carbon neutral by 2050. We plan an annual 'Self-assessment' of each property to assess current CO2 emissions. By sharing annual usage, ideas and pooling resources we can work collaboratively to achieve these targets (and save money too!).



What next?	When by	Comments
Complete your 2022 CO2 Self Assessment:	31st January 2023	Please calculate your 2022 CO2 emissions from home energy consumption.
Complete this form OR		Return this completed form to the postbox at Beech Village Hall
Complete the ONLINE form		www.beechpc.com/annual-home-energy-co2-assessment/
Share the summarized results	28th February 2023	We will share a summary of the results on our website. Here is the link to the 2021 numbers: www.beechpc.com/2021-home-energy-co2-assessment/
Attend the Climate Action workshop	26th March 2023	Come to the workshop at Beech Village Hall to share ideas and best practice

1. Sign me up!

Signature	Date	By signing I agree to:
		<input type="checkbox"/> My personal information being stored and used for the purposes of the Home Energy annual 'Self-Assessment'

2. Your personal information

Name	Address	Email	Phone

To calculate your 2022 CO2 emissions from home energy consumption take the quantity of fuels and multiply by these factors:				Your 2022 total home heating CO2 emissions	Approx year of construction
	Qty	Factor	CO2 kg	Kg / year (Beech 2021 average 8,298, England average 2,910)	
Electricity	kWh	0.193			
Gas	kWh	0.203			
Oil	litre	3.18			
Coal	Kg	2.88			
Wood	Kg	0.10			

Please share with us the actions you have taken in 2022 and your assessment of their impact on your CO2 emissions. We will not share your personal details without your additional permission:

Area (please tick each one that applies)	What did you do?	What was the impact?
<input type="checkbox"/> Draught proofing <input type="checkbox"/> Loft insulation <input type="checkbox"/> Double glazing <input type="checkbox"/> Smarter heating controls <input type="checkbox"/> Boiler upgrade <input type="checkbox"/> Air source heat pump <input type="checkbox"/> Ground heat pump <input type="checkbox"/> Solar panels <input type="checkbox"/> Solar battery <input type="checkbox"/> Other please specify:		

For help or comment please email: kim.eakers@beechpc.com