



HOPE VALLEY
CLIMATE ACTION

Public Acceptance of Renewables

HVCA Survey Findings

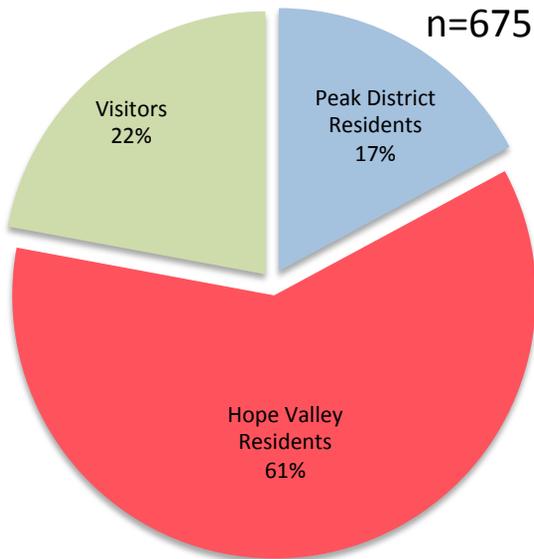
Stephen Platt February 2022

Summary

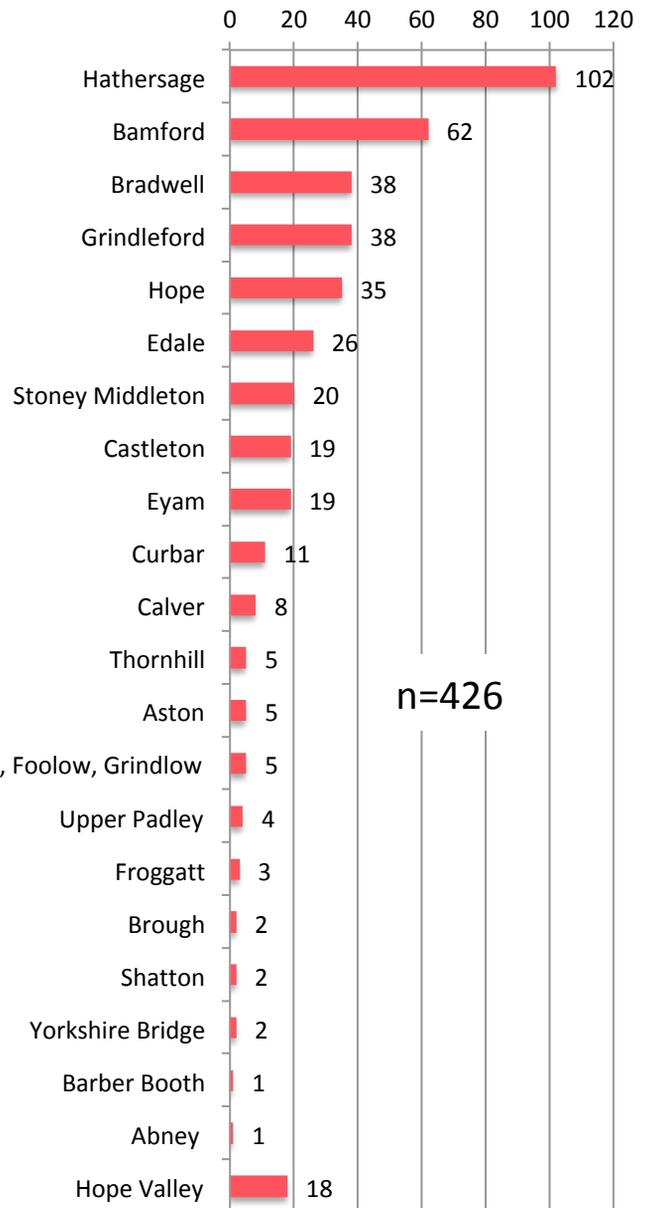
- 1 A big thank you to the many people who completed the survey. 675 people responded. 61% live in Hope Valley, 16% elsewhere in the Peak and 22% are visitors. 50% are members of a climate group or are HVCA supporters; 50% are neither.
- 2 Over half of all respondents (61%) are prepared to consider large-scale renewables in the Peak Park. 26% might consider them and 13% said they were not prepared to consider them.
- 3 There was no significant difference in opinion by age or according to where people live. This means that the 400 residents of Hope Valley and the 270 odd visitors surveyed have the same range of concerns about climate change and opinions about renewables.
- 4 However, there was a clear difference of opinion between climate group members and those who are not. 70% of members a climate group or supporters of HVCA are prepared to consider renewables and 8% are not. This compares with 52% of non-members who are prepared to consider renewables and 19% who are not.
- 5 The percentage of respondents that like, or like a lot, each option was:
Roof Solar: domestic roof solar 89%, non-domestic solar 90%
Solar Arrays: ground-based solar 67%, floating solar 66%
The majority of respondents are in favour of solar generation in Hope Valley. Solar on non-domestic roofs of schools, factories, shops, churches and farm buildings was liked by 90%.
Single Wind Turbines: small turbine 68%, large turbine 59%
Multiple (5) Wind Turbines: 46%
- 6 There was no statistical difference in preference for different options by age or where people live. However, members of climate groups are significantly more in favour of all large scale renewables in Hope Valley (solar arrays and large wind turbines) than those who are not. For example, 70% of members of climate groups like single large wind turbines compared to 55% of respondents who like them who are not members of a climate group.
- 7 93% of respondents are concerned or very concerned about climate change. 96% of members of climate groups are concerned or very concerned about climate change compared with 88% of people who are not.
- 8 When considering proposals for renewable installations in Hope Valley, 66% see reducing carbon emissions as very important and 25% see it as important.
- 9 34% believe that their home is already well insulated and 51% are interested in improving insulation. Of those whose homes are not well insulated, 61% would seriously consider insulating their homes at a cost of £10-20k if a grant covered 50% of the cost. 90% of respondents would seriously consider it if the grant was 75% of the cost. It is clear from the survey results that financial support from the government has the potential to dramatically increase the number of insulated homes in the UK.
- 10 50% of respondents are strongly in favour and 26% are in favour in principle of large scale renewables in Hope Valley being owned and managed by a Community Benefit Society.

