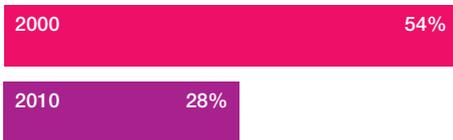


6. Environment

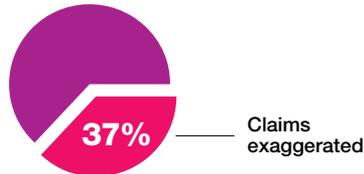
Concern about climate change: a paler shade of green?

Environmental disasters around the world have provided recent reminders of the challenges facing our planet. How has public concern and behaviour in this area evolved in recent years? Have they been affected by events such as the ‘climategate’ row over scientific evidence and the onset of recession?

Public concern about the threat posed by different types of environmental pollution declined over the past decade, and scepticism concerning the seriousness of such threats increased.



28% regard **air pollution from cars** as “very” or “extremely” dangerous to the environment, down from 54% in 2000.



37% think many claims about **environmental threats are exaggerated**, up from 24% in 2000. The proportion who think it is “definitely true” that fossil fuels contribute to climate change has fallen from 35% to 20%.

Some green behaviours are much more common than others, and, aside from recycling, are most likely to be practised by those who are concerned about the environment.



Recycling is now very common, but other forms of **environmentally-friendly behaviour** are far less common. Four in ten (39%) reduce energy use in the home and just two in ten (19%) cut back on driving the car.



Higher rates are found among those who think the rise in the world’s temperature caused by climate change is dangerous, half (52%) of whom reduce their energy use in the home.

Author: Eleanor Taylor*

On the face of it, there should be few political or social issues more epic or pressing than those concerning the environment and the future of our planet. To quote Sir Nicholas Stern's report to the British government on the economics of climate change (2006):

The scientific evidence is now overwhelming: climate change is a serious global threat, and it demands an urgent global response

A decade ago, there was strong evidence from *British Social Attitudes* that the public agreed. The 2000 survey showed that a large majority of people were concerned about the threat of rising temperatures and air pollution from cars and industry, and that this concern was increasing (Christie and Jarvis, 2001). The following decade has seen a succession of international catastrophes, from drought, flooding and deforestation to major oil leaks that have – irrespective of any specific link to climate change – kept issues of environmental pollution to the fore. In addition to well-publicised international incidents like Hurricane Katrina and the disaster at BP's Deepwater Horizon oil rig in the Gulf of Mexico, Britain itself experienced destructive flooding in Cornwall in 2004, in Cumbria the following year and across the country during the summer of 2007. These are all reasons why we might anticipate that concern about risks to the environment, not least carbon emissions linked to climate change, might have increased over the past 10 years. Politically, we can also observe how all the main parties have sought to emphasise their climate-friendly credentials; not least the Conservatives who gave environmental issues a central role in their re-branding under David Cameron and campaigned in the 2008 local elections under the slogan: "Vote blue – go green". Indeed, within days of forming his coalition administration with the Liberal Democrats in 2010, Mr Cameron told civil servants that he wanted it to be "the greenest government ever".

However, as we start to examine whether opinion in Britain has kept pace with the nation's policy makers, we may also note other reasons why the public might be less concerned about environmental issues. For example, in 2004 a public opinion survey found that terrorism, in the wake of the 9/11 attack in New York three years earlier, had displaced climate change as the most serious perceived threat to the world (Norton and Leaman, 2004). More recently, political and media commentators who reject the science of climate change have made much of a sequence of leaked emails between researchers at the University of East Anglia (UEA). These were alleged to show that data had been manipulated or withheld to strengthen the case for climate change. The international furore over 'climategate' was widely reported in 2009; not least in the United States where the Republican Vice-Presidential candidate, Sarah Palin, claimed that man-made climate change had been disproved. Although independent investigations subsequently cleared the UEA scientists of any tampering with research data, the negative publicity at the time may have shaken some people's trust in the science concerning man-made climate change. We might also anticipate that recession and other negative economic circumstances have influenced people's views. Unemployment increased in the two years preceding the 2010 *British Social*

* Eleanor Taylor is a Researcher at the *National Centre for Social Research* and a Co-Director of the *British Social Attitudes* survey series.

Attitudes survey and the financial ‘pinch’ was felt especially by people on lower incomes, as food, fuel and other prices rose through 2009 and 2010. We know from existing studies that issues such as the economy and unemployment are seen as higher priorities for the government than dealing with pollution and the environment (Thornton, 2009), and that people are reluctant to take action to help the environment if personal cost is involved (Lynn and Longhi, 2011). So it follows people may no longer give environmental issues such priority in their own lives – particularly if they feel there is a price that they are no longer willing to pay themselves for reducing levels of pollution.

British Social Attitudes sought people’s views on the environment in 1993, 2000 and most recently in 2010. This chapter uses data from those three years to examine trends in the public’s level of concern about dangers posed by pollution, climate change and other environmental hazards. To gain a more detailed impression of the way opinion has shifted, we also draw on annual data collected between 2005 and 2010 monitoring views on the impact of transport on climate change. We look at changing levels of activism and environmentally-friendly behaviour before launching an exploration of possible reasons for the trends that are highlighted by our analysis.

