Home Energy Green Forum Survey Report



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Introduction

Following on from the work carried out on 'active travel', 'biodiversity', 'plastics and consumption', the fourth quarter of the Green Forum 2022 was used to explore 'home energy: cutting energy, cutting carbon, and cutting costs'. This coincided with the rise in energy prices and home energy bills by around three times. As with the previous forums the work was carried out by members of Abingdon Carbon Cutters (ACC) and One Planet Abingdon Climate Emergency Centre (OPACEC).

As well as this online survey, there were a number of stalls (displaying the model houses) where a paper survey was distributed and the results from over 20 responses were reported to the Town Council in December. The main finding from that survey was the wide range of housing types in terms of size, configuration and tenure and of personal/household circumstances. This suggested that a similar wide range of incentives would be required to make inroads into the leaky, poorly heated and inadequately insulated housing stock. OPACEC had been limited by the expertise available, but importantly by the terms of its insurance, to the provision of information and not advice on what a particular enquirer should do.

Two attempts were made to set up webinars to hear from estate agents and mortgagees/lenders on the impact that significant rises in the cost of heating was having on house buying and selling. One bank manager was prepared to talk about the impact of living costs on lending policy and was already offering 'green mortgages' with preferential rates for more energy efficient homes. One estate agent volunteered that the Energy Performance Certificate (EPC) had become much more important by potential buyers but refused to participate in the webinar when it was pointed out that their sales particulars included only the first page of the multipage document, excluding most of the information that should be interest to buyers. In fact only two of the agents in the town thought that it was worthwhile to include the whole of the EPC on their websites (it would be available on request to those seriously interested in buying a property).

Two energy efficiency experts also declined to offer help with this webinar on grounds that it was simply too complicated to give generic advice and there was disagreement surrounding many potential 'improvements'.

These responses underlined and supported the approach being taken by OPACEC regarding the role in raising of awareness and the provision of information, but avoiding what could be taken as advice. In the event the advice was limited to:

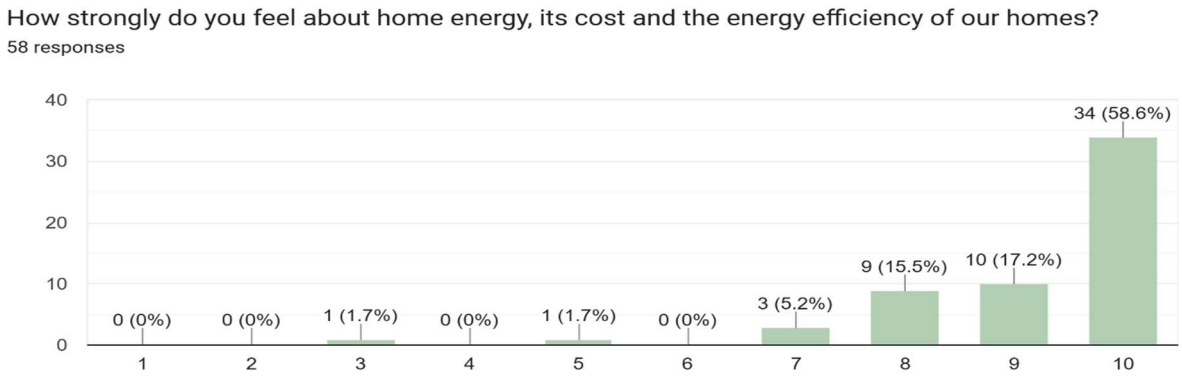
- start with commissioning a whole house/flat survey before investing in expensive works/improvements, and
- refer to the Energy Savings Trust for up to date advice on particular measures.

Low Carbon Hub and Cosy Homes were pointed to as sources of local advice. They could also carry out surveys and project manage energy efficiency improvement projects.