Respondents

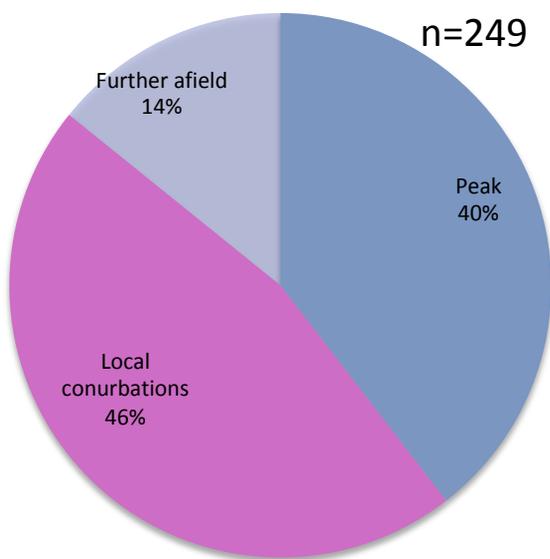
All respondents



Residents of Hope Valley



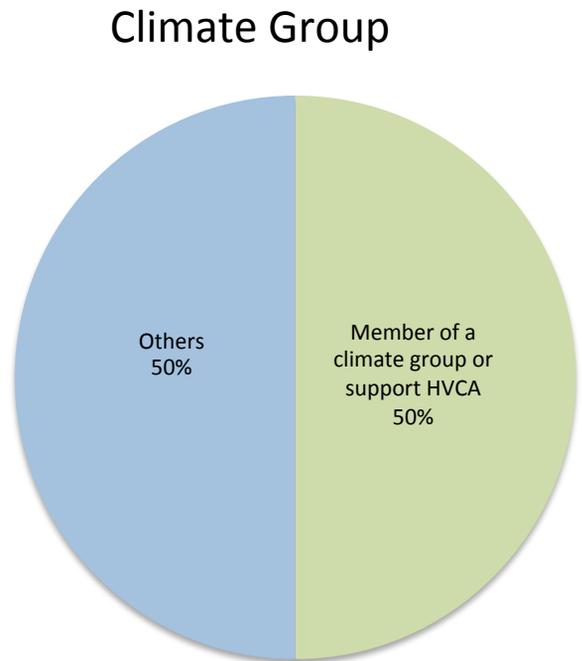
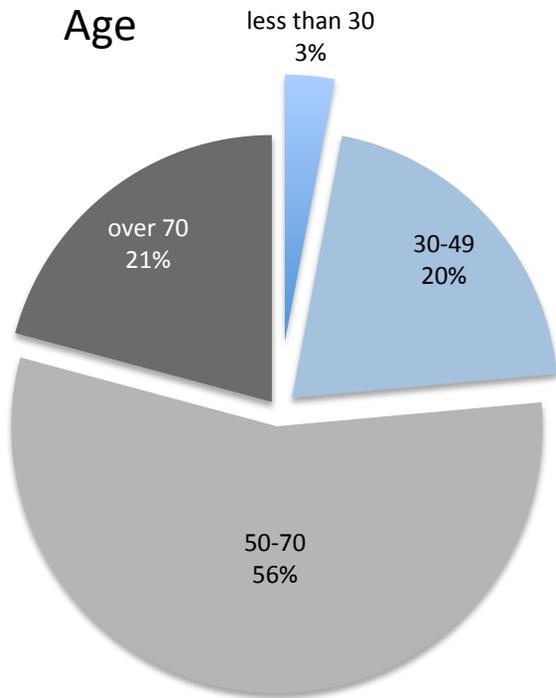
Non-residents of Hope Valley



675 people responded. 61% live in Hope Valley (409), 16% elsewhere in the Peak (115) and 22% are visitors (148).

