



Department of the
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Public perceptions on climate change in Northern Ireland 2009

September 2009



Index

Technical notes	3
Introduction	4
Results	
Public opinion on the causes of climate change	5
Concerns about climate change	6
Climate change and lifestyle	8
Combating climate change	9
Appendix A: The questionnaire	10
Appendix B: Tables	13

Technical notes

Statistical significance

Any statements in this report regarding differences between groups such as males and females, etc. are statistically significant at the 5% significance level. This significance level is the criteria for judging whether differences between groups might have arisen by chance. The most common criteria is the 5% level i.e. the probability being one in twenty that a difference might have arisen by chance.

Please note the following in the figures and tables.

For figures less than 0.5%, the value recorded is '0'.

For figures with no response, a '-' has been recorded.

Percentages may not add to 100% due to multiple responses.

This report has been prepared by the Central Statistics and Research Branch (CSRB), Department for Regional Development.

In keeping with government policy, no hard copies of this report have been published, but are available on request. Requests or enquiries concerning this publication should be directed to.

Central Statistics & Research Branch
Department for Regional Development
Clarence Court
10 -18 Adelaide Street
Belfast BT2 8GB
Email: csrb@drdni.gov.uk
Tel: 028 9054 0916

1. Introduction

The Northern Ireland Environment Agency ran a module on public perceptions to climate change in the January 2009 Northern Ireland Omnibus survey. This report summarises people's attitudes towards climate change in Northern Ireland. It covers the following issues:

- Public opinion on the causes of climate change
- Concerns about climate change
- Climate change and lifestyle
- Combating climate change

The questionnaire was developed from a steering group of colleagues from the Northern Ireland Environment Agency, the Department of the Environment, the Northern Ireland Climate Change Impacts Partnership and the Northern Ireland Statistics and Research Agency. A copy of the questionnaire is in Appendix A. Detailed tables are available in Appendix B.

Background to the January 2009 Omnibus Survey

The Northern Ireland Omnibus Survey is conducted several times each year by the Central Survey Unit of the Northern Ireland Statistics and Research Agency (NISRA) and is designed to provide a snapshot of the behaviour, lifestyle and views of a representative sample of people aged 16 and over in Northern Ireland. The survey comprises two distinct parts: core questions about the respondents and their individual circumstances, and a variety of questions commissioned by clients, which seek information on a range of issues.

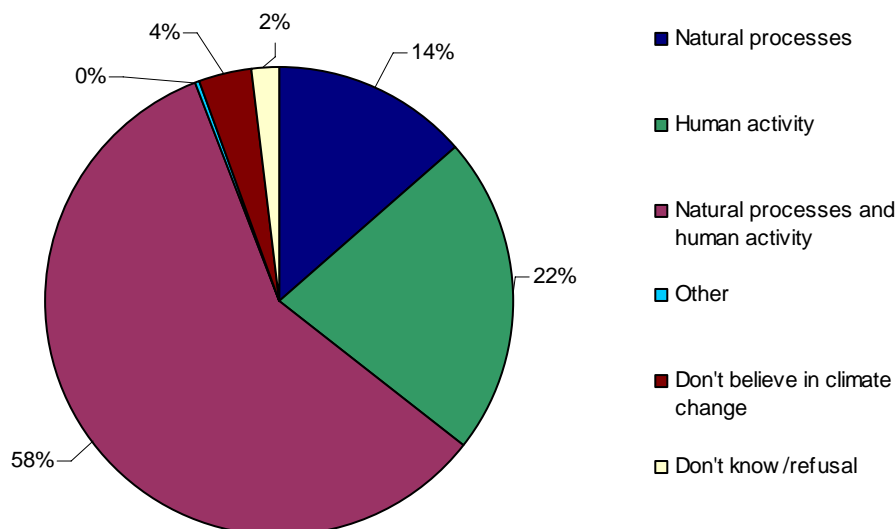
The sample for this survey consisted of a systematic random sample of addresses selected from the Land and Property Service list of private addresses. This is the most up-to-date listing of private households in Northern Ireland and is available to NISRA for research purposes. A total of 2,200 addresses were selected for interview. At each address, one person aged 16 or over was selected to participate in the survey. From an eligible sample of 1,922 households, 1,126 interviews were achieved, giving a response rate of 59%. Interviews were conducted between 19 January and 21 February 2009.

