



Market Research Report for:

Clean Heat Wave II Survey

Prepared for:

Environment Canterbury

September 2005

Reference: 3416

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Appendix I: Questionnaire

1. Background

Opinions Market Research Ltd was invited by Bill Simpson, Communications Manager, Environment Canterbury to carry out research for a survey to measure awareness of the Clean Heat Project among the public in Christchurch.

The 'Clean Heat Project' is an incentives and assistance project that assists residents in Christchurch using solid fuels for home heating to change to cleaner forms of heating. The Clean Heat Project was developed as a result of new rules for home heating proposed in the Natural Resources Plan.

2. Objectives

A citywide advertising campaign was to start on 2 July 2005 and the research was required to measure awareness of the Project before and after this campaign and to measure the impact of the campaign.

This report outlines the second stage – i.e. post-campaign.

3. Methodology and Sample Structure

A telephone survey was conducted among a representative sample of 400 Christchurch residents. The sample was representative by age, gender and ward as defined in the 2001 Census. The margin of error associated with a sample of 400 is $\pm 4.9\%$.

Interviewing was conducted between 2 and 12 September 2005.

The following table shows the sample structure achieved.

Base: Total Sample: 400	Census 2001	Clean Heat Pre Campaign	Clean Heat Post Campaign
	%	%	%
Gender			
Male	48	47	48
Female	52	53	53
Age			
15-24	19	19	18
25-39	28	28	28
40-59	32	32	32
60+	22	22	22
Ward			
Burwood/ Pegasus	16	16	16
Fendalton/ Waimairi	16	16	16
Ferrymead/ Hagley	17	17	17
Heathcote/ Spreydon	16	16	17
Papanui/ Shirley	17	17	17
Riccarton/ Wigram	18	18	18
Working Status			
Full/ Part time paid employment	59	63	60
Not in paid employment	41	38	41
Community Services Card			
Have community services card	-	-	29
Do not have community services card	-	-	71

4. Summary of Findings

4.1 Environmental Issues Facing New Zealand

Of the five issues asked post campaign, the ones deemed most important were air quality, waste disposal and global warming/ climate change/ greenhouse gases (all receiving a mean score higher than 5).

Of slightly less importance were water availability and ground water quality i.e. drinking water quality.

Post campaign respondents rated air quality, waste disposal and water availability as slightly more serious than pre campaign respondents.

4.2 Advertising and Information Awareness

4.2.1 Overall Awareness of the Clean Heat Project

Overall awareness of the Clean Heat Project was 72%. The following table shows the distribution of respondents in terms of awareness of the Project itself and awareness of advertising and information on the Project.

Base: Total Sample: 400	%
Heard of Clean Heat Project and aware of advertising and information	47
Heard of Clean Heat Project but not aware of advertising and information	13
Not heard of Clean Heat Project (by name) but aware of advertising and information	12
Overall Aware	72
Claimed to have heard of Clean Heat Project but once questioned were mistaken, and not aware of advertising or information	2
Not heard of Clean Heat Project nor aware of advertising or information	26
Not Aware	28

4.2.2 Awareness of Advertising or Information about Wintertime Air Quality

Two thirds (66%) were aware of advertising about wintertime air quality in Christchurch post campaign. This is higher than the pre campaign awareness (53%).

Most recalled information/ advertising about banning of open fires and about smog/ smog levels/ air quality/ pollution.

Post campaign there was also a fifth who mentioned that home fires are the biggest cause of air pollution. 8% also specifically mentioned that 80% of pollution is caused by home fires.

Over half (59%) claimed to have seen/ heard this information/ advertising in The Press. A fifth or fewer mentioned other sources including TV, radio and The Christchurch Star.

4.2.3 Awareness of the Clean Heat Project

When asked about the 'Clean Heat Project', 62% claimed to be aware of this. This increased from 39% awareness pre campaign.

Most claimed the project was about converting to non polluting heating (with no mention of subsidies). A further fifth said it was about subsidies for changing/ replacing open fires and log burners. Other responses included insulating your home and clean burning.

With further prompting about what the Clean Heat project is about, 59% said they remembered seeing or hearing advertising or information about this project.

Most often, messages were remembered about getting rid of open fires/ log burners or converting to cleaner heat forms, and the level of pollution caused by fires.

Half of those aware of Clean Heat advertising saw it in The Press, while 15% saw it on TV. Around one in ten saw advertising in The Christchurch Star, City Scene/ CCC newsletter or on the radio.

Of those aware of advertising or information about the Clean Heat Project:

- A third felt this advertising and information had changed their understanding of air quality in Christchurch.
- The main reason for this was they were more aware (in general) of air quality in Christchurch, and realised the importance of upgrading/ need cleaner air.
- A third felt this advertising and information had changed their attitude to Christchurch air quality.
- Almost half felt their attitude to air quality in Christchurch has changed in that they were more aware of it in general, and a further fifth now use cleaner fuel or are thinking about upgrading. 16% felt people should change their heating or take more responsibility.

4.3 Air Pollution in Christchurch

Responses to the main cause of air pollution in Christchurch were:

	Pre campaign	Post campaign
	%	%
Home heating	41	55
Vehicles	46	32
Don't know	1	6
Industry	9	5
Other	4	3

The number mentioning home heating as the main cause of air pollution increased post campaign, while those mentioning vehicles decreased

When asked what proportion of air pollution in Christchurch is caused by home fires, the range of responses given was from 3% to 96%. A fifth stated 80%.

The mean amount stated was 55%. This is a slight increase from the pre campaign mean of 47%.

- Level of agreement was highest for the statements:
 - *'insulating my home will reduce heating costs'* (95% agreed)
 - *'I believe air pollution in Christchurch is a problem'* (93% agreed) and
 - *'air pollution is bad for my health'* (91% agreed).
- *'I think open fires and log burners over 15 years old should be banned'* had two thirds agreeing and a third disagreeing. Similar agreement levels resulted for the comment *'80% of air pollution in winter is caused by home fires'*.
- More people disagreed (44%) than agreed (30%) that *'the amount of firewood I personally burn wont make a difference to pollution overall'*. However, 28% claimed this was not applicable to them.
- Few (22%) felt that the appearance of the air in winter in Christchurch was acceptable.

4.4 Home Heating

Currently a third claim to use an electric heater and a similar proportion a log burner. Almost a fifth use a heat pump or a gas heater. Other forms are used by 3% each or less. These are similar to the pre campaign results.

Of those currently using a log burner or open fire, 39% would convert if other sources were cheaper (slightly higher than the 31% pre campaign) while 22% would if there were financial help. Around a fifth claimed that nothing would encourage them to change.

Just 14% of respondents were considering changing or upgrading their home heating in the next 12 months. Of these, most were considering changing from a log burner. This amount is higher than pre campaign, and there were fewer considering changing from electric heater post campaign.

Almost half of those considering changing felt they would convert to a heat pump.

Of those considering changing heat forms:

- the main reasons were that their current heating was inefficient or inconvenient, and that they wanted some home heating that is more environmentally friendly.
- 50% felt the Clean Heat advertising or information had a little or a lot of influence on their decision to change their home heating. 30% felt it had no influence at all. The remaining 20% were not aware of the Clean Heat advertising.

4.5 Conclusion

Overall, almost three quarters of respondents surveyed claimed to be aware of the Clean Heat Project, with 62% aware of the project itself and 59% recalling advertising or information on the project.

Recall of the advertising focussed on converting to cleaner forms of home heating and the level of pollution caused by fires.

When questioned on the main cause of air pollution in Christchurch 55% cited home heating (an increase from 41% pre campaign) and home heating emerged as the main cause, whereas pre campaign vehicles were cited as being the main cause.

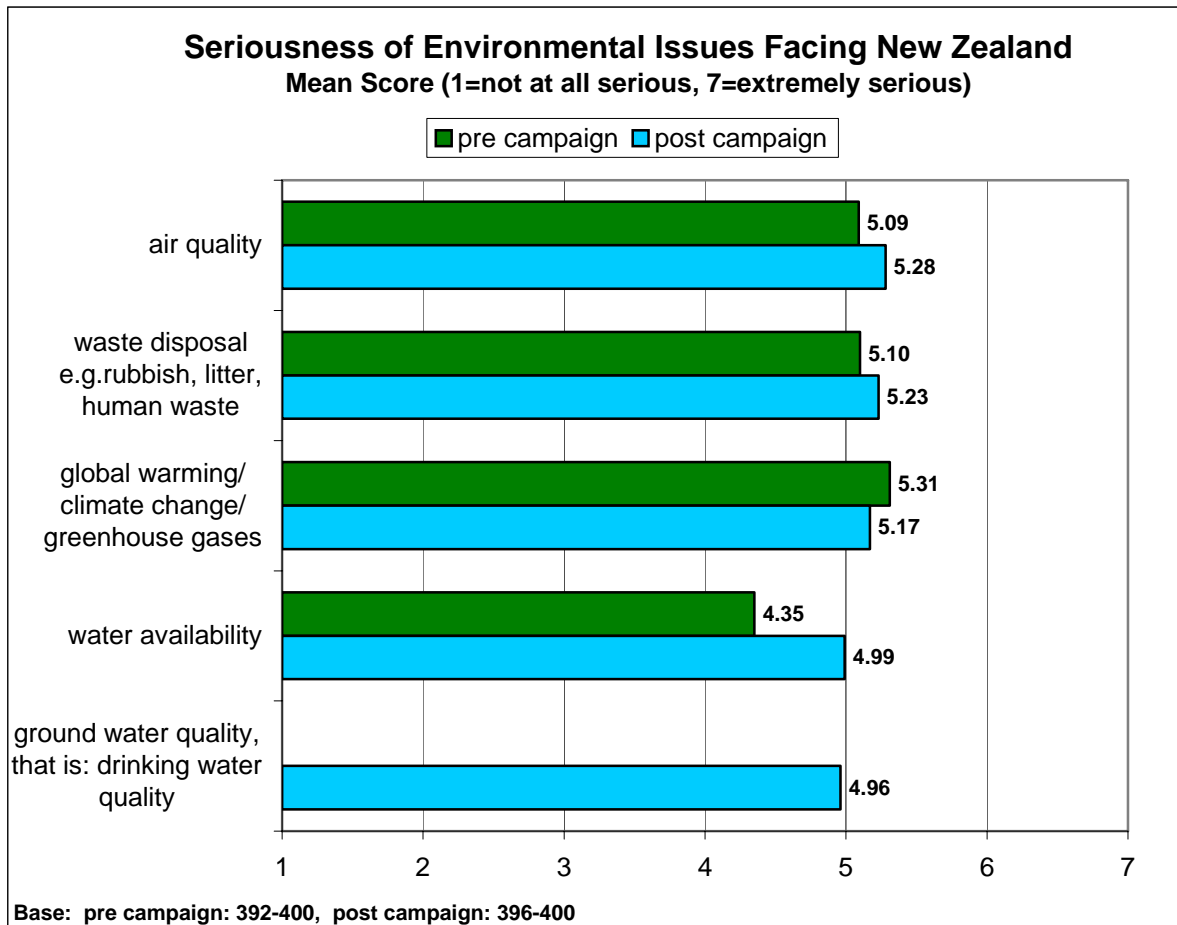
Over a third felt that 70% or more of the air pollution in Christchurch was caused by fires compared to a fifth pre campaign. (A fifth stated 80%). Overall the mean score post campaign was 55% compared to 47% pre campaign. In addition the proportion agreeing that '80% of air pollution in winter is caused by home fires' was 54%.

It would appear that the campaign has had an impact on awareness of air pollution and air pollution levels in Christchurch. Furthermore, a third of those aware of the advertising (20% overall) claimed that as a result of this advertising, their attitude and understanding of Christchurch air quality had changed. And, although just 14% claimed to be considering changing their home heating in the future, half of these felt the advertising had had some influence on this.

5. Research Findings

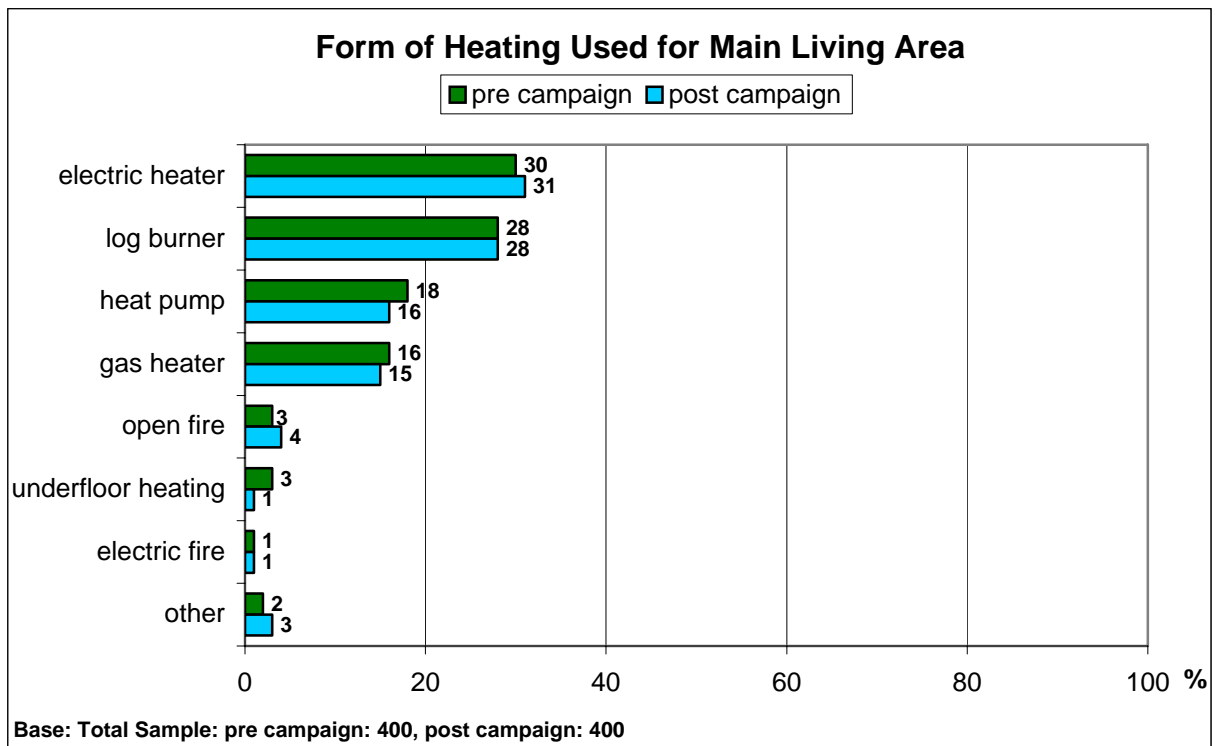
5.1 Environmental Issues Facing New Zealand

Respondents were asked to rate several environmental issues facing New Zealand on a scale of 1 to 7, where 1 = not at all serious and 7 = extremely serious.