50% are members of a climate action group or are HVCA supporters; 50% are neither.

Respondents

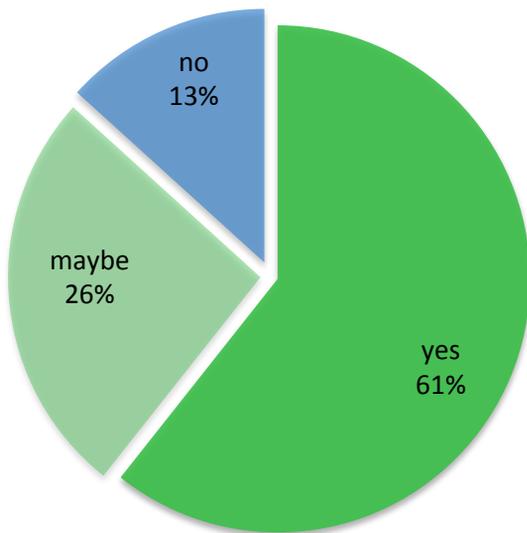


A quarter of respondents (23%) were less than 50 and 21% were over 70, the majority (56%) were aged 50-70. This doesn't necessarily indicate that younger people are less interested, rather it suggests that we were less successful in reaching younger people.

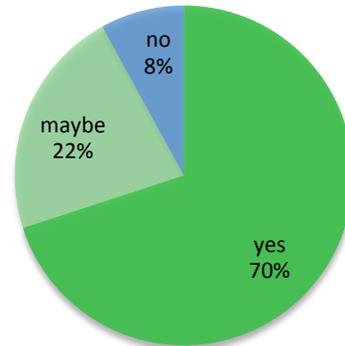
Half of all respondents are either a member of a climate group or a supporter of HVCA (ie they have signed up to receive our newsletter). Half are neither.

Acceptance of renewables

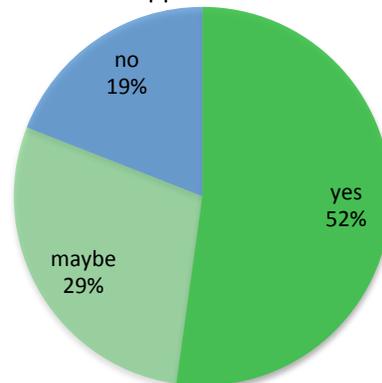
Are you prepared to consider large scale renewables in Hope Valley?



Member of Climate Group or
Supporter of HVCA



Neither a member of Climate Group nor
a supporter of HVCA



There is considerable support for large scale renewables.

Over half of all respondents (61%) are prepared to consider large-scale renewables in the Peak Park. 26% might consider them and 13% said they were not prepared to consider them.

There was little difference in opinion according to where people live or by age of respondent.

However, there was a clear difference of opinion between those who are either members of a climate group or supporters of HVCA (50% of respondents) and those who are neither. (Pearson Chi-Square 26; p-value <0.01)

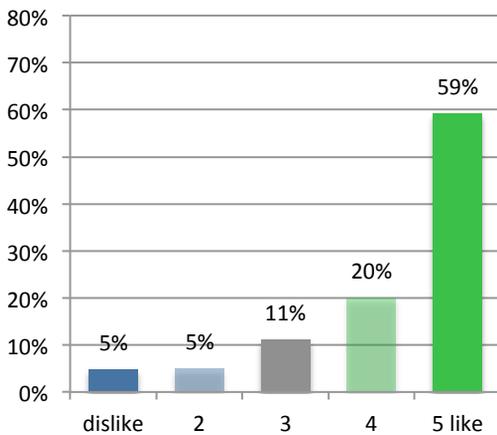
Of those who are neither members a climate group or supporters of HVCA, 52% are prepared to consider renewables and 19% are not.

Roof Solar

What do you think of the following options for Hope Valley?



Domestic solar



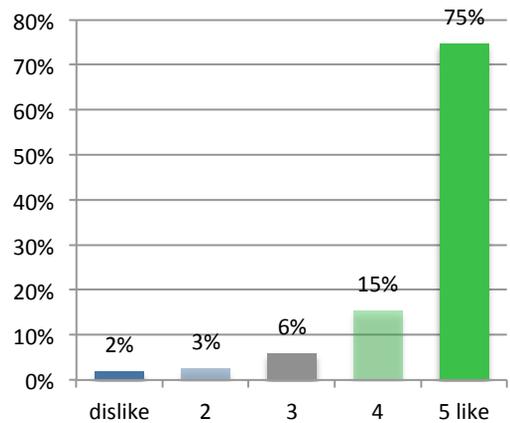
79% like or like a lot. Only 10% dislike or dislike a lot.