Dangers to the environment

We first consider whether public concern about environmental issues has increased or diminished in the last 10 years. To do this, we compare the responses in 1993, 2000 and 2010 to questions that measure the perceived danger of five specific threats to the environment. These are: “air pollution caused by cars”, “air pollution caused by industry”, “pesticides and chemicals used in farming”, “pollution of Britain’s rivers, lakes and streams” and “a rise in the world’s temperature caused by climate change”.¹ For each of these we asked respondents whether they think it is:

extremely dangerous for the environment

very dangerous

somewhat dangerous

not very dangerous, or

not dangerous at all for the environment

Table 6.1 shows the percentage of people in each of the three years who consider each pollutant or threat to be “very dangerous” or “extremely dangerous” to the environment. From this we can see that less than half the population (43 per cent) currently consider climate change to be dangerous for the environment. If anything,

43%

**consider climate change to be
dangerous for the environment**

people are rather more concerned by air pollution from industry (48 per cent) and water-borne pollution (46 per cent). Just 28 per cent think that air pollution caused by cars is dangerous for the environment.

We can also see a clear decline since 2000 in the perceived threat posed by different pollutants to the environment. On all but one of the measures (pesticides and chemicals in farming), the level of concern has dipped below that first recorded in 1993. The most dramatic fall is in perceptions of the risk posed by air pollution from cars, which has declined by 26 per cent since 2000 when 54 per cent considered it dangerous to the environment. There have also been decreases over the past decade in the perceived danger of air pollution from industry (15 percentage points), water pollution (16 points), and pesticides and chemicals used in farming (12 points). This decline in concern about dangers to the environment echoes the findings of other recent studies, for example, a study funded by the Department for Transport found that concern about climate change has fallen significantly since the mid-2000s (Department for Transport, 2011).

The decline in concern contrasts with the increases that occurred between 1993 and 2000 in relation to all the listed threats, apart from climate change. It could be that these changes in outlook reflect a view that specific pollution threats, widely publicised in the 1980s and 1990s, have since been tackled effectively. The fitting of pollution-filtering catalytic converters on new cars and the phasing out of leaded petrol may have convinced many motorists that their cars – despite continued concern about carbon emissions – are no longer such a threat to the environment. Action to clean up the Thames, the Mersey and other rivers once notorious for the extent of industrial pollution has produced positive news stories about the increasing diversity of fish and other wildlife now found in their waters. A widening choice of organic and pesticide-free produce in shops and supermarkets may further explain why people have become less concerned by the use of chemicals in farming. Even so, it is a striking discovery that people tend to be less alarmed by environmental hazards than 10 years ago. Remarkably, this decline in concern about climate change has occurred after repeated warnings from the UN Intergovernmental Panel on Climate Change (IPCC, 2007), the Stern report (2006) and others that the issues must be tackled faster and more effectively to avoid catastrophic long-term consequences around the world.

Table 6.1 Perceived danger of threats to the environment, 1993–2010

| | 1993 | 2000 | 2010 |
|--|------|------|------|
| % who consider these “very” or “extremely dangerous” to the environment | | | |
| Air pollution from industry | 54 | 63 | 48 |
| Air pollution caused by cars | 48 | 54 | 28 |
| A rise in the world’s temperature caused by climate change ¹ | 51 | 50 | 43 |
| Pollution of Britain’s rivers, lakes and streams | 61 | 62 | 46 |
| Pesticides and chemicals used in farming | 37 | 49 | 37 |
| <i>Base</i> | 1261 | 972 | 928 |

To gain further insight into people's thinking, we asked two further questions inviting people to agree or disagree with statements about the way that society in general treats environmental issues:

We worry too much about the future of the environment and not enough about prices and jobs today

People worry too much about human progress harming the environment

Knowing that concern about pollution and climate change has decreased in the past decade; we might expect to find an accompanying increase in support for these statements, suggesting that concern for the environment has been overplayed. The results, presented in Table 6.2, confirm this. The percentage agreeing that too much emphasis is placed on the environment and not enough on prices and jobs is eight points higher than in 2000 (43 per cent compared with 35 per cent) and the proportion agreeing that people worry too much about human progress harming the environment is up by seven points (35 per cent compared with 28 per cent). Meanwhile disagreement with both statements has fallen considerably since 2000. Notably, for the first time in 2010 more people agreed than disagreed that we worry too much about the environment and not enough about prices and jobs (43 per cent compared with 34 per cent).

Table 6.2 Views on public concern about the environment, 1993–2010

| | 1993 | 2000 | 2010 |
|---|------|------|------|
| We worry too much about the future of the environment and not enough about prices and jobs today | | | |
| | % | % | % |
| Agree | 36 | 35 | 43 |
| Neither | 13 | 13 | 20 |
| Disagree | 48 | 50 | 34 |
| People worry too much about human progress harming the environment | | | |
| | % | % | % |
| Agree | 30 | 28 | 35 |
| Neither | 18 | 22 | 25 |
| Disagree | 47 | 46 | 36 |
| <i>Base</i> | 1261 | 972 | 928 |

This suggests that the public has not only become less concerned about the threat posed by different types of pollution, but is also rather more sceptical that a problem really exists.