- Post campaign respondents rated air quality, waste disposal and water availability slightly more serious than pre campaign.
- Global warming/ climate change/ greenhouse gases was rated slightly lower post campaign.
- Ground water quality (drinking water quality) was asked for the first time, post campaign, and was seen as slightly less serious than other issues raised.
- Pre campaign, water availability was rated significantly less serious than other issues. Post campaign this was not the case.

5.2 Current Form of Heating Used



Post Campaign

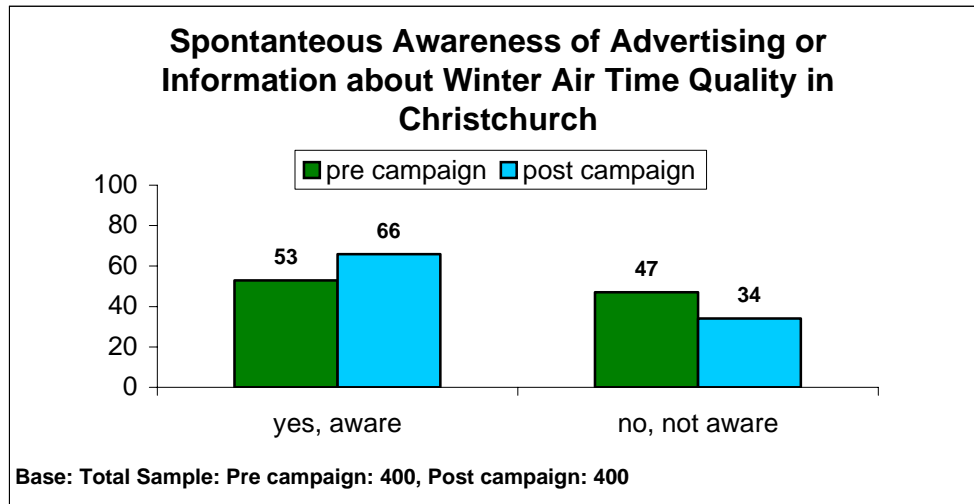
- Electric heaters and log burners were used by around a third of respondents to heat the main living areas.
- Heat pumps (16%) and gas heaters (15%) were the next most common form of heating used.
- All other forms were used by 4% or less.

Comparison to Pre Campaign

- Results are similar to the pre campaign results.

5.3 Advertising and Information about Wintertime Air Quality in Christchurch

5.3.1 Awareness of Advertising and Information about Wintertime Air Quality in Christchurch



- Two thirds (66%) were aware of advertising about wintertime air quality in Christchurch post campaign. This is higher than the pre campaign awareness (53%).

Age:	15 – 24		25 – 39		40 – 59		60 +	
	%		%		%		%	
Total sample: 400	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:
Yes, aware	74	73	112	110	126	129	88	88
No, not aware	24	29	46	74	69	73	64	77
	76	71	54	26	31	27	36	23

Post Campaign

- Awareness of advertising about wintertime air quality in Christchurch was significantly higher among those aged over 25 years old and lower amongst those aged 15 – 24 years.

Comparison to Pre Campaign

- Post campaign saw increased awareness among all ages, but more so among 25 – 39 year olds and those over 60.

Main form of heating: Total sample: 400	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre: 71	Post: 64	Pre: 122	Post: 124	Pre: 112	Post: 114	Pre: 13*	Post: 16*	Pre: 63	Post: 61	Pre: 12*	Post: 5*	Pre: 0	Post: 4*	Pre: 7*	Post: 12*
Yes, aware	66	70	49	60	49	67	69	69	51	69	58	80	-	50	43	75
No, not aware	34	30	51	40	51	33	31	31	49	31	42	20	-	50	57	25

**sample size too small for further analysis*

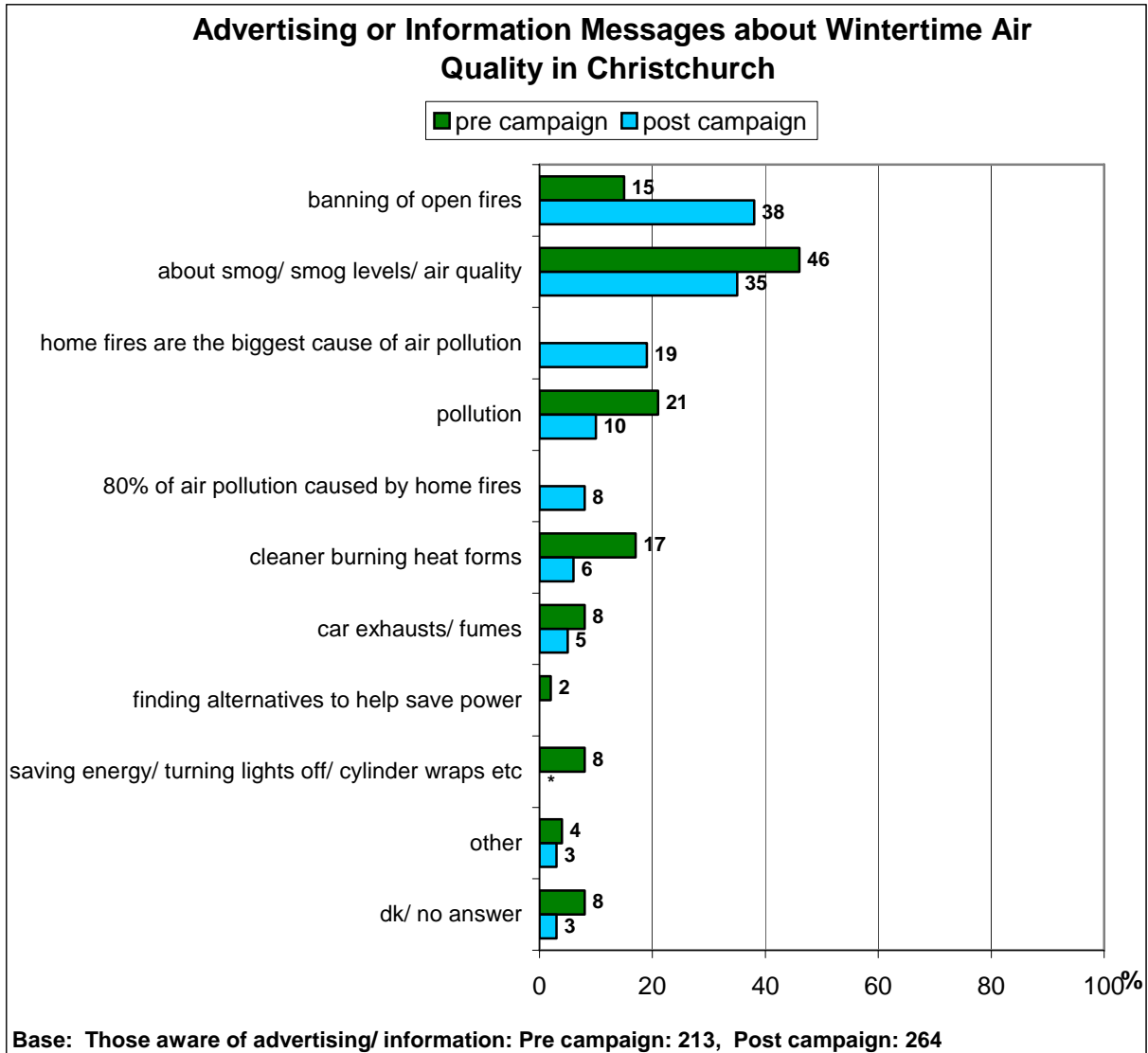
Post Campaign

- Awareness levels were similar across the different types of heating forms.

Comparison to Pre Campaign

- Awareness levels increased across all home heating subgroups, however it increased slightly more among those with electric heaters, gas heaters and log burners.
- Awareness was higher among those that currently use heat pumps as the main form of heating.

Those that were aware of advertising/ information about wintertime air quality were asked what the message was. The following graph shows the responses.



Post Campaign

- Almost two fifths (38%) were aware of advertising about banning of open fires, and a further 35% were aware of advertising about smog/ smog levels/ air quality in Christchurch.
- Another fifth (19%) were aware of advertising that home fires are the biggest cause of air pollution, and 10% mentioned pollution (in general).
- All other mentions were by less than one in ten.

Comparison to Pre Campaign

- More people were aware post campaign of advertising regarding the banning of open fires, and that home fires are the biggest cause of air pollution.
- Post campaign, fewer people mentioned smog/ smog levels/ air quality advertising, pollution (in general) and cleaner burning heat forms.

Age: Those aware of advertising or information: Pre: 213, Post 264	15 – 24		25 – 39		40 – 59		60 +	
	%		%		%		%	
	Pre: 18	Post: 21	Pre: 52	Post: 81	Pre: 87	Post: 94	Pre: 56	Post: 68
banning of open fires	17	19	10	42	16	33	18	46
about smog/ smog levels/ air quality	39	19	56	27	49	28	36	60
home fires are the biggest cause of air pollution	-	24	-	19	-	24	-	12
pollution	11	5	15	11	25	10	23	10
80% of air pollution caused by home fires	-	14	-	11	-	7	-	1
cleaner burning heat forms	22	5	23	6	13	4	16	9
car exhausts/ fumes	6	-	8	4	6	4	11	7
find alternatives to help save power	-	-	2	-	-	-	7	-
saving energy/ lights off/ cylinder wrap	17	-	8	-	8	1	5	-
other	-	10	-	1	7	3	4	1
don't know/ no answer	11	10	10	1	7	2	9	3

**Please note that sample sizes are small in each age group and as such are indicative only.*

Post Campaign

- Awareness of advertising about banning open fires was higher among 25 – 39 year olds and those over 60 years old.
- Awareness of advertising about smog/ smog levels/ air quality was higher among those over 60, while this age group were less likely to be aware of advertising about home fires being the biggest cause of air pollution.
- Those aware of advertising about 80% of air pollution being caused by home fires were slightly more likely to be under 39 years old.

Comparison to Pre Campaign

- Awareness about advertising for banning of open fires increased across all age groups and there were specific mentions that 80% of air pollution is caused by home fires, and that more generally, home fires are the biggest cause of air pollution.
- Those aged over 60 had increased awareness for advertising about smog/ smog levels/ air quality.
- All other advertising forms saw a drop in awareness compared to pre campaign.

Main form of heating: Those aware of advertising or information: Pre: 213, Post 264	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre: 47	Post: 45	Pre: 60	Post: 75	Pre: 55	Post: 76	Pre: 9	Post: 11	Pre: 32	Post: 42	Pre: 7	Post: 4	Pre: 0	Post: 2	Pre: 3	Post: 9
banning of open fires	30	33	15	43	4	39	-	27	16	33	14	75	-	50	33	22
about smog/ smog levels/ air quality	47	40	47	44	44	33	67	36	41	21	57	25	-	-	67	33
Home fires are the biggest cause of air pollution	-	11	-	17	-	17	-	18	-	36	-	25	-	-	-	22
pollution	17	22	23	11	22	3	11	9	28	10	14	-	-	50	-	-
80% of air pollution caused by home fires	-	9	-	4	-	9	-	18	-	5	-	-	-	-	-	22
cleaner burning heat forms	15	4	18	4	15	8	11	9	25	7	-	25	-	-	33	-
Car exhausts/ fumes	9	4	5	5	11	7	11	-	-	2	29	-	-	-	-	-
Find alternatives to help save power	-	-	5	-	2	-	-	-	3	-	-	-	-	-	-	-
saving energy/ lights off/ cylinder wrap	9	-	7	-	7	1	-	-	13	-	14	-	-	-	-	-
other	6	-	5	1	4	5	-	-	-	2	-	-	-	-	-	11
don't know/ no answer	6	4	7	3	18	1	-	-	3	2	-	-	-	50	-	-