Many more homes in the valley could have solar panels on their roofs. A typical installation would generate about 3400 kWh of electricity annually. This is similar to the current annual consumption of a 2-3 bed home.

The majority of respondents are in favour of solar generation in Hope Valley. Solar panels on roofs are more popular than solar arrays, whether land-based or floating. Solar on non-domestic roofs of schools, factories, shops, churches and farm buildings was liked by 90% of respondents. There was no difference by age or where people live, and little difference between members of a climate group and those who are not.



Non-domestic solar



The most popular option. 90% like or like a lot. Only 5% dislike or dislike a lot.

Roof mounted solar could be incorporated alongside a primary use such as village halls, churches, retail, schools and car parks. A 50 kW installation would deliver the equivalent electricity needs of up to 15 homes.

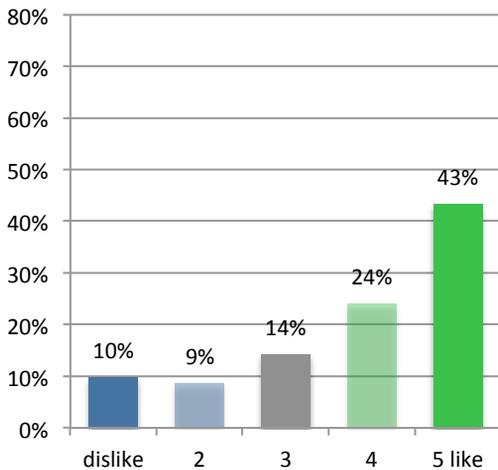
	Domestic solar	Non-domestic solar
Climate group members	78%	95%
Not members	82%	88%

Solar Arrays

What do you think of the following options for Hope Valley?



Large solar array



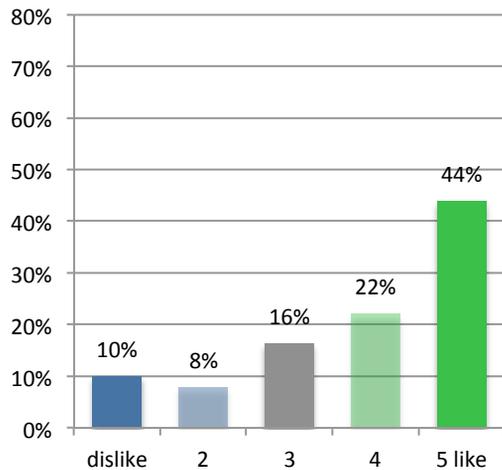
Liked by 67% 19% dislike or dislike a lot.

Sited on land that has been previously developed or has reduced agricultural value, such as old quarries which can be improved through enhancing biodiversity. Visual impact would be minimised by incorporating wildlife appropriate hedgerows. A 2.5 MW array would deliver the equivalent electricity needs of about 1000 homes.

About two-thirds of all respondents like large scale solar arrays, whether land-based or floating. There was, however, a difference of opinion between respondents who are members of climate groups and those who are not.



Floating solar



Liked by 66%. 18% dislike or dislike a lot.

Upland lakes or reservoirs where the solar array would have the additional benefit over land-based solar of greater efficiency from water cooling and greater environmental value through increased deep water oxygenation and decreased evaporation. A 2.5 MW array would deliver the equivalent electricity needs of about 1000 homes.

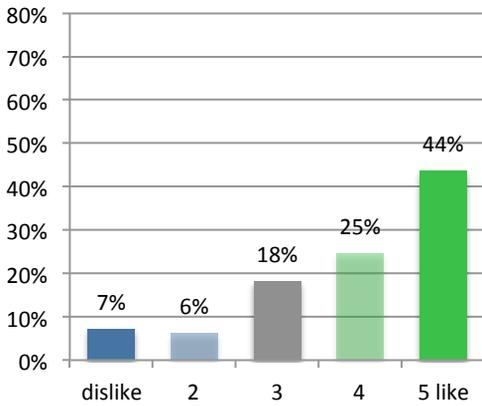
	Large solar array	Floating solar
Climate group members	78%	76%
Not members	64%	62%

Single Wind Turbines

What do you think of the following options for Hope Valley?



Small wind turbine



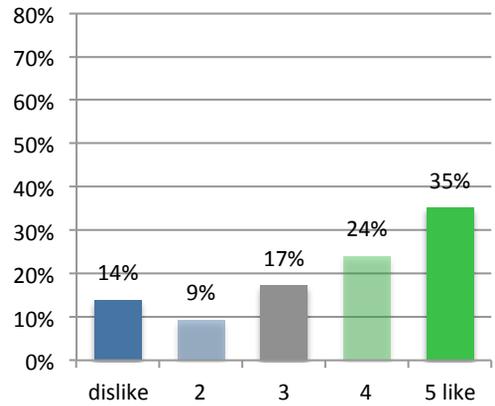
Liked by 69% Only 13% dislike or dislike a lot.