Results

1. Public opinion on the causes of climate change

- 1.1. Respondents were first asked if they thought that the causes of climate change were from natural processes or human activity. Respondents were given the option to record that they did not believe in climate change although this was a spontaneous option only. Respondents who did not believe in climate change were not asked any further questions. Figure 1 shows a breakdown of public opinion on the causes of climate change.
- 1.2. A high proportion of respondents thought climate change was caused by human activity and natural processes together (58%). A small number of respondents did not believe in climate change (4%). Respondents under 65 were more likely to believe human activity, either on its own or together with natural processes, caused climate change compared to respondents aged 65 and over (83% and 71% respectively).

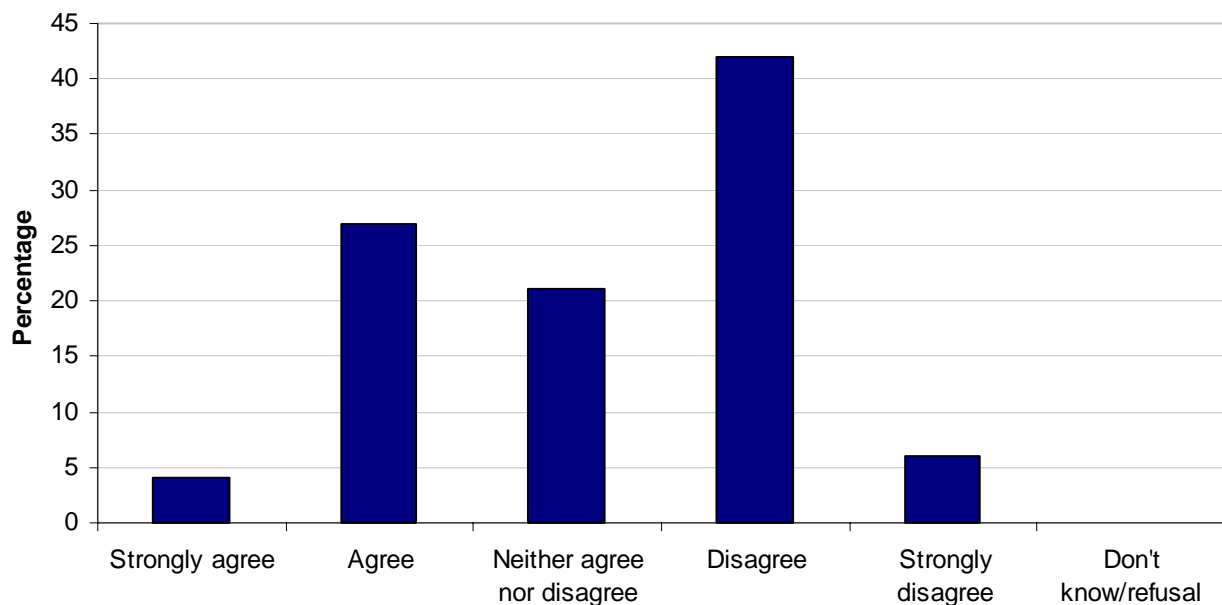
Figure 1: Public opinion on the causes of climate change



