

Carbon Zero Homes Project Final Report Appendix A



The **Carbon Zero Homes Project** aims to support households to make changes to existing buildings so that energy consumption and emissions are reduced, and your home is warmer, healthier and more comfortable.



Funded by
UK Government



DATE: 03Jun24

REPORT TO: Zero Carbon Committee, Stoke Climsland Parish Council

REPORT FROM: Andy Nevill, Project Officer, Carbon Zero Homes
Project

Carbon Zero Homes Project Client Feedback

RESULTS

Property Diagnostics Campaign

We hope that you have had a positive experience with your property survey(s) and that the findings and reports are useful.

This is a community learning project, and a significant aspect of that is to capture your feedback. Anonymised feedback will be used to guide future advice and support for households so that this can be as meaningful as possible.

Paul Willingham (Two Counties Property Surveyors) was your surveyor for your **Retrofit Assessment and Whole House Plan**.

If you had a **Heritage / Traditional Property Survey**, your surveyor was Andrew Richards (Cornwall Council).

If you had a **Heat Loss Survey / Heating System Assessment**, your surveyor was Mathew Acaster (MPA Plumbing & Heating Ltd) or Nathan Brown (Eco Nrg Ltd) or James Fortune/Dan Kelly (Dartmoor Energy Ltd).

This questionnaire should take between 10 and 15 minutes to complete.

ANIMATION

Please comment on the animation. For example, did you find it helpful?

POSITIVE COMMENTS
Yes (8 responses)
Helpful (2 responses)
YES. IT GIVES A CLEAR MESSAGE
Great animation - communicates a complex set of criteria in a simple & understandable way .Well done!
Reinforces the message that addressing a single issue such as inadequate heating is not going to make a huge impact
Good explanation of what to expect
Yes, a good overview in a very accessible format
Helpful for those who were not aware of the potential
very simplistic - gives an introduction
Bright and engaging, clear language, helpful breakdown of steps
Good information for people to start thinking about retrofitting.
Yes it reinforces what I thought I knew
Very informative
Yes a little
Very nice
Mirrored the retrofit process
Clear message - understand what they are conveying to me
Yes it was helpful
Interesting
Nice presentation that explained retrofitting in simple terms and was very clear on what processes it involves.
Right amount of information, useful starting point.
Very helpful and captured my imagination
Yes, a good clear explanation

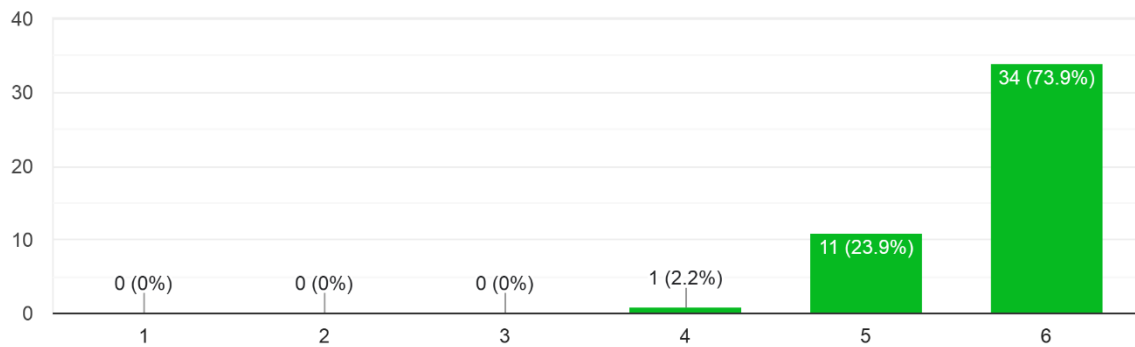
NEUTRAL AND MIXED COMMENTS
it was ok
For people who know nothing it is good for those with knowledge it's a bit condescending but overall good job
Yes was helpful. It made me think about my home but I found the animation a bit childish.
I guess that I knew all this some time ago. But it's a good promotion.

CRITICAL COMMENTS
The animation was childish and irritating. It was not helpful at all.
Didn't tell me much more than I already know. Found graphics childish and off putting.
Kids cartoon. Too long if for kids.
Not particularly

RETROFIT ASSESSMENT AND WHOLE HOUSE PLAN

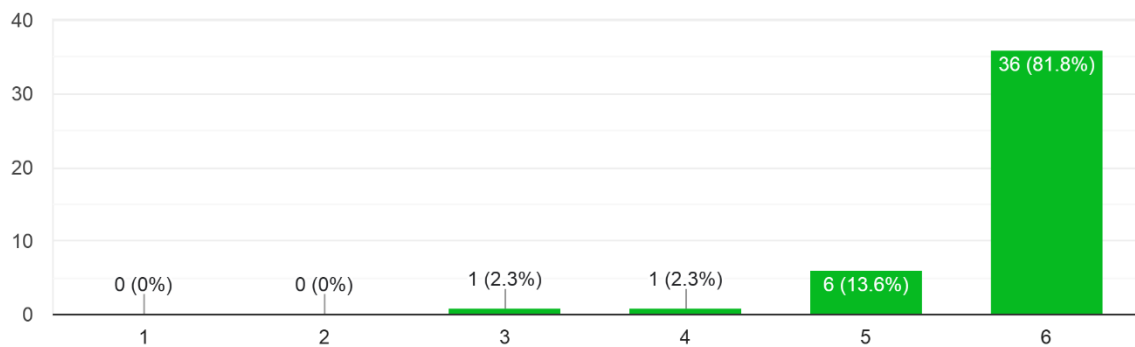
I am happy with the communication with the surveyor including arranging the survey and any follow up queries.

46 responses



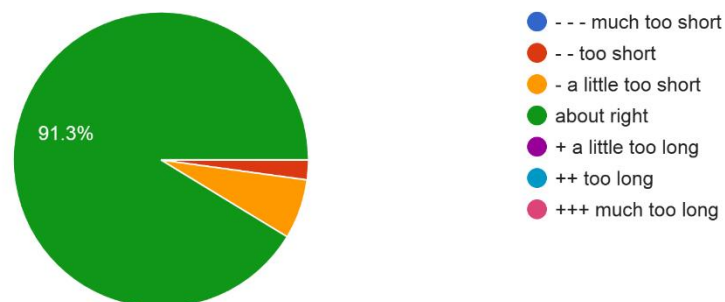
Interacting with the surveyor during the survey was beneficial.

