

Living in Lancashire Wave 28 survey

Climate change

Prepared by Nicola Pemberton
Corporate Research and Intelligence Team
Policy Unit
Lancashire County Council
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1 Executive Summary

This wave of the Living in Lancashire panel looked at perceptions of winter highway maintenance services and perceptions of how we communicate information relating to it. The survey was sent by email or by post to all 2,626 members of the panel on 10 February and the fieldwork ended on 26 March 2010. In total 2,019 questionnaires were returned, giving an overall response rate of 83%.

1.1 Key findings

- Overall more than twice as many people say they know a lot about climate change (26% rated 8 or more) than know little (10% rated 3 or less). However the majority fall into the middle ground with the mean ranking at 6.11 (excluding 'don't know' responses). Those over 60, women and those in socio-economic group DE have less knowledge.
- Six in ten people are concerned about the impact of climate change in Lancashire (60%). Where respondents have less knowledge of climate change, they are less concerned about the impact of climate change.
- The majority are convinced that climate change is occurring (24% very convinced, 44% fairly convinced). There is a significant proportion who is not convinced of climate change (31%), which has increased since 2007 (19%). Respondents who say they know a lot about climate change are more likely to be convinced that it is happening.
- The majority say that climate change is mainly due to human activities (53%), though a quarter say it isn't (26%). Where people are less convinced that climate change is happening, they are less likely to say it is due to human activities.
- The biggest causes of climate change were felt to be the destruction of forests and cutting down of trees (73%), emissions from vehicles (59%), carbon emissions (58%), and manufacturing and industry (56%) were problems. Where respondents don't believe it's happening, they are more likely to say climate change is down to natural changes in the environment (74%).
- The factors respondents feel they personally contribute most to are emissions from vehicles (82%) and energy use in homes (78%). The over 60s were less likely to mention most factors.

- Respondents think the effects of climate change worldwide are being felt already (44%), whereas they were less likely to say the effects are making an impact locally or personally (28% and 27% respectively), this broadly reflects the 2007 results. The main difference in perceptions is related to how convinced respondents are that climate change is happening – the more convinced they are the sooner they think the effects will be felt.
- The biggest proportion thinks the UK government (77%) and themselves personally (65%) are working to tackle climate change. Personal action is highest when people are more economically prosperous (75%). Where people are not convinced climate change is happening they are more likely to say none of these (11%).
- There are very few people who think they can personally do a lot to reduce climate change (7%), the mean ranking being 3.94 (where 1 is very little and 10 is a lot). More respondents say they can do something to reduce climate change when they think it's due to the actions of people.
- However people are still making an effort to tackle climate change (25% doing everything they can, 37% doing a lot but could do more). Where respondents aren't convinced climate change is happening they are more likely to say they are doing nothing (44%). People also do less when they feel they can't do much personally to reduce it, or that it isn't caused by human activity.
- Half are doing the same as a year ago (50%), and almost another half are doing more than a year ago to tackle climate change (48%). Again the more convinced they are of climate change and the more personal influence they have, the more they tend to do.
- The actions most frequently undertaken to limit climate change are recycling (89%), turning lights off when leaving a room (83%), using energy saving lighting (78%), and not leaving things on standby (70%).

1.2 Recommendations

The results show that there is still work to be done with improving knowledge around climate change and awareness of how individuals can make a difference. This is imperative in getting people to change their behaviour because knowledge influences how convinced people are about the occurrence of climate change, and in turn impacts on the actions they take.

The groups that have lower levels of knowledge are over 60 and in the lower socio-economic group (DE). Recent information on preferred ways of finding out information about the county council and its services has shown that newspapers are the most preferred communication channel, particularly among the over 60s (including the council newspaper Vision). For specifically targeting the lower socio-economic groups leaflets and posters are also effective.

It may also be worth investigating further why there has been a drop in the proportion of people being convinced that climate change is occurring since the 2007 survey.

Continue to educate people in how they can help tackle climate change at a personal level, and provide assistance to help them make lifestyle changes. Some examples include:

- demonstrating how homes can be made more energy efficient;
- increase awareness of tools like the home energy monitors to help people understand where energy is being used; and
- making the use of alternatives to the car more viable by promoting car sharing schemes or looking at opportunities for improving public transport.

Communications can be made more effective by segmenting the population into different groups and targeting different environmental messages appropriately, for example communicating information about an activity to groups have a lower take-up. It might also be worth considering emphasising the financial as well as environmental benefits of making lifestyle changes when promoting the actions people can take. This is because even where people don't believe in climate change they do undertake certain activities to save themselves money.

Continue to look at how the county council can work with other agencies (eg national government) to help tackle the main causes of climate change. Also continue to look at ways of reducing the impact the council's operations have on the environment.

2 Introduction

Lancashire County Council has used Living in Lancashire regularly since August 2001 (formerly known as Life in Lancashire). A panel of willing participants is recruited and is approached on a regular basis to seek their views on a range of topics and themes. Panel members are voluntary participants in the research they complete and no incentives are given for completion.