2. Concerns about climate change

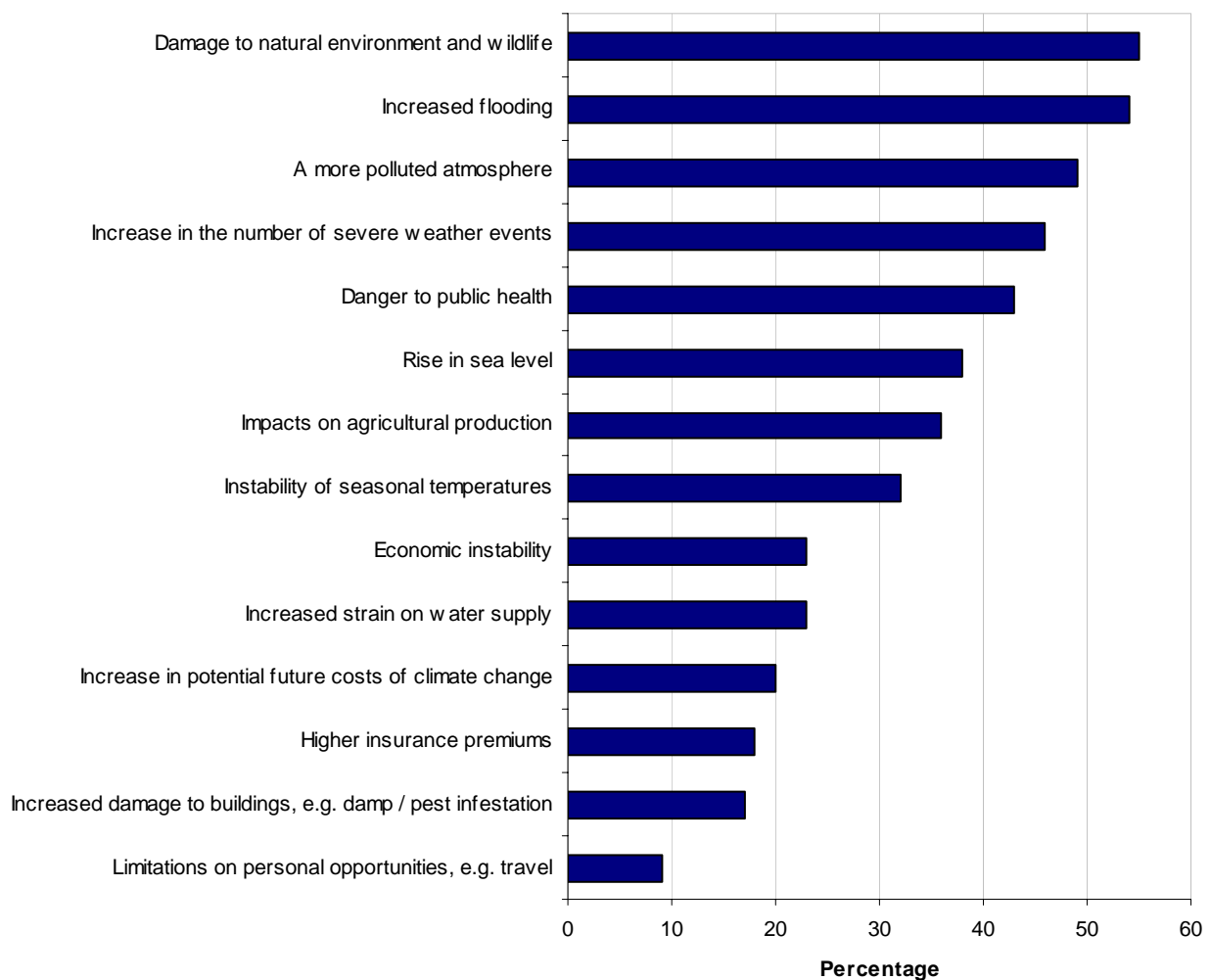
- 2.1. Respondents who believed in climate change were then asked if they were concerned about the impacts of climate change in Northern Ireland and if they thought changes to the climate would have a direct impact on them. Over half of respondents (57%) were concerned about the possible impacts of climate change in Northern Ireland.
- 2.2. There were some differences between groups of people on the levels of concern over climate change in Northern Ireland. Catholic respondents (63%), female respondents (60%) and respondents aged under 65 (60%) were more likely to be concerned about the possible impacts of climate change than Protestant respondents (53%), male respondents (53%) and respondents aged 65 and over (45%), respectively.
- 2.3. Nearly a third of respondents (31%) agreed that changes to the climate have had a direct impact on them with 48% of respondents disagreeing with this statement (Figure 2).