44 responses



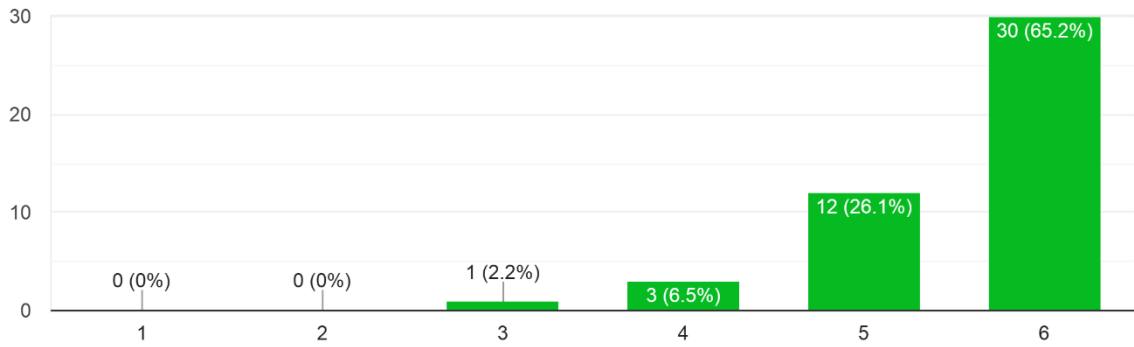
The duration of the survey was ...

46 responses



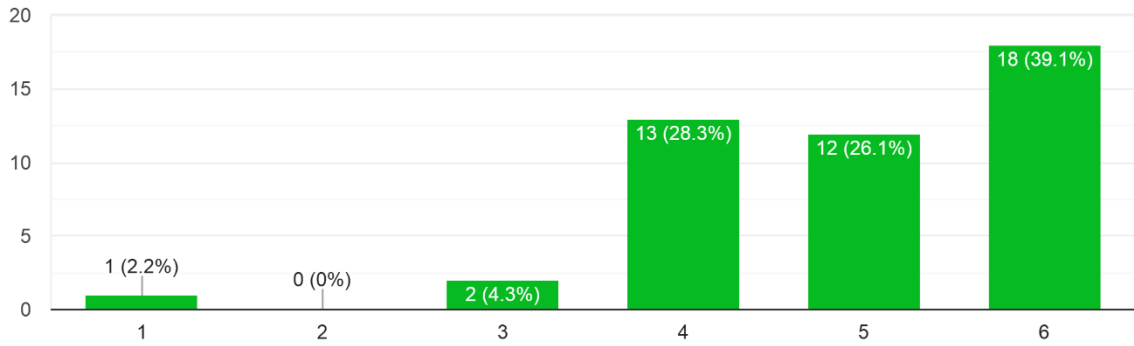
I am happy with the thoroughness of the survey.

46 responses



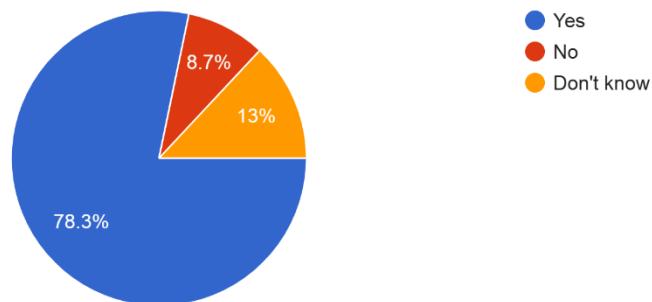
I find the survey report easy to understand.

46 responses



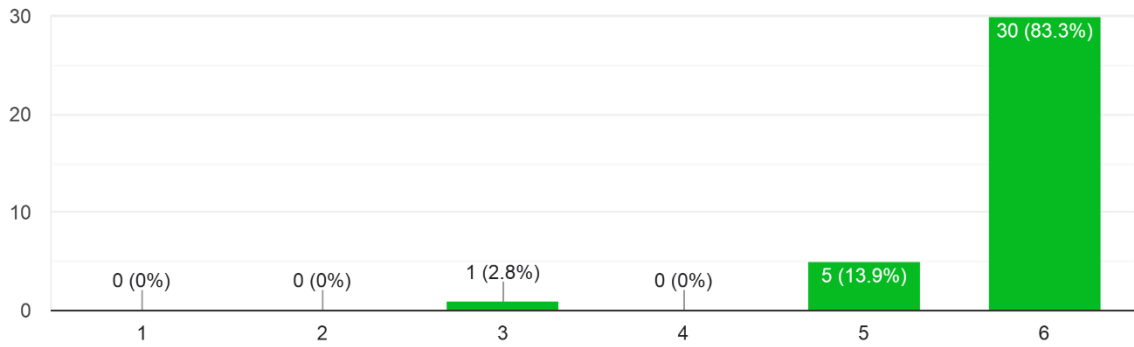
Did the surveyor use a thermal imaging camera during the survey?

46 responses



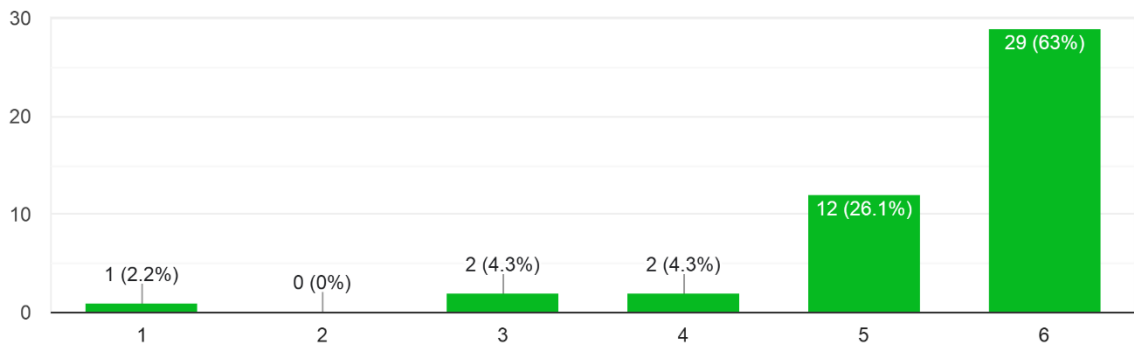
I feel that the thermal imaging added value to the survey.