The panel has been designed to be a representative cross-section of the county's population. The results for each survey are weighted in order to reflect the demographic profile of the county's population.

The panel provides access to a sufficiently large sample of the population so that reliable results can be reported at a county wide level. It also provides data at a number of sub-area and sub-group levels.

Each wave of Living in Lancashire is themed. Firstly, it enables sufficient coverage on a particular topic to be able to provide insight into that topic. And secondly, it comes across better to the residents completing the questionnaires if there is a clear theme (or 2-3 clear themes) within each survey.

The panel is refreshed periodically. New members are recruited to the panel and some current members are retired on a random basis. This means that the panel remains fresh and is not subject to conditioning i.e. the views of panel members become too informed with county council services to be unrepresentative of the population as a whole.

3 Research Objectives

The objectives of this survey are to look at perceptions of climate change. Questions looked specifically at:

- knowledge and concern about climate change;
- perceptions of the main causes of climate change;
- the effects of a changing climate; and
- the actions taken to tackle it.

4 Methodology

This wave of Living in Lancashire research was sent to 2,626 members of the panel on 17 February. A reminder was sent on 10 March, with a final closing date of 26 March.

The survey was conducted through a postal questionnaire, and an online version of the same questionnaire being emailed to members who had previously requested to take part online. The postal questionnaire was sent to 2,019 members and the online questionnaire was sent to 607 members. Where members didn't respond to the online questionnaire they were sent a paper reminder.

In total 2,169 questionnaires were returned, giving an overall response rate of 83%.

All data are weighted by age, ethnicity and district to reflect the Lancashire overall population, and figures are based on all respondents unless otherwise stated. The weighted responses have been scaled to match the effective response of 1,432, which is the equivalent size of the data if it had not been weighted and was a perfect random sample.

4.1 Limitations

The table below shows the sample tolerances that apply to the results in this survey. Sampling tolerances vary with the size of the sample as well as the percentage results.

Number of respondents	50/50 + / -	30/70 + / -	10/90 + / -
50	14%	13%	8%
100	10%	9%	6%
200	7%	6%	4%
500	4%	4%	3%
1000	3%	3%	2%
2000	2%	2%	1%

On a question where 50% of the people in a sample of 1000 respond with a particular answer, the chance are 95 out of 100 that the answer would be between 47% and 53% (ie +/- 3%), versus a complete coverage of the entire Lancashire population using the same procedure.

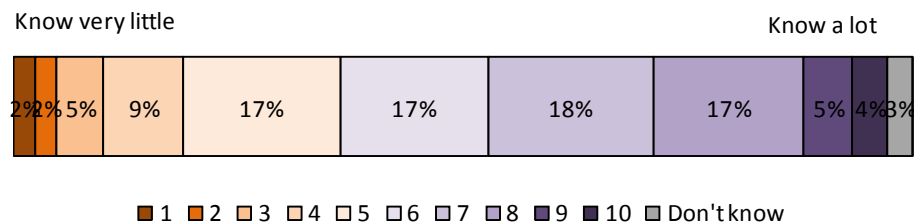
In charts or tables where responses do not add up to 100%, this is due to multiple responses or computer rounding.

5 Main Research Findings

5.1 Knowledge of climate change

The first climate change question asked respondents to rate their knowledge of climate change. Overall more than twice as many people say they know a lot about climate change (26% rated 8 or more) than know little (10% rated 3 or less). However the majority fall into the middle ground saying they know something, but not a lot (61% rated between 4 and 7). The mean ranking (excluding don't know responses) is 6.11.

Chart 1 - On a scale of 1 to 10 (where 1 is 'know very little' and 10 is 'know a lot') how would you rate your knowledge of climate change?



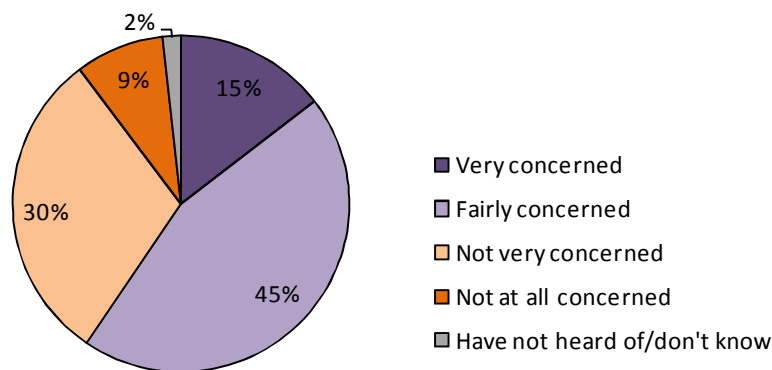
Base: All respondents (unweighted 2138, weighted 1491)

The type of respondent who knows less about climate change are over 60, women or in socio-economic group DE (mean of 5.87, 5.78 and 5.54 respectively).