Results and Comments

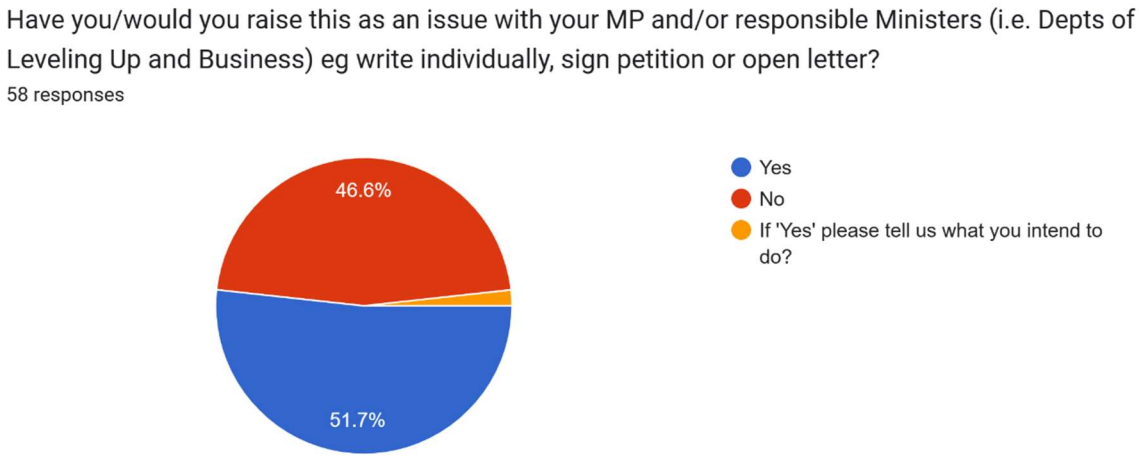
The online survey was available on the OPACEC web site and achieved nearly 60 responses. This was the opposite of a random sample of the population given the specific time and effort required in both accessing and completing the survey. This is demonstrated by the response to Qu.1

Fig 1



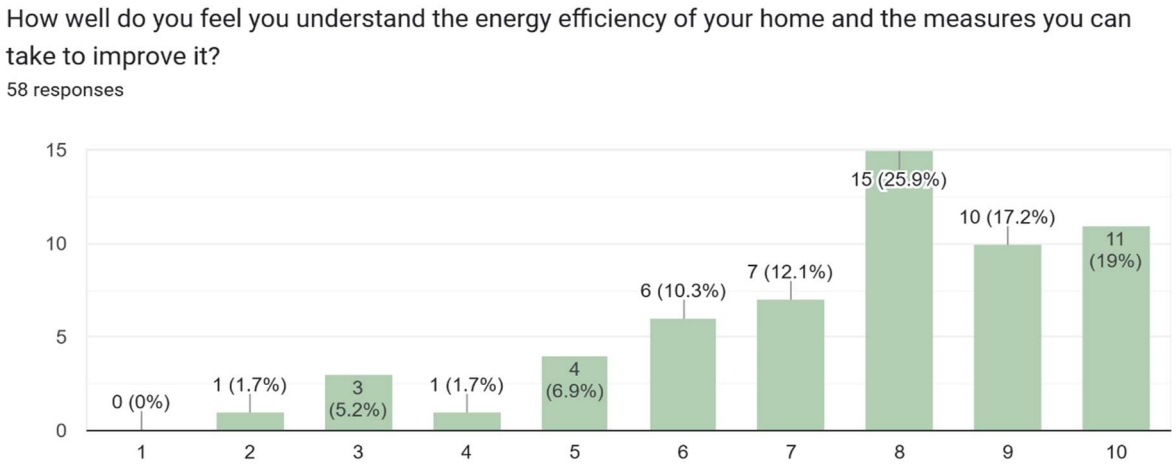
It is encouraging that more than half of the respondents felt that this was a public/political issue meriting a letter to Government of MPs. There has been no follow-up to see whether this has happened and even 30 letters to an MP on this subject would not be a surprise when the cost of living (if not carbon emissions and climate change) is regularly being debated in Parliament.