**Please note that sample sizes are small in each group and as such are indicative only*

Post Campaign

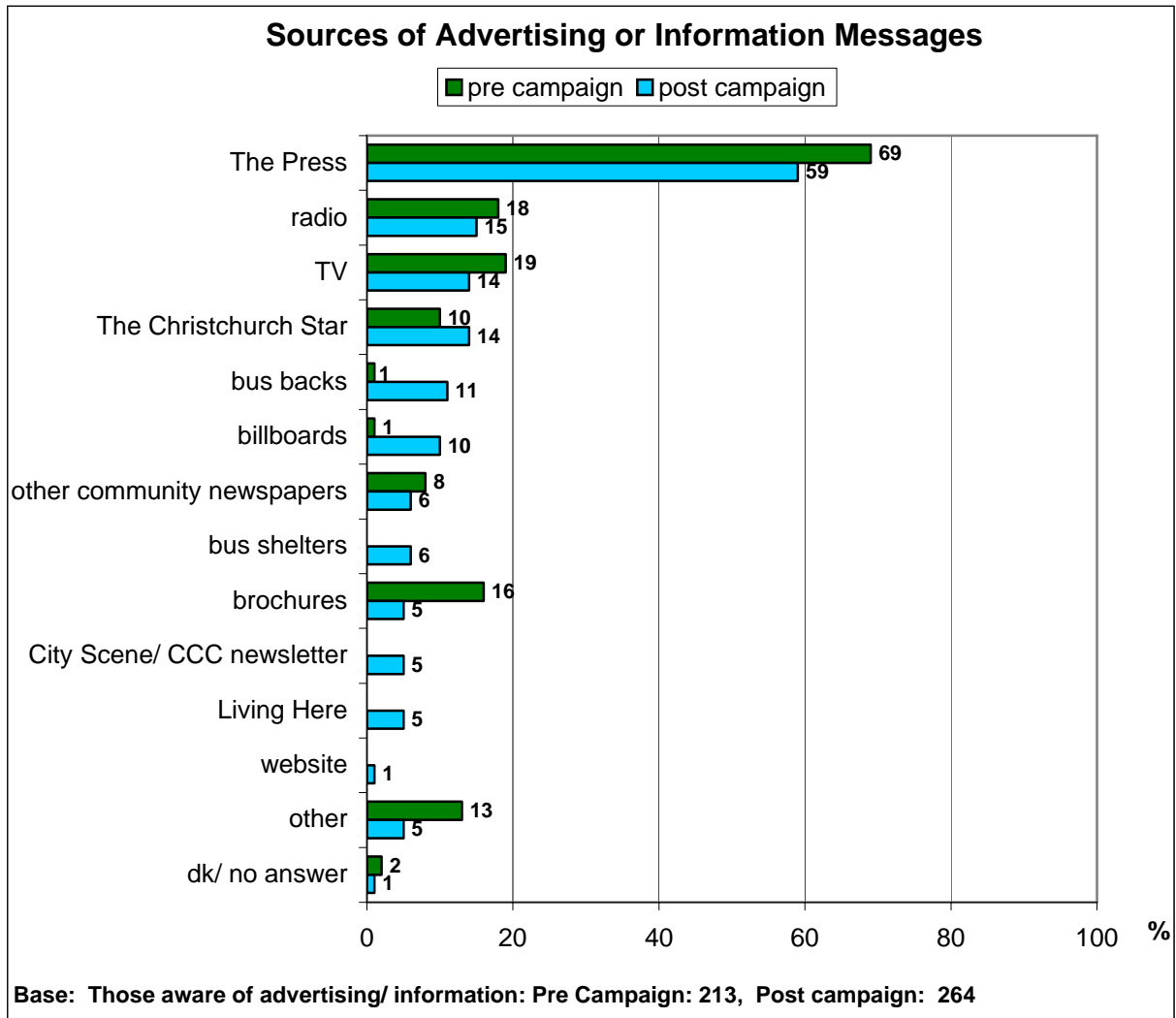
- Overall there was little difference in awareness across the different heating forms used.

Comparison to Pre Campaign

- Awareness about advertising for banning of open fires increased across all age groups as did specific mentions that 80% of air pollution is caused by home fires, and that more generally, home fires are the biggest cause of air pollution.

5.3.2 Sources of Advertising and Information about Wintertime Air Quality in Christchurch

Respondents were then asked where they had seen or heard this information.



Post Campaign

- Around three fifths (59%) had seen advertising in The Press.
- Between 10% and 15% had seen or heard advertising on radio, TV, the Christchurch Star, bus backs and billboards.
- All other mediums were mentioned by less than 10% of respondents.

Comparison to Pre Campaign

- There has been an increase in the number of respondents that have seen or heard advertising on bus backs, billboards, and bus shelters, *as well as in the Council newsletter and in Living Here*, and a slight drop in those mentioning The Press.

Age: Those aware of advertising or information: Pre: 213, Post 264	15 – 24		25 – 39		40 – 59		60 +	
	%		%		%		%	
	Pre: 18	Post: 21	Pre: 52	Post: 81	Pre: 87	Post: 94	Pre: 56	Post: 68
The Press	39	24	67	60	70	65	77	59
radio	17	10	15	15	17	18	23	13
TV	22	10	23	10	15	12	21	25
The Christchurch Star	6	5	6	12	11	9	13	26
bus backs	6	48	2	10	1	9	-	6
billboards	-	19	2	14	-	10	2	3
other community newspaper	-	-	12	5	5	5	14	9
bus shelters	-	48	2	5	-	2	-	-
brochures	28	5	17	7	16	3	13	6
City Scene/ CCC newsletter	-	-	-	1	-	1	-	16
Living Here	-	5	-	-	-	3	-	13
website	-	5	-	-	-	-	-	1
other	6	-	17	2	13	3	11	12
don't know/ no answer	17	5	2	1	-	-	2	1

Post Campaign

- Those older than 60 were more likely to have seen advertising on TV or in local papers e.g. The Christchurch Star, City Scene and Living Here than other age groups.
- Younger people aged 15 – 24 were more likely to have seen advertising on billboards, bus shelters and bus backs than those in other age groups.

Comparison to Pre Campaign

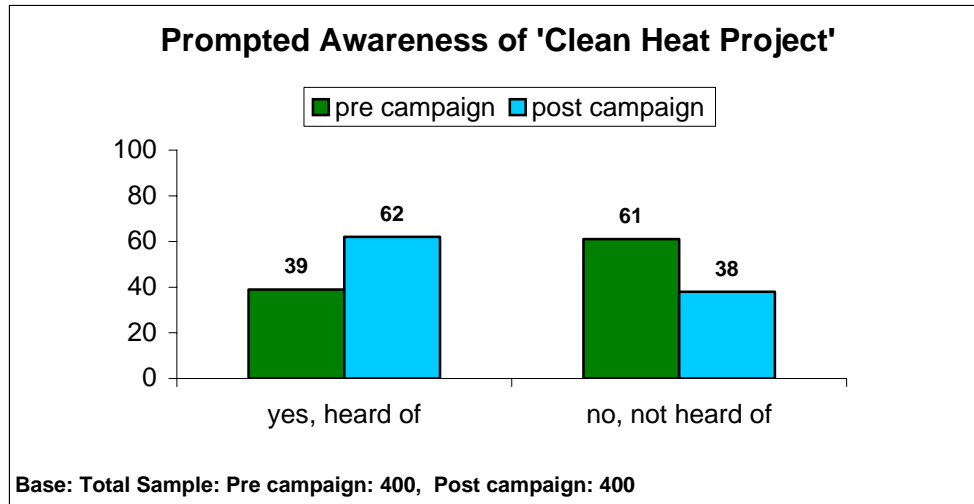
- Awareness of advertising in The Press dropped across all age groups, though is still higher among those over 25 years old. Awareness levels also dropped for brochures.
- Awareness increased across all age groups for advertising on bus backs, billboards and bus shelters.

Main form of heating: Those aware of advertising or information: Pre: 213, Post 264	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:
	47	45	60	75	55	76	9	11	32	42	7	4	0	2	3	9
The Press	70	56	73	67	64	62	67	64	59	45	100	25	-	50	67	56
TV	13	16	17	15	20	9	33	9	28	21	14	50	-	-	33	11
radio	17	18	18	12	18	17	22	18	22	17	14	25	-	-	-	-
brochures	17	4	15	4	20	8	-	-	16	2	14	-	-	-	33	22
The Christchurch Star	13	16	12	13	4	12	22	9	9	24	-	-	-	-	33	-
City Scene/ CCC newsletter	-	9	-	5	-	3	-	-	-	5	-	25	-	-	-	-
Living Here	-	7	-	4	-	4	-	18	-	2	-	-	-	-	-	11
other community newspaper	15	7	12	5	2	8	-	-	9	5	-	-	-	-	-	-
billboards	2	4	-	9	2	7	-	36	-	10	-	-	-	100	-	22
bus backs	-	7	3	8	2	16	-	18	-	10	-	25	-	-	-	22
website	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-
bus shelters	-	7	-	5	2	5	-	27	-	2	-	25	-	-	-	-
other	11	7	12	3	9	8	33	-	16	2	29	25	-	-	-	-
don't know/ no answer	2	-	2	1	4	-	-	9	3	2	-	-	-	-	-	-

- **Overall, the sources were too varied and sample sizes too small for meaningful analysis.*

5.4 Awareness of Clean Heat Project

Respondents were asked if they had heard of the 'Clean Heat Project'.



Post Campaign

- Around three fifths had heard of the Clean Heat project with 38% claiming not to have heard of it.

Comparison to Pre Campaign

- Awareness of the Clean Heat project increased from 39% pre campaign to 62% post campaign.

Age: Total Sample: Pre: 400, Post 400	15 – 24 %		25 – 39 %		40 – 59 %		60 + %	
	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:
	74	73	112	110	126	129	88	88
Yes, heard of	18	27	47	65	44	71	40	75
No, not heard of	82	73	53	35	56	29	60	25

Post Campaign

- Awareness increased relative to age, with those aged 15 – 24 less likely to be aware of the Clean Heat Project.

Comparison to Pre Campaign

- Awareness increased across all the age groups post campaign, with the largest increase (35%) occurring in the over 60 age bracket, and the smallest (9%) in the 15-24 year old age bracket.

Main form of heating:	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre: 400	Post: 400	Pre: 122	Post: 124	Pre: 112	Post: 114	Pre: 13*	Post: 16*	Pre: 63	Post: 61	Pre: 12*	Post: 5*	Pre: 0	Post: 4*	Pre: 7*	Post: 12*
Yes, heard of	55	58	29	64	40	68	54	63	38	51	50	60	-	50	14	67
No, not heard of	45	42	71	36	60	32	46	38	62	49	50	40	-	50	86	33

**sample size too small for further analysis*

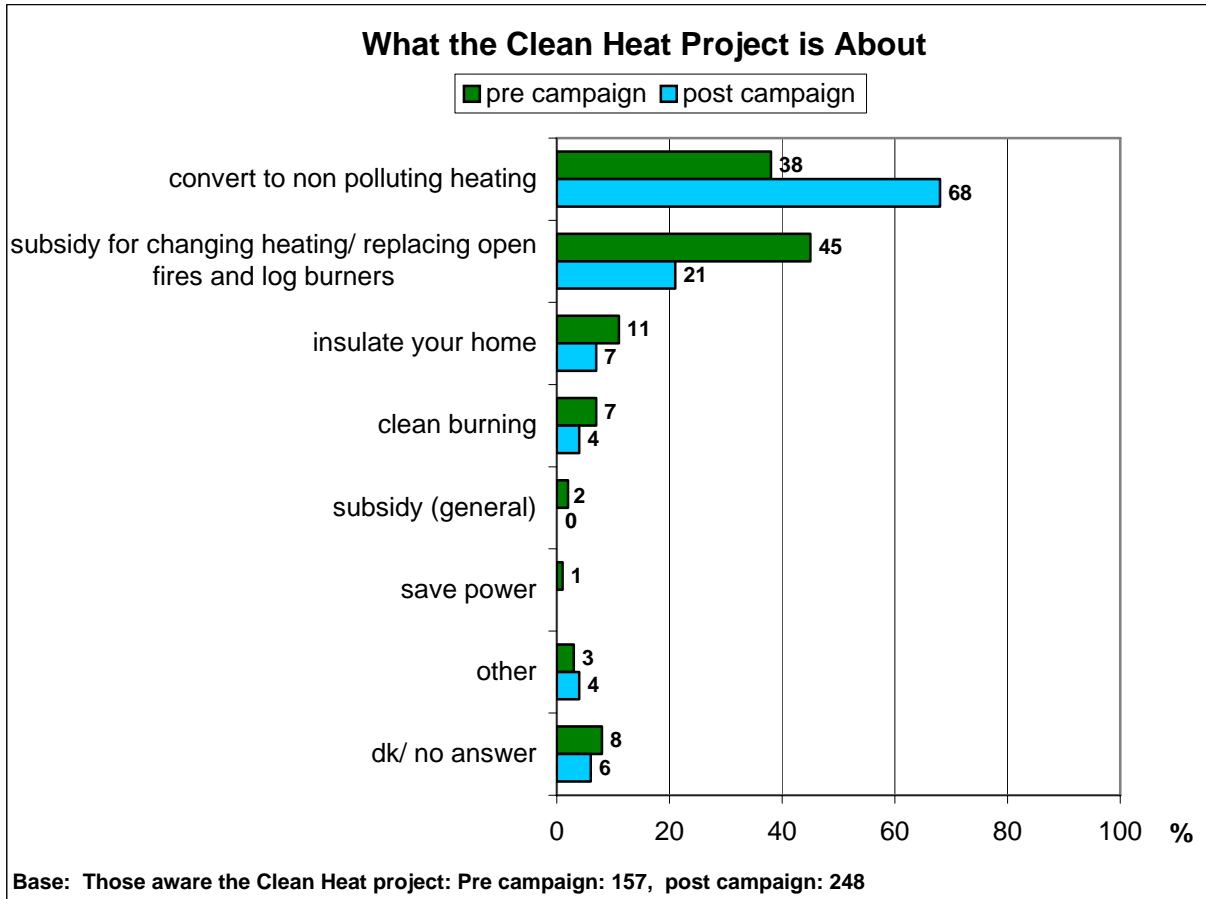
Post Campaign

- Those aware of the Clean Heat project were slightly more likely to use a log burner as their main form of heating.