5.2 Impact of climate change

Perceptions of the impact of climate change were measured by two questions. Firstly respondents were asked about how concerned they are about the impact of climate change in Lancashire. The results show that six in ten people are concerned (60%), significantly more than say they aren't concerned (39%). Very few people said they hadn't heard of it or didn't know (2%).

Chart 2 - How concerned are you about the impact of climate change in Lancashire?



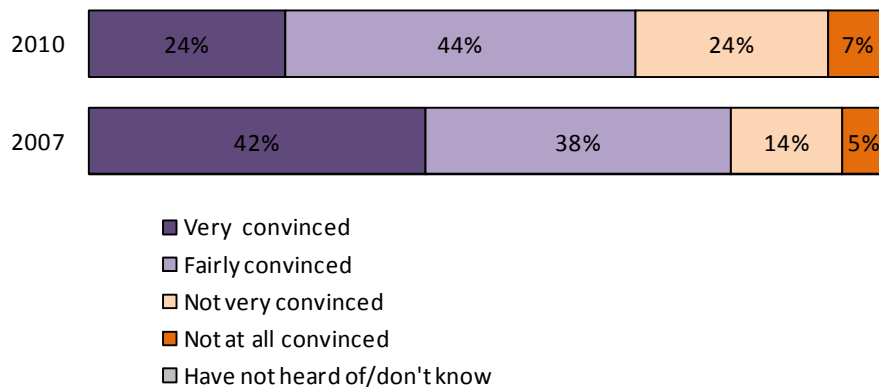
Base: All respondents (unweighted 2127, weighted 1484)

Where respondents have less knowledge of climate change, they are less concerned about the impact of climate change in Lancashire (41% concerned when rate their knowledge of climate change as 1-3). Demographically there are also some differences as those from a BME background, women and people without a vehicle are more concerned about climate change (68%, 66% and 65% concerned respectively).

They were next asked how convinced they are that the earth's climate and long-term weather patterns are actually changing. A quarter of respondents were very convinced that there is climate change occurring (24%), and a further three in seven people are fairly convinced of it (44%). However there are still a significant proportion of respondents who are not convinced that climate change is occurring (31%).

When looking at the 2007 results for this question, it shows that respondents are less convinced about climate change now than they were three years ago (68% versus 80% convinced).

Chart 3 - How convinced are you that the earth's climate and long-term weather patterns are changing (climate change)?



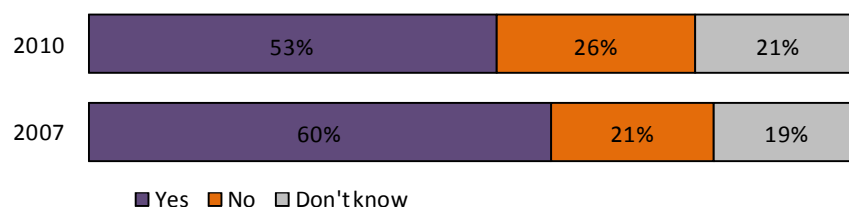
Base: All respondents 2010 (unweighted 2129, weighted 1479); 2007 (unweighted 1231, Weighted 986)

It is a similar group of people who are also convinced that climate change is happening. That is those from a BME background, women and people without a vehicle being more convinced that climate change is happening (83%, 73% and 80% convinced respectively), and also those aged 25 to 44 years (77% convinced). Respondents who say they know a lot about climate change are more likely to be convinced that it is happening (76% are convinced when they rate their knowledge of climate change as 8-10).

5.3 Causes of climate change

Looking at perceptions of the causes of changes to long-term weather patterns, the majority say that it is due to human activities (53%), though a quarter say it isn't (26%), and a further one in five don't know (21%). There is a slight fall in the number of respondents who think climate change is caused by human activities since the 2007 survey when three-fifths thought that it was (60%).

Chart 4 - Would you say that this change is mainly due to human activities?



Base: All respondents 2010 (unweighted 2111, weighted 1471); 2007 (unweighted 1231, Weighted 986)

It is people aged 25 to 44 and women who are more likely to say the change is due to human activities (62% and 56% respectively). Where people are less convinced that climate change is happening, they are less likely to say it is due to human activities (6% when not at all convinced, 30% when not very convinced).