Fig 2



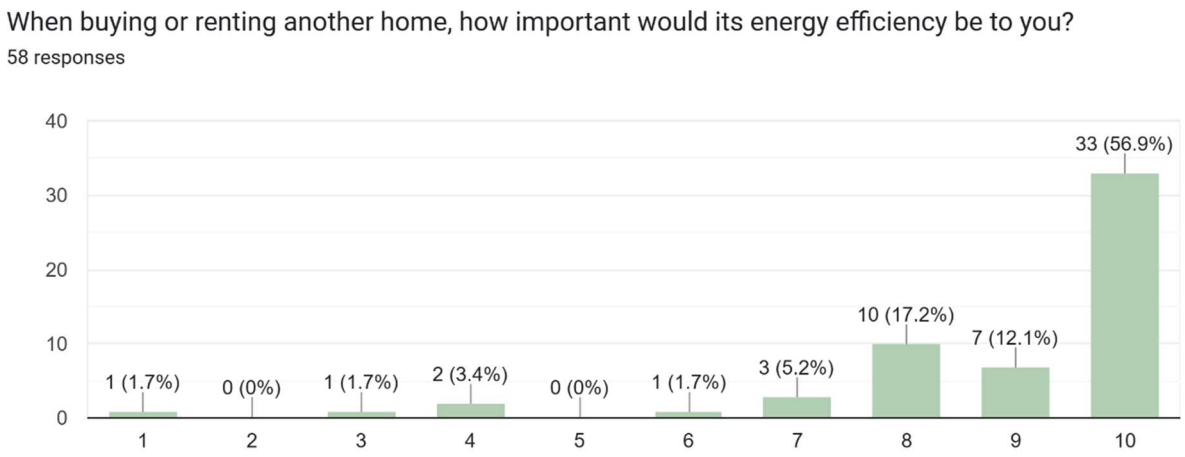
Given that 75% of respondents felt very strongly about energy efficiency and the cost of heating it is interesting that there was a wide spread of confidence in their understanding of the subject. It is unlikely given the significant financial investment and the many other challenges involved that significant home improvements would be implemented without a much higher level of certainty about the outcomes. About 40% of respondents would appear to have a sufficient level of doubt to hinder progress. However, there are many others expressing sufficient confidence to at least carry out less ambitious or expensive projects.

Fig 3



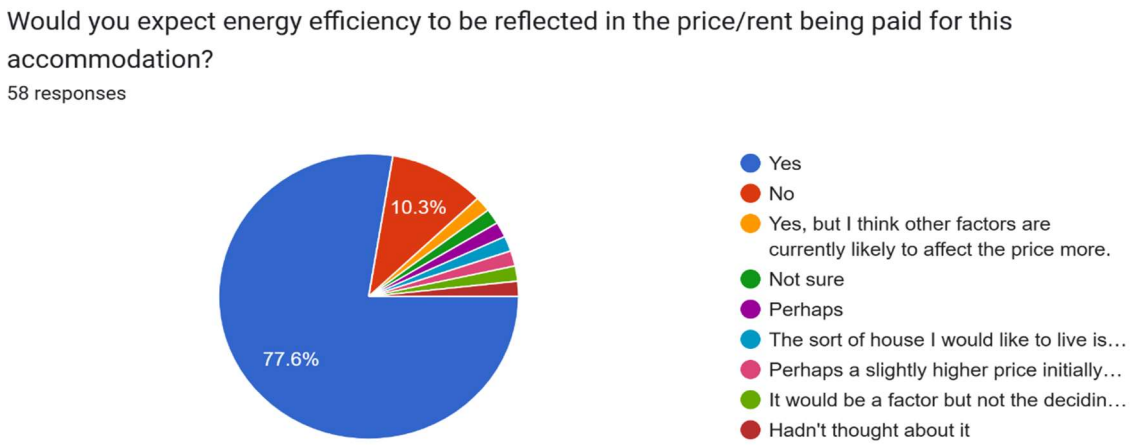
Without the help a bank or building society the survey did reveal the part that energy efficiency would now be playing in moving to another home. A high level of discerning buyers could and should reflect on those looking to sell or rent properties. Property owners should have more confidence that the investment in energy improvements should make it easier to sell or rent properties that could be reflected in the price/rent.