Exposed, windy upland areas with frequent strong wind speeds and away from homes and with the least visual impact on surrounding settlements.

A single 20 KW turbine would deliver the equivalent electricity needs of a large farm or about 5 homes

Although small wind turbines are liked as much as solar arrays, larger turbines are less well liked. Nevertheless, they would be an efficient way generating electricity in Hope Valley.

Large wind turbine



Liked by 59%. Disliked by 23%

Exposed, windy upland areas with regular strong wind speeds and away from homes and with the least visual impact on surrounding settlements. The site would need a cost effective and accessible electricity grid connection. A single 2.5 MW turbine would deliver the equivalent electricity needs of about 2000 homes.

	Small turbine	Large turbine
Climate group members	74%	70%
Not members	66%	55%

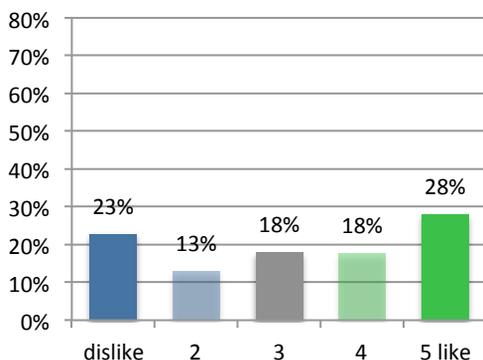
Multiple Wind Turbines

What do you think of the following options for Hope Valley?



Multiple wind turbines are the least liked option offered in the survey. Arguably, they would have the biggest visual impact and their siting would need to be very carefully considered. Many suitable sites in terms of wind speed would need to be excluded on the grounds of environmental sensitivity. Nevertheless, a limited group of 5 large turbines on say Bradwell Moor would provide most of the current domestic electricity demand in the Valley.

Multiple large wind turbines



Only liked by 46%. Disliked by 36%.

Exposed, windy upland areas with regular strong wind speeds and away from homes and with the least visual impact on surrounding settlements. The site would need a cost effective and accessible electricity grid connection. Five 2.5 MW turbines would deliver the equivalent electricity needs of about 10,000 homes (ie most homes in Hope Valley).

Other options not considered



Hydro

Hydro options were not included in the survey because of their relatively small potential to meet electricity demand.

Other forms of renewable generation were not included in the survey. Wave power, geothermal and nuclear are not relevant for installation in Hope Valley for obvious reasons. Hydro is relevant but was excluded because the potential capacity is extremely small.

A report commissioned by Friends of the Peak District in 2010 assessed the small-scale hydro potential of the Peak District National Park. [Link.](#)

The report CPRE concluded that the total generation potential in the PDNP is 2.9 MW. This may be an under estimate of the total theoretical micro hydro potential but is an over-estimate of the realistic potential given licensing/planning/commercial issues. The actual potential the report suggests is 1-1.5 MW with with a capacity factor of 40-50%. This is the equivalent of 1 large wind turbine.

There is an installed capacity at Ladybower of 234kW but this is not available for domestic use.

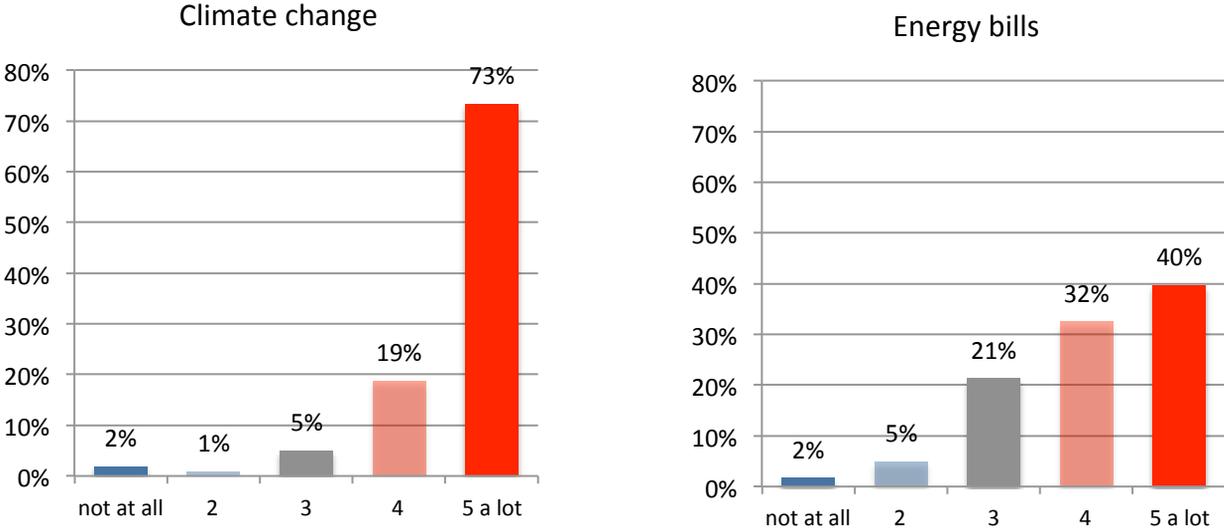
The report identified Calver Mill weir as the most promising hydro option in Hope Valley, having a potential continuous capacity 125 kW. This is equivalent to a 0.5 MW solar installation and would supply the current energy needs of about 150 homes.