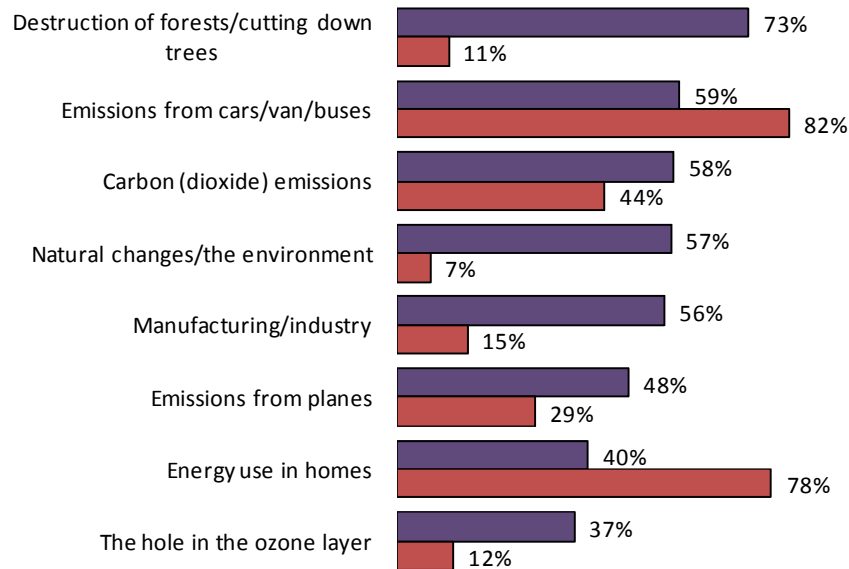
When asked to think about the specific main causes of climate change, the biggest problem was felt to be the destruction of forests and cutting down of trees (73%). More than half of respondents also felt that emissions from vehicles (59%), carbon emissions (58%), and manufacturing and industry (56%) were problems. However, many also said that natural changes in the environment is a main driver of changes in the climate (57%), suggesting that people believe it isn't only due to human activities.

The factors respondents feel they personally contribute most to are emissions from vehicles (82%) and energy use in homes (78%). There is a big difference in perceptions of energy use in homes, as respondents thought that it was a weaker driver of climate change (40% main cause) even though it is something they can affect.

There have been some changes in perceptions since the 2007 survey. The proportion of respondents citing many of the main causes of climate change have seen falls. This is especially the case for manufacturing and industry being ranked the second main cause of climate change in 2007 (67%), and now falling to fifth in the rankings (56%). Perceptions of the factors respondents personally contribute to have remained broadly consistent with

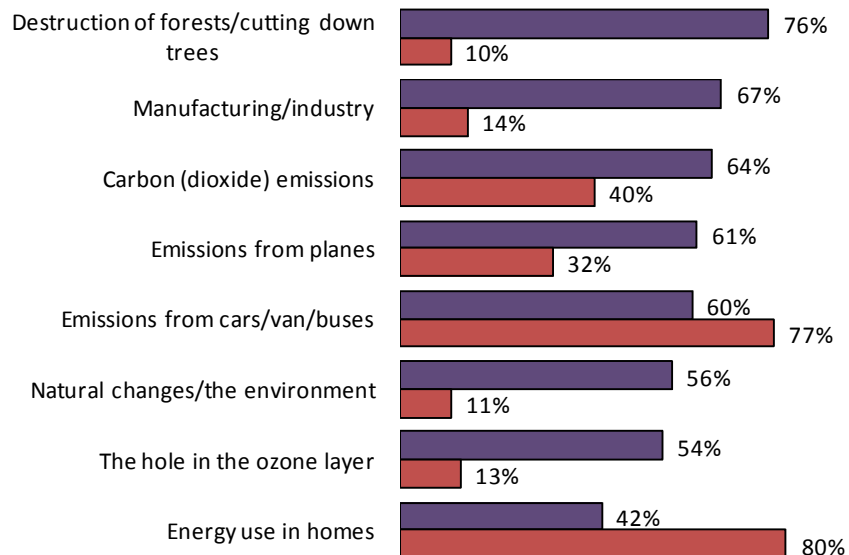
2007, however emissions from vehicles and carbon emissions have seen slight increases in respondents saying they contribute towards them.

Chart 5 - a) Specifically what do you think are the main causes of climate change? b) Which of the following do you think you personally contribute to?



2010

■ Main causes of climate change
■ Personally contribute to



2007

■ Main causes
■ Personally contribute to

Base: All respondents 2010 (unweighted 1605, weighted 1142); 2007 (unweighted 1231, Weighted 986)

Perceptions of the main causes of climate change are linked to whether respondents are convinced it is actually happening. Where respondents don't believe it's happening, they are more likely to say climate change is down to natural changes in the environment (74% not at all convinced, 68% not very convinced). Where respondents are very convinced of climate change they are more likely to say they personally contribute through energy use in their home (82%).

There are a number of differences in perceptions of the main causes of climate change by demographic group. Those over 60 are less likely to say it is caused by carbon emissions (48%), industry and manufacturing (45%) and energy use in homes (29%). Those without access to a vehicle are more likely to say vehicles are a major contributor (72%), whereas respondents in the highest socio-economic group are more likely to state carbon emissions (71%). Respondents from a BME background were less likely to say it was a natural phenomenon (44%) and more likely to give carbon emissions as a main cause (68%).