Comparison to Pre Campaign

- Awareness increased across all types of heating used, with the largest increase coming from those with electric heaters (29% pre campaign, 64% post campaign).

Those aware of the Clean Heat Project were asked what the project was about. The following graph shows the responses.



Post Campaign

- More than two thirds thought the Clean Heat Project was about converting to non polluting heating e.g. banning open fires (no mention of subsidies)
- A fifth felt it was about a subsidy for changing heating/ replacing open fires and log burners.
- All other reasons were mentioned by 7% or less.

Comparison to Pre Campaign

- The number mentioning converting to non polluting heating almost doubled between pre and post campaign (38% pre campaign, 68% post campaign), while the number mentioning being subsidised for changing heating almost halved (45% pre campaign, 21% post campaign).

Age: Those aware of Clean Heat Project: Pre: 157, Post 248	15 – 24 %		25 – 39 %		40 – 59 %		60 + %	
	Pre: 13	Post: 20	Pre: 53	Post: 71	Pre: 56	Post: 91	Pre: 35	Post: 66
subsidy for changing heating/ replacing open fires/ log burners	46	-	47	27	41	24	49	17
convert to non polluting heating	46	70	36	62	38	69	37	73
insulate your home	8	-	6	6	14	10	14	8
clean burning	8	-	8	4	7	1	6	8
subsidy (general)	-	-	-	-	5	-	-	2
Save power	-	-	2	-	2	-	-	-
other	-	5	4	-	2	3	3	8
don't know/ no answer	8	25	13	6	5	4	3	3

**Please note that sample sizes are small in each group and as such are indicative only*

Post Campaign

- Overall, responses were similar across the age groups.

Comparison to Pre Campaign

- The number mentioning converting to non polluting heating almost doubled in each age group post campaign, while those mentioning subsidies for changing heating decreased across each age group.

Main form of heating: Those aware of Clean Heat Project: Pre: 157, Post 248	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre: 39	Post: 37	Pre: 35	Post: 79	Pre: 45	Post: 78	Pre: 7	Post: 10	Pre: 24	Post: 31	Pre: 6	Post: 3	Pre: 0	Post: 2	Pre: 1	Post: 8
subsidy for changing heating/ replacing open fires/ log burners	59	24	49	13	31	24	43	20	38	26	67	-	-	-	100	50
convert to non polluting heating	31	73	31	75	49	62	29	50	42	74	33	100	-	50	-	38
insulate your home	13	14	11	6	9	9	43	-	4	-	-	-	-	-	-	13
clean burning	10	-	6	5	4	4	-	-	13	6	-	-	-	-	-	-
subsidy (general)	3	-	3	1	-	-	-	-	4	-	-	-	-	-	-	-
Save power	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
other	3	3	-	3	4	5	-	-	4	-	-	-	-	50	-	13
don't know/ no answer	-	-	11	6	11	6	14	30	8	6	-	-	-	-	-	-

**Please note that sample sizes are small in each group and as such are indicative only*

Post Campaign

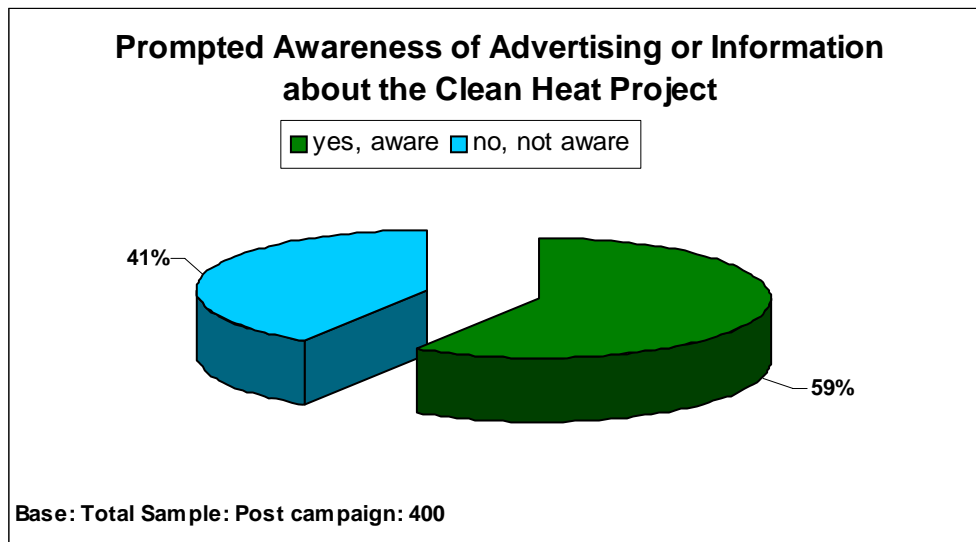
- There was little difference between responses among the different forms of heating.

Comparison to Pre Campaign

- Again, the number mentioning converting to non polluting heating increased across all heat forms, while those mentioning a subsidy for changing heating decreased.

Respondents were told that the Clean Heat Project is a programme of Environment Canterbury to clean up Christchurch’s winter time air quality. As part of that programme there has been advertising in the city to make people aware of the causes of air pollution.

They were then asked if they remember seeing or hearing any advertising or information about this project.



Three fifths were aware of the Clean Heat Project, while two fifths were not aware.

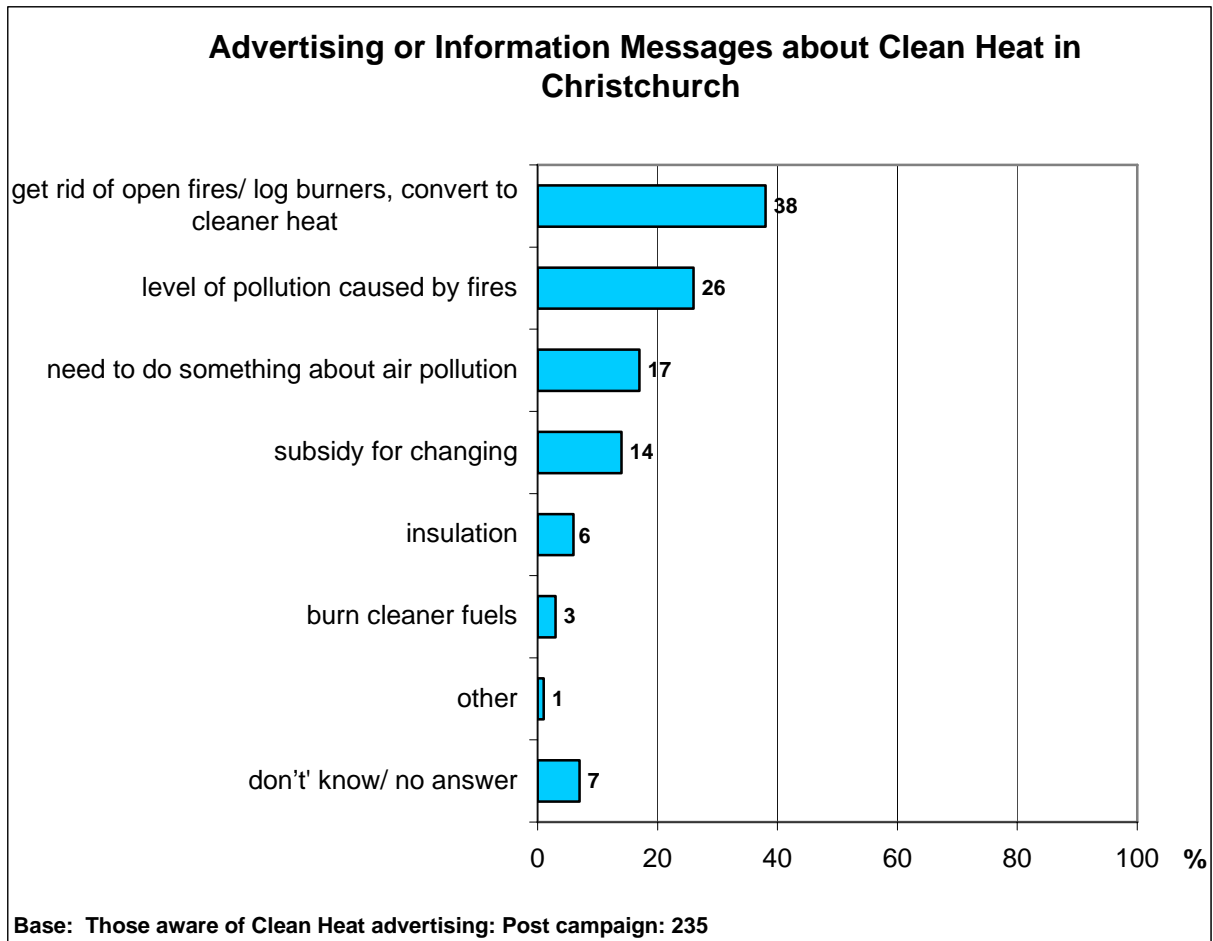
Age:	15 – 24	25 – 39	40 – 59	60 +
Total Sample: Post campaign: 400	73	110	129	88
	%	%	%	%
Yes, aware of	30	56	67	73
No, not aware of	70	44	33	27

- Those over 40 had higher levels of awareness (70% aware), while those aged 15-24 were less likely to be aware of the Clean Heat project.

Main form of heating:	heat pump	electric heater	log burner	open fire	electric fire	gas heater	underfloor heating	other
Total Sample: Post campaign: 400	64	124	114	16	4	61	5	12
	%	%	%	%	%	%	%	%
Yes, aware of	55	61	58	63	50	54	100	67
No, not aware of	45	39	42	38	50	46	-	33

- There was little difference of awareness among the different heating forms used.

Those aware of advertising about Clean Heat, were asked what the message was of the advertising/ information.



- Over a third mentioned that the Clean Heat Project was about getting rid of open fires/ log burners or converting to cleaner heat forms.
- A quarter talked about the level of pollution caused by fires.
- Between a tenth and a fifth stated Clean Heat was to do with air pollution, and a subsidy for changing heating.
- All other reasons were mentioned by 6% or less.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those aware of Clean Heat advertising: Post campaign: 235	22	62	87	64
	%	%	%	%
get rid of open fires/ log burners, convert to cleaner heat	32	35	33	50
level of pollution caused by fires	36	37	28	8
need to do something about air pollution	9	11	16	28
subsidy for changing insulation	5	23	15	9
	-	3	9	5
burn cleaner fuels	5	2	2	3
other	5	-	1	2
don't know/ no answer	9	3	11	5

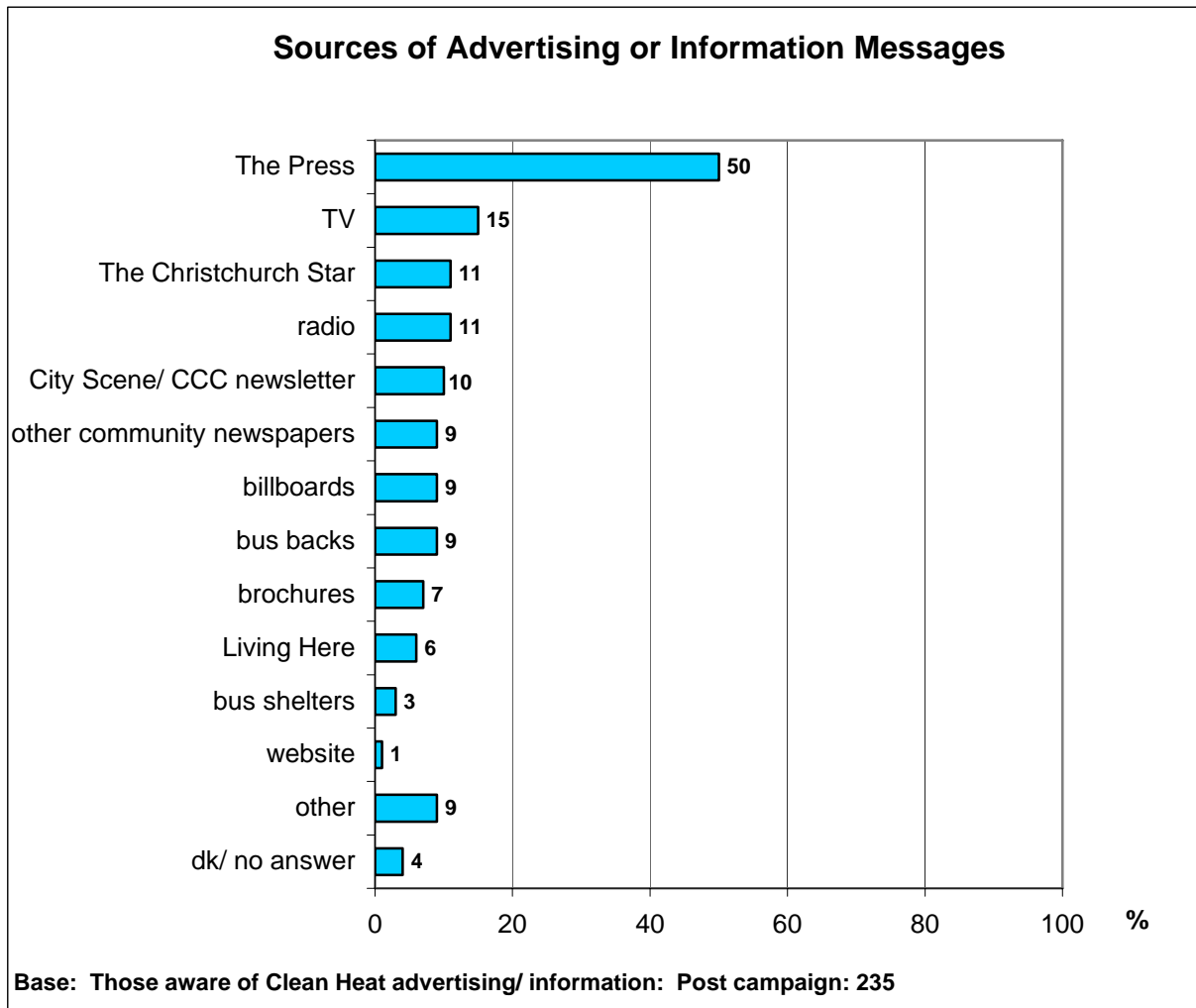
Base sizes are small so results are indicative only

- Those over 60 were more likely to mention that Clean Heat was about needing to do something about air pollution and getting rid of open fires and log burners/ converting to cleaner heat, than other ages.
- 25-39 years olds were slightly more likely to mention a subsidy for changing heat sources
- those under 40 years old were slightly more likely to mention that Clean Heat was about the level of pollution caused by fires.