'Green' activism and environmentally-friendly behaviour

Before considering the reasons for this loss of concern in more detail, we will briefly look at trends in people's participation in activities related to environmental protection

and 'green' activism. While the key focus of the chapter is environmental attitudes, it is also important that we consider behaviour, and the relationship this has with concern about environmental issues. We asked respondents whether they had taken part in any of the following activities in the last five years:

...signed a petition about an environmental issue?

...given money to an environmental group?

...taken part in a protest or demonstration about an environmental issue?

We also asked:

Are you a member of any group whose main aim is to preserve or protect the environment?

The questions are designed to identify different levels of commitment. So it comes as little surprise to discover in Table 6.3 that more people take part in 'non-committal' activism, such as signing a petition (22 per cent) or giving money (16 per cent), than in environment-related protests or demonstrations (three per cent). But we also see there has been a marked decrease in the levels of participation compared with 20 years ago – although this only applies to non-committal activism. For example, the proportion who say they have given money to an environmental group is 13 points lower than in 1993. Involvement in committed environmental activism has stayed at a low, but stable level. Six per cent say they are members of an environmentalist group, and three per cent have taken part in a demonstration about an environmental issue.

Table 6.3 Taking part in environmental activism, 1993–2010

| | 1993 | 2000 | 2010 |
|---|------|------|------|
| % who... | | | |
| ...have signed a petition about an environmental issue | 36 | 30 | 22 |
| ...have given money to an environmental group | 29 | 23 | 16 |
| ...have taken part in a protest or demonstration about an environmental issue | 3 | 3 | 3 |
| ...are a member of a group to protect the environment | 6 | 6 | 6 |
| <i>Base</i> | 1261 | 972 | 928 |

35%

agree people worry too much about human progress harming the environment

We also asked respondents how often they engaged in a number of environmentally-friendly behaviours, by making “a special effort” to:

...sort glass or tins or plastic or newspapers and so on for recycling
...buy fruit or vegetables grown without pesticides or chemicals

They were also asked how often they:

...cut back on driving the car for environmental reasons
...reduce the energy or fuel you use at home for environmental reasons
...choose to save or re-use water for environmental reasons
...avoid buying certain products for environmental reasons

Table 6.4 shows that the vast majority of people (86 per cent) say they “always” or “often” make an effort to recycle. This is followed by 39 per cent who reduce their energy use at home, 37 per cent who make an effort to buy organic fruit and vegetables and 32 per cent who practise water conservation. Twenty-eight per cent avoid buying certain products for environmental reasons. A rather lower proportion of one in five (19 per cent) say they cut back on driving, but the response when the question was previously asked shows that this is on an upward trend (from 14 per cent in 2000 and nine per cent in 1993). As we see in our chapter on transport, there is widespread recognition among the public that individuals should reduce their car use for the sake of the environment – though many have not done so, even while recognising it would be as easy to make particular journeys by alternative modes of transport. Although trend data does not exist for all the behaviours, we can also see a much more striking increase in the proportion of the population who make efforts to recycle. Ten years ago it was 35 points lower at 51 per cent, and in 1993 it stood at just 42 per cent. We can reasonably expect that the driving force behind this major change in behaviour has been the legislation introduced in 2003 which required all English local authorities to provide doorstep recycling collections.²

Table 6.4 ‘Environmentally-friendly’ behaviours, 1993–2010

| | 1993 | 2000 | 2010 |
|--|------|------|------|
| % Always/often... | | | |
| ...make an effort to recycle | 42 | 51 | 86 |
| ...reduce energy use in the home | n/a | n/a | 39 |
| ...make an effort to buy fruit and vegetables grown without pesticides/chemicals | 20 | n/a | 37 |
| ...choose to save/re-use water | n/a | n/a | 32 |
| ...avoid buying certain products | n/a | n/a | 28 |
| ...cut back on driving the car | 9 | 14 | 19 |
| <i>Base</i> | 1261 | 972 | 928 |

n/a = not asked

There is, however, a clear disparity between the rates of recycling identified and people's involvement in other environmentally-motivated behaviours. A possible explanation is a contrast between the ease with which people can nowadays put out their recycling for collection and the inconvenience that many people might experience from making less use of their cars. Meanwhile, fruit and vegetables grown without pesticides and chemicals are generally more expensive than non-organic food, suggesting cost may be another reason why people may choose not to behave in a more environmentally-friendly manner.

It seems, generally, that people may be less likely to change their behaviour for the sake of the environment if this will cost them money, time or effort. If they are also feeling less worried about climate change they may feel there is even less reason to alter their behaviour, but is there evidence supporting a link between environmentally-friendly behaviours and concern about the environment?

In Table 6.5 we see that rates of recycling do not differ according to level of concern about the danger of climate change; in fact even among those who believe climate change is not dangerous to the environment, 85 per cent say they always or often recycle. However behaviours that require more radical lifestyle change, such as reducing energy use and driving less, are clearly associated with concern about climate change. For example, around half (52 per cent) of those who believe climate change is dangerous say they regularly reduce energy use in the home, compared with only a fifth (21 per cent) of those who believe it is not dangerous. A similar pattern is evident for cutting back on driving, with 28 per cent of those showing concern about climate change doing this regularly compared with 16 per cent of those who are not concerned.