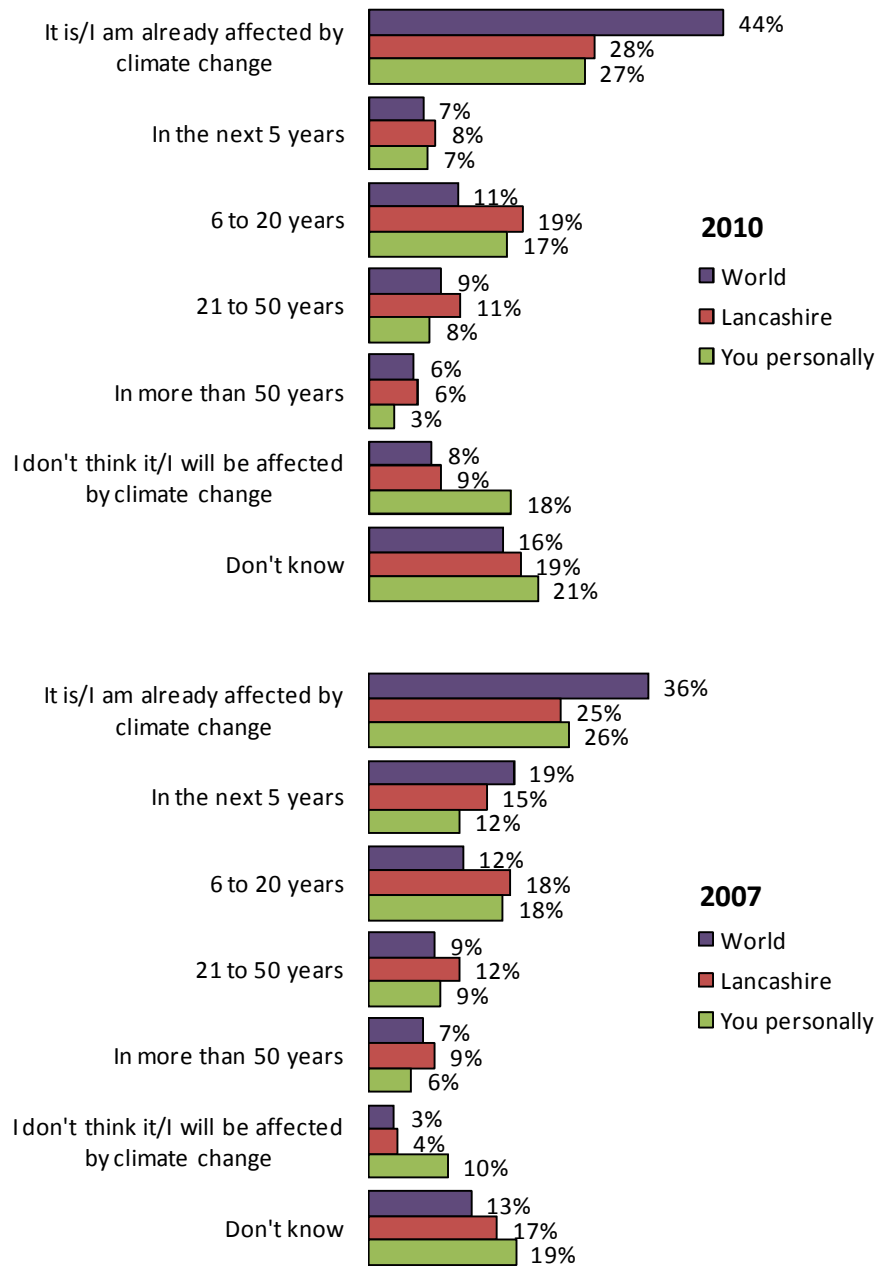
In terms of the factors respondents feel they personally contribute to, the over 60s were less likely to mention most factors. Men were more likely to name carbon emissions (48%) and manufacturing and industry (18%), and those without a car in the household were less likely to name vehicles (42%). Whereas the highest socio-economic group (AB), were more likely to name vehicles (72%), carbon emissions (56%) and planes (43%).

5.4 The effects of climate change

Respondents were then asked about when the effects of climate change will be felt. Interestingly respondents think the effects worldwide are being felt already (44%), whereas they were less likely to say the effects are making an impact locally or personally (28% and 27% respectively). Respondents feel the effects closer to home will be felt within the next 6 to 20 years (19% Lancashire and 17% personally) or even longer into the future. There are also 18% of respondents that say they won't be affected personally by climate change.

Again comparing current results against those recorded in 2007 for these questions reveals broadly similar patterns with respondents thinking the world is likely to be affected sooner than Lancashire or individual people. There are however a couple of differences to note, as respondents are more likely to say that the world is already affected by climate change than they were three years ago (44% versus 36%). Respondents were also more likely to say that they don't think they will personally be affected by climate change than they were three years ago (18% versus 10%).

