Does the framing of climate policies make a difference to public support? Evidence from UK marginal constituencies

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Public support for climate policies is essential to underpin their credibility, but evidence suggests that an environmental basis for that support is not strong. It has been suggested that framing climate policies in other terms, such as energy security or job creation, will build a more sustainable political basis for bold climate policies. This approach is explored using data from a survey in 157 UK marginal constituencies. Framing does make a difference to support for the expansion of renewable energy, but not to support for policies on energy efficiency and financial assistance to developing countries. The data also show key differences in levels of support for policies between different socio-demographic and voter groups.

Keywords: climate change policies; policy communication; political processes

Le soutien public aux politiques climatiques est essentiel pour soutenir leur credibilité, mais il semble que l'argument environ-nemental à la base de ce soutien n'est pas fort. Il a été suggéré que l'élaboration des politiques climatiques selon d'autres objectifs, tels que sécurité énergétique ou création d'emplois, constituerait une base politique plus durable pour les politiques climatiques plus audacieuses. Cette approche est examinée à l'aide de données provenant d'une enquête portant sur 157 circonscriptions disputées du Royaume-Uni. Le cadrage a effectivement une incidence sur l'expansion des énergies renou-velables, mais non sur les politiques d'efficacité énergétique et d'aide financière aux pays en développement. Les données montrent également des différences importantes en dans le niveau de soutien aux politiques en fonction des différents groupes sociodémographiques et groups d'électeurs.

Mots clés : communication de politiques; politiques climatiques; procédés politiques

1. Introduction

There is considerable evidence that the majority of the UK public is quite aware of and concerned about climate change, even though a significant minority is not yet convinced about the science (e.g. Portinga et al., 2006; YouGov, 2006; Downing and Ballantyne, 2007; Ipsos MORI, 2008).[1] However, while these environmental concerns are quite widespread, they are not deep.[2] Tracker polls show that since the mid-1990s, the percentage of the UK public that sees the environment as the most impor-tant issue facing Britain is consistently in the 5–10% range, with a brief spike at the time of the Stern Review. This level falls far below that for most other issues, such as health, education, crime and the economy (Clark, 2008). Environmental concern is thus a weak basis for getting the attention of the public on climate policy, and is even weaker in the current economic climate.[3]

Environmental concerns also seem to be weaker than dislike of some of the policies that may be needed, especially environmental taxes and restrictions on consumer choice. While polls show that

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people tend to think that the Government has a responsibility to lead on tackling climate change (COI, 2006; Clark, 2008), a large majority (>60%) is also consistently opposed to paying higher taxes, especially on flying and driving (Bird and Vigor, 2006; ICM, 2006; YouGov, 2007).[4] This opposition can also be clearly seen in public debate (and direct action) on fuel duty and road pricing, and environmental taxes are now widely portrayed as 'stealth taxes' (Lockwood et al., 2008).

At the same time, the cost of reducing emissions in the UK is likely to be significant. Estimates of the cost of reducing carbon emissions by 80% by 2050 are in the range of 2–3% of GDP (Lockwood et al., 2007). The Climate Change Committee put the cost of reaching a 2020 target of a 34% reduction in emissions relative to 1990 at 1% of GDP (CCC, 2008). However, as Helm (2009) and others point out, such estimates, based on optimizing models, almost certainly significantly underestimate real costs. The cost of decarbonizing the electricity system alone is likely to be of the order of hundreds of billions of pounds over the next two decades (Ofgem, 2010).

The costs of climate policy will not only be financial. Restrictions on consumer choice are already involved in areas such as domestic boilers, under the building regulations, and are due to spread into areas such as the banning of incandescent light bulbs. Even stronger 'choice-editing' measures may follow, and may conflict with strongly held notions of privacy and freedom. Equally important are emotional, psychological and perceived aesthetic costs. For example, the expansion of renewable electricity in the UK to meet the 2020 target is projected to involve a doubling in the number and an increase in the size of on-shore wind turbines (HMG, 2009). Such an expansion will be strongly opposed by some people citing deep attachment to particular landscapes.

This combination of a low priority accorded to environmental concerns together with high costs is a major problem for politicians of all parties who seek to propose more radical climate policies. The problem is exacerbated by trends in political identification. Over the last 40 years, traditional party allegiances driven by social class (working class to Labour and middle class to the Conservatives) have eroded, and voters with no stable party identification have become an increasingly large and important group. In recent years, political parties have won decisive majorities at British elections by successfully wooing this group, especially in marginal constituencies (Heath et al., 1985; Andersen and Heath, 2000; Clarke et al., 2004; Mortimore et al., 2007). Floating voters are not a fixed group, but in recent years they are more likely than the general population to be: older; in occupational group C1 or C2; tabloid rather than broadsheet readers; and most concerned about the economy, crime, immigration and health, all suggesting that they may be disinterested in, if not hostile, to environmental issues. Leaders focusing a great deal on environmental issues, which floating voters do not tend to prioritize, risk appearing out of touch, possibly elitist and likely to levy taxes seen as 'stealth' taxes (Morris, 2008).