Table 6.5 'Environmentally-friendly' behaviours, by perceived danger of climate change

| | Rise in world's temperature caused by climate change is... | | | All |
|----------------------------------|--|-----------------------|------------------|-----|
| | ...dangerous | ...somewhat dangerous | ...not dangerous | |
| % Always/often... | | | | |
| ...make an effort to recycle | 89 | 86 | 85 | 86 |
| ...reduce energy use in the home | 52 | 35 | 21 | 39 |
| ...cut back on driving the car | 28 | 13 | 16 | 19 |
| <i>Base</i> | 392 | 335 | 120 | 928 |

The nature of the associations between concern and actions seen in Table 6.5 highlight the ascension of recycling to a national social norm. Furthermore we see the importance of the role of public concern about perceived dangers to the environment in engaging people in environmentally-motivated behaviours. We now return to the search for reasons why people in Britain are significantly less concerned about the environment than they were 10 years ago.

Understanding changes in levels of concern

The measures of concern for the environment we have described so far do not allow us to consider trends in people's views at points in time between 2000 and 2010. This makes it difficult to ascertain whether there was a sudden downturn, or whether the downward trend occurred more slowly over time. Fortunately we are able to examine the responses to three further questions about travel in the context of climate change. Every year since 2005 we have asked:

...how concerned are you about the effect of transport on climate change?

We have also asked respondents to say how much they agree or disagree with the following statements:

The current level of car use has a serious effect on climate change

The current level of air travel has a serious effect on climate change

Table 6.6 shows that there has been a decline in public concern about the effect of transport on climate change since 2006, and that a particularly sharp fall occurred between 2009 and 2010. In 2009, 75 per cent of people said that they were concerned about the effect of transport on climate change, but this fell to 68 per cent a year later. A similar pattern can be seen for the questions about car use and air travel. While 73 per cent said that car use has a serious effect on climate change in 2009, this dropped to 64 per cent in 2010. Similarly 71 per cent in 2009 said that air travel has a serious effect on climate change, falling to 66 per cent in 2010. We also see in our chapter on transport, which focuses on the environmental dangers of car use in more detail, that concern about exhaust fumes specifically is in decline; 81 per cent were concerned about this in 2005, compared to 70 per cent now.

Table 6.6 Views on the effect of transport on climate change, 2005–2010

| | 05 | 06 | 07 | 08 | 09 | 10 |
|--|------|------|------|------|------|------|
| % concerned about the effect of travel on climate change | 80 | 81 | 76 | 74 | 75 | 68 |
| % agree that car use has a serious effect on climate change | 77 | 80 | 72 | 73 | 73 | 64 |
| % agree that air travel has a serious effect on climate change | 64 | 74 | 70 | 72 | 71 | 66 |
| <i>Base</i> | 1101 | 3220 | 3094 | 3364 | 3421 | 3297 |

Explaining changing attitudes

Earlier we described the possible effect that the changing economic climate might have on levels of environmental concern. The banking and financial crisis of recent years first hit in 2008, a year or so before the downturn in concern between 2009 and 2010 illustrated in Table 6.6. So there is no conclusive proof here of a link between Britain's economic woes and declining environmental concern. However, this does not rule out a relationship between the two; there could have been some delay before the financial crisis was felt by individuals to the point where it altered the priority they placed on environmental issues.

Another potential explanation for the changing attitudes we have observed is the influence of climate change sceptics in the media and the extensive coverage given to the 'climategate' affair of 2009–2010. To examine this possibility we can consider how people respond to a question inviting them to agree or disagree that:

Many of the claims about environmental threats are exaggerated

They are also invited to say whether the following statement is “definitely true”, “probably true”, “probably not true” or “definitely not true”:

Every time we use coal or oil or gas, we contribute to climate change³

Although it is the consensus view among scientists that the burning of carbon-based fuels is a major cause of climate change, Table 6.7 suggests there has been significant increase in public scepticism that this is so since 2000. A decade ago, a quarter (24 per cent) of respondents agreed that many claims about environmental threats are exaggerated; but in 2010 this has risen to 37 per cent. Fewer people, meanwhile, fully accept that fossil fuels contribute to climate change. For example, where 35 per cent in 2000 believed it was ‘definitely’ true that personal use of fossil fuels contributes to climate change, only 20 per cent are nowadays so certain. Around half say it is probably true (51 per cent), while 17 per cent think it is probably or definitely untrue.

Table 6.7 Scepticism about climate change, 2000, 2010

| | 2000 | 2010 |
|---|------|------|
| Many claims about environmental threats are exaggerated | % | % |
| Agree | 24 | 37 |
| Neither agree nor disagree | 25 | 26 |
| Disagree | 45 | 32 |
| Every time we use coal or gas or oil we contribute to climate change³ | % | % |
| Definitely true | 35 | 20 |
| Probably true | 46 | 51 |
| Definitely/Probably not true | 12 | 17 |
| <i>Base</i> | 972 | 928 |

Can we be quite sure that the rise in scepticism about environmental threats is related to declining levels of concern about climate change and other issues? Table 6.8 compares people's replies to our question about the degree of danger posed by the world's rising temperature with their views on whether claims about environmental threats have been exaggerated, and whether use of fossil fuels contributes to climate change. We can think of those who agree with the statement "many claims about environmental threats are exaggerated" as climate change 'sceptics' and those who disagree as 'believers' in climate change. In 2000, 34 per cent of the sceptics described a rise in the world's temperature as "very" or "extremely" dangerous, compared with 60 per cent of believers. But this distinction appears even stronger in 2010, when just 24 per cent of sceptics show concern about the world's rising temperatures, compared with 73 per cent of believers.