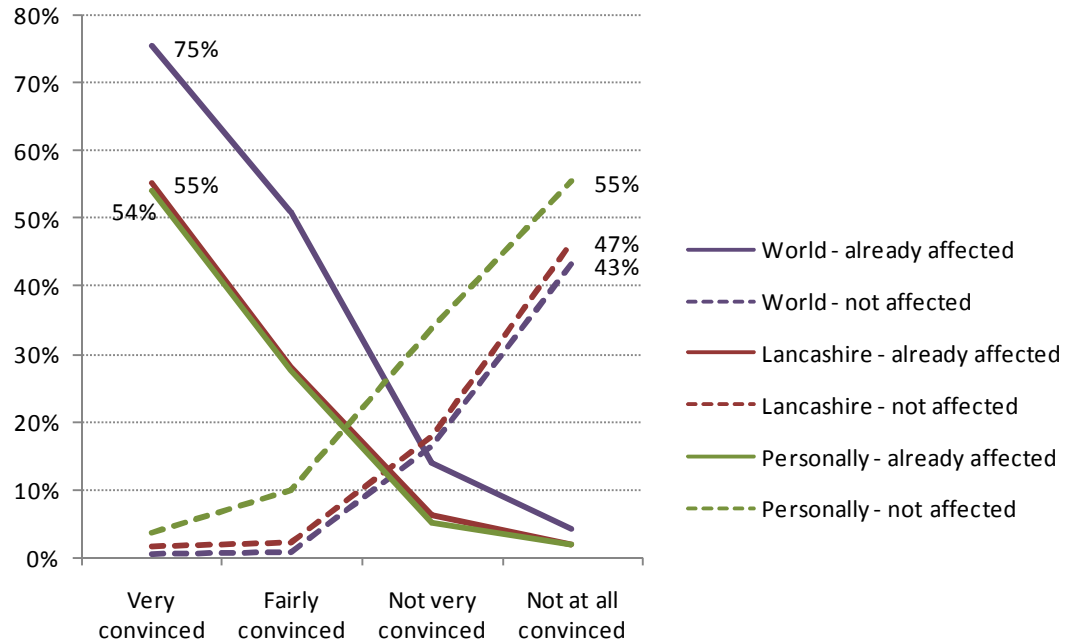
Chart 6 - How soon, if at all, do you think the world will be affected by climate change?



Base: All respondents 2010 (unweighted 1573, weighted 1121); 2007 (unweighted 1231, weighted 986)

The main difference across all levels of the effects of climate change is by if respondents are convinced it is happening. The differences for each group are shown in the chart below.

Chart 7 - Timeline for the effects of climate change by if respondents are convinced climate change is occurring¹



Base: All respondents (unweighted 1573, weighted 1121)

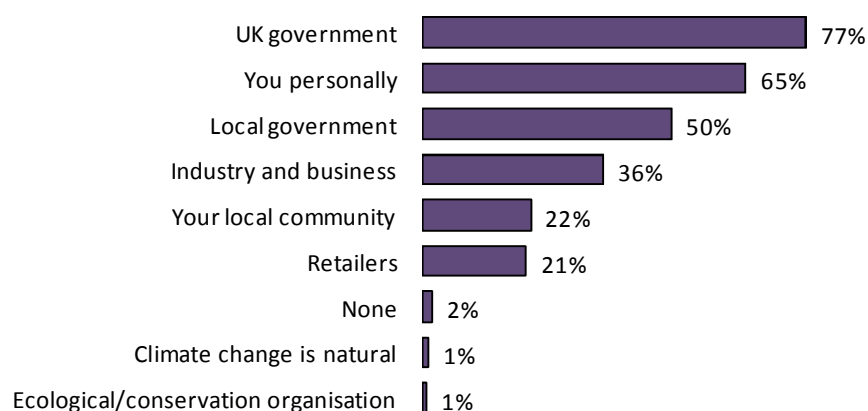
There is more uncertainty among older people (over 60s) about the effects of climate change as they are more likely to say they don't know (world 22%, Lancashire 25%, personally 28%).

¹ This chart just shows the extremes in the timeline to show the general trend (ie responses "it is/I am already affected" and " I don't think it/I will be affected by climate change")

5.5 Tackling climate change

The biggest proportion of respondents say that it is the UK government who are working to tackle climate change (77%). Two-thirds of respondents say that they are also personally taking action to reduce their effect on climate change (65%). Fewer people think that local government (50%) and industry and businesses (36%) are taking action to limit climate change.

Chart 8 - Which of the following do you think are currently taking action to limit climate change?

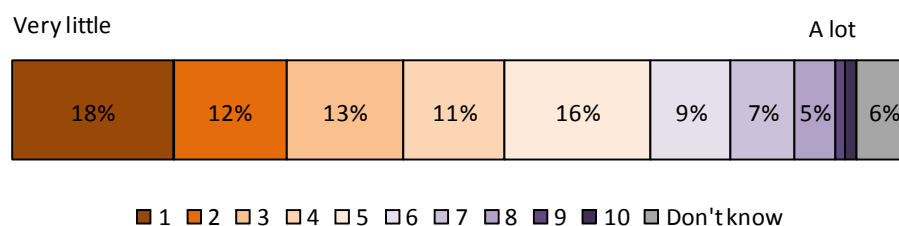


Base: All respondents (unweighted 1980, weighted 1383)

Where people are not convinced climate change is happening they are more likely to say none of these (11%). The over 60s are less likely to say they are personally taking action to limit climate change (51%), and the 45 to 59 group are more likely to say local government is taking action (58%). Men are more likely to say the UK government and industry and business is taking action (80% and 41%). The groups who are more likely to say they personally are taking action are more economically prosperous, have a vehicle in the household and women (75%, 69% and 69% respectively).