Main form of heating:	heat pump	electric heater	log burner	open fire	electric fire	gas heater	underfloor heating	other
Those aware of Clean Heat advertising: Post campaign: 235	35	76	66	10	2	33	5	8
	%	%	%	%	%	%	%	%
get rid of open fires/ log burners, convert to cleaner heat	43	34	38	50	50	36	60	38
level of pollution caused by fires	26	20	33	30	-	21	20	38
need to do something about air pollution	23	26	12	-	-	15	-	-
subsidy for changing insulation	11	14	12	10	-	21	-	38
burn cleaner fuels	6	4	8	-	-	3	20	13
other	3	3	2	10	-	3	-	-
don't know/ no answer	-	3	-	-	-	-	-	13
	6	8	6	-	50	12	-	-

Bases sizes are small and indicative only

- Those with heat pumps were more likely to believe Clean Heat was about needing to do something about air pollution and getting rid of open fires/ log burners and converting to cleaner heat
- Electric heater owners were slightly more likely to mention needing to do something about air pollution
- Log burner owners were more inclined to mention the level of pollution caused by fires.



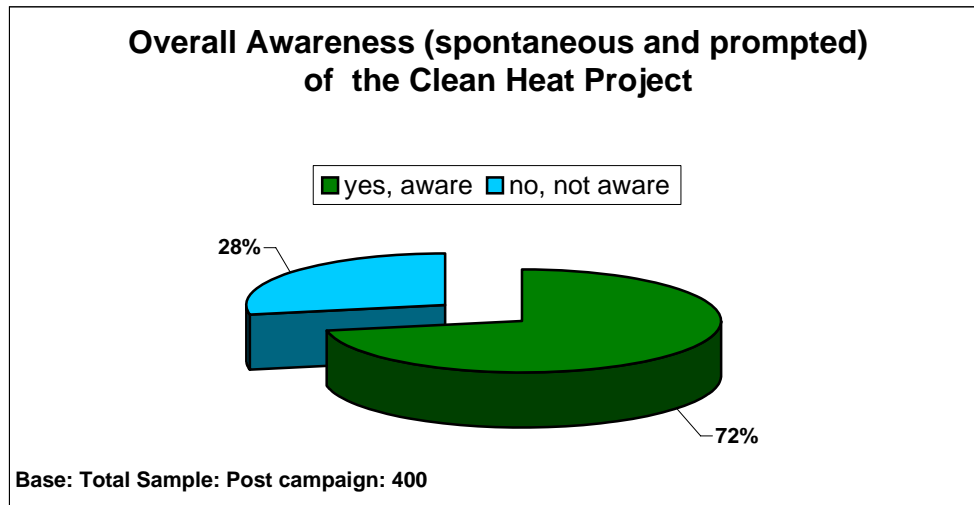
- Half of those aware of Clean Heat advertising saw it in The Press.
- The next most common source of advertising was on TV (15%).
- Around one in ten saw advertising in The Christchurch Star, City Scene/ CCC newsletter or on the radio.
- All other sources were mentioned by less than one in ten.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those aware of Clean Heat advertising: Post campaign: 235	22	62	87	64
	%	%	%	%
The Press	14	44	53	66
TV	27	8	14	20
The Christchurch Star	-	8	8	20
radio	9	13	13	8
City Scene/ CCC newsletter	-	2	10	20
other community newspapers	-	6	6	17
billboards	18	13	8	2
bus backs	36	10	6	5
brochures	14	5	8	6
Living Here	-	5	6	11
bus shelters	14	6	1	-
website	-	2	1	-
other	9	5	7	14
dk/ no answer	9	5	6	-

Base sizes are small so results are indicative only

- Those older, aged over 60 were more likely than other age groups to have seen Clean Heat advertising in written media e.g. The Press, The Christchurch Star, City Scene/ CCC newsletter and community newspapers.
- In contrast younger people, aged 15-24 years, were more likely to have seen Clean Heat advertising on TV, billboards, bus shelters, bus backs and brochures.

Overall Awareness of the Clean Heat Project



Overall awareness of The Clean Heat project was 72%.

Awareness by sub group:

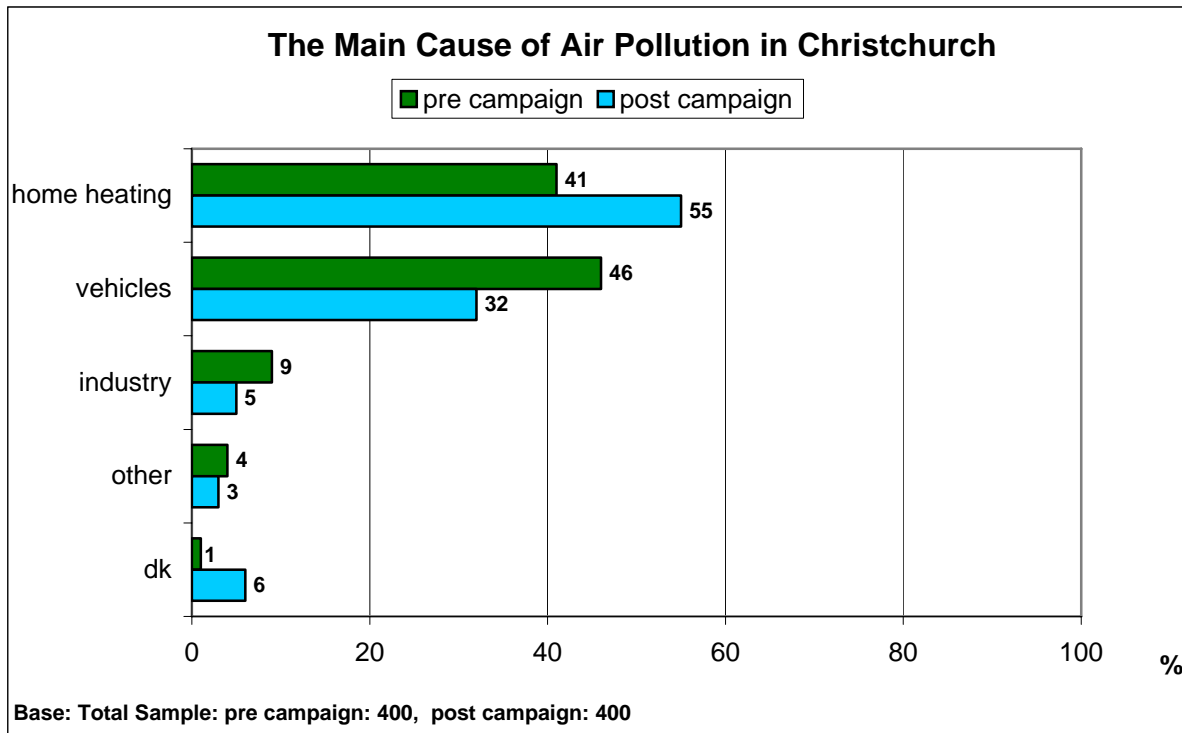
- Male 72%
- Female 72%

- 15 – 24 38%
- 25 – 39 73%
- 40 – 59 81%
- 60+ 86%

- Community Services Card holder 79%
- Non card holder 69%

- Homeowner 80%
- Renter/boarder 61%
- Living with parents 47%

5.5 Causes of Air Pollution in Christchurch



Post Campaign

- More than half (55%) felt that home heating was the main cause of air pollution in Christchurch, with a further third (32%) claiming vehicles were. Just 5% felt industry was the main cause of air pollution.

Comparison to Pre Campaign

- The number mentioning home heating as the main cause increased, while those mentioning vehicles decreased.
- There was also a small increase in the number claiming ‘don’t know’.

Age: Total Sample: Pre: 400, Post 400	15 – 24		25 – 39		40 – 59		60 +	
	%		%		%		%	
	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:
	74	73	112	110	126	129	88	88
home heating	34	41	53	67	47	61	24	40
vehicles	46	41	36	20	40	24	66	49
industry	19	10	7	5	8	4	2	3
other	-	-	3	3	4	5	8	2
don't know	1	8	2	5	2	5	-	6

Post Campaign

- Those aged 25-59 were more likely to have mentioned home heating as the main cause of Christchurch's air pollution (64%) than other age groups.
- Those aged 15 – 24 (41%) and over 60 (49%) were more likely than the other age groups to mention vehicles as the main cause.
- Home heating was cited as the main cause by those aged 25 – 59 years. Those aged 60+ more often cited vehicles as the main cause, while those aged 15 – 24 were divided with 41% mentioning home heating and the same proportion blaming vehicles.

Comparison to Pre Campaign

- Those who felt that vehicles were the main cause of air pollution in Christchurch decreased across all ages.
- While home heating as the main cause increased across the ages by 7% to 16%.

Main form of heating: Total Sample: Pre: 400, Post 400	heat pump		electric heater		log burner		open fire		gas heater		underfloor heating		electric fire		other	
	%		%		%		%		%		%		%		%	
	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:	Pre:	Post:
	71	64	122	124	112	114	13	16	63	61	12	5	0	4	7	12
home heating	48	55	39	59	38	49	38	44	44	57	33	20	-	75	29	67
vehicles	37	28	50	31	47	37	38	31	43	26	50	80	-	25	57	17
industry	10	5	7	2	9	6	15	13	11	8	-	-	-	-	-	8
other	6	6	2	2	3	2	8	13	2	2	17	-	-	-	14	-
don't know	-	6	2	6	3	6	-	-	-	7	-	-	-	-	-	8

**sample size too small for further analysis*

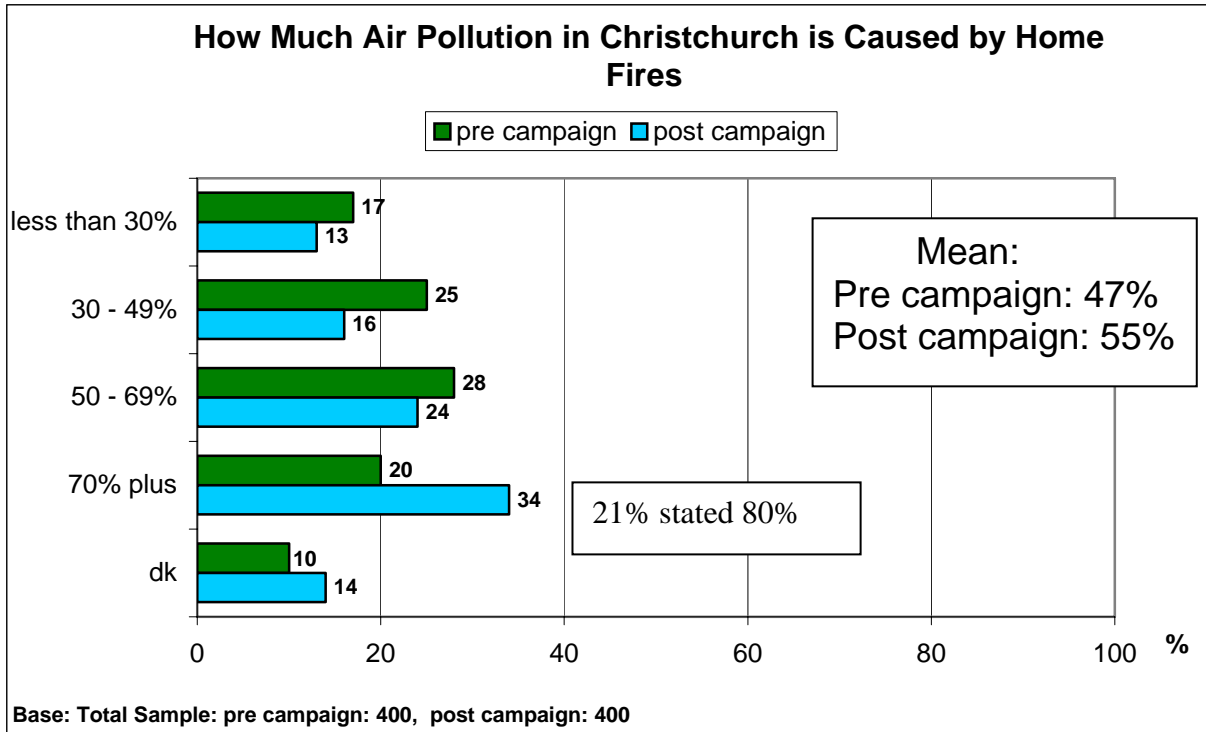
Post Campaign

- Results were similar across the different forms of heating, though those with log burners were slightly more likely to feel that vehicles were the main cause of Christchurch's air pollution.