Table 6.8 Agreement that a rise in the world's temperature is dangerous to the environment, by climate change scepticism, 2000, 2010

| | % Agree that a rise in world's temperature is very/extremely dangerous | | | |
|---|--|------|------|------|
| | 2000 | Base | 2010 | Base |
| Many claims about environmental threats are exaggerated | | | | |
| Agree (sceptics) | 34 | 235 | 24 | 345 |
| Neither agree nor disagree | 37 | 236 | 36 | 225 |
| Disagree (believers) | 60 | 343 | 73 | 233 |
| Every time we use coal or gas or oil we contribute to climate change³ | | | | |
| Definitely true (believers) | 75 | 329 | 76 | 164 |
| Probably true | 43 | 442 | 48 | 470 |
| Definitely/Probably not true (sceptics) | 29 | 123 | 10 | 162 |
| All | 50 | 972 | 43 | 928 |

We see a similar pattern when comparing views about whether use of fossil fuels contributes to climate change. In 2000, 75 per cent of those who said it definitely contributes to what was then widely referred to as the 'greenhouse' effect agreed that rising temperatures are particularly dangerous, while 29 per cent of 'sceptics' (despite doubting the contribution made by burning fossil fuels) said the same. Again in 2010 this effect was more pronounced, with just 10 per cent of 'sceptics' agreeing that a rise in temperatures is dangerous.

We can, therefore, see that climate change scepticism has not only grown since 2000, but is also directly linked to a decline in concern about the effects of climate change. This, coupled with the notable fall in concern about the effect of transport on climate change between 2009 and 2010, means we may reasonably suspect that the drop in public concern about the environment is to some extent connected with the media furore surrounding the 2009 'climategate' affair.

Changing views among social groups

By examining the views of different social groups, we will now try to find out which sections of society are most concerned about the threat from climate change, which are the most sceptical and which – over a 10 year period – have demonstrated the greatest tendency to change. Table 6.9 shows changes in the perceived danger of air pollution from cars, and a rise in world temperature caused by climate change by age, educational attainment, level of income and identification with a political party.

The expression of strong concern about climate change has declined markedly among three particular groups: older people, those with the lowest educational qualifications, and those in the lowest income groups. Thus in 2000, people over 65 were less likely than other age groups to regard a rise in world temperature as alarming (47 per cent). But in 2010, little more than a quarter (28 per cent) view it as particularly dangerous. Meanwhile people aged 55–64, who were the most likely to show strong concern (56 per cent) in 2000, have become rather less worried (43 per cent) than younger people; the age groups whose view have changed least since 2000. In terms of educational background, we see that the biggest decline in serious concern about climate change has been among people without qualifications (from 47 per cent to 28 per cent), while the proportion of graduates considering it particularly dangerous to the environment is around the same level as a decade earlier. A comparable pattern emerges in relation to income where views among people in the lowest income quartile are the most likely to have changed (from 54 per cent to 37 per cent), and the proportion of those in the highest income quartile is around a half, and has not altered.

Data on party political sympathies, meanwhile, reveals some distinct differences. Conservative supporters (38 per cent) are markedly less likely to show strong concern about the environmental consequences of global warming than those who lean towards Labour (49 per cent) or the Liberal Democrats (55 per cent). However, while the level of concern among Conservative and Liberal Democrat sympathisers is much the same as in 2000, concern among Labour supporters shows a modest five point decline.

While concern about climate change has only decreased among certain demographic groups, all groups saw a considerable drop in concern about the danger of pollution from cars. This holds true even among groups that have remained stable in their level of concern about climate change. For example, concern about car pollution among younger people aged 18–34 has declined by 18 points since 2000, from 51 per cent to 34 per cent. Likewise, concern about car pollution among those with degree level education has fallen by almost a quarter, from 62 per cent to 39 per cent.

37%

agree that many claims about environmental threats are exaggerated

Table 6.9 Concern about the dangers to the environment, by demographic group, 2000 and 2010⁴