36 responses



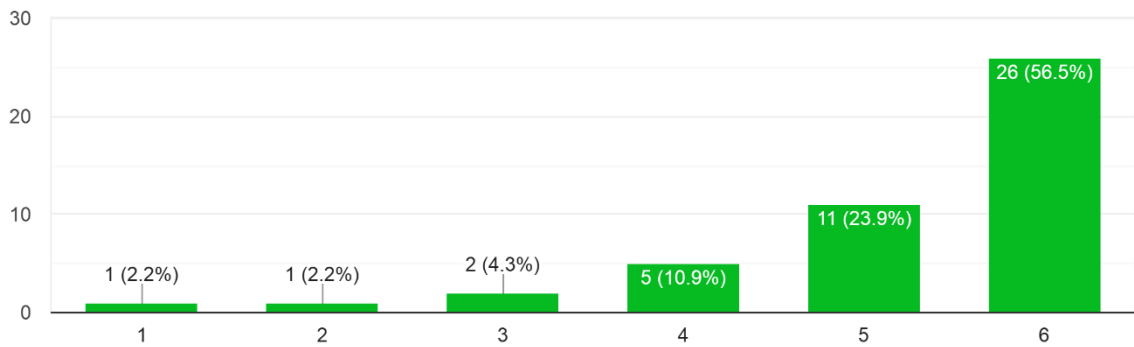
Overall, I feel the survey was useful: I now feel more knowledgeable about my home.

46 responses



This survey has encouraged me to act.

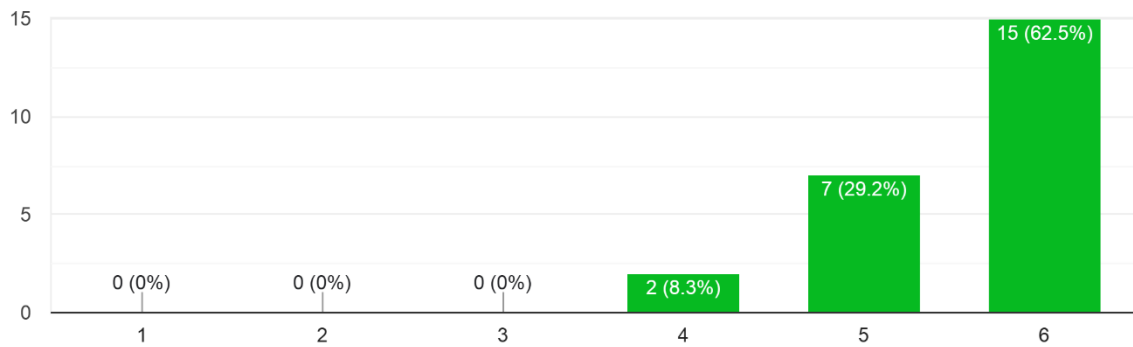
46 responses



HERITAGE / TRADITIONAL PROPERTY SURVEY

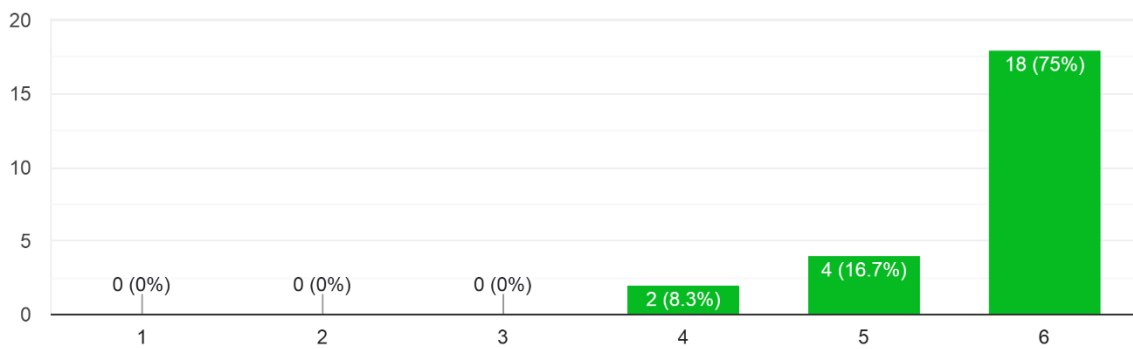
I am happy with the communication with the surveyor including arranging the survey and any follow up queries.

24 responses



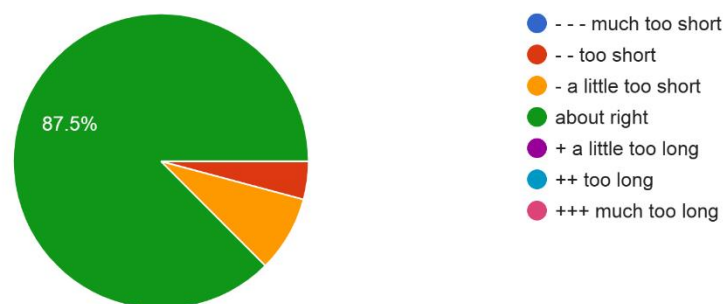
Interacting with the surveyor during the survey was beneficial.

24 responses



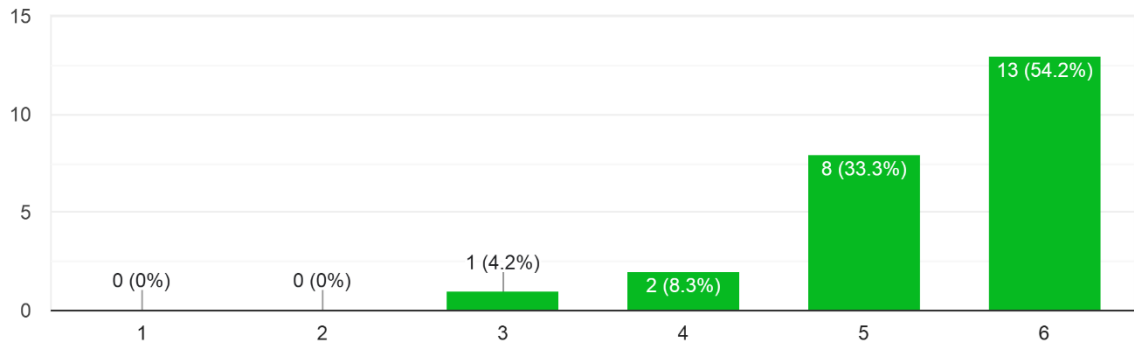
The duration of the survey was ...