Fig 4



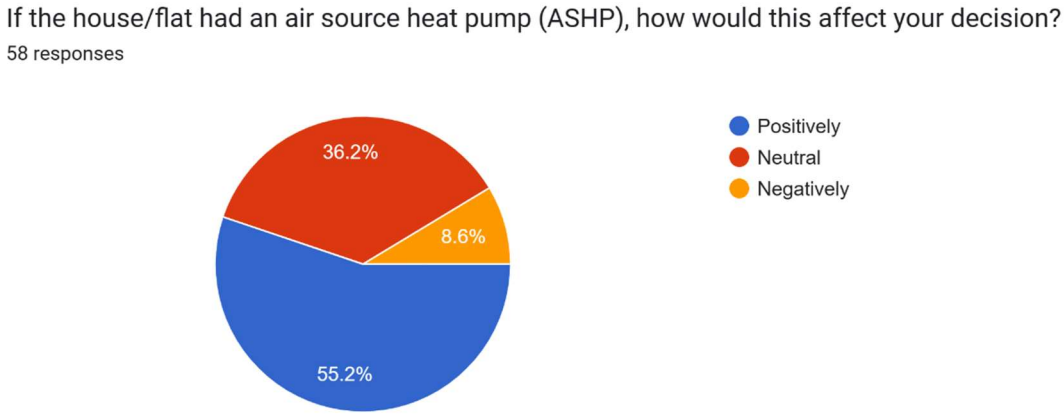
Those selling and renting property should take note of the interest in the cost of energy and energy efficiency if this goes beyond the 80% of respondents to this survey.

Fig 5



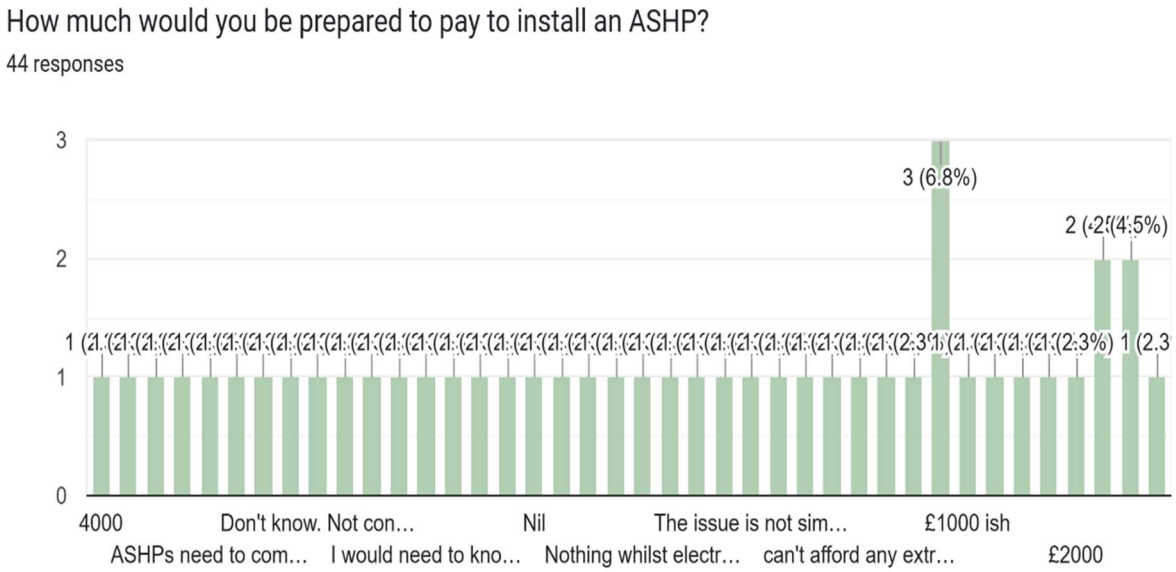
The question on air source heat pumps (ground and water source were regarded as too niche) showed a marginal overall level of support and not too much opposition. This result should be seen in the context of the Boiler Upgrade Scheme that for most householders is the only financial support from Government for energy efficiency measures. It is also likely that an ASHP would have a negative affect on the EPC as the costs of space and water heating can go up while gas remains cheaper the electricity. The average price of property recently bought/sold in the Abingdon area is nearly £500,000. In this context the cost of an ASHP (£10,000 depending on grants and associated works) would represent an additional 2%.