| | % “Extremely dangerous” or “very dangerous” to the environment | | | | | |
|---|--|------|----------|--|------|----------|
| | Air pollution from cars | | | Rise in world’s temperature caused by climate change | | |
| | 2000 | 2010 | % change | 2000 | 2010 | % change |
| Age | | | | | | |
| 18–34 | 51 | 34 | -18 | 52 | 48 | -3 |
| 35–54 | 54 | 27 | -27 | 49 | 48 | -1 |
| 55–64 | 58 | 29 | -29 | 56 | 43 | -13 |
| 65+ | 56 | 21 | -35 | 47 | 28 | -19 |
| Educational attainment | | | | | | |
| Degree or higher | 62 | 39 | -23 | 61 | 63 | 1 |
| Below degree level | 53 | 26 | -27 | 49 | 42 | -7 |
| No qualifications | 51 | 25 | -26 | 47 | 28 | -19 |
| Household income (quartiles)⁵ | | | | | | |
| Lowest quartile | 59 | 27 | -32 | 52 | 37 | -15 |
| 2nd lowest quartile | 53 | 28 | -26 | 48 | 36 | -11 |
| 2nd highest quartile | 57 | 31 | -26 | 55 | 50 | -5 |
| Highest quartile | 47 | 27 | -20 | 49 | 52 | 3 |
| Party identification | | | | | | |
| Conservative | 45 | 21 | -24 | 40 | 38 | -2 |
| Labour | 60 | 32 | -28 | 54 | 49 | -5 |
| Liberal Democrat | 61 | 36 | -25 | 56 | 55 | -1 |
| All | 54 | 28 | -26 | 50 | 43 | -7 |

Since age, educational background, income and political inclination are interrelated; our next step is to apply statistical controls to discover whether any one of these factors is particularly influential in predicting concern about climate change. (A more detailed account of our regression analysis can be found in the appendix at the end of this chapter.) From this, we find that educational qualifications and party identification are strongly related to the level of concern that people express. However, after taking account of education and age, income ceases to be a significant predictor of people’s views. Overall, educational attainment and political party identification explain much of the variation in levels of concern about pollution from cars, while only educational attainment was found to account for the variation in concern about climate change.

Financial sacrifices

Notwithstanding our finding that income does not predict people's concerns about climate change independently of their age and educational background, we can strongly suspect that it influences their willingness to pay for environmental protection out of their own pockets. The *British Social Attitudes* survey asks:

How willing would you be to pay much higher prices in order to protect the environment?

And how willing would you be to pay much higher taxes in order to protect the environment?

And how willing would you be to accept cuts in your standard of living in order to protect the environment?

Given the deterioration in Britain's economic fortunes during recent years, we would expect people's willingness to pay higher prices and taxes to have decreased since last measured in 2000. Table 6.10 shows that this is not only the case among people living on low incomes, but across the income distribution. Whereas, 43 per cent a decade ago said they would be willing to pay higher prices to protect the environment, this is nowadays only true of 26 per cent. There has been a similar fall in the proportion prepared to pay higher taxes (31 to 22 per cent), but a smaller decline in relation to cuts in the standard of living (26 per cent to 20 per cent). We can see equivalent increases in the proportion of respondents who say they would be unwilling to do these three things for the sake of the environment.

People in the lowest income quartile are rather less willing than others to accept cuts in their living standards to protect the environment (54 per cent), but the proportion among the highest income quartile saying the same is not hugely different, having risen from 40 per cent in 2000 to 48 per cent. There is little difference in the levels of opposition to higher taxes across all four groups, but willingness to pay more to help the environment (while lower than in 2000) is greater among those with higher incomes. People in the highest income quartile are more willing than others to accept higher prices (36 per cent), but this is well below the proportion 10 years earlier (52 per cent). Although we do not have any data for the intervening years, we can continue to suspect that the recession and its aftermath are implicated in the way that people's views have changed. However, we may also be witnessing a two-way process where reduced willingness to make sacrifices for the sake of the environment is linked to rising levels of scepticism, and *vice versa*.

26%

say they would be willing to pay higher prices to protect the environment, down from 43% a decade ago

Table 6.10 Willingness to make sacrifices for the sake of the environment, 2000 and 2010, by income band (quartiles)

| | 2000 | | | | All | 2010 | | | | All |
|---|---|---------------------|----------------------|------------------|-----|---|---------------------|----------------------|------------------|-----|
| | Household income (quartiles) ⁵ | | | | | Household income (quartiles) ⁵ | | | | |
| | Lowest quartile | 2nd lowest quartile | 2nd highest quartile | Highest quartile | | Lowest quartile | 2nd lowest quartile | 2nd highest quartile | Highest quartile | |
| Pay much higher prices | % | % | % | % | % | % | % | % | % | % |
| Willing | 43 | 37 | 42 | 52 | 43 | 23 | 24 | 27 | 36 | 26 |
| Unwilling | 27 | 25 | 26 | 21 | 24 | 40 | 39 | 41 | 30 | 38 |
| Pay much higher taxes | % | % | % | % | % | % | % | % | % | % |
| Willing | 29 | 24 | 35 | 41 | 31 | 17 | 17 | 28 | 27 | 22 |
| Unwilling | 38 | 43 | 42 | 33 | 40 | 49 | 49 | 51 | 47 | 50 |
| Accept cuts in your standard of living | % | % | % | % | % | % | % | % | % | % |
| Willing | 21 | 25 | 28 | 32 | 26 | 19 | 16 | 19 | 29 | 20 |
| Unwilling | 51 | 50 | 48 | 41 | 48 | 54 | 51 | 51 | 48 | 53 |
| <i>Base</i> | 295 | 221 | 212 | 174 | 972 | 233 | 173 | 184 | 205 | 928 |

Conclusions

Having established in this chapter that public concern about climate change and a range of other environmental issues has declined in Britain over the past decade, we have explored some of the potential reasons for this. These principally relate to the way people have been affected by the recession and economic hardship and to the fact that there is greater public scepticism about the science of climate change than 10 years ago.