24 responses



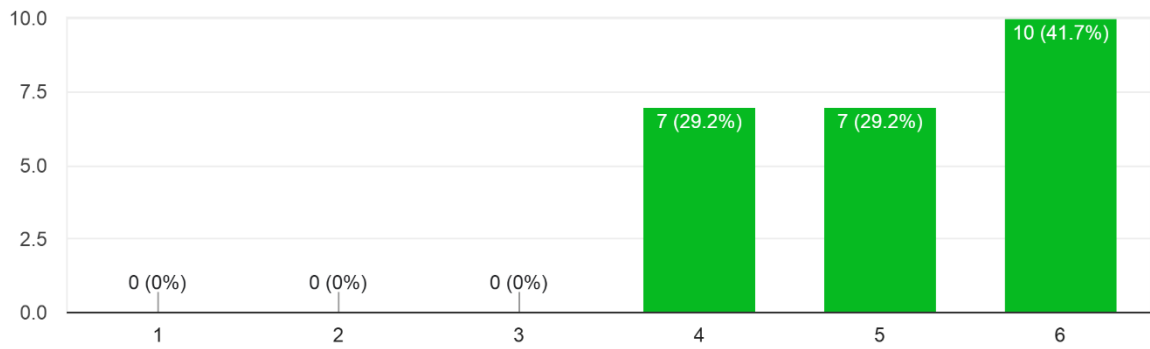
I am happy with the thoroughness of the survey.

24 responses



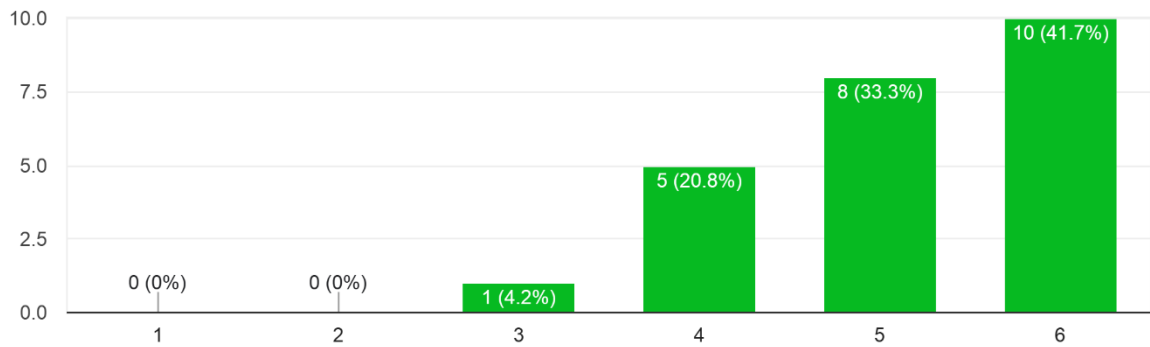
I find the survey report easy to understand.

24 responses



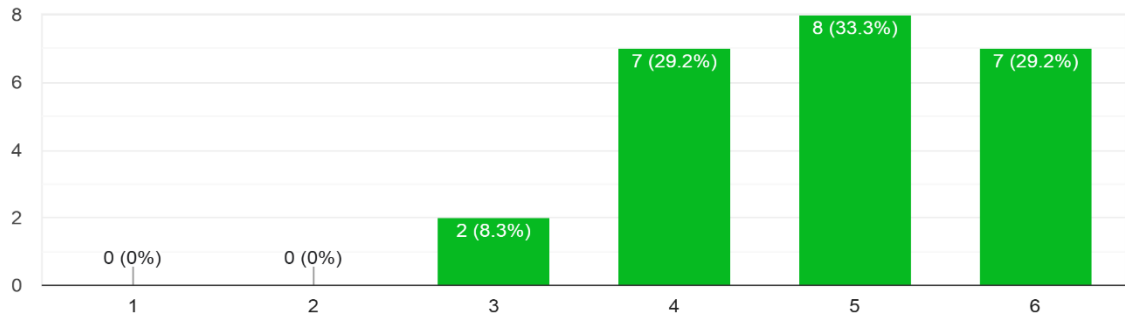
Overall, I feel the survey was useful: I now feel more knowledgeable about my home.

24 responses



This survey has encouraged me to act.

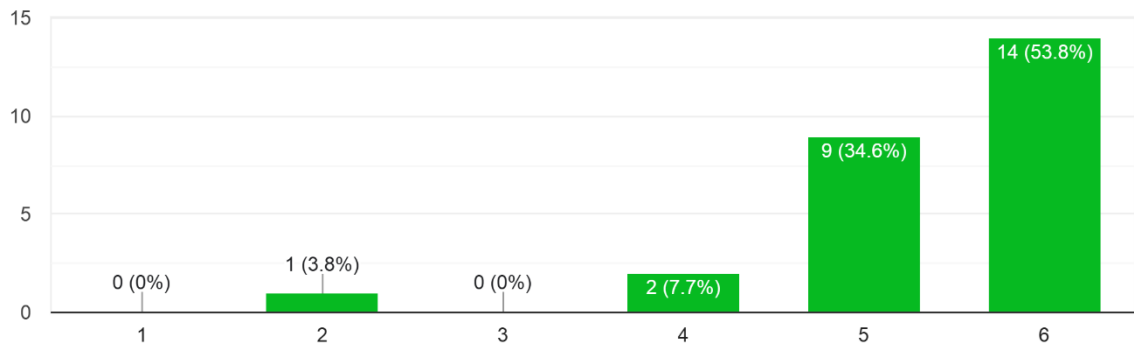
24 responses



HEAT LOSS SURVEY / HEATING SYSTEM ASSESSMENT

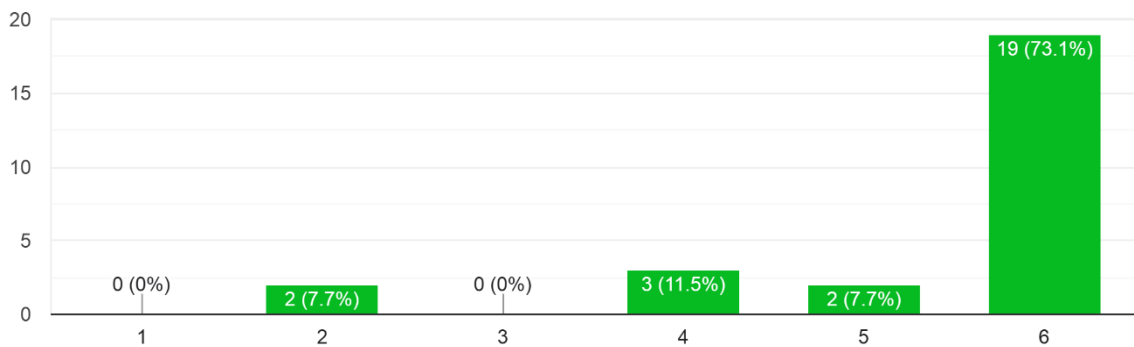
I am happy with the communication with the surveyor including arranging the survey and any follow up queries.