The result is that political parties have tended to see strong environmental policies and messages more as potential net vote-losers rather than as vote-winners, and feel constrained by a lack of 'political space' on climate policy. Given the logic of electoral politics, simple exhortations to leaders to show 'political will' are unlikely to be effective. Nor is an approach based on trying to win over voters by making them care more about climate change and the environment. Although environmental campaigning in the UK over the last 35 years has been effective in mobilizing those who already care, there is no evidence that it is producing a cumulative growth in numbers of voters who prioritize the issue.

2. Approaches to framing

An alternative is to abandon environmental arguments altogether, seeking instead to connect with the priority issues, attitudes and values of floating voters, and to base support for climate policy on these

instead. Anthony Giddens, for example, argues for maximizing 'political convergence', by which he means 'how far climate policy overlaps in a positive way with other values and political goals' (Giddens, 2009:8).[5]

More broadly, this approach can be seen as attempting to re-frame climate policies. At root, framing is about the presentation of an issue or action, often a conscious presentation with the intention of making the object of framing either more or less acceptable to the audience. Framing analysis has developed across a range of disciplines, including behavioural economics, media studies, the sociology of social movements and cognitive linguistics. In this context, it is the theories of framing that have been developed in the last two areas that are the most relevant.

In cognitive linguistics, framing is most associated with the work of George Lakoff (Lakoff, 2003, 2008), who argues that the use of language physically triggers unconscious frames in the brain. A frame is a conceptual structure triggered by a word or associated groups of words. Use of the words evokes the frame and therefore reinforces it, even if the user is trying to negate the frame. Lakoff argues that framing is distinct from a mere marketing exercise, since to be effective and have resonance, frames have to be true and connect with a set of values already held by the audience. They also have to be built up over a long period of time, which means that connecting an issue to a well-established powerful frame is easier than building up new frames (Lakoff, 2010).

Lakoff is not without his critics (Cooper, 2005; Pinker, 2006), but his ideas have been influential in parts of the American political elite, especially in the Democratic Party. Certainly, President Obama eschewed mention of climate change during the Presidential election in 2008, instead employing the language of a 'clean energy economy' (keying into the importance of jobs and investment) and 'energy independence' (tapping into American anxieties about dependence on oil from the Middle East).

However, a second literature on framing, from the sociology of social movements (e.g. Benford and Snow, 2000), may be more relevant for attempts to win the public over to climate policies by reframing them. This approach draws on a concept of frames that is broader than that triggered by language, going back to Goffman's (1974) interest in frames as 'schemata of interpretation' that render events or actions meaningful. Snow et al. (1986) argue that an important way in which social movements operate is by linking their activities, goals and ideologies to sets of values and beliefs held by groups of people they want to recruit. There is a clear analogy here with attempts by politicians to link climate policies to values and beliefs that the public already hold.

According to this analysis, social movements align their frames with those of target groups through a number of processes, the most relevant of which for this discussion is 'frame extension':

> The programs and values that some social movement organisations (SMOs) promote may … appear to have little if any bearing on the life situations and interest of potential adherents. When such is the case, an SMO may have to extend the boundaries of its primary framework so as to encompass interests or points of view that are incidental to its primary objectives but of considerable salience to potential adherents. (Snow et al., 1986:472)

In the UK, politicians of all parties have experimented with alternative frames for climate policy over the last three years. However, there is as yet no evidence of how effective such a strategy – whether via a cognitive or a sociological route – will be. As noted above, Obama appeared to have some success in re-framing climate policies in the US, but UK political culture and reference points are different from those in America, so a simple reading across cannot be made.

This article reports on an attempt to directly test the efficacy of re-framing climate policies. Survey data are presented on responses to three climate policies: the expansion of renewable energy, regulating for energy efficiency, and financial assistance for adaptation and mitigation in developing countries. These policies were presented to sub-groups using different frames, and the responses compared.

In each case, a framing referring to climate change was included to act as a baseline or 'control' framing. A set of alternative frames were developed for each policy, through an analysis of speeches by senior politicians in the main parties and consultation with campaigning organizations seeking to influence climate policy. Some frames apply to more than one policy (e.g. an energy security frame was tested both for the expansion of renewable energy and regulating for energy efficiency), but in general the frames were tailored to the policy.

This study's findings show mixed results for the efficacy of framing in the UK context. In some cases, with some policies, framing appears to make a considerable difference, but not for all policies nor with all groups. The research implies that there is a value in calibrating the use of framing. It also provides evidence of the nature of the overall political challenge for different policies.

3. Methodology and data

The presented assessment of the effects of different frames on how climate policies are perceived is based on an on-line survey conducted in September 2009 by Brand Democracy.