A number of questions looked into perceptions of the personal influence people feel they have over reducing climate change. There are very few people who think they can personally do a lot to reduce climate change (7% rated 8 or more), whereas significantly more people say they can do very little (44% rated 3 or less). A similar proportion think there is something they can do, but that it won't have a big effect (43% between 4 and 7). The mean ranking (excluding don't know responses) is 3.94.

Chart 9 - On a scale of 1-10 (where 1 is very little and 10 is a lot) how would you rate your personal ability to reduce climate change?

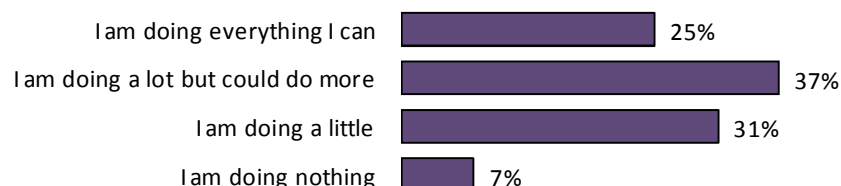


Base: All respondents (unweighted 2113, weighted 1473)

Where respondents say that climate change is due to the actions of people, they are more likely to say they can personally do something to reduce climate change (54% rated between 4 -7), and where they say it isn't due to people they are more likely to say there is little they can do themselves (60% rated between 1-3). The over 60s, men and those without a car are more likely to say there is little they can do (mean ranking 3.5, 3.5 and 4.3 respectively).

Even though respondents don't feel they can have a big impact on reducing climate change, they are still making an effort. A quarter say they are doing everything they can (25%), a further 37% say they are doing a lot but could do more. There are almost two in five people who say they are doing a little (31%) or doing nothing (7%).

Chart 10 - Which of these statements best reflects what you personally are doing to tackle climate change?



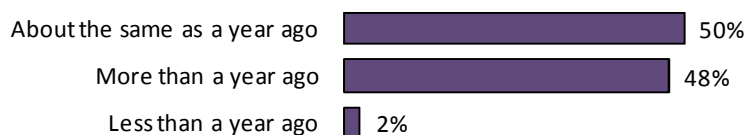
Base: All respondents (unweighted 2101, weighted 1460)

As you would expect, where respondents aren't convinced climate change is happening they are more likely to say they are doing nothing (44%). Also where respondents feel that there is little they can personally do to reduce it, or that it isn't caused by human activity, they are more likely to say they

are doing a little (41% and 39% respectively). Whereas if respondents feel they can personally do a lot, they are more likely to say they are doing everything they can to tackle climate change (44%).

Half are doing the same as a year ago (50%), and almost another half are doing more than a year ago to tackle climate change (48%).

Chart 11 - Would you say that you are doing more or less than a year ago to tackle climate change?



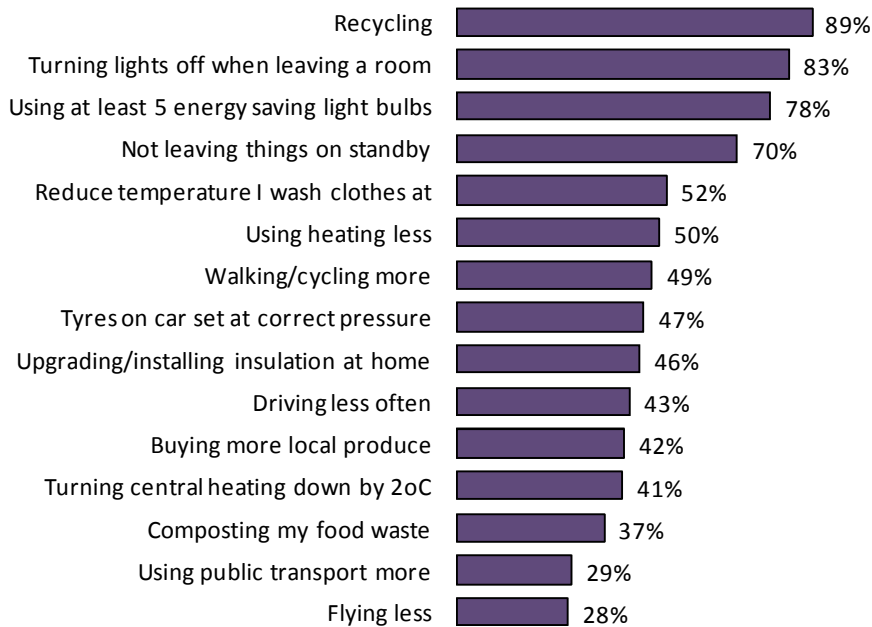
Base: All respondents (unweighted 2106, weighted 1467)

How convinced respondents are about if climate change is happening influences how much people do more to tackle climate change (doing the same as a year ago is 63% when not very convinced and 72% when not at all convinced of climate change). Also when a respondent feels there is little they can personally do to influence climate change they are more likely to keep the same behaviours (doing the same as a year ago 61%).