Fig 6



There is no clear answer to the question of what respondents are prepared to pay for a ASHP. ACC and OPACEC commissioned research from and Oxford University micro-intern who found that it was costing on average £10,000 to buy and install. These costs can vary depending on what other works are necessary for the heat pump to work efficiently (ie upgrade insulation and new pipes and/or radiators). The Boiler Upgrade Scheme involves a Government grant of £5000 for an AHSP.

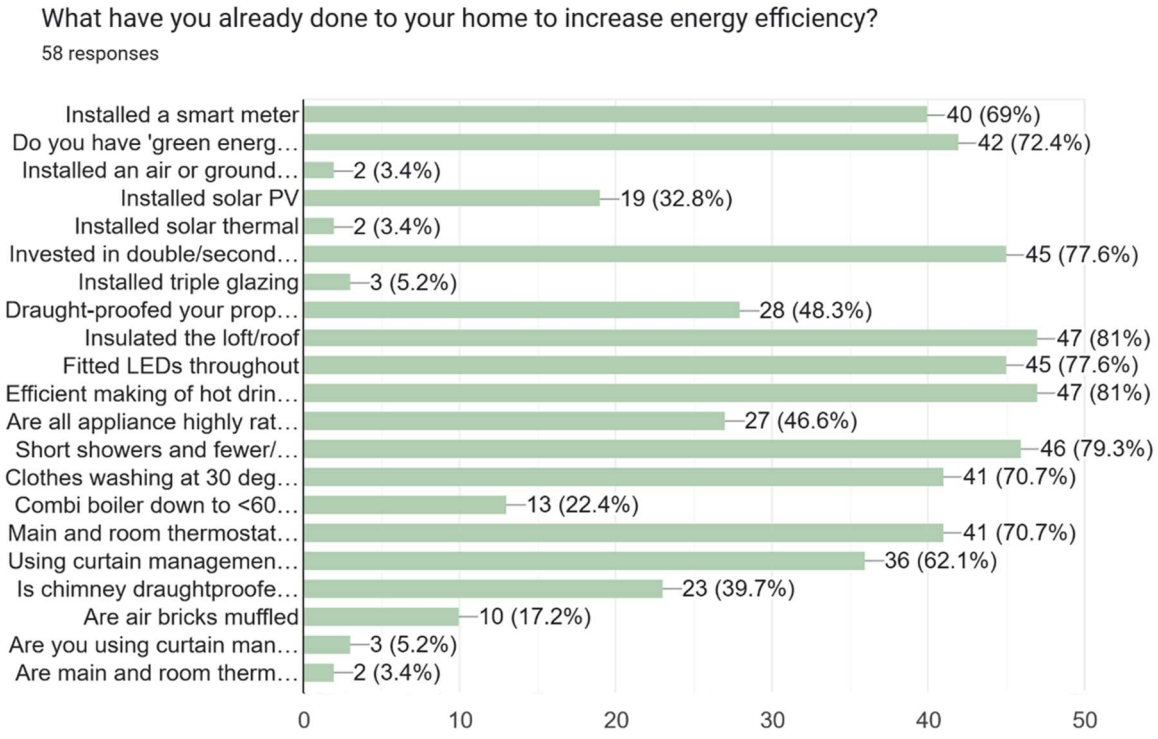
Fig 7



Perhaps the main message from the response to measures already taken is that, despite the interest and movement in the right direction there is very much more to do, much of it at little expense. For example only 22% had reduced the flow temperature of a combi boiler to below 60degrees, this might be down to lack of knowledge but also shows the scope for saving of money, energy and carbon by campaigns of this sort. There are also a remarkable number of measures involved in the efficient running of a dwelling, many of which require the time and effort and commitment of the household.