The draft questionnaire was pre-tested face-to-face with a group of 12 people mixed by age, social class, gender and attitudes to climate change. The final survey was administered to a sample of 3,032 people on the YouGov on-line panel, resident in 157 constituencies that were marginal on boundaries created in recent reviews by the Boundary Commissions. Fieldwork took place between 16 and 18 September 2009, and was completed before the beginning of the political party conference season. Given the consistent lead held by the Conservative Party in published polls prior to our field-work, the focus was placed on 102 Labour-held constituencies where the Conservatives required a swing of 7% or less to capture the seat. Added to these were the 29 Liberal Democrat-held seats where the Conservatives required a 7% swing or less to capture the constituency, and all seats where the Liberal Democrats attained the second largest share of votes and required a swing of 5% or less to capture the seat (Table 1).

Since the responses were obtained via an on-line panel and not through a survey using stratified sampling, to ensure that results are representative of the population in marginal constituencies the data were weighted by age, gender, socio-economic classification of the chief income earner in the household, and region, to reflect proportions in the whole of Great Britain based on the 2001

TABLE 1 Definition of marginal constituencies

From	To	
	Conservative	Liberal Democrat
Labour	Swing of up to 7% (102 seats)	Swing of up to 5% (7 seats)
Conservative		Swing of up to 5% (19 seats)
Liberal Democrat	Swing of up to 7% (29 seats)	

census. These proportions will be different from those for the sample constituencies, but given that the sample makes up 24% of all constituencies, the bias will be very small.

As differences in responses are examined by voting intention, steps were also made to ensure that the sample is politically representative. Data were weighted by past vote, taking into account false recall, as is common practice among polling companies, and for turnout.

Respondents were asked who, if anyone, they voted for in the last election. These results were compared with the average vote distribution across these constituencies at the last election. This was then weighted to the mid-point between the declared past vote collected in the poll, and the average result at the last election across the relevant seats, thereby assuming that 50% of the difference is a product of political imbalance within our sample (which is accounted for through the weighting) and 50% is a product of faulty recall on the part of the respondents (which is not accounted for). The 109 Labour-held seats were weighted separately from the Liberal Democrat-Conservative marginals, with each grouping weighted to the average 2005 vote share across that group of constituencies.

For turnout weighting, respondents were asked how likely they would be to turn out at the next election on a scale of 0–10, where 0 = 'definitely will not vote' and 10 = 'definitely will'. Responses were then weighted accordingly, so that someone who is certain to turn out is counted as 1, and someone who is certain to stay home is counted as 0, with a sliding scale for each point in between.

The weighted sample size is 2,291. Descriptive statistics for this weighted sample are shown in Table 2.

4. Views on climate change

As the context for the findings on framing of policies, it is useful to look briefly at general attitudes towards climate change among the sample. Similar to results for the wider UK population, climate

TABLE 2 Descriptive statistics

		N	%
Gender	Male	1,109	48
	Female	1,182	52
Age	18–34	600	26
	35–44	431	19
	45–54	373	16
	55+	887	39
Social classification	ABC1	1,312	57
	C1DE	977	43
Voting intention	Conservative	853	37
	Labour	435	19
	Liberal Democrat	310	14
	Scottish National Party/Plaid Cymru	70	3
	Green	78	3
	Other	169	8
	Would not vote	75	3
	Do not know	302	13

change is not a priority issue for most people (Figure 1)[6]. From a pre-determined list, respondents were asked to choose both the single most important issue in deciding who to vote for in the next general election and the three or four most important issues.

To assess the influence of particular language, the sample was split, using 'climate change' for one-half and 'global warming' for the other. However, the differences between the sample responses were small – 17% of one split sample named 'climate change' among the top three to four issues, as opposed to 18% of the other split sample for global warming. Figure 1 therefore shows the combined results for the whole sample.

Given the general economic situation (in September 2009 the UK was still in recession), it is not surprising that unemployment and the state of the economy dominate the priority issues, with immigration, pensions, health care and crime following. Climate change or global warming was named as a priority issue by only 5% of the sample.

Climate change/global warming is included by a larger group in a wider set of priority issues, but 'energy and petrol costs' is named by far more. Among issues named as the top three to four priorities for voting choice, climate change ranks 8th out of 11, ahead only of child care, transport and traffic and foreign policy.

However, the relatively low ranking given to climate change as a valence issue for voting behaviour does not imply that respondents did not believe in the existence of anthropogenic climate change, nor that they thought it would not have an impact.

A large majority were in agreement with the statement that climate change exists, and almost as large a majority also believed it was man-made (Figure 2). While a total of 40% expressed doubt about the certainty that climate change is caused by human activity, more (over 60%) agreed with the statement that it is. However, note that the survey was conducted before the considerable publicity surrounding leaked e-mails from the Climate Research Unit at the University of East Anglia in November 2009, which may have had an impact on public confidence in climate science.