The rise in public scepticism may be connected with a sense of environment ‘fatigue’

We have seen that income, although correlated with serious concerns (or a lack of them) about climate change, is not directly implicated after taking account of people's age and educational background. But we have also observed a large decline among people on the lowest incomes in assessments of the danger level created by global warming and in their personal willingness to pay higher prices in order to protect the environment. Since we have also seen a significant dip between 2009 and 2010 in concerns about the effect that car use and air travel have on climate change, there is a case for thinking that economic uncertainties have, indeed, played a part in making people less concerned about pollution and the consequences of climate change. Economic recovery, if and when it comes, may serve to restore flagging public interest in tackling environmental challenges – especially if it restores people's willingness to accept more of the personal cost implications.

The evidence also suggests, not surprisingly, that greater scepticism about climate change has influenced the extent to which people view climate change as dangerous. The timing of the fall in concerns about car and air travel points the finger more specifically in the direction of the 'climategate' row that erupted towards the end of 2009. Notwithstanding the way that the charges levelled at climate change science, and scientists, have since been nullified, it seems the initial publicity may have exerted a disproportionate influence on British public opinion. From this we conclude that media coverage may make a difference – not least 'new' media and the internet 'blogosphere' where unfounded opinion can sometimes be favoured over scientific fact.

Another possibility we must consider in the light of these findings is that the rise in public scepticism may be connected with a sense of environment 'fatigue'. People, despite their exposure to mounting evidence concerning the negative future consequences of climate change, may have come to feel over time that climate change has little to do with them personally or their lives. We know from existing research that people who feel distant geographically or chronologically from the impact of environmental threats, tend to think of them as a problem affecting 'other people' (see, for example, Lorenzoni *et al.*, 2005). They may also consider that the problems that come closest to their daily experiences, such as car emissions and river pollution are being tackled and that there is less to worry about than 10 or 20 years ago.

As we have seen, there is a link between people's concern about climate change and their engagement in environmental behaviours. However it is those behaviours that involve a higher personal cost, both financially and in terms of lifestyle change, that are most strongly linked with environmental concern. If the government is to increase the prevalence of such behaviours among the general public, addressing levels of concern and scepticism about the causes of climate change may be a logical place to start.

Notes

1. The wording of this question differed in 2010 to that used in 2000 and 1993. In the two earlier surveys we asked: "*In general, do you think that a rise in the world's temperature caused by the 'greenhouse effect' is...*" The 2010 survey replaced the term 'the greenhouse effect' with 'climate change' to reflect the changing terminology being used between 2000 and 2010 in discourse surrounding the greenhouse effect and its consequences in terms of climate change and global warming.

2. The Household Waste Recycling Act of 2003 required that English local authorities introduce kerbside collections for at least two types of recyclable waste by the year 2010. The act in full is available at www.legislation.gov.uk/ukpga/2003/29/pdfs/ukpga_20030029_en.pdf
3. The wording of this question differed in 2010 to that used in 2000 and 1993. In these earlier surveys we asked: “*Every time we use coal, oil or gas, we contribute to the greenhouse effect*”. The 2010 survey replaced the term ‘the greenhouse effect’ with ‘climate change’. The reason for this is discussed in Note 1.
4. Bases for Table 6.9 are as follows:

| | % “Extremely dangerous” or “very dangerous” to the environment | | | |
|-------------------------------------|--|------------|--|------------|
| | Air pollution from cars | | Rise in world’s temperature caused by climate change | |
| | 2000 | 2010 | 2000 | 2010 |
| Age | | | | |
| 18–34 | 257 | 187 | 257 | 187 |
| 35–54 | 382 | 347 | 382 | 347 |
| 55–64 | 125 | 175 | 125 | 175 |
| 65+ | 207 | 218 | 207 | 218 |
| Education | | | | |
| Degree or higher | 130 | 202 | 130 | 202 |
| Qualification below degree | 552 | 428 | 552 | 428 |
| No qualifications | 269 | 207 | 269 | 207 |
| Household income (quartiles) | | | | |
| Lowest quartile | 295 | 233 | 295 | 233 |
| 2nd lowest quartile | 221 | 173 | 221 | 173 |
| 2nd highest quartile | 212 | 184 | 212 | 184 |
| Highest quartile | 174 | 205 | 174 | 205 |
| Party identification | | | | |
| Conservative | 274 | 280 | 274 | 280 |
| Labour | 409 | 279 | 409 | 279 |
| Liberal Democrat | 89 | 129 | 89 | 129 |
| All | 972 | 928 | 972 | 928 |

5. Household income quartiles in Tables 6.9 and 6.10 are as follows: for 2000, the lowest quartile is £10,000 or less per year, the second lowest quartile is £10,001 to £20,000 per year, the second highest quartile is £20,001 to £34,999 per year, the highest quartile is £35,000 or more per year; for 2010 the lowest quartile is £12,000 or less per year, the second lowest is £12,001 to £26,400 per year, the second highest is £26,401 to £44,400 per year, and the highest quartile is £44,401 or more per year.