Figure 2: Respondents' level of agreement with the statement that changes to the climate have had an impact on them



- 2.4. Respondents were also asked to rank their five main concerns about the potential effects of climate change in Northern Ireland from a showcard. Figure 3 shows the percentage of respondents who ranked one or more of these concerns in their top five.
- 2.5. The top five main concerns from respondents about potential effects of climate change in Northern Ireland were damage to natural environment and wildlife (55%), increased flooding (54%), a more polluted atmosphere (49%), an increase in the number of severe weather events (46%) and danger to public health (43%). Impact on agricultural production was one of the top five main concerns for respondents from rural areas (44%).

Figure 3: Respondents' concerns that were ranked in their top five main concerns about the potential effects of climate change in Northern Ireland

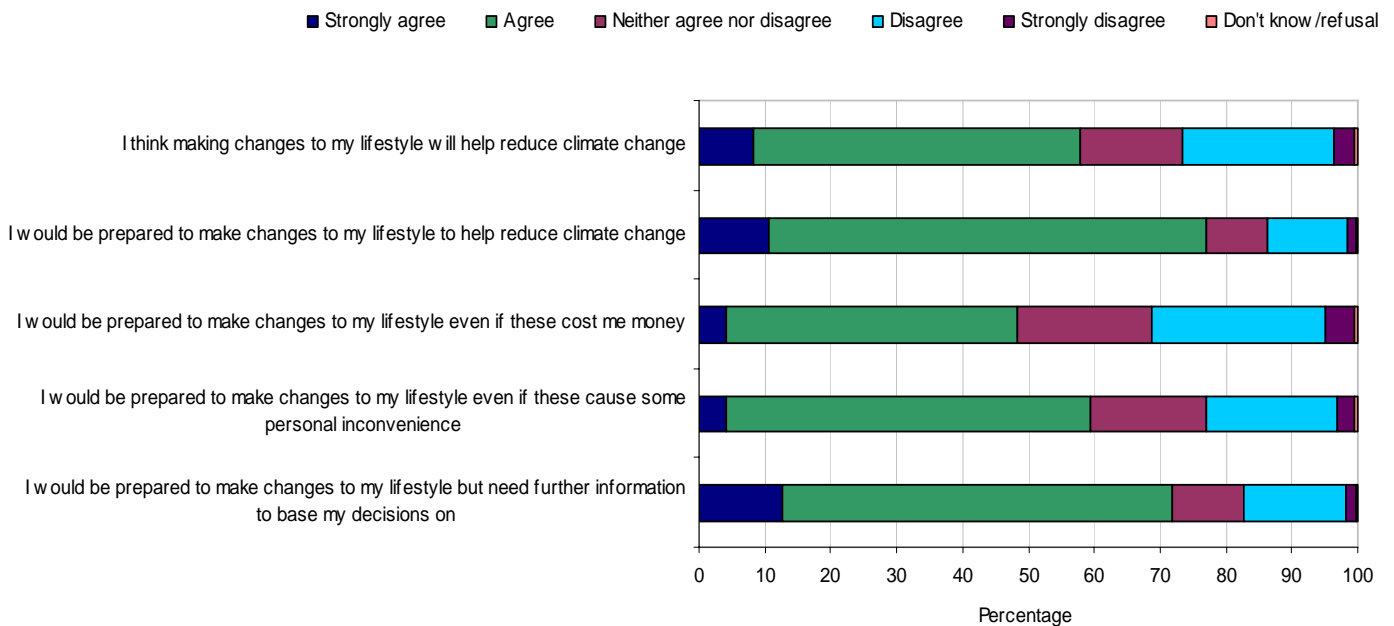


Percentages may add to more than 100% due to multiple responses

3. Climate change and lifestyle

- 3.1 Respondents who believed in climate change were then asked a series of questions about making changes to their lifestyle to help reduce climate change. The results of these questions are shown in Figure 4 below.
- 3.2. Over half of respondents (57%) thought that making changes to their lifestyle will help reduce climate change. Over three-quarters of respondents (77%) would be prepared to make changes to their lifestyle to help reduce climate change. A lower percentage of respondents would be prepared to make changes to their lifestyle to help reduce climate change if these cost them money (48%) or if it caused them some personal inconvenience (59%). In total, 72% of respondents would be prepared to make changes to their lifestyle but need further information to base their decisions on.