26 responses



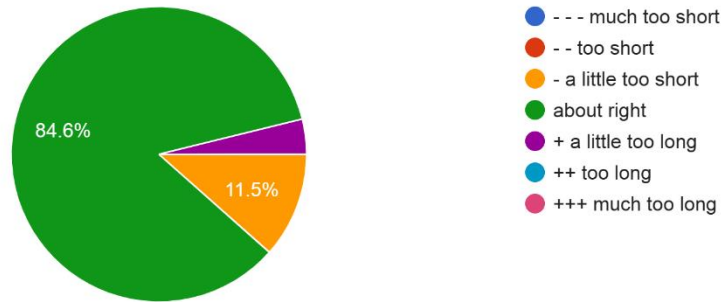
Interacting with the surveyor during the survey was beneficial.

26 responses



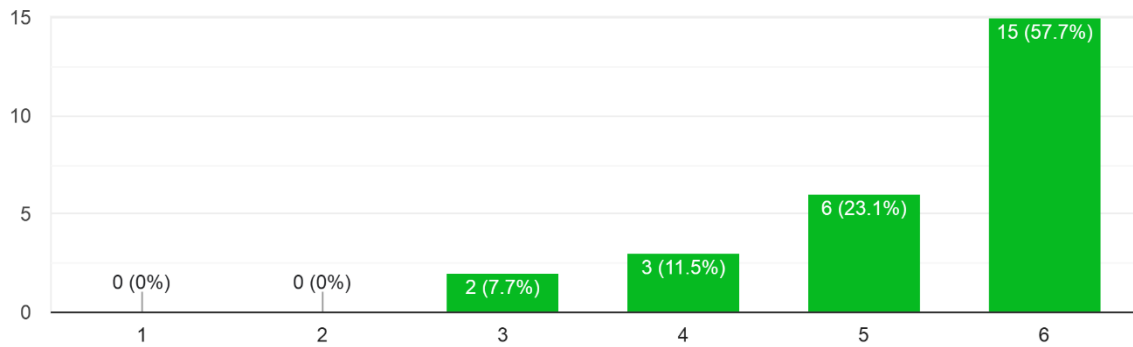
The duration of the survey was ...

26 responses



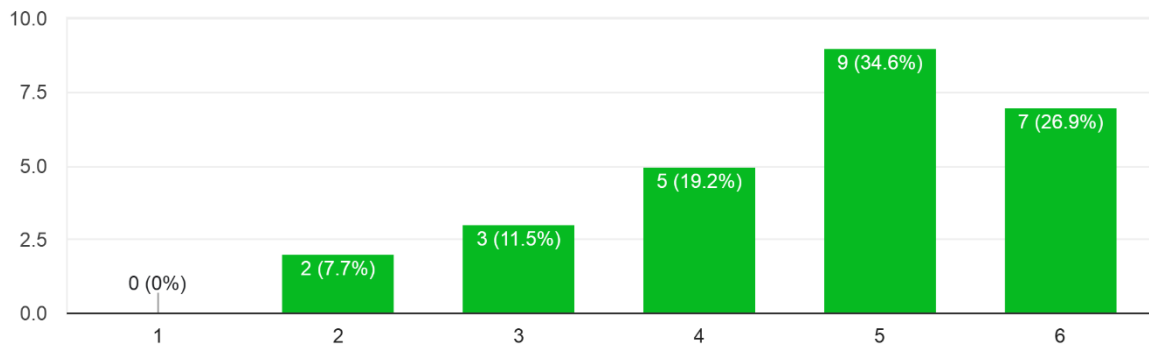
I am happy with the thoroughness of the survey.

26 responses



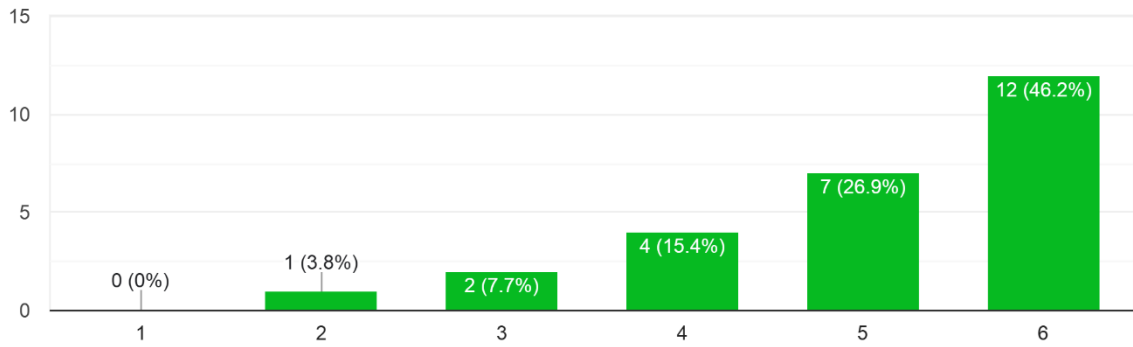
I find the survey report easy to understand.

26 responses



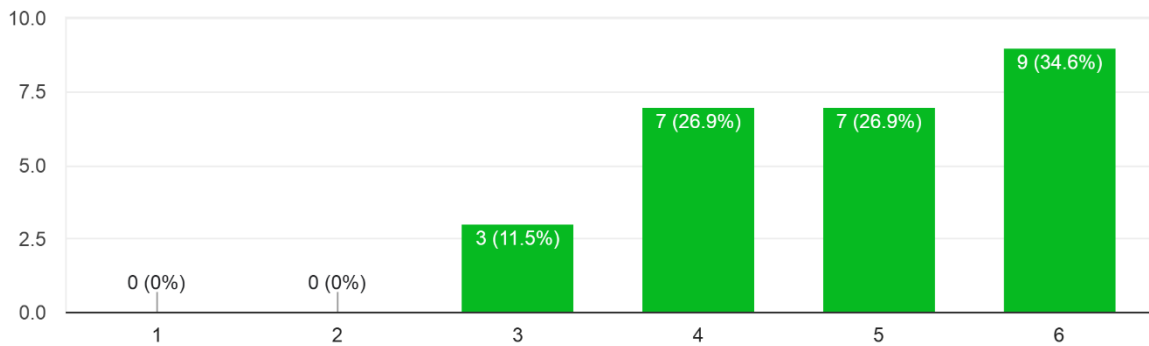
Overall, I feel the survey was useful: I now feel more knowledgeable about my home.