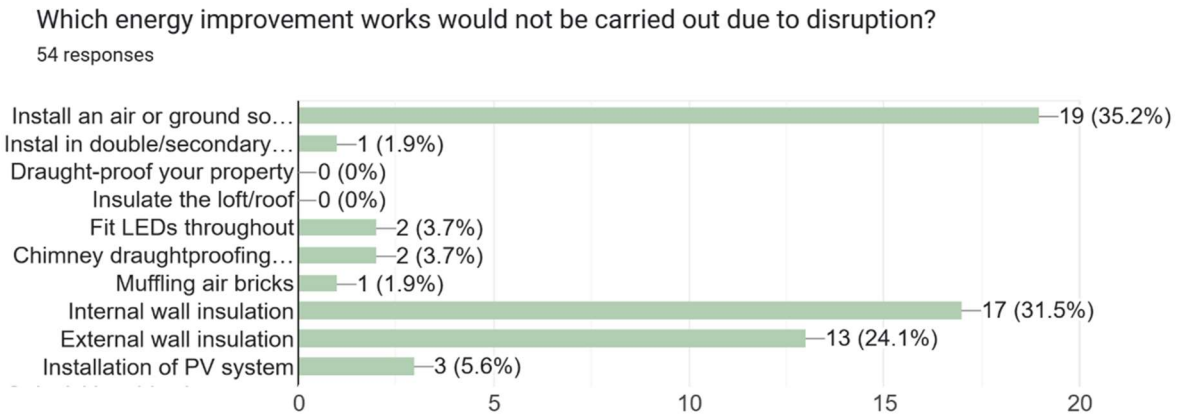
Air tightness is on of the key factors in energy efficiency and yet only 48% had carried out draught proofing. In new houses this might already appear to have been carried out but many relatively new seals need checking and this is an area where the savings far exceed the usually modest costs. Draughts are best found through a thermal imaging camera and not a naked flame.

Fig 8



The next question was designed to identify the reasons why not more was being done, even among the 75% who expressed a high level of understanding. The stand out improvements that were being thwarted by 'disruption' were three of the most important; heat pumps and internal or external insulation. It is unlikely that the existing housing stock can reach net zero in operation unless these matters are faced. It should be noted that in no case was 'disruption' a factor for more than 35% of respondents.

Fig 9



Given that the taking of a 'whole house survey' was the one piece of advice that ACC/OPACEC were prepared to offer it was disappointing that more than half of respondents would need to be persuaded. That should be balanced by the 22% who are keen that across the board would be a very large number of dwellings relating to the number of qualified surveyors. To this should be added the even larger number (24%) who are persuadable. The clear message should be to increase the training and number of people qualified to carry out this work that, just from this survey and its results, is extremely complex.

The resistance to paying the guide price of £500 is reflected in Fig 11 with lower prices being more popular. In a survey group where 75% expressed a high level of understanding could mean that this translates into confidence of being able to dispense with and avoid the cost of a professional survey?