Figure 4: Respondents opinion on lifestyle changes and climate change



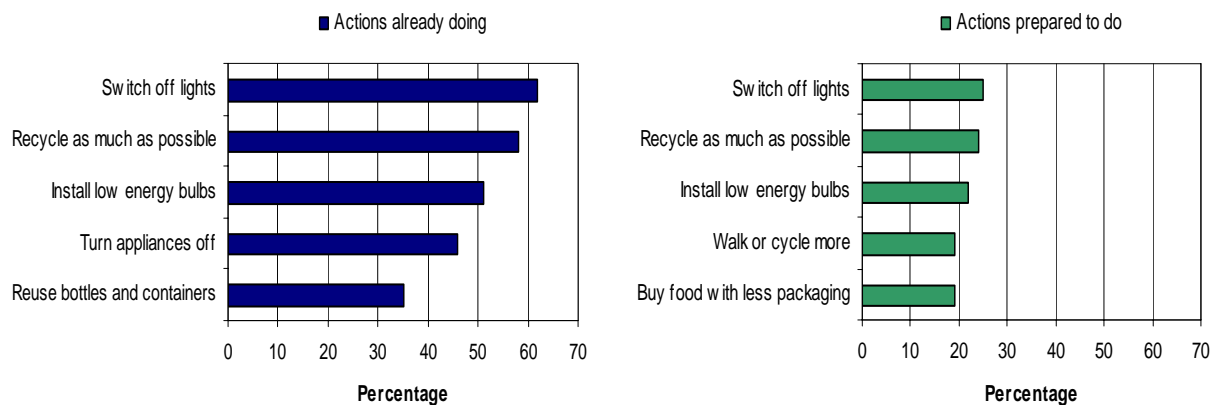
- 3.3. There were some differences in gender and age in respondents' views on these questions. Overall, female respondents (80%) and respondents aged under 65 (81%) were more likely to be prepared to makes changes to their lifestyle than male respondents (74%) and respondents aged 65 and over (61%).

4. Combating climate change

4.1. Respondents who believed in climate change were asked two questions about what they were already doing to combat climate change and what they would be prepared to do in the next 12 months.

4.2. Over half of respondents switch off lights (62%), recycle as much as possible (58%) and have installed low energy light bulbs (51%). Around a quarter of respondents said they would be prepared to switch off lights (25%), recycle as much as possible (24%) and install low energy light bulbs (22%).

Figure 5: The top five actions respondent are already doing and are prepared to do in the next 12 months



Percentages may add to more than 100% due to multiple responses

4.3. There were some differences by gender in respondents' actions on these questions. Female respondents were more likely to switch off lights and recycle as much as possible (65% and 63% respectively) than male respondents (58% and 54% respectively).

Appendix A: The questionnaire

Intro: I would like to ask you some questions about climate change. Climate change is described as any long-term significant change in the 'average weather' of any given region.

Ask all

Q1. Do you think climate change is mainly caused by:

1. Natural processes
2. Human activity
3. Natural processes and human activity
4. Other (please specify)
5. I don't believe in climate change (spontaneous only)

Ask all except Q1 = 5

Q2. Are you concerned about the possible impacts of climate change in Northern Ireland?

1. Yes
2. No

Ask all except Q1 = 5

Q3. To what extent do you agree or disagree with the following statements?

Changes to the climate have had a direct impact on me

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q4. I think making changes to my lifestyle will help reduce climate change

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q5. I would be prepared to make changes to my lifestyle to help reduce climate change

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q6. I would be prepared to make changes to my lifestyle to help reduce climate change even if these cost me money

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q7. I would be prepared to make changes to my lifestyle to help reduce climate change even if these cause some personal inconvenience

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q8. I would be prepared to make changes to my lifestyle to help reduce climate change but need further information to base my decisions on

1. Strongly agree
2. Tend to agree
3. Tend to disagree
4. Strongly disagree

Ask all except Q1 = 5

Q9. Rank in order (1 being the most significant concern) your five main concerns about the potential effects of climate change on Northern Ireland (use showcard).