We concluded that hydro could only make a small contribution to local electricity generation.

However, many respondents (26) asked about hydro in their comments and, with hindsight, it would have been sensible to have included hydro as an option.

Concerns

How concerned are you about climate change and about energy bills?



At the time of the survey, in January 2022, respondents were more concerned about climate change than they were about energy bills.

92% of respondents were concerned or highly concerned about climate change, compared with 72% who were concerned or highly concerned about energy bills.

There was no difference in the level of concern about climate change or energy bills according to where people live or age.

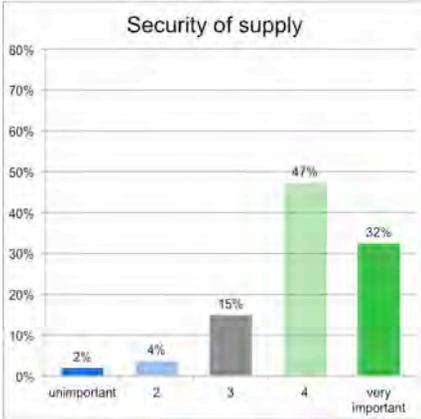
There is, however, a difference in the level of concern about climate change according to whether respondents are a member of a climate group or a supporter of HVCA. (Pearson Chi-Square 53; p-value = <0.01)

96% of members of a climate group or supporters of HVCA are highly concerned or concerned about climate change compared with 88% of people who are members or supporters of neither.

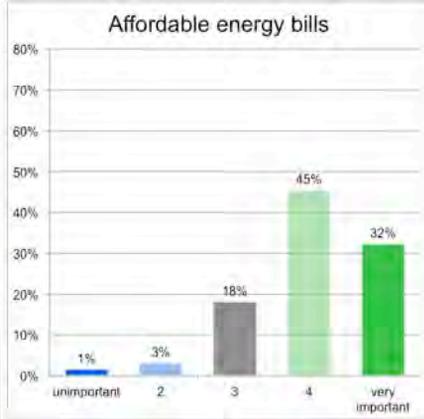
Being a member of a climate group or not had no affect on the level of concern about energy bills.

Considerations

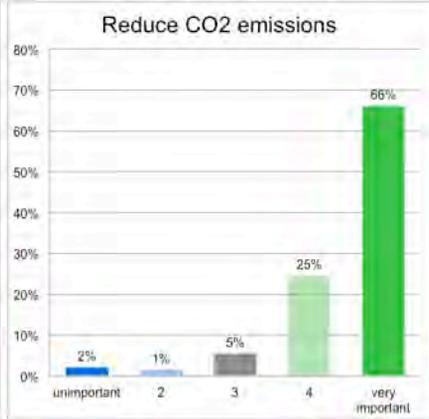
How important are the following to you when considering proposals for renewable installations in Hope Valley?



Seen as important or very important by 79%



Seen as important or very important by 78%

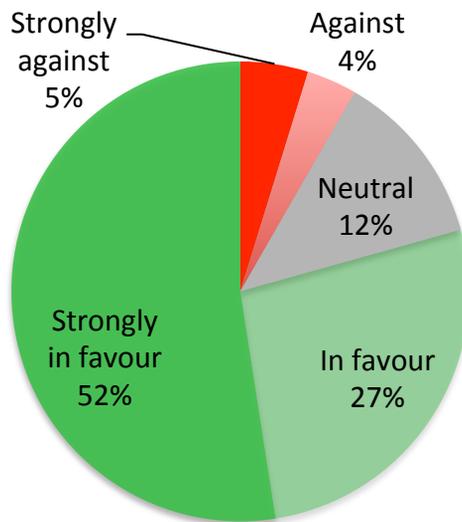


Seen as important or very important by 92%

When considering proposal for renewables, reducing carbon emissions is seen as important or very important by 91% of all respondents. This outweighs considerations about affordability and security of supply, important as both these are.