Comparison to Pre Campaign

- Post campaign there was a drop across all heat forms of the number of mentions for vehicles as the main cause of air pollution and an increase in the number mentioning home heating.

Respondents were then asked what percentage of the air pollution in Christchurch home fires cause. The following graph shows the grouped responses.



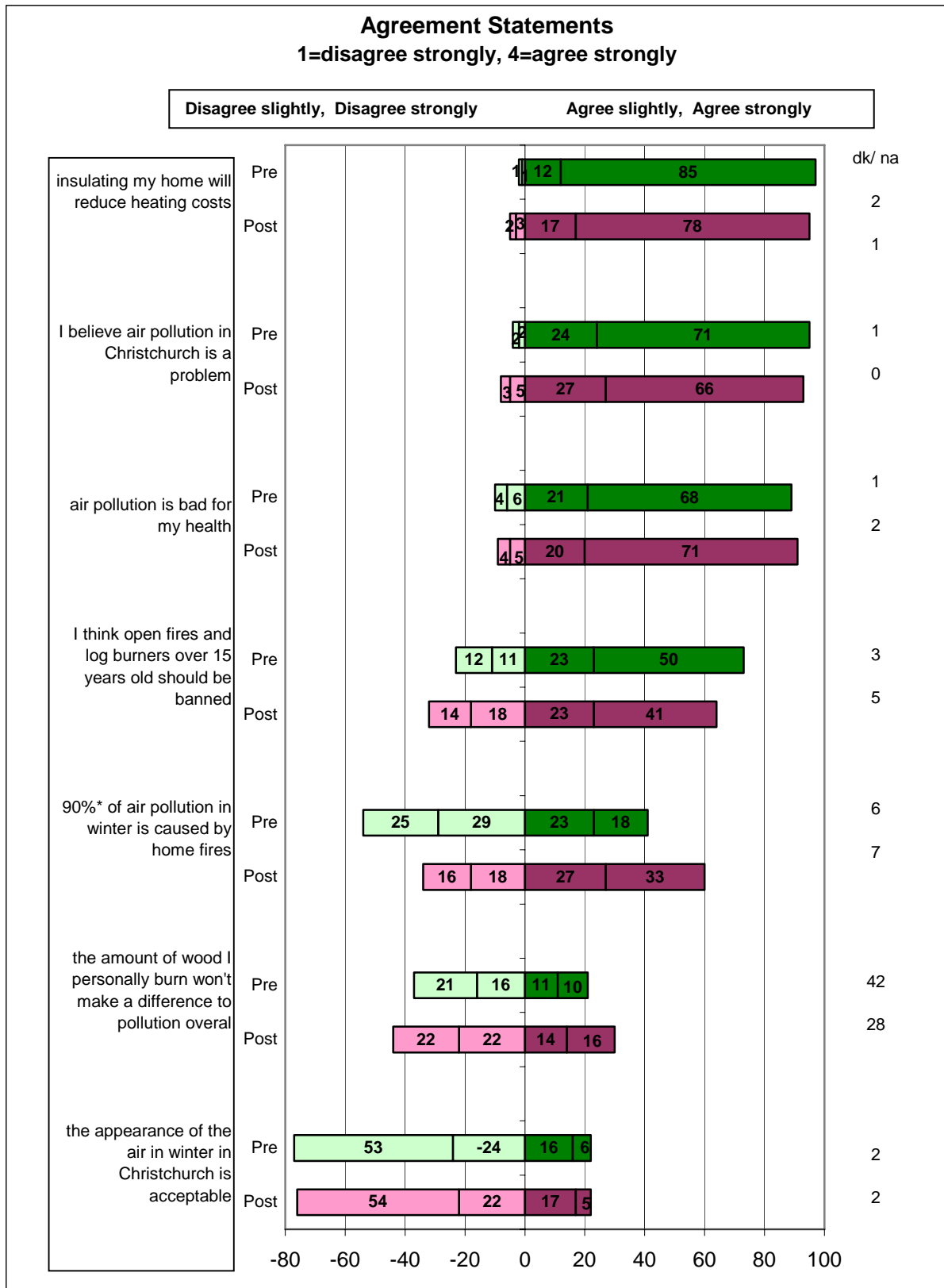
Post Campaign

- The mean percentage specified was 55%.
- Less than a third (29%) felt home fires contributed to up to 49% of air pollution in Christchurch.
- A further 24% felt home fires contributed 50% to 69% of air pollution with 34% nominating 70% or more.
- A fifth stated 80% of the air pollution was caused by home fires.

Comparison to Pre Campaign

- The mean percentage specified increased from 47% to 55% post campaign.
- The biggest increase was among those mentioning more than 70%.

5.6 Level of Agreement with Air Pollution Statements



* Asked post campaign as '80% of air pollution in winter is caused by home fires.'

Post Campaign

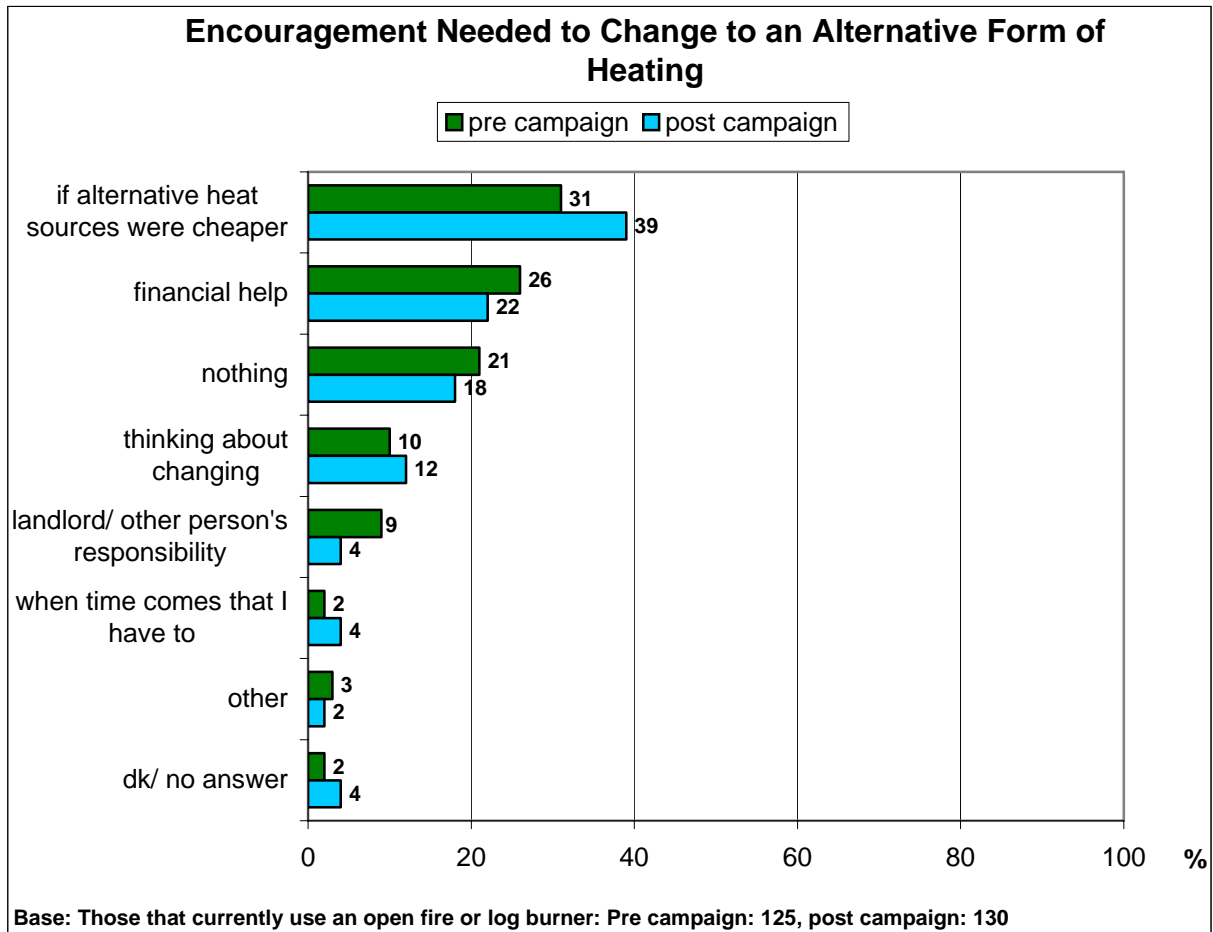
- Level of agreement was highest for the statements:
 - ‘insulating my home will reduce heating costs’ (95% agreed)
 - ‘I believe air pollution in Christchurch is a problem’ (93% agreed) and
 - ‘air pollution is bad for my health’ (91% agreed).
- ‘I think open fires and log burners over 15 years old should be banned’ had two thirds agreeing and a third disagreeing. Similar agreement levels resulted for the comment ‘80% of air pollution in winter is caused by home fires’.
- More people disagreed (44%) than agreed (30%) that ‘the amount of firewood I personally burn wont make a difference to pollution overall’. However, 28% claimed this was not applicable to them.
- Few (22%) felt that the appearance of the air in winter in Christchurch was acceptable.

Comparison to Pre Campaign

- Slightly fewer people agreed with ‘I think open fires and log burners over 15 years old should be banned’ post campaign (64% from 73% pre campaign).
- As the question was asked slightly differently, and is therefore not directly comparable, pre campaign 41% agreed that ‘90% of air pollution in winter is caused by home fires’, while post campaign, 60% agreed that ‘80% of air pollution in winter is caused by home fires’.

5.7 Changing or Updating Home Heating

Those that used either a log burner or an open fire were asked what would encourage them to change to an alternative form of heating.



Post Campaign

- More than a third (39%) said they would change to an alternative form of heating if alternative heat sources were cheaper.
- Around a fifth thought they would need some financial assistance to change heating, and a further fifth felt nothing would encourage them to change to alternative heating forms.
- Around one in ten stated that they were thinking about changing.

Comparison to Pre Campaign

- Results were similar to pre campaign, though there was a slight increase in the number that felt alternative heat sources would need to be cheaper.

Age: Those that use an open fire or log burner: Pre: 125, Post: 130	15 – 24 %		25 – 39 %		40 – 59 %		60 + %	
	Pre: 26	Post: 33	Pre: 44	Post: 27	Pre: 39	Post: 45	Pre: 16	Post: 25
nothing	4	9	25	11	18	29	44	20
financial help	27	15	25	41	31	22	13	12
if alternative sources were cheaper	35	48	30	48	44	36	-	24
recently changed/ thinking about changing	8	6	9	11	10	9	13	28
landlord/ other person's responsibility	15	9	9	-	3	4	13	-
when time comes that I have to	4	3	2	4	3	2	-	8
other	4	-	-	-	-	2	19	8
don't know/ no answer	8	9	2	-	-	2	-	4

**sample sizes in each category are small and as such results are indicative only.*

Post Campaign

- Those younger (aged under 40 years old) were more likely to state they would change heating if alternative heat sources were cheaper (48%) than older age groups.
- 25-39 year olds were more likely to suggest they would like financial help than other ages.
- 40-59 year olds were more likely to state that nothing would get them to change heating forms than other age groups.
- Those aged over 60 were more likely to have stated they were thinking about changing heat forms than those younger.

Comparison to Pre Campaign

- Base sizes were too small for further analysis.

Those that use an open fire or log burner: Pre: 125, Post: 130	Log burner %		Open fire %	
	Pre: 112	Post: 114	Pre: 13*	Post: 16*
nothing	23	19		13
financial help	26	21	23	31
if alternative sources were cheaper	32	41	23	25
recently changed/ thinking about changing	8	11	23	19
landlord/ other person's responsibility	6	4	31	-
when time comes that I have to	3	4	-	6
other	4	2	-	6
don't know/ no answer	3	4	-	6

**please note small sample size*

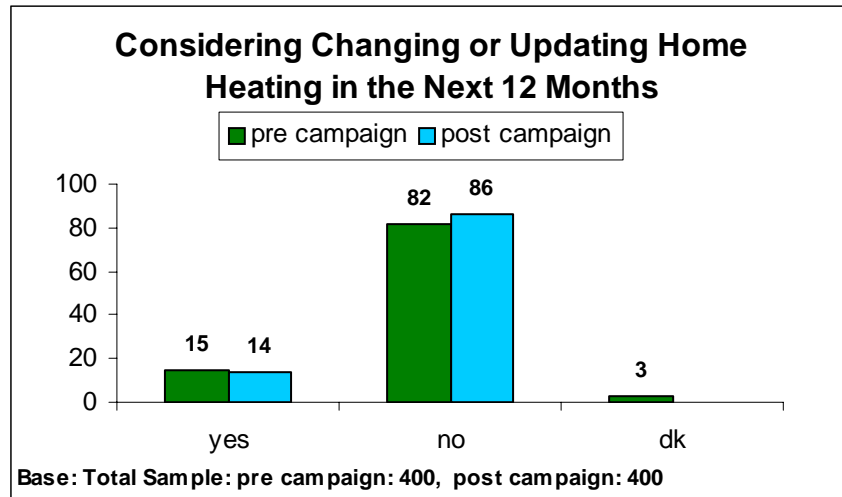
Post Campaign

- Log burner users were more likely to change if alternative sources were cheaper, than open fire users.
- Open fires users were more likely to change heating forms if they had financial help, than log fire users.

Comparison to Pre Campaign

- There was a slight increase among log burner users that would be encouraged to change heat sources if alternative heat sources were cheaper.