It is only among the over 60s that there is a difference in the amount people are doing to tackle climate change, with people over 60 more likely to do the same as a year ago (58%).

The actions respondents are most frequently undertaking to limit their impact on climate change are recycling (89%), turning lights off when leaving a room (83%), using energy saving lighting (78%), and not leaving things on standby (70%). The actions respondents are least likely to take are flying less often (28%) and using public transport more (29%). When looking at these actions, it should be borne in mind that they may not be undertaken purely out of concern for the environment but also from a financial one – to save people money. These differences may also result from their demographic group characteristics, for example older people and those in socio-economic groups are more likely to walk or cycle more as they may be less likely to either own a vehicle or drive.

Chart 12 - What actions are you personally taking to limit your impact on climate change?



Base: All respondents (unweighted 2135, weighted 1488)

Where respondents are very convinced that climate change is happening they are more likely to say they are using heating less (63%), driving less often (53%) and flying less (38%).

Respondents who say there is a lot they can do to tackle climate change are more likely to be doing a number of these things. The actions they are most likely to take are reducing the temperature they wash clothes at (74%), turning the heating down (65%), driving less often (64%), and checking car tyre pressures (62%).

There are also some demographic differences in the type of actions taken by respondents.

- Over 60s are less likely to recycle (83%), or walk or cycle more (39%);
- Men are more likely to check car tyre pressures (53%), and women are more likely to not leave things on standby (73%), lower washing temperatures (62%) and buy more local produce (45%).
- Respondents from a BME background are less likely to recycle (78%), but more likely to use heating less (62%) and walk or cycle more (62%).
- People who are in the lower socio-economic group (DE) are more likely to say they walk or cycle more (60%).

6 Recommendations

The results show that there is still work to be done with improving knowledge around climate change and awareness of how individuals can make a difference. This is imperative in getting people to change their behaviour because knowledge influences how convinced people are about the occurrence of climate change, and in turn impacts on the actions they take.

The groups that have lower levels of knowledge are over 60 and in the lower socio-economic group (DE). Recent information on preferred ways of finding out information about the county council and its services has shown that newspapers are the most preferred communication channel, particularly among the over 60s (including the council newspaper Vision). For specifically targeting the lower socio-economic groups leaflets and posters are also effective.

It may also be worth investigating further why there has been a drop in the proportion of people being convinced that climate change is occurring since the 2007 survey.

Continue to educate people in how they can help tackle climate change at a personal level, and provide assistance to help them make lifestyle changes. Some examples include:

- demonstrating how homes can be made more energy efficient;
- increase awareness of tools like the home energy monitors to help people understand where energy is being used; and
- making the use of alternatives to the car more viable by promoting car sharing schemes or looking at opportunities for improving public transport.

Communications can be made more effective by segmenting the population into different groups and targeting different environmental messages appropriately, for example communicating information about an activity to groups have a lower take-up. It might also be worth considering emphasising the financial as well as environmental benefits of making lifestyle changes when promoting the actions people can take. This is because even where people don't believe in climate change they do undertake certain activities to save themselves money.

Continue to look at how the county council can work with other agencies (eg national government) to help tackle the main causes of climate change. Also continue to look at ways of reducing the impact the council's operations have on the environment.

7 Appendix

7.1 Socio-Economic-Group Definitions

These groups are based on Market Research Society definitions and on the respondent. They are graded as A, B, C1, C2, D and E.

Group A

- Professional people, very senior managers in business or commerce or top-level civil servants.
- Retired people, previously grade A, and their widows

Group B

- Middle management executives in large organisations, with appropriate qualifications
- Principle officers in local government and civil service
- Top management or owners of small business concerns, educational and service establishments
- Retired people previously grade B, and their widows

Group C1

- Junior management, owners of small establishments, and all others in non-manual positions
- Jobs in this group have very varied responsibilities and educational requirements
- Retired people, previously grade C1, and their widows

Group C2

- All skilled manual workers, and those manual workers for responsibility for other people
- Retired people, previously grade C2, with pensions from their job
- Widows, if receiving pensions from their late partner's job

Group D

- All semi skilled and unskilled manual workers, and apprentices and trainees to skilled workers
- Retired people, previously grade D, with pensions from their late job
- Widows, if receiving pensions from their late partner's job

Group E

- All those entirely dependant on the state long term, through sickness, unemployment, old age or other reasons
- Those unemployed for a period exceeding six months (otherwise classified on previous occupation)
- Casual workers and those without a regular income