There is also net agreement within the sample with the statement that climate change is the biggest challenge the planet faces, with 55% agreeing and 35% disagreeing. Those in strong agreement (22%) were twice as many as those in strong disagreement. However, a clear majority (58%) do not see climate change as the biggest challenge facing Britain, and strong disagreement with this statement, at 22%, is far larger than strong agreement (12%).
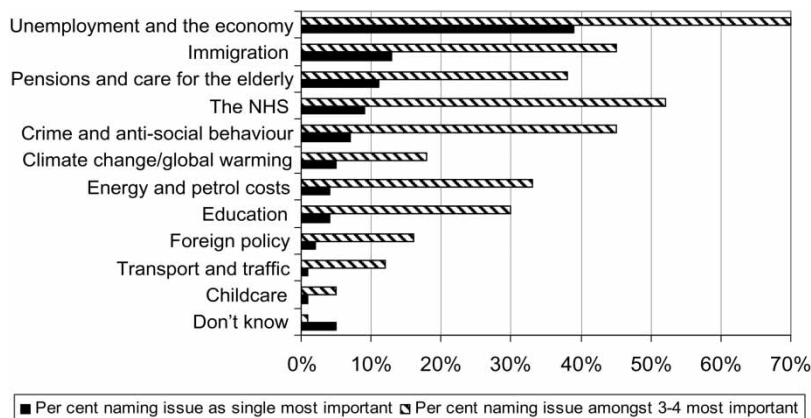

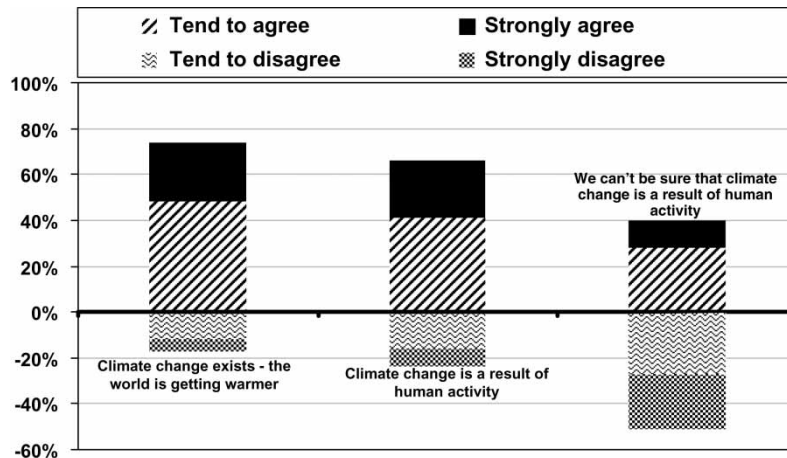**FIGURE 1** Priority issues for voting intention

FIGURE 2 Belief in climate change

There is some variation in these attitudes among socio-demographic and political groups. Women, younger people, people in socio-economic classification groups ABC1, those intending to vote Labour or Liberal Democrat and swing voters are all surer about man-made climate change, and think it will have a bigger impact. Conversely, men, those over 55, people in groups C2DE and those intending to vote Conservative are less likely to believe in anthropogenic climate change and its impacts.

5. Framing climate policies

The central aim of the survey was to test whether different ways of framing climate policies would make a difference to the level of public support such policies might enjoy. In particular, the author sought to assess whether alternative framings would elicit more support than a climate change framing. Three policy areas were examined: the expansion of renewable energy; regulating for energy efficiency; and financial assistance for mitigation and adaptation in developing countries. In each case, a number of different ways of framing policy were developed, through an examination of political speeches and other material, and in consultation with civil society groups and political advisers. The selected approach was therefore to draw on current practice, rather than to test frames designed from scratch, and with common levels of comprehensiveness. In that sense, some of the 'frames' the author attempted to assess might be seen as comprising only elements of larger frames. Within this constraint, the emphasis was, in terms of the discussion in Section 2 above, on 'frame extension' – that is, connecting the policy with a concern or issue that the author hypothesizes is more central for most respondents than climate change.

The approach was to split the sample randomly into different groups, where each group was asked to respond to the policy framed in a different way. Each group saw only one framing. For example, on the expansion of renewable energy, three frames were tested: energy security, climate change and economic opportunity. Each of three sub-groups saw one of the following statements and was asked to respond. The first part of the statement frames the policy, which is then common across all three frames:

1. *To help reduce our reliance on foreign oil and gas*, we should be getting 15% of our energy from renewable sources like wind power and solar energy by 2020.
2. *To help tackle climate change*, we should be getting 15% of our energy from renewable sources like wind power and solar energy by 2020.
3. *To create new economic opportunities for Britain*, we should be getting 15% of our energy from renewable sources like wind power and solar energy by 2020.

The first and third of these – the energy security frame and the economic opportunities frame, respectively – represent the frame extensions. Within this framework, two kinds of responses to the statements were considered: firstly, how far people agreed with the policy; and secondly, whether respondents would be more likely to vote for a party that proposed that policy.