Following from this, respondents were asked if they were considering changing or updating their heating in the next twelve months.



Post Campaign

- The majority (86%) were not considering changing or updating their heating in the next twelve months.

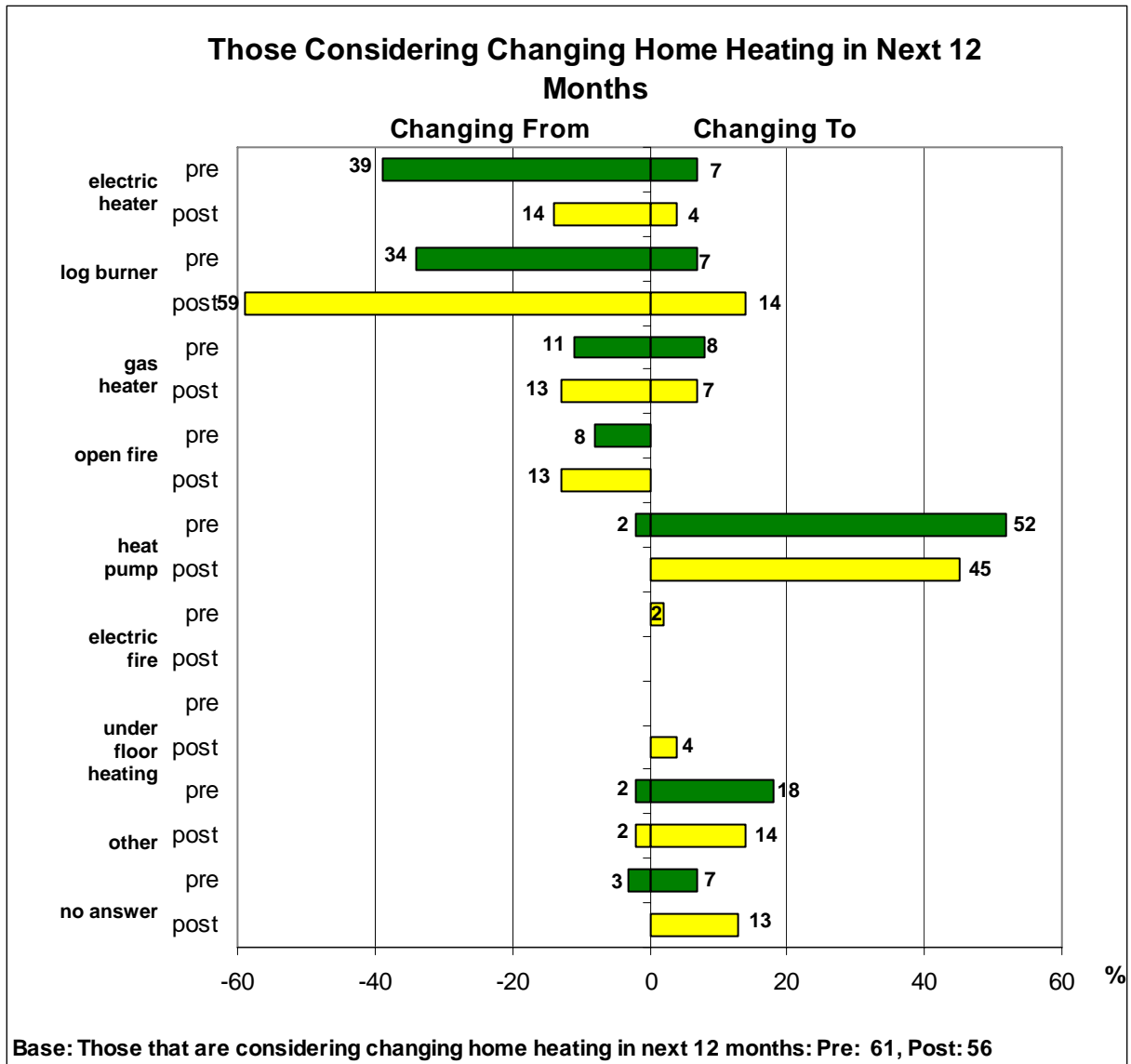
Sub group analysis

- Encouragingly, those more likely to be considering changing their heating in the next 12 months were current open fires (38%) or log burners (30%) users.

Comparison to Pre Campaign

- Results are similar to pre campaign results.

Those that were considering changing or updating their heating (14%) were asked what they were considering changing from and changing to.



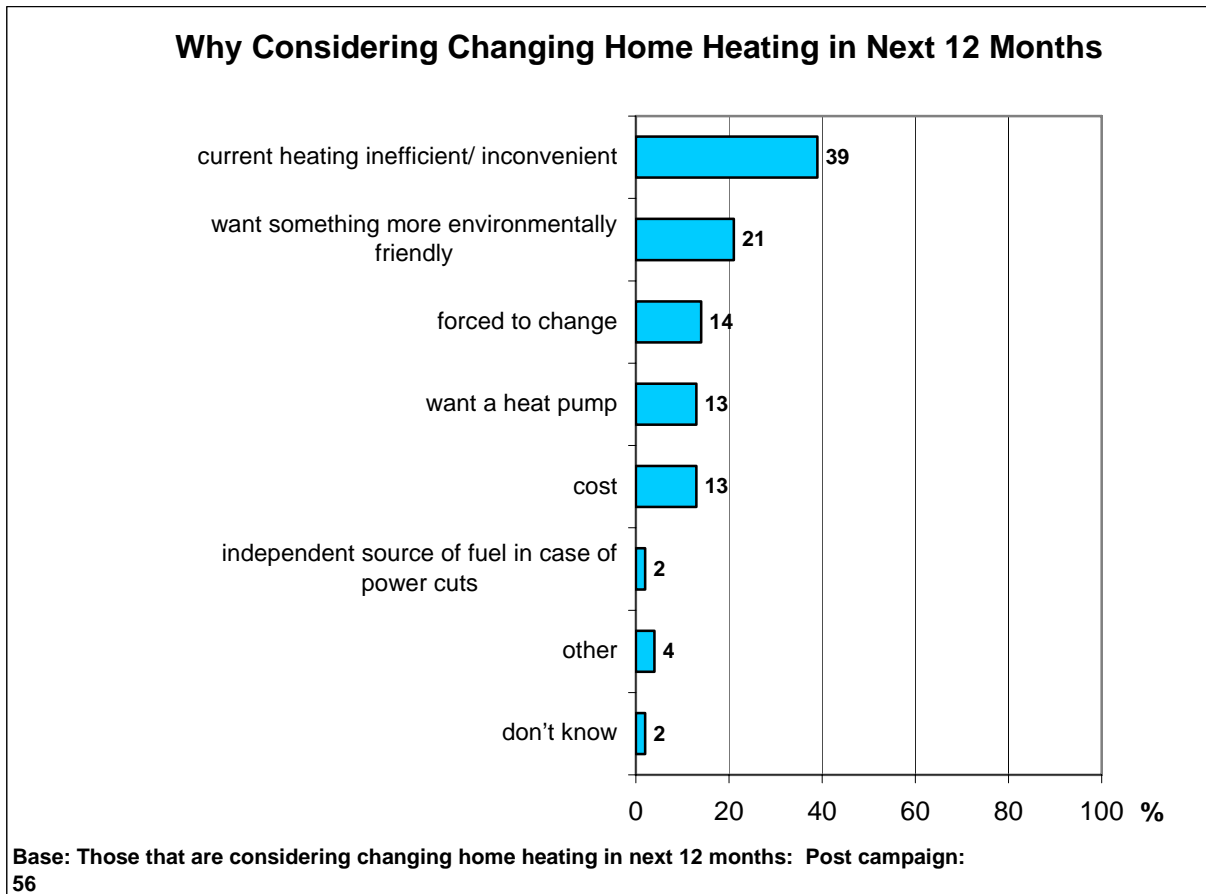
Post Campaign

- Three fifths (59%) were considering changing from a log burner.
- 13% to 14% were considering changing from electric heaters, gas heaters or open fires.
- Almost half (45%) were considering changing to a heat pump.
- 14% would each change to a log burner, or ‘other’ heating forms
- ‘Other’ forms of heating included pellet fires, diesel and solar power)
- All those considering changing to a log burner were either current log burner or open fire users.

Comparison to Pre Campaign

- There was an increase in those considering changing from log burners.

Those that were considering changing or updating their heating (14%) were asked why they were considering changing their home heating.



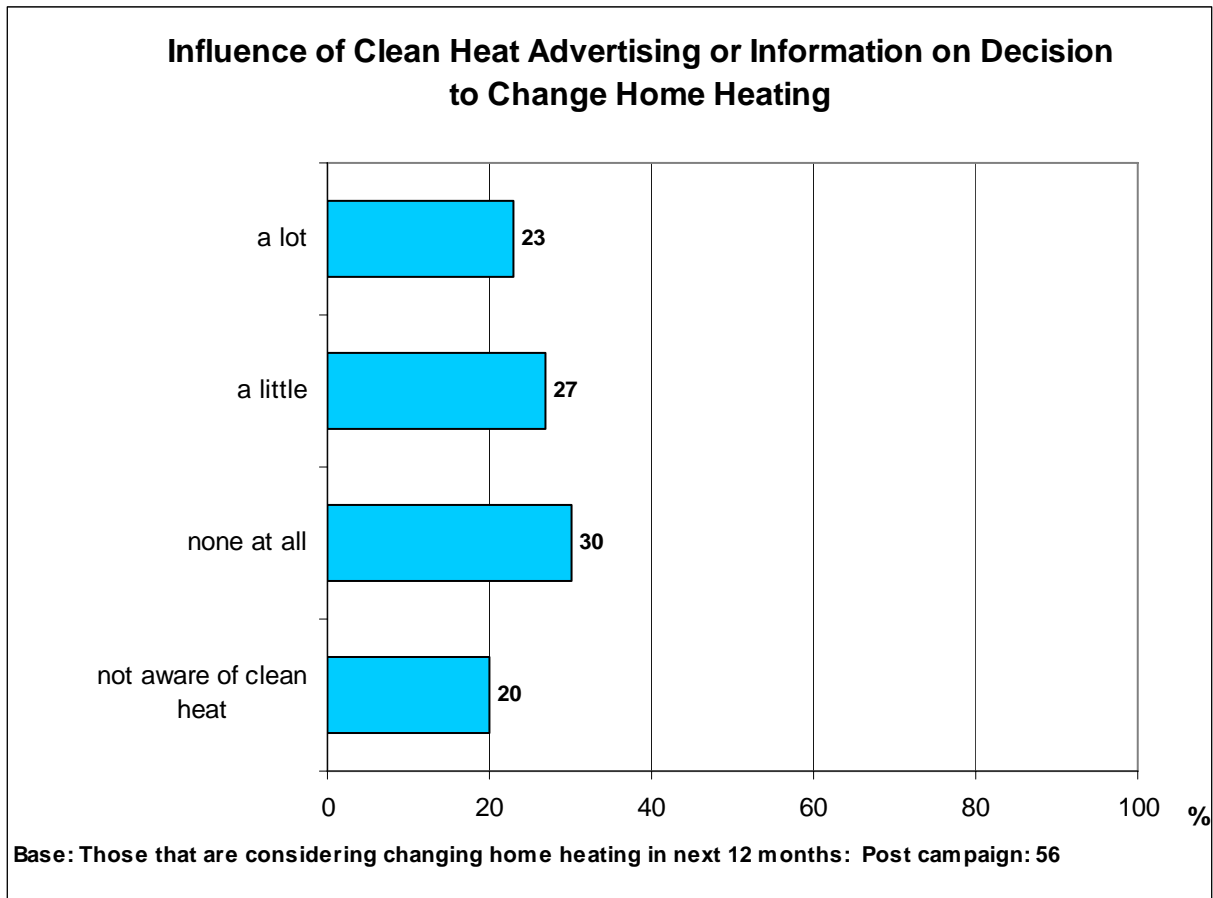
- Two fifths (39%) felt that their current heating was inefficient or inconvenient.
- A further 21% want some home heating that is more environmentally friendly.
- 13% to 14% felt they were forced to change, wanted a heat pump or for cost reasons.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those considering changing in next 12 months: 56	10	14	19	13
	%	%	%	%
current heating inefficient/ inconvenient	40	36	42	38
want something more environmentally friendly	10	29	11	38
forced to change	10	7	11	31
want a heat pump	10	7	21	8
cost	30	14	11	-
independent source of fuel in case of power cuts	-	-	5	-
other	-	14	-	-
don't know	-	7	-	-

- Younger people aged 15-24 were more likely to change heating due to cost.
- Those aged 40-59 were more likely to state that they wanted a heat pump
- Those aged over 60 were more likely to believe they were forced to change or want something more environmentally friendly.

Main form of heating:	heat pump	electric heater	log burner	open fire	gas heater
Those considering changing in next 12 months: 56	2	6	34	6*	8
	%	%	%	%	%
current heating inefficient/ inconvenient	50	33	44	33	25
want something more environmentally friendly	-	-	24	-67	-
forced to change	50	-	18	17	-
want a heat pump	-	33	6	-	38
cost	-	17	12	-	25
independent source of fuel in case of power cuts	-	17	-	-	-
other	-	-	3	-	13
don't know	-	-	3	-	-

- Base sizes are too small for further analysis.