1. A more polluted atmosphere
2. Increased flooding
3. Increase in the number of severe weather events
4. Instability of seasonal temperatures
5. Rise in sea level
6. Impacts on agricultural production
7. Increased damage to buildings, e.g. damp / pest infestation
8. Damage to natural environment and wildlife
9. Danger to public health
10. Increased strain on water supply
11. Increase in potential future costs of climate change
12. Economic instability
13. Higher insurance premiums
14. Limitations on personal opportunities, e.g. travel

Ask all except Q1 = 5

Q10. Please indicate which of the following you are already doing to combat climate change (use showcard):

1. Buy car with a smaller engine size
2. Change to a more fuel efficient car
3. Make fewer car journeys
4. Walk or cycle more
5. Use public transport
6. Take fewer flights

7. Buy fewer new clothes
8. Buy second hand clothes and furniture
9. Buy food with less packaging
10. Buy locally grown food
11. Buy some organic produce
12. Eat less meat
13. Grow some of your own food

14. Install loft insulation
15. Install low energy light bulbs
16. Install renewable energy
17. Sign up to an eco-tariff
18. Switch off lights
19. Turn appliances off at the plug when not in use
20. Turn down heating (thermostat)
21. Use fewer chemicals in the home
22. Use water sparingly

23. Recycle as much as possible
24. Reduce the amount of waste you produce
25. Reduce the number of electrical appliances you have
26. Replace broken appliances with more energy-efficient ones
27. Reuse bottles and containers

Ask all except Q1 = 5

Q11. Please indicate which of the following you would be prepared to do in the next 12 months to combat climate change (use showcard):

1. Buy car with a smaller engine size
2. Change to a more fuel efficient car
3. Make fewer car journeys
4. Walk or cycle more
5. Use public transport
6. Take fewer flights

7. Buy fewer new clothes
8. Buy second hand clothes and furniture
9. Buy food with less packaging
10. Buy locally grown food
11. Buy some organic produce
12. Eat less meat
13. Grow some of your own food

14. Install loft insulation
15. Install low energy light bulbs
16. Install renewable energy
17. Sign up to an eco-tariff
18. Switch off lights
19. Turn appliances off at the plug when not in use
20. Turn down heating (thermostat)
21. Use fewer chemicals in the home
22. Use water sparingly

23. Recycle as much as possible
24. Reduce the amount of waste you produce
25. Reduce the number of electrical appliances you have
26. Replace broken appliances with more energy-efficient ones
27. Reuse bottles and containers

Appendix B: Tables

Public opinion on the causes of climate change

Table B1: Do you think climate change is mainly caused by...

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Natural processes	8	10	17	17	14	13	11	15	14
Human activity	33	19	23	19	23	21	26	19	22
Natural processes and human activity	51	68	57	52	57	60	58	60	58
Other	-	1	-	0	-	1	-	0	0
Don't believe in climate change	7	1	2	7	4	3	3	4	4
Don't know/refusal	1	1	2	5	2	2	2	2	2
Base number	108	354	388	276	510	616	449	593	1126

All persons aged 16 and over

Concerns about climate change

Table B2: Are you concerned about the possible impacts of climate change in Northern Ireland?

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Yes	54	60	61	45	53	60	63	53	57
No	46	39	39	54	46	39	37	47	43
Don't know/refusal	-	0	0	1	0	0	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B3: Changes to the climate have had a direct impact on me

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	3	5	4	3	5	4	5	4	4
Agree	12	27	31	27	24	30	29	25	27
Neither agree nor disagree	27	23	21	14	20	22	21	21	21
Disagree	54	38	37	50	44	40	39	45	42
Strongly disagree	5	6	6	5	7	4	5	5	6
Don't know/refusal	-	0	0	1	0	0	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B4: Respondents' concerns that were ranked in their top five main concerns about the potential effects of climate change in Northern Ireland