Community benefit

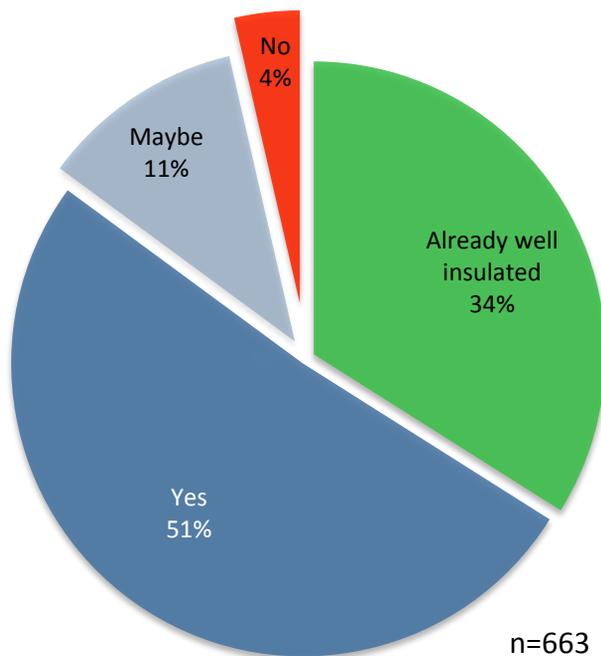
Large scale renewables in Hope Valley could be owned and managed by a Community Benefit Society with any profits ploughed back into the community. Would you be in favour of this??



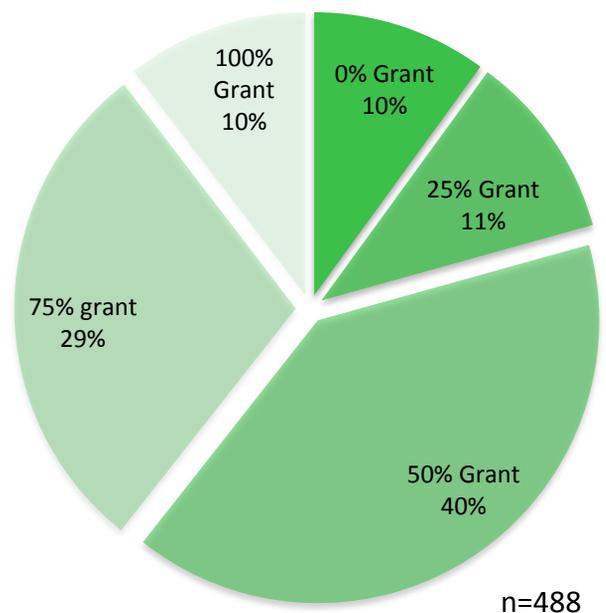
79% of respondents are in favour or strongly in favour of any future large scale renewables being owned and managed by a Community Benefit Society with any surplus being ploughed back into the community. Only 9% are against the idea.

Reducing demand with improved insulation

Are you interested in improving the insulation in your home or having it better insulated if you rent?



If insulating your home cost £10-20K, how much grant would you want before you seriously considered it?



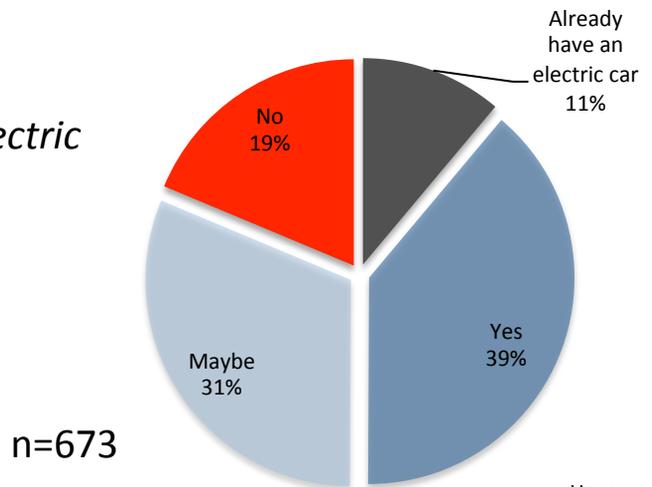
A third of respondents think their homes are already well insulated; a half are interested in improving insulation and a further 11% might be. Only 4% are not interested at all.

Of the 488 people for whom further insulation is relevant, if the total cost were £10-20K, 61% would be interested if a grant covered 50% of the cost and 90% would be interested if a grant covered 75%.

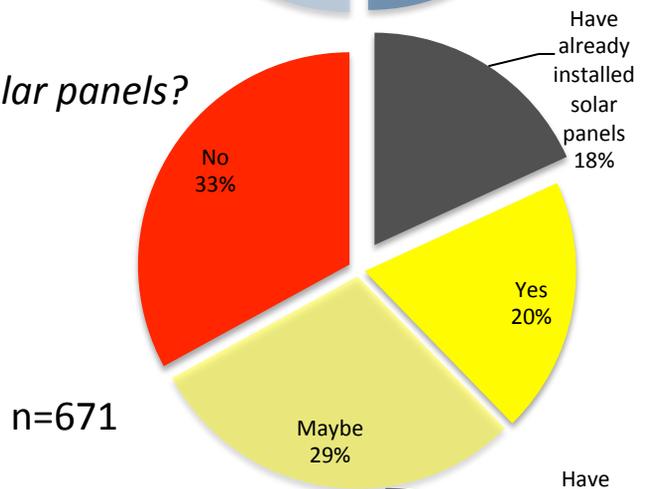
It is clear from the survey results that financial support from the government has the potential to dramatically increase the number of insulated homes in the UK.