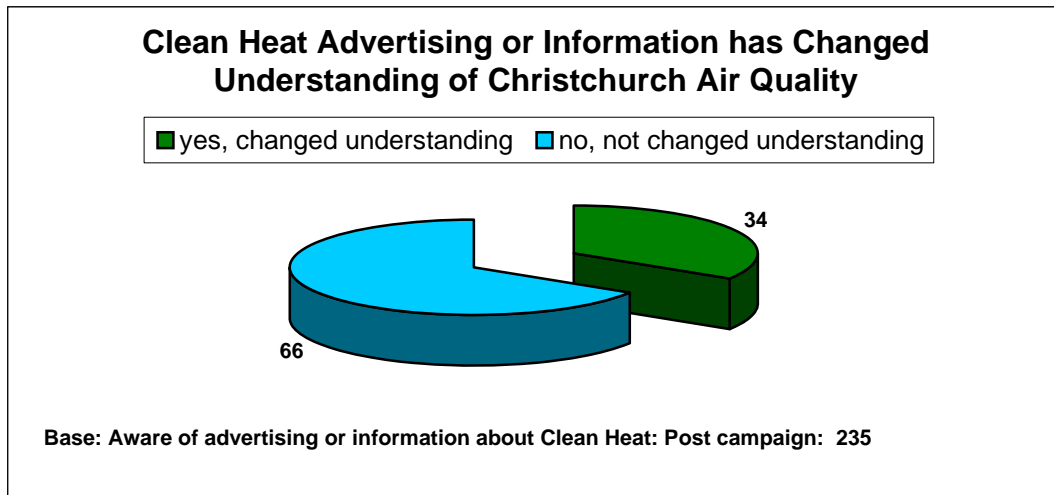


- Almost a quarter (23%) felt the Clean Heat advertising or information had a lot of influence on their decision to change their home heating. A further 27% felt it had a little influence.
- (30%) felt the Clean Heat advertising or information had no influence at all on their decision to change home heating.
- The remainder (20%) were unaware of the Clean Heat advertising.

Main form of heating:	heat pump	electric heater	log burner	open fire	gas heater
Those considering changing in next 12 months: 56	2	6	34	6*	8
	%	%	%	%	%
A lot	50	33	24	33	-
A little	-	17	29	50	12
None at all	50	33	29		50
Not aware of Clean Heat	-	17	18	17	38

- Base sizes are too small for further analysis.

Those aware of advertising or information about the Clean Heat project were asked if this had changed their understanding of air quality in Christchurch.



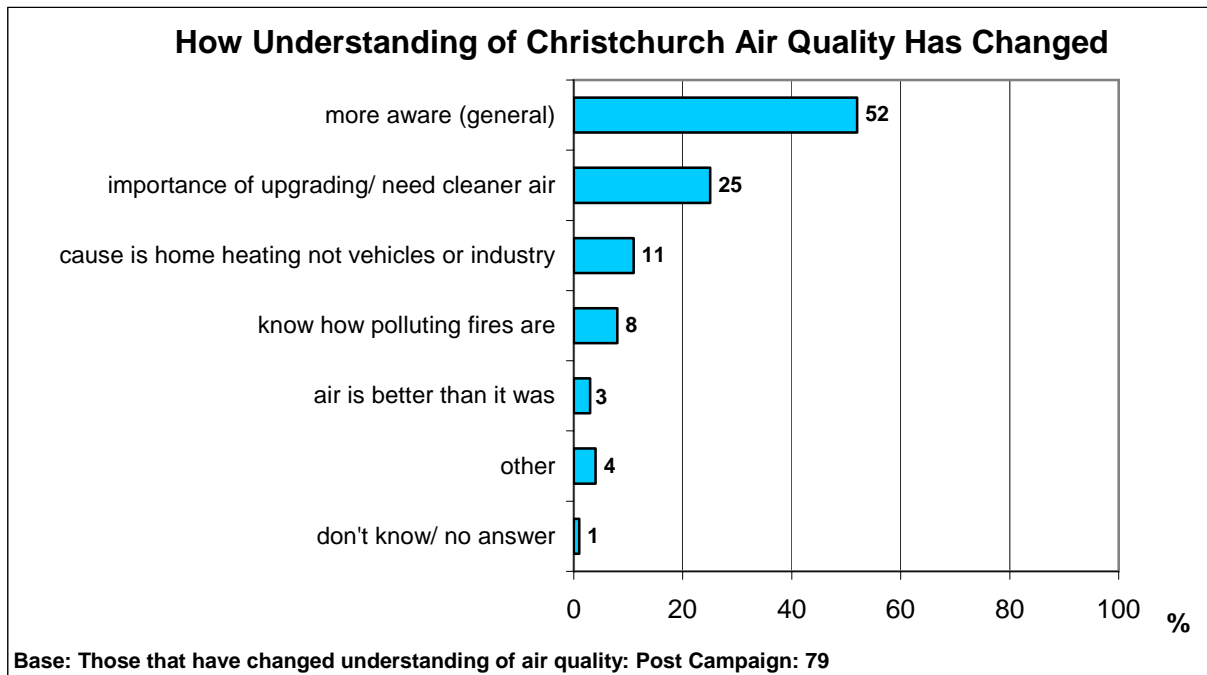
A third felt this advertising and information had changed their understanding of air quality in Christchurch.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those aware of advertising and information about Clean Heat: 235	22	62	87	64
	%	%	%	%
Yes, changed understanding	45	44	28	28
No, not changed understanding	55	56	72	72

- Those aged under 40 years old were more likely to state that the advertising and information about Clean Heat had changed their understanding of air quality in Christchurch, than those over 40.

Main form of heating:	heat pump	electric heater	log burner	open fire	electric fire	gas heater	underfloor heating	other
Those aware of advertising and information about Clean Heat: 235	35	76	66	10	2	33	5	8
	%	%	%	%	%	%	%	%
Yes, changed understanding	34	30	33	-	-	52	20	50
No, not changed understanding	66	70	67	100	100	48	80	50

- Overall there was little difference between heating users.



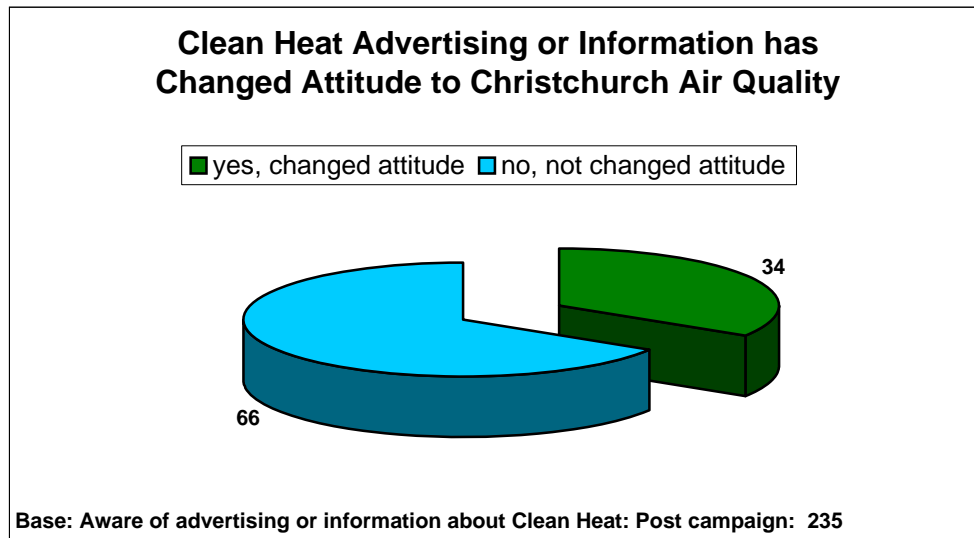
- Around half felt that their understanding had changed in that they were more aware generally of air quality in Christchurch.
- A quarter stated the importance of upgrading/ need cleaner air.
- Around one in ten felt the cause of air quality in Christchurch is home heating not vehicles or industry.
- All other reasons were mentioned by 8% or less.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those that have changed understanding of air quality in Christchurch: 79	10	27	24	18
	%	%	%	%
more aware (general)	60	70	42	33
importance of upgrading/ need cleaner air	30	11	29	39
cause is home heating not vehicles or industry	10	11	13	11
know how polluting fires are	-	7	13	6
air is better than it was	-	-	4	6
other	-	-	4	11
don't know/ no answer	-	4	-	-

- Base sizes are too small for further analysis.

Main form of heating:	heat pump	electric heater	log burner	gas heater	other
Those that have changed understanding of air quality in Christchurch: 79	12	23	22	17	4
	%	%	%	%	%
more aware (general)	58	48	50	47	100
importance of upgrading/ need cleaner air	25	17	36	29	-
cause is home heating not vehicles or industry	17	4	14	12	-
know how polluting fires are	-	17	5	-	25
air is better than it was	-	4	-	6	-
other	-	9	5	-	-
don't know/ no answer	-	-	-	6	-

- Base sizes are too small for further analysis.



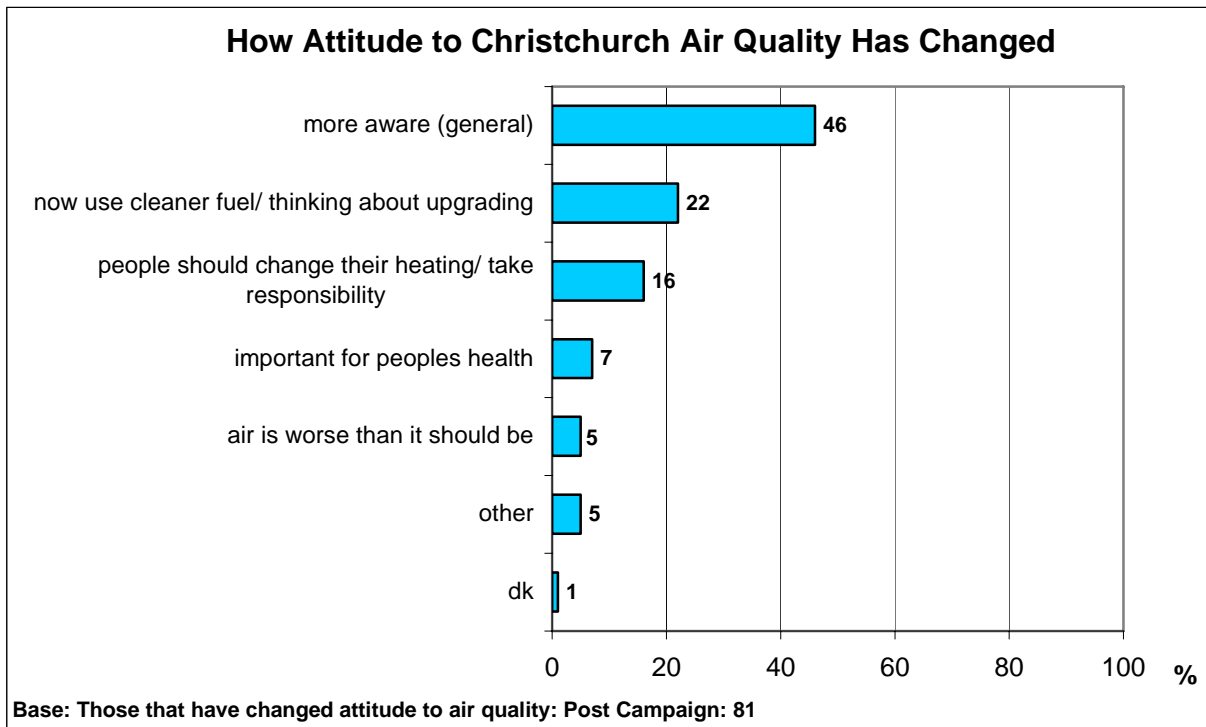
A third felt the advertising and information had changed their attitude to Christchurch air quality.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those aware of advertising and information about Clean Heat: 235	22	62	87	64
	%	%	%	%
Yes, changed attitude	45	37	31	33
No, not changed attitude	55	63	69	67

- Younger people aged 15-24 were more likely to feel the Clean Heat advertising or information had changed their attitude towards air quality in Christchurch.

Main form of heating:	heat pump	electric heater	log burner	open fire	electric fire	gas heater	underfloor heating	Other
Those aware of advertising and information about Clean Heat: 235	35	76	66	10	2	33	5	8
	%	%	%	%	%	%	%	%
Yes, changed attitude	34	33	36	10	-	42	20	50
No, not changed attitude	66	67	64	90	100	58	80	50

- Base sizes are too small for further analysis.



- Almost half felt their attitude to air quality in Christchurch has changed in that they are more aware of it in general.
- Around a fifth now use cleaner fuel or are thinking about upgrading.
- 16% felt people should change their heating or take more responsibility.
- All other reasons were mentioned by less than one in ten.

Age:	15 – 24	25 – 39	40 – 59	60 +
Those that have changed attitude to air quality in Christchurch: 81	10	23	27	21
	%	%	%	%
more aware (general)	70	48	48	29
now use cleaner fuel/ thinking about upgrading	10	22	26	24
people should change their heating/ take responsibility	-	30	11	14
important for peoples health	10	-	4	19
air is worse than it should be	-	-	11	5
other	10	4	4	5
don't know	-	-	-	5

- Base sizes are too small for further analysis.

Main form of heating:	heat pump	electric heater	log burner	open fire	gas heater	underfloor heating	Other
Those that have changed attitude to air quality in Christchurch: 81	12	25	24	1	14	1	4
	%	%	%	%	%	%	%
more aware (general)	42	64	42	100	29	-	25
now use cleaner fuel/ thinking about upgrading	50	-	38	-	7	-	50
people should change their heating/ take responsibility	8	12	17	-	29	-	25
important for peoples health	8	8	4	-	14	-	-
air is worse than it should be	-	12	-	-	7	-	-
other	-	4	4	-	7	100	-
Don't know	-	-	-	-	7	-	-

- Base sizes are too small for further analysis.