To assess the likely robustness of each frame in political debate, respondents were also presented with a series of arguments for and against each proposition, and asked whether each argument made them more or less supportive of the policy. After respondents had seen the arguments and counter-arguments, the basic framing question was repeated, to assess whether agreement with the policy had changed as a result.

5.1. Expanding renewable energy

The specific policy chosen for testing the expansion of renewable energy was the Government's target of ensuring that 15% of energy comes from renewable sources by 2020 (HMG, 2009). As described above, the three frames for the expansion of renewables policy were energy security, economic opportunities and the 'base case' of climate change.

Figure 3 shows the results for strong and very strong agreement and disagreement with each framed policy statement. The first point to note is the overall high level of support for the policy, with strong and very strong support of around 40% on average far outweighing disagreement. This strong public support is striking, especially given the controversial nature of the Renewable Energy Strategy in the media and among some expert groups. Backing for the policy is also evident in the findings for
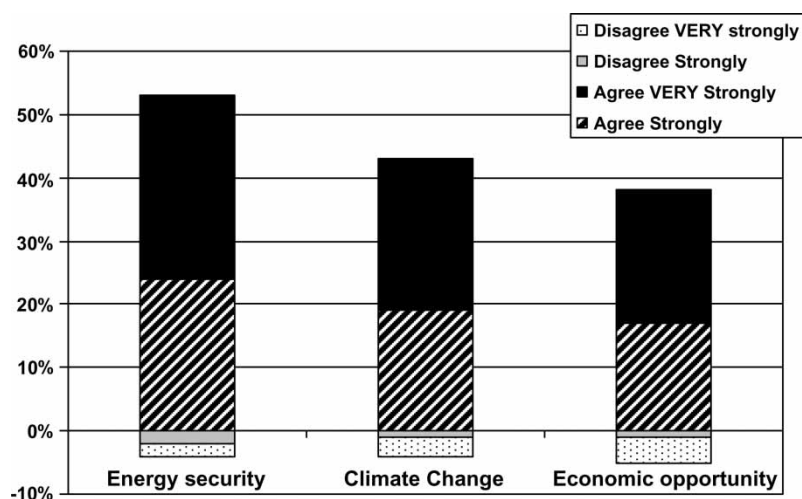
FIGURE 3 Very strong and strong agreement and disagreement with the expansion of renewable energy, by frame

whether the policy would make the respondent more or less likely to vote for a party that proposed it. Depending on the frame, between 60% and 70% said that the policy would make them more likely to vote for the party that proposed it, with less than 10% less likely.

Between the different frames, it is clear that the energy security frame is the most powerful, eliciting strong and very strong support from over 50% of the sub-sample. However, the economic opportunity frame, which has been deployed by politicians especially during the recession, elicits less support than the climate change frame.

Responses to frames varied substantially between different socio-demographic and political sub-groups. Table 3 shows percentages for strong and very strong agreement *net* of strong and very strong disagreement. Women are more likely to support the policy than men, regardless of the frame, but the ranking of frames is the same for both. Contrasting the under-35s and the over-55s, the main pattern is that younger people are slightly more supportive of the policy. The anomalous result here is the collapse in net support for the policy among older people when the policy is framed in terms of economic opportunity. It is not clear why this is, but it clearly represents a greater scepticism among older voters in relation to this frame.

Respondents in classification groups C2DE are more responsive to the economic opportunity frame and especially the energy security frame, whereas professional groups are relatively more supportive of the climate change frame, although the differences are small.

The most consistent and striking differences in responses are associated with political leanings. Those intending to vote Conservative are consistently less net supportive of the policy than prospective Labour and Liberal Democrat voters, by some 30% points on the energy security frame, and by approaching 40% points on the economic opportunity frame. While the energy security frame appealed most to prospective Conservative and Labour voters, among those intending to vote Liberal Democrat the other frames were slightly more effective in eliciting support.

Respondents were also presented with a series of arguments for and against the policy, tailored to the particular frame they were given. The full list of arguments is available on request from the author; in this article, the focus is on those that were most powerful in terms of the response they elicited.

For the energy security frame, the most important arguments – with the largest percentages of respondents saying they made them feel more or less supportive of the policy – were about the

TABLE 3 Net strong and very strong agreement for the expansion of renewable energy

		Frame (%)		
		Energy security	Climate change	Economic opportunity
Gender	Male	43	34	26
	Female	52	46	37
Age	18–34	55	47	51
	55+	51	40	6
Socio-economic classification	ABC1	46	47	30
	C2DE	54	40	33
Voting intention	Conservative	37	32	28
	Labour	64	60	53
	Liberal Democrat	59	64	64

availability or scarcity of energy supplies. Arguments supporting the policy were better received than those undermining it.

Within the climate change frame, the most widely accepted argument for renewables expansion was about the need to develop technologies in light of future dependence on renewable energy, whereas the most powerful argument against (receiving 39% support) was that wind turbines ruin the landscape.