Fig 10

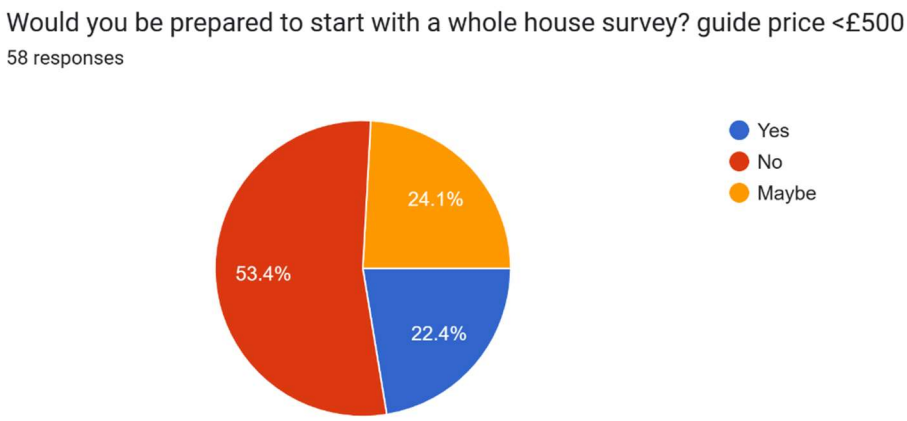
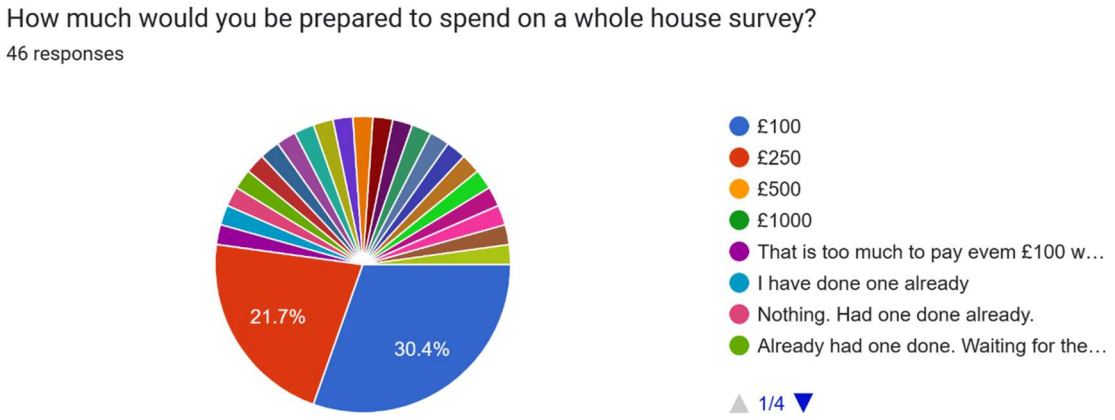


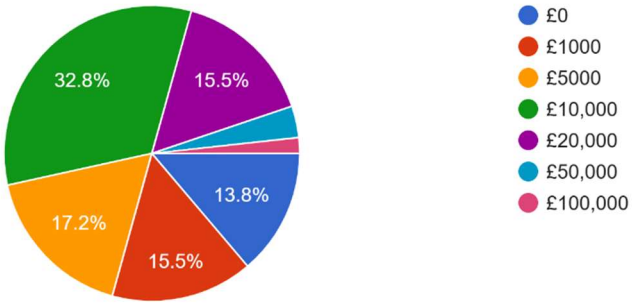
Fig 11



In the investigation of what people would be prepared to pay to get close to net zero emissions implying significantly lower if not zero running costs about 30% regarded just £1000 as the limit. This would be less than half the average cost of running 3 bedroom house for 3 person household that is £2500. The Government's Energy price Guarantee could be a disincentive to some householders carrying out more expensive improvements but about 70% expressed a willingness to spend between £5000 and £100,000 that collectively would cover substantial improvements to the local housing stock were the right incentives and conditions in place.

Fig 12

How much would you be prepared to spend on your home to get close to zero carbon emissions?
58 responses



Summary

Improving the energy efficiency of over 20 million dwellings to a standard consistent with a net zero carbon economy is a mammoth undertaking. The main point of this survey was to explore the motivations of home owners (previous surveys had also revealed the particular obstacles being faced by renters) to identify the challenges being faced which would need to be addressed and overcome and the assistance that would be required by those responsible for policy and funding.

A main finding was the difficulties being experienced even by a survey sample of people already likely to be more knowledgeable and enthusiastic than the general population. There is a clear need for tailored advice and probably a greater awareness of the costs involved; starting with the expense of a whole house survey that was suggested as the sensible precursor to any substantial investment.

The energy adviser from Low Carbon Hub (also a member of OPACEC) assisted with this project and has been taking forward the work of providing information through stalls around Abingdon (and Oxfordshire).