26 responses



This survey has encouraged me to act.

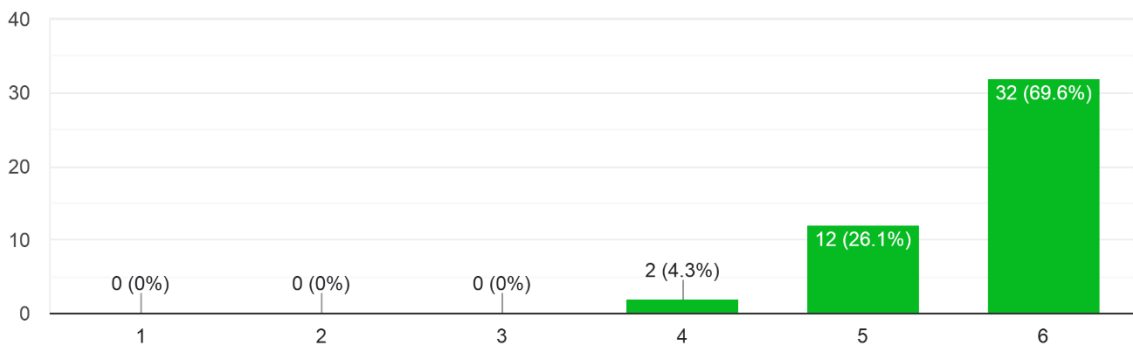
26 responses



CARBON ZERO HOMES PROJECT

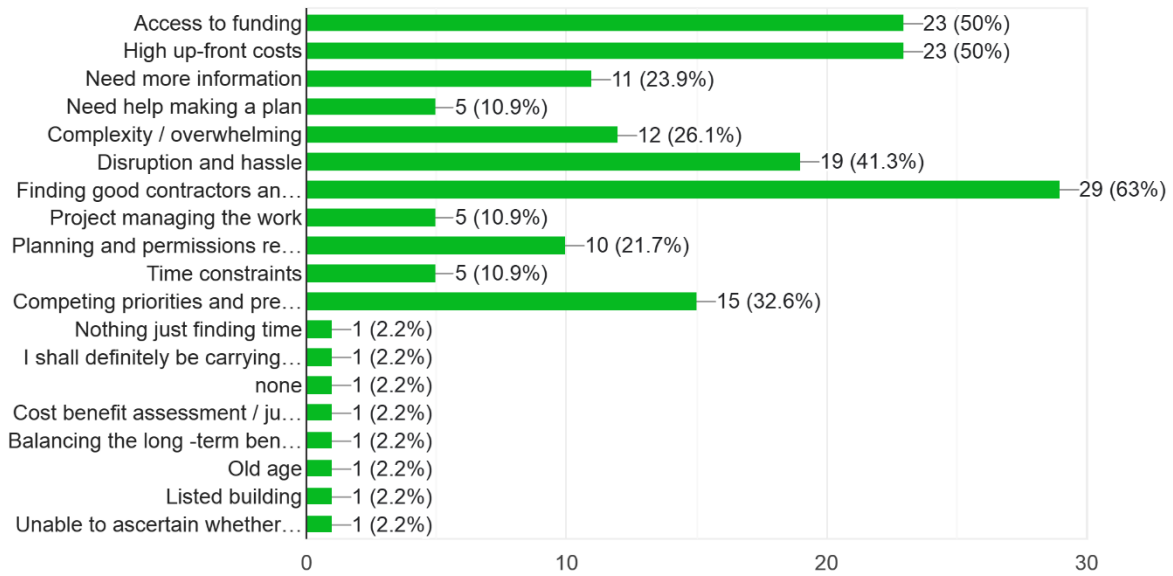
I am happy with the overall communication with the project.

46 responses



Please describe any barriers to acting.

46 responses



CHECK BOX OPTIONS:

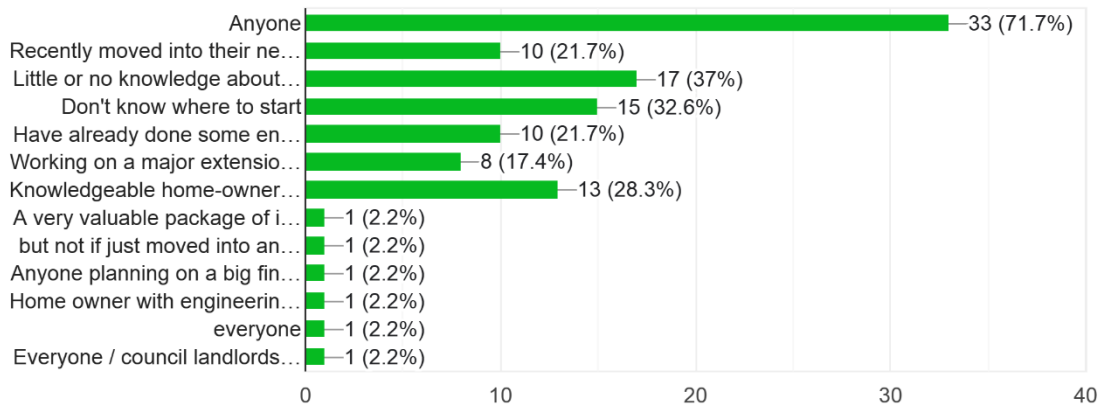
- Access to funding
- High up-front costs
- Need more information
- Need help making a plan
- Complexity / overwhelming
- Disruption and hassle
- Finding good contractors and trades
- Project managing the work
- Planning and permissions related
- Time constraints
- Competing priorities and pressures

Other...

- Unable to ascertain whether an ASHP would work in this property.
- Cost benefit assessment / justification
- Listed building
- I shall definitely be carrying out major work as soon as I have funds available
- Old age
- Balancing the long -term benefits to us against being in our eighties.
- Nothing just finding time
- none

Who do you think this would be most suitable and useful for?