The economic opportunities frame for renewable energy policy is the least effective. Large proportions of respondents said that arguments citing numbers of jobs that could potentially be created and the threat of being left behind by other countries (e.g. the US and China) make them feel more supportive of the policy. But the relative weakness of the frame appears to be the scepticism by some that the jobs created would stay in the UK – the counter-argument that most jobs would go to other countries leads 50% of respondents to say that they feel less supportive of the policy.

However, despite the fact that a large proportion of respondents reported that many of the arguments and counter-arguments made them feel more or less supportive of the renewable energy policy statement, when support was re-tested after these had been presented, there was virtually no change in levels of net support. The author interpreted this as evidence that renewable energy is a relatively mature policy area, where most people have already been exposed to debate and where opinion is quite stable.

5.2. Regulating for residential energy efficiency

The second policy area included in the survey was residential energy efficiency. The intention was to test views on a strong version of policy, involving not just incentives but also compulsion. Respondents were asked how strongly they agreed or disagreed with the statement that:

'the Government should require people to make their homes more energy efficient. That means giving people financial help to do things like insulate their homes or replace an old boiler and penalties for those who fail to improve their homes.'

As before, the sample was randomly split into three sub-groups, and the statement was presented in each case with a different frame. The three frames were: energy security ('reducing reliance on foreign oil and gas'), climate change ('tackling climate change') and comfort ('making peoples' homes warmer and more comfortable'). Again, the first and third represent frame extensions.

The energy efficiency policy statement receives rather less support overall than the expansion of renewable energy, but as before there are low levels of opposition despite the strong form of the policy put to respondents (Figure 4). Unlike the expansion of renewable energy, the way in which the policy is framed by a preceding clause makes almost no difference to levels of support. However, as with renewable energy policy, the impact of framing is greater for some sub-groups (Table 4). Note that in all sub-groups, the policy receives net overall support, although this is lower than for renewable energy expansion.

Women are generally more supportive of regulation for energy efficiency than men, but the energy security frame is more powerful than the other two. Perhaps surprisingly, the 'comfort' frame elicited the least support among women, lower than that from men.

Support for energy efficiency regulation among older people is relatively low but stable across frames. Younger people respond most to the climate change frame, where net support for the policy is highest, at 45%. This pattern is also found across socio-economic classification groups, with those in ABC1 groups most responsive to the climate change frame and those in the C2DE groups less responsive overall and with least difference between frames.
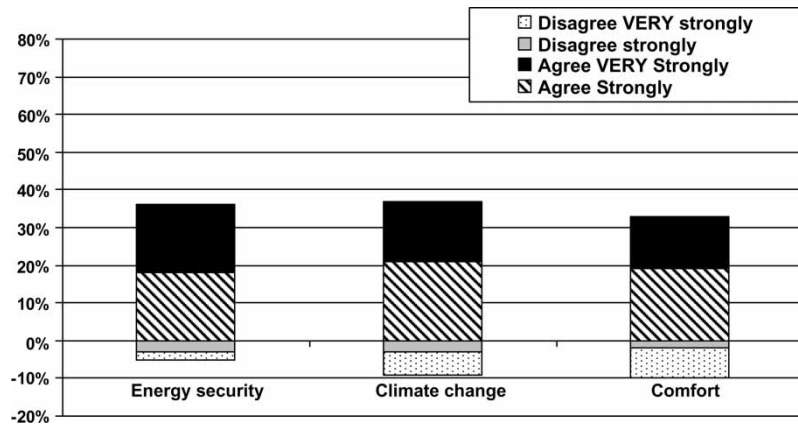
FIGURE 4 Very strong and strong agreement and disagreement with energy efficiency regulations, by frame

TABLE 4 Net strong and very strong agreement for energy efficiency regulations

		Frame (%)		
		Energy security	Climate change	Warmth and comfort
Gender	Male	23	25	25
	Female	36	30	21
Age	18–34	40	45	25
	55+	27	20	24
Socio-economic classification	ABC1	31	35	21
	C2DE	29	21	24
Voting intention	Conservative	25	18	22
	Labour	34	39	33
	Liberal Democrat	44	38	46

Finally, the party political affiliation results mirror those for renewable energy policy – Conservative leaning voters are the least supportive overall, and with the energy security frame ahead of the other two. More Labour voters appear to respond to the climate change frame, whereas Liberal Democrats, who are the most supportive overall, are more responsive to the 'comfort' and energy security frames.

As before, the stability of the frames was tested with arguments and counter-arguments. Generally, these had little effect on overall support for the policy on re-testing the statements, implying that opinion is quite mature and stable on the issue. A counter-argument referring to excess interference by a 'nanny state' did not, on balance, lead to respondents saying they felt less supportive of regulation, but the counter-argument that 'This is just another excuse for stealth taxes' did, with 43% saying it made them feel less supportive.