Other measures to reduce emissions

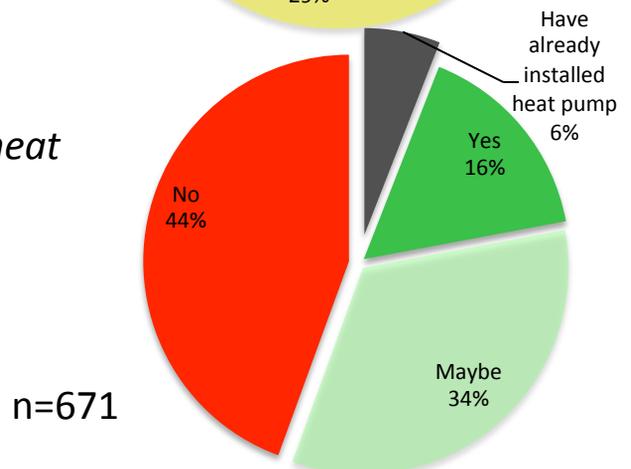
Are you considering buying an electric car in the next 4-5 years?



Are you considering installing solar panels?



Are you considering installing a heat pump?



11% of respondents already have an electric car and a further 39% are considering buying one in the next 4-5 years. (18% of new UK car registrations in 2021 were for plug-in EV)

A high proportion of respondents (18%) have already installed solar panels. (3% of all homes in the UK had installed solar panels un 2020).

There is currently fairly low interest in installing solar panels and heat pumps.

Methodology

The internet based survey ran for 4 weeks from 1-31 January 2022. 675 people responded to the survey. 98% of respondents told us where they lived, 44% gave their name and 43% gave their email, although all these questions were optional.

The survey was extensively piloted by HVCA Energy group members and members of the Renewables Steering Group.

Promotion of the survey

An email invitation was sent to our 700 supporters at the beginning of January and again just before the deadline. Three invitation notices were posted in 68 Facebook Groups in and around the Valley on the 1, 14 and 28 January. The post on the HVCA Facebook Group was "boosted" twice in the Valley and surrounding conurbations of Manchester, Sheffield, Chesterfield, Buxton and Glossop. Invitations were emailed 279 personal contacts.

Sampling

The following measures of confidence hold for random samples. The renewables sample was self-selected and may be biased to those more aware of the climate emergency, nevertheless the following gives an indication of representativeness.

Residents: Assuming the population of Hope Valley is 9-10,000 a sample of 409 residents gives a margin of error of plus-or-minus 5% with a confidence level of 95%.

Visitors: Assuming there are about 3-4 million visitors to Hope Valley each year, our sample size of 267 gives a margin of error of plus-or-minus 6-7% with a confidence level of 95%

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21 February 2022

Other evidence

Our sample was self-selected and might be expected to have attracted more people concerned about climate change than not and therefore be unrepresentative of the population of residents and visitors to Hope Valley.

The following national surveys, although not referring to national parks, give a measure of the general public concern about climate change and support for renewables that can be compared with the findings of this survey of Hope Valley and the Peak District.

Concern about climate change

The Office of National Statistics (ONS) surveyed adults (aged 16 years and over) about their level of worry about the impact of climate change 6 – 17 October 2021. 44% were "somewhat worried" and 32% were "very worried" ie 76%.

Findings from the Department for Business, Energy & Industrial Strategy (BEIS) Public Attitudes Tracker 2021 showed that 33% were very concerned and 47% were "concerned about current climate change". ie. 80%

These figures of 76% and 80% compare with 92% of respondents to this renewables survey who are concerned or highly concerned about climate change.

Public support for renewables

Findings from the Department for Business, Energy & Industrial Strategy (BEIS)² Public Attitudes Tracker published May 2020 showed that 33% of people strongly support and 44% support "the use of renewable energy for providing our electricity, fuel and heat" ie. 77%.

This compares with 61% of respondents to the renewables survey who are prepared to consider large-scale renewables in Hope Valley.

YouGov polling commissioned by Renewable UK showed renewable energy as the first 'green sector' priority for Government investment. 45% of respondents see it as the first priority. Support is particularly strong among people over the age of 65: 75% of which chose renewable energy as one of their top three priorities for Government investment.

Support for building onshore wind farms remains overwhelming high at 70% - with levels of support exactly the same among people who live within five miles of a wind farm as those living elsewhere.

This compares with 46% of respondents in the renewables survey who like multiple large wind turbines.

<https://www.ons.gov.uk/releases/publicattitudestotheenvironmentandtheimpactofclimatechangeinbritainin2021>

2 <https://www.gov.uk/government/statistics/beis-public-attitudes-tracker-wave-33>

3 <https://www.renewableuk.com/news/565686/YouGov-poll-shows-public-want-renewables-to-be-at-the-top-of-Governments-plans-for-green-growth.htm>