46 responses



CHECK BOX OPTIONS:

Anyone

Recently moved into their new home

Little or no knowledge about their house

Don't know where to start

Have already done some energy efficiency improvements

Working on a major extension / renovation project

Knowledgeable home-owner - to help confirm what they think they know

Other...

Everyone

Anyone planning on a big financial outlay to help identify the best steps for their home and decide logical order of priority

A very valuable package of information for every homeowner

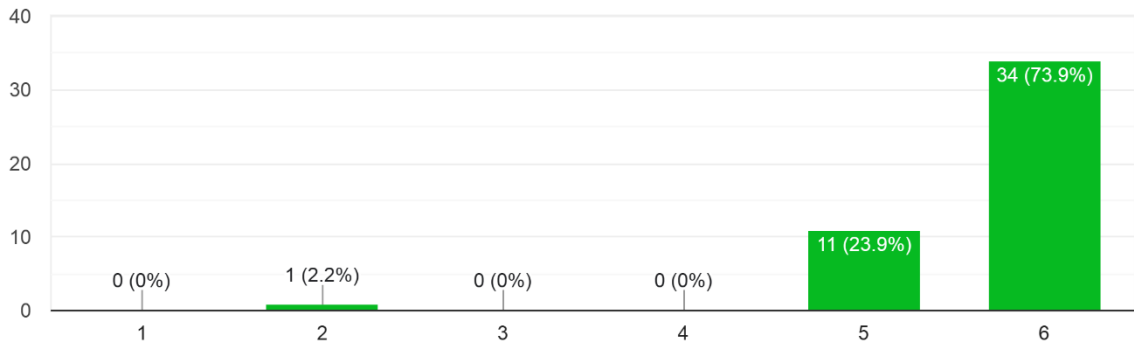
but not if just moved into an ECO house

Everyone / council landlords / private landlords / long term renters

Home owner with engineering background, and recent academic knowledge to at least 'A' Level standard, particularly as regards 'The Theory Of Heat' and of graph interpretation

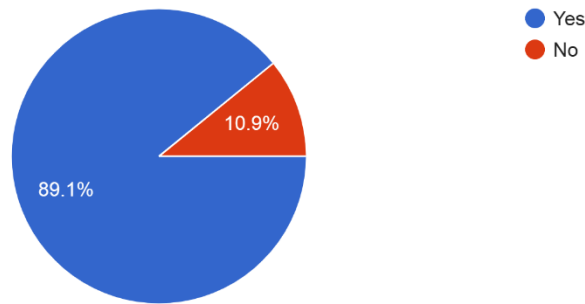
I would recommend this to others.

46 responses



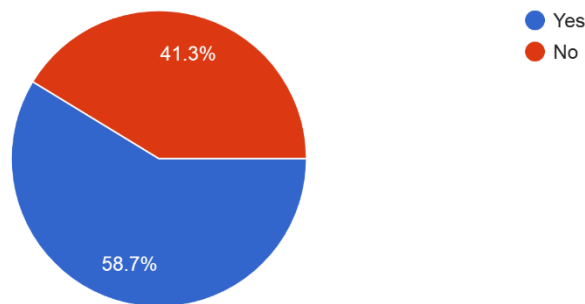
Would you be willing to share your experiences of improving your home with other residents?

46 responses



Would you be willing to participate in the creation of the Stoke Climsland Retrofit Guide for yourself and other households – to capture and share learning from this project?

46 responses



Do you have any other feedback and comments?

RETROFIT SURVEY The ability to ask questions and seek explanations during the survey was extremely useful and helped to make the process more customised to my needs. I felt the

duration was sufficient for a thorough survey to be undertaken. It did not feel rushed. The assessor explained what the measurements were all about and covered all the areas that I would have expected. Some of the calculations are a bit obscure and the use of standardised assumptions limits the usefulness of the some of the detail. Overall the survey report is useful and provides a good basis for future improvements and investment. In large part it confirmed what I already knew, but it was good to have professional confirmation of this. It has given me confidence that my existing assumptions about my home are valid and has provided a good basis against which to assess future investment (for example, in an air source heat pump).

TRADITIONAL SURVEY Still awaiting response regarding whether or not planning permission is needed for a small external plant room for air source heat pump installation (I think it will be covered by Permitted Development but would like to know for sure). Very clear report. Emphasis on the construction of the property was particularly useful. Comprehensive list of references. Some useful tips on maintenance issues. This report is probably most useful to householders in listed buildings, designated landscapes or conservation areas where planning and legislative constraints are material considerations. However the surveyor's observations on maintenance issues concerning the stones walls were very helpful and informative.

HEAT LOSS SURVEY Very fast response to my post-survey queries. The surveyor listened to my needs and concerns during the survey and came up with a solution that met my needs. Comprehensive report that covered my needs and expectations. Some of the calculations are a bit arcane and based on assumptions, however I was able to validate the overall energy use estimate with actual experience based on my known consumption of LPG and I found the results correlated remarkably well. This gave me confidence that the proposed solution would work and was valid for my property. The survey proposes an air source heat pump solution that minimises internal disruption (for example through keeping existing heating pipework and some radiators, with radiator replacements being principally double panel units of the same overall dimensions as the existing ones) but that provides for my heating and hot water needs in line with present usage. This was an important consideration as the property is small and has recently been thoroughly revovated, so damaging and/or disruptive internal works would not have been acceptable. The survey and report give me the knowledge I need to be able to go to the market and seek proposals and quotations. It also enables me to carry out preparatory works in terms of constructing a small external plant room that will be needed to house the hot water cylinder and ancillary equipment. Given the horror stories that abound regarding poorly designed and installed heat pumps (a consequence of government grants pushing demand and encouraging some inappropriate operators into the market to take advantage of this "free" money) I feel that an independent survey like this is a must for any householder considering installing a heat pump. It gives the householder the knowledge of what to look for, what to avoid and what questions to ask of a prospective installer.