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Limitations on personal opportunities, e.g. travel	15	9	8	6	11	6	9	9	9
Increased damage to buildings, e.g. damp / pest infestation	15	15	21	16	15	20	20	16	17
Higher insurance premiums	13	19	18	21	21	16	17	20	18
Increase in potential future costs of climate change	22	21	21	13	20	19	15	23	20
Increased strain on water supply	19	25	22	25	22	24	25	23	23
Economic instability	22	26	21	20	25	20	19	26	23
Instability of seasonal temperatures	31	35	31	31	35	30	34	32	32
Impacts on agricultural production	30	38	39	32	34	38	35	39	36
Rise in sea level	41	33	39	44	39	38	39	37	38
Danger to public health	54	38	45	39	39	46	47	40	43
Increase in the number of severe weather events	45	51	47	38	46	46	45	47	46
A more polluted atmosphere	55	54	47	44	45	53	55	46	49
Increased flooding	55	56	51	58	52	56	54	55	54
Damage to natural environment and wildlife	51	63	51	50	56	53	54	56	55
Don't know/refusal	2	1	2	6	2	3	3	2	3
Base number	101	348	377	253	488	591	428	568	1079

*All persons aged 16 and over who believe in climate change
Percentages may add to more than 100% due to multiple responses*

Climate change and lifestyle

Table B5: I think making changes to my lifestyle will help reduce climate change

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	12	10	8	5	7	10	9	8	8
Agree	44	52	55	38	46	52	55	47	49
Neither agree nor disagree	17	16	15	16	16	15	14	17	16
Disagree	25	19	19	36	27	19	19	25	23
Strongly disagree	0	3	4	4	4	3	2	3	3
Don't know/refusal	-	-	0	2	0	1	1	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B6: I would be prepared to make changes to my lifestyle to help reduce climate change

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	10	14	11	5	7	14	11	10	11
Agree	68	67	70	56	67	66	70	66	66
Neither agree nor disagree	8	8	8	13	10	9	7	10	9
Disagree	13	9	8	23	14	10	10	13	12
Strongly disagree	1	1	1	2	2	1	1	1	1
Don't know/refusal	-	-	0	1	-	0	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B7: I would be prepared to make changes to my lifestyle to help reduce climate change even if these cost me money

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	6	4	5	3	3	5	5	4	4
Agree	42	44	50	35	41	47	46	43	44
Neither agree nor disagree	20	22	19	20	21	20	20	21	20
Disagree	24	27	20	38	30	24	25	27	26
Strongly disagree	8	3	5	3	5	4	3	5	4
Don't know/refusal	1	0	-	1	0	1	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B8: I would be prepared to make changes to my lifestyle to help reduce climate change even if these cause some personal inconvenience

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	5	5	4	3	3	5	5	4	4
Agree	49	59	61	42	57	54	57	54	55
Neither agree nor disagree	24	16	16	18	15	20	17	18	18
Disagree	17	19	16	32	22	18	18	21	20
Strongly disagree	4	1	3	3	3	2	2	3	3
Don't know/refusal	1	-	0	2	0	1	1	0	1
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Table B9: I would be prepared to make changes to my lifestyle to help reduce climate change but need further information to base my decisions on

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Strongly agree	12	13	14	11	12	14	10	14	13
Agree	60	60	62	52	58	60	64	56	59
Neither agree nor disagree	10	10	12	12	10	11	11	11	11
Disagree	17	16	10	23	18	14	14	17	15
Strongly disagree	2	2	2	1	2	1	1	2	2
Don't know/refusal	-	-	0	1	0	0	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

All persons aged 16 and over who believe in climate change

Combating climate change

Table B10: Please indicate which of the following you are already doing to combat climate change

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Buy car with a smaller engine size	8	15	20	26	15	21	18	19	18
Change to a more fuel efficient car	6	16	19	17	18	15	17	16	16
Make fewer car journeys	12	22	24	23	21	22	24	21	22
Walk or cycle more	38	30	30	23	26	33	33	26	30
Use public transport	37	19	20	26	20	26	23	22	23
Take fewer flights	2	10	7	10	8	9	8	8	8
Buy fewer new clothes	13	13	11	7	10	13	11	12	11
Buy second hand clothes and furniture	8	6	5	4	4	7	6	5	6
Buy food with less packaging	18	31	35	22	25	33	29	28	29
Buy locally grown food	20	36	32	27	27	34	30	31	31
Buy some organic produce	9	22	18	14	13	21	19	15	17
Eat less meat	9	10	12	12	7	14	12	10	11
Grow some of your own food	2	8	8	7	7	7	6	8	7

Table B10: Please indicate which of the following you are already doing to combat climate change (cont.)