5.3. Financial assistance for developing countries

The third policy area tested was financial assistance for both mitigation and adaptation in developing countries (Figure 5). This issue emerged over the course of 2009, and especially at the COP 11 summit in Copenhagen in December 2009 as a key element of an international settlement on climate change.

Levels of support were investigated for a very general policy statement that:

the UK should provide financial assistance to poor countries to help them adapt to the impacts of climate change and to invest in clean energy

In this case, four frames were tested, comprising security ('to avoid threats to our security'), humanitarian ('to help save lives and protect the most vulnerable'), environmental ('to help prevent climate change from ruining the planet') and historical responsibility ('we helped cause climate change, so . . .'). Here, the first and second represent frame extension, as discussed in Section 2 above. The fourth, however, is not a frame extension in this sense. Rather, it is a frame that has been used widely in international climate policy debates, and one that is commonly used by developing country representatives – from both governments and NGOs – to motivate larger financial flows.

Of the three policy areas included in the survey, financial assistance for developing countries received by far the least support and aroused the most opposition (Figure 5). In the case of the environmental and historical responsibility frames, strong and very strong opposition exceeded strong and very strong support.

However, the different frames make little difference to the overall picture – no one way of presenting this policy makes it more popular than the others.

Net support varies in similar ways to the other policies (Table 5). Men are more hostile than women to the policy overall, with male respondents particularly opposed to the policy framed in terms of historical responsibility and climate change frames. Women give small net support to the policy on security and humanitarian terms, but only by a few percentage points.

There is a similar differential between younger and older respondents, with older people particularly opposed to the policy on grounds of historical responsibility. The humanitarian frame elicited the strongest positive response among young people.
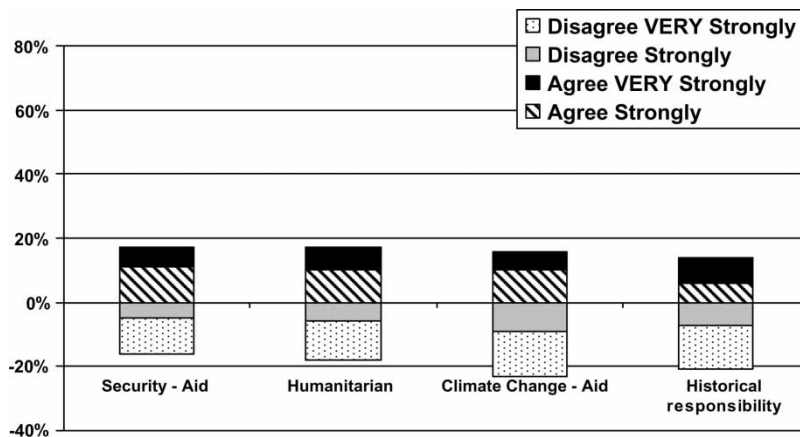

FIGURE 5 Very strong and strong agreement and disagreement with financial assistance, by frame

TABLE 5 Net strong and very strong agreement for financial assistance to developing countries for mitigation and adaptation

		Frame (%)			
		Security	Humanitarian	Climate change	Historical responsibility
Gender	Male	−3	−6	−10	−13
	Female	4	4	−6	−1
Age	18−34	7	15	−2	5
	55+	−6	−10	−15	−17
Socio-economic classification	ABC1	4	3	1	−1
	C2DE	−6	−7	−19	−15
Voting intention	Conservative	−16	−15	−21	−20
	Labour	25	22	23	5
	Liberal Democrat	16	8	21	10

Numbers opposing and supporting the policy among socio-economic groups ABC1 were quite evenly balanced across all four frames, with perhaps a slightly more positive net view on the security frame. In contrast, those in socio-economic groups C2DE were net opposed across the board, and by a comfortable margin in the case of the climate change and historical responsibility frames.

However, as before, the largest contrast is seen between groups by voting intention. Conservative leaning voters show the largest net opposition, of around 20% for both the climate change and historical responsibility frames. The latter frame also received little net support from Labour and Liberal Democrat leaning voters, but the picture with the other three frames is different. Security, humanitarian and environmental frames all elicited large net support from Labour voters, and the environmental frame also received large net Liberal Democrat support.

As with the other policy areas, the robustness of the frames was tested through asking respondents whether particular arguments for and against the policy made them feel more or less supportive.

For the humanitarian frame, the most powerful supporting argument involved a statement about the effects of drought on children in East Africa (with 32% saying it made them more supportive), whereas the most powerful counter-arguments involved mention of the cost[7], and the possibility that the money would be taken by corrupt leaders. For the other two policies, the re-testing of net support for the policy statements after the arguments and counter-arguments had been put showed virtually no change. However, in this case, re-testing showed a 5% rise in support for the policy framed in terms of saving lives.

There was an even larger increase in support for re-testing the environmental frame. Here the most powerful argument in favour of the policy was about the need to protect forests in developing countries (54% said that it made them more supportive), while corruption was again the most powerful counter-argument.