CZHP Andy provided good communications and prompt responses at all stages of the process. The main barriers are the cost of a heat pump installation and the need to carry out some physical adaptations to create space for it (an external plant room will be needed). On the plus side, the Heating System Assessment gave me an approach that minimises internal disruption, which would otherwise have been a significant barrier that would probably have stopped any future investment in a heat pump altogether (being a very small property that has recently been refurbished to a high standard, severe internal disruption would not have been acceptable). Useful for anyone who is thinking of investing in energy efficiency measures or a new heating system (especially a heat pump). The surveys are independent and thorough, so can give the property owner a good base of knowledge against which to compare and interrogate future proposals and quotations for work. I am happy to discuss informally with friends and near neighbours but would not wish to share more widely for privacy reasons. Happy to proof read and/or make suggestions. Some of the worst performing properties from an energy efficiency and damp/condensation perspective are inhabited by relatively poor people. The £150 fee is a barrier to low-income people participating in the scheme, even though they might find it very beneficial. A reduced fee (say £50) for those on means-tested benefits or state pension only might encourage greater take up from this important but often underrepresented group, especially if the fee included the production of an EPC as part of the

output if desired (effectively making it cost neutral). Also, it would be useful if the scheme could be expanded to include advice on grants/funding aimed at this group of people.

When the surveyor sat down and talked things through with me after the survey I felt I understood all that I needed to know. Having read the report through at least thrice I felt overwhelmed by the amount of complex data, some of which seemed to conflict with other advice (eg: it is no longer recommended to turn down heating in unused/seldom used rooms). How to interpret or understand much of the pictorial information was unclear whilst for the written information, often tabulated, it could too soon become a mystery. In short the report, whilst doubtless a gold mine of information, seemed too often to have been 'written by a specialist for a specialist'. What the report should have been, solely, was a document presented by a specialist to someone who had neither any great understanding nor any great ability to understand the matters on which she had bought advice.

At first I found the retrofit report rather daunting particularly when initials were used and the glossary was towards the end of the report. I would suggest it should be at least on the first page where the initials were used. It would be more useful if it were at the top of each relevant page. The ratings for cost, energy etc. are for the average of each type of house located in middle England. I suggest that once the reports are received the actual costs for the surveyed property should be calculated as this may be very different. Example - The fuel bills of my house were given as £7,470 and Modelled using SAP. with the UK average at £1,184. The actual for my house is £3,435. I found the summary giving the order in which improvement should be made along with the energy rating for each benefit extremely useful.

The scheme is a great idea and should lead to positive and much needed change. I found the surveys rather daunting as they highlighted a number of issues and actions I need to undertake to improve my property. I have tried to progress the most pressing actions but have been impeded by the lack of response from recommended tradespeople. Is it possible to take stock of the most common recommendations in the household surveys and appoint trusted contractors in the way that the surveyors have been appointed? I will have to prioritise the actions I can take as costs will be a limiting factor for me. I understand that I can contact the surveyors if I have any questions but have not had chance to follow this up. How long will this offer be available?

It was very helpful to spend time with the assessor as he proceeded with the assessment on the day. He was knowledgeable and pragmatic, and explained everything very clearly. The report itself is comprehensive, informative and helpful. Some of the improvements are very straightforward to carry out and relatively inexpensive, such as fitting window vents. This gives us a good place to start. Anyone considering arranging an assessment will likely factor the cost of this into overall financial savings, which will undoubtedly influence their decision. Some, like us, will be motivated by lowering our carbon footprint as well as financial savings, and may well see the assessment as an overall investment.

Our heat loss survey was based around redesign of our heating system and heat pump arrangement with useful discussion about how to improve the system to be more efficient and provide better distribution of heat through the property. Incorporation of the hot water system to the heat pump system was also covered and useful information provided that can be acted upon as time constraints allow.

At this stage I guess I have to take the next step and get a full cost estimate from a contractor so that we can decide whether we're going to alter the heating system (and do a few other improvements). By far the biggest constrain is the disruption to the house. Bridging from the surveys to that is a big step which the Zero Homes Project could maybe advise on.

I felt the retrofit survey was of least use in that the surveyor seemed less aware and informed

with the complexity of a very old and listed building. The heating surveyor was very helpful and confirmed our suspicions that our options for upgrading the heating system were somewhat limited. Happy to discuss this further.
Was great to see the cold points with the thermal camera and receive productive suggestions on how we can make improvements on a modest budget like carrying out window maintenance by replacing hinges and handles rather than replacing the whole frame and what types of flooring would be better suited to each room etc.
Acting: improving ventilation, trickle vents, thermal door to garage in progress. A couple of projects abandoned after discussion. Little things like boiler setting. Learnt about thermal transfer + more. Thought I was clued up but learnt a lot. A very positive experience. Paul was excellent.
Would be useful to have a list of reliable trades and contractors to be able to contact for a whole range of work, eg, fitting solar tiles. Would be good to be able to speak to other residents. Would be to be able to co-ordinate work with other residents - to batch it up.
Great experience throughout - I found the retrofit survey report quite technical in its format and potentially this could frighten those of a lesser technical background. Maybe some thought could be made to a simpler format.
Whilst finding all the surveys beneficial, I feel it would be advantageous for an expert to pull all the recommendations together in a cost benefit / pro-cons summary.
Until I have embarked upon the work required by my property, I don't feel I have much to share other than the value I place upon the information the surveys provided.
I would really have liked some help after the results (eg finding trades) to encourage me to actually DO the things I mean to. IE a bit more hand-holding post survey
Loads of data and information, but a need for an independent view on what the answer could be - particularly with respect to having a heat pump.
Production of initial floorplan survey for use by subsequent surveyors to mitigate duplication of effort / precious resource
I think that a hard (i.e. printed) survey report, etc. should have been issued and not just as attachments to an e-mail.
There are 2 completed questionnaires from this email address because the email address is shared by both residents.
Wind turbines are a no-no, other retrofit ideas very expensive and very disruptive if going to insulate as should.
Very long delay in getting heat loss survey results, difficulty understanding the economic case for actions
Innovative project much needed to address elements of climate emergency declaration within the parish.
Concentrates the mind on creating a proper plan rather than jumping into piecemeal improvements
Extra roof insulation now ordered!! Secondary glazing: initial quote looks too expensive.
Realised that we weren't eligible for grants - info on grants could be clearer.
useful having something like this in the village and would like to support this
Would be appropriate to have a synopsis of the findings from the surveys.
I would recommend people to have a survey done if appropriate or able to.
The survey was a useful exercise following on from extending our house
Felt the heat loss report was too technical at this stage.
Complex process finding out and applying for grants.
Useful to combine our rental complex as one unit.

Overall, a very useful exercise.

Thank you