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Install loft insulation	10	33	37	36	32	32	31	34	32
Install low energy light bulbs	34	60	55	41	49	54	49	53	51
Install renewable energy	3	7	4	3	5	3	4	5	4
Sign up to an eco-tariff	1	3	1	1	1	1	1	2	1
Switch off lights	66	69	63	47	58	65	63	61	62
Turn appliances off at the plug when not in use	47	52	45	38	42	51	48	45	46
Turn down heating (thermostat)	22	44	33	24	32	35	34	32	34
Use fewer chemicals in the home	9	13	15	13	10	16	13	13	13
Use water sparingly	23	27	21	21	20	26	23	24	23
Recycle as much as possible	52	66	58	51	54	63	57	60	58
Reduce the amount of waste you produce	19	25	20	24	20	24	20	25	22
Reduce the number of electrical appliances you have	10	8	5	5	6	7	8	5	7
Replace broken appliances with more energy-efficient ones	8	22	21	16	20	18	16	21	19
Reuse bottles and containers	39	43	33	25	30	40	31	39	35
None of these	5	4	4	6	6	3	3	6	4
Don't know/refusal	1	-	0	1	1	0	0	0	0
Base number	101	348	377	253	488	591	428	568	1079

*All persons aged 16 and over who believe in climate change
Percentages may add to more than 100% due to multiple responses*

Table B11: Please indicate which of the following you would be prepared to do in the next 12 months to combat climate change

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Buy car with a smaller engine size	8	10	8	7	8	9	7	9	8
Change to a more fuel efficient car	3	10	12	8	11	8	10	10	9
Make fewer car journeys	10	13	13	8	13	11	12	12	12
Walk or cycle more	22	23	19	10	19	20	19	20	19
Use public transport	24	14	13	10	13	16	15	13	14
Take fewer flights	3	5	8	5	5	7	5	7	6
Buy fewer new clothes	14	13	8	6	8	13	11	9	10
Buy second hand clothes and furniture	1	3	4	2	2	4	4	2	3
Buy food with less packaging	16	22	19	16	16	21	19	20	19
Buy locally grown food	13	19	17	19	16	18	17	18	17
Buy some organic produce	14	13	11	9	9	14	13	12	12
Eat less meat	8	6	7	5	4	8	6	6	6
Grow some of your own food	8	6	8	4	6	7	8	5	7

Table B11: Please indicate which of the following you would be prepared to do in the next 12 months to combat climate change (cont.)

Unit: Percentage

	Age				Gender		Religion		All respondents
	<25	25-44	45-64	65 and over	Male	Female	Catholic	Protestant	
Install loft insulation	5	11	8	10	9	9	8	10	9
Install low energy light bulbs	21	23	22	20	19	25	25	21	22
Install renewable energy	10	10	10	3	9	8	8	10	9
Sign up to an eco-tariff	-	6	3	1	3	4	4	3	3
Switch off lights	29	26	26	20	25	25	30	22	25
Turn appliances off at the plug when not in use	19	21	14	10	16	16	17	15	16
Turn down heating (thermostat)	9	18	15	15	14	16	18	13	15
Use fewer chemicals in the home	10	14	14	9	11	14	14	13	13
Use water sparingly	16	20	17	11	17	16	17	16	17
Recycle as much as possible	31	29	22	17	25	24	27	22	24
Reduce the amount of waste you produce	20	19	16	11	17	16	20	14	16
Reduce the number of electrical appliances you have	16	8	5	1	7	6	10	4	7
Replace broken appliances with more energy-efficient ones	10	17	14	9	12	15	14	14	14
Reuse bottles and containers	19	15	13	10	13	14	18	11	14
None of these	6	10	9	19	13	8	8	12	11
Don't know/refusal	1	0	1	3	1	1	1	1	1
Base number	101	348	377	253	488	591	428	568	1079

*All persons aged 16 and over who believe in climate change
Percentages may add to more than 100% due to multiple responses*