Corruption was again the counter-argument eliciting the most response within the security frame. Arguments about direct security threats, such as mass immigration of climate refugees, were perhaps not credible as they attracted less support than indirect arguments, for example that food shortages globally could drive up food prices in the UK. However, as with the other frames, re-testing showed a large rise, of 10%, in net support for the policy statement framed within security.

Even the historical responsibility frame, which was the most unpopular, saw an increase of 5% on net support on re-testing. Here, the arguments eliciting the most support were those that gave information about where the impacts of climate change will be felt first. However, the mention of China as the world's largest emitter was the most powerful counter-argument.

6. Discussion and conclusions

The idea of re-framing climate policies as a strategy for winning greater public support is still relatively new in the UK, but has attracted considerable debate and interest within policy and environmental campaigning circles. While there have been some studies on the effects of framing on public acceptance of policy in other areas, such as nanotechnology and the EU (de Vreese and Boomgarden, 2003; Cobb, 2005), until now there has been no direct evidence for the framing of climate policies to inform that debate, and the research reported here was aimed at filling that gap.

As discussed above, a framing strategy can be seen either in terms of the use of particular language, which is hypothesized to trigger a response linked to a set of values, or in terms of an extension of the described aims of an activity (in this case a policy) to connect with values or interests held by target groups. Here there is no attempt to distinguish between these approaches, but simply to assess whether framing a question in a survey in different ways produces different levels of support for a policy.

The results of a survey of respondents from 157 marginal constituencies in the UK from an on-line panel show that at the aggregate level, framing appeared to make a major difference to levels of support only for the policy of expanding renewable energy, and in contrast, relatively little difference to support for regulation for energy efficiency, or for financial aid for adaptation and mitigation.

The survey provides evidence that a strategy of framing renewable policy in terms of energy security would be more effective than the default climate change, or environmental frame. However, the latter frame also elicited high levels of support for the policy, and notably, higher than the economic opportunities framing. The latter finding has important implications, since although this frame has become much more popular with policymakers and campaigners (especially since the financial crash of 2008), our research suggests that many people do not find it credible. It may be more difficult to construct a frame for renewable energy in terms of the jobs and investment that have resonance and credibility in the UK than in the USA, but this is an area where further, more targeted research would be useful.

What was more striking was the differences in support by sub-group, with women, younger people, and Labour and Liberal Democrat leaning voters consistently more favourable to the policy. Net support for expanding renewables, while still positive, was markedly lower among those intending to vote Conservative.

In contrast with renewable energy, framing made almost no difference at all to support for regulating energy efficiency. This may be in part because the language of energy security more naturally evokes national policies for generating energy than energy efficiency, which is usually understood as an area of individual action. Similarly, different frames for the policy of giving aid to developing countries for mitigation and adaptation made little difference to support, at the level of the whole sample.

Within sub-groups, framing did make more difference for the energy efficiency and financial assistance policies. Women gave a lot more support to energy efficiency policy within an energy security frame than within a warmth and comfort frame, whereas for those in socio-economic groups ABC1, climate change was actually the most powerful frame. In the case of financial assistance to poor countries, men, Conservative leaning voters, those over 55 and those in socio-economic groups C2DE all were most hostile when the policy was framed in terms of historical responsibility. There

are clear lessons here about how best to build support for policies (or how to best avoid political problems with policies) when communicating with particular social, demographic and political groups.

Overall, energy efficiency policy received clear net support, but less than in the case of renewable energy, whereas aid for developing countries received the least support (and, for the environmental and historical responsibility frames, is marginally opposed).

This last point poses a serious challenge to policy makers, because such aid is so central to the prospects of an international agreement in climate change. However, it is also the only one of the policy statements on which arguments and counter-arguments appear to shift opinion on re-testing, and in the direction of greater support. One interpretation of this is that renewable energy and energy efficiency are relatively mature and well-known policy areas, about which there has been a lot of debate and on which most people already have established views. In contrast, the idea that countries like the UK may have to provide assistance to developing countries for climate change, in addition to conventional aid, is relatively new. These findings suggest that higher levels of support for such a policy could be built up through appropriate arguments.

Acknowledgements

Notes

1. Since this research took place, a set of e-mails from the Climate Research Unit at the University of East Anglia were leaked, and there is some evidence that the ensuing publicity has reduced public confidence in climate science, although it is too early to say how far-reaching and long-lasting these effects will be.
2. For a similar analysis of US public opinion, see Shellenberger and Nordhaus (2007).
3. See Bennett (2008) for typical comments.
4. See also the Energy Saving Trust's 'Green Barometer' (www.energysavingtrust.org.uk/your_impact_on_climate_change/the_uk_s_opinion_on_climate_change_the_green_barometer).
5. In the US, Shellenberger and Nordhaus (2007) are strong advocates of this approach.
6. See, for example, Clark (2008).
7. Based on the US$100 billion by 2020 proposed by Gordon Brown in June 2009.

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