References

Christie, I. and Jarvis, L. (2001), 'How green are our values?' in Park, A., Curtice, J., Thomson, K., Jarvis, L. and Bromley, C. (eds.), *British Social Attitudes: the 18th Report – Public policy, Social ties*, London: Sage

Department for Transport (2011), *Attitudes to climate change and its impact on transport*, available at www.dft.gov.uk/statistics/releases/attitudes-to-climate-change-and-its-impact-on-transport-august-2010

Intergovernmental Panel on Climate Change (2007), *Climate Change 2007 – Synthesis Report*. Geneva: United Nations Intergovernmental Panel on Climate Change

Lynn, P. and Longhi, S. (2011), 'Environmental attitudes and behaviour: who cares about climate change?' *Understanding society: early findings from the first wave of the UK's household longitudinal study*, Colchester: Institute for Social and Economic Research, University of Essex

Norton, A. and Leaman, J. (2004), *The day after tomorrow: Public opinion on climate change*, London: MORI Social Research Institute

Poortinga, W. and Pidgeon, N. F. (2003), *Public perceptions of risk, science and governance – Main findings of a British survey on five risk cases*, Technical Report, Centre for Environmental Risk, Norwich: University of East Anglia

Stern, N. (2007), *The Stern Review: the Economics of Climate Change*, Cambridge: Cambridge Press

Thornton, A. (2009), *Public attitudes and behaviours towards the environment – tracker survey: A report to the Department for Environment, Food and Rural Affairs*, available at www.defra.gov.uk/statistics/files/report-attitudes-behaviours2009.pdf

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Appendix

The multivariate analysis technique used is logistic regression – more details can be found in Appendix I of the report. The dependent variable for Table A.1 is whether the respondent thinks that air pollution from cars is “extremely” or “very dangerous”, rather than “somewhat”, “not very” or “not dangerous at all”. A positive coefficient indicates that the group is more likely than the reference group (shown in brackets) to think air pollution from cars is dangerous while a negative coefficient indicates the group is less likely than the reference group to think it is dangerous.

Table A.1 Logistic regression on whether people think that air pollution from cars is dangerous to the environment

| | Coefficient | Standard error | p value |
|--|-------------|----------------|---------|
| Sex (male) | | | |
| Female | 0.192 | 0.156 | 0.218 |
| Age (18–34) | | | 0.515 |
| 35–54 | -0.123 | 0.208 | 0.553 |
| 55–64 | 0.059 | 0.250 | 0.814 |
| 65+ | -0.289 | 0.269 | 0.283 |
| Household income quartiles | | | |
| (lowest quartile) | | | 0.479 |
| Second lowest quartile | -0.129 | 0.242 | 0.593 |
| Second highest quartile | -0.264 | 0.247 | 0.286 |
| Highest quartile | -0.451 | 0.266 | 0.090 |
| Education (Degree) | | | 0.002 |
| Higher education below degree | -0.318 | 0.269 | 0.237 |
| A level or equivalent | -0.540 | 0.265 | 0.042 |
| O level or equivalent | ** -0.948 | 0.250 | 0.000 |
| No qualifications | ** -0.817 | 0.277 | 0.003 |
| Party identification (Conservative) | | | 0.034 |
| Labour | ** 0.605 | 0.207 | 0.003 |
| Liberal Democrat | 0.398 | 0.250 | 0.111 |
| Other party | 0.334 | 0.222 | 0.133 |
| Constant | -0.476 | 0.344 | 0.166 |

Base: 883

* significant at 95% level

** significant at 99% level

The dependent variable for Table A.2 is whether the respondent thinks that a rise in the world's temperature caused by climate change is "extremely dangerous" or "very dangerous", rather than "somewhat", "not very" or "not dangerous at all". A positive coefficient indicates that the group are more likely than the reference group (shown in brackets) to think climate change is dangerous to the environment while a negative coefficient indicates the group are less likely than the reference group to think it is dangerous.

Table A.2 Logistic regression on whether people think that a rise in the world's temperature caused by climate change is dangerous to the environment

| | Coefficient | Standard error | p value |
|--|-------------|----------------|---------|
| Sex (male) | | | |
| Female | 0.103 | 0.146 | 0.483 |
| Age (18-34) | | | 0.090 |
| 35-54 | 0.153 | 0.198 | 0.442 |
| 55-64 | 0.064 | 0.240 | 0.789 |
| 65+ | -0.474 | 0.257 | 0.065 |
| Household income quartiles | | | |
| (lowest quartile) | | | 0.975 |
| Second lowest quartile | -0.141 | 0.230 | 0.540 |
| Second highest quartile | -0.085 | 0.232 | 0.715 |
| Highest quartile | 0.021 | 0.247 | 0.933 |
| Education (Degree) | | | 0.000 |
| Higher education below degree | -0.146 | 0.263 | 0.579 |
| A level or equivalent | -0.440 | 0.250 | 0.079 |
| O level or equivalent | ** -1.021 | 0.232 | 0.000 |
| No qualifications | ** -0.956 | 0.268 | 0.000 |
| Party identification (Conservative) | | | 0.131 |
| Labour | 0.358 | 0.192 | 0.062 |
| Liberal Democrat | 0.359 | 0.233 | 0.123 |
| Other party | 0.015 | 0.204 | 0.941 |
| Constant | 0.257 | 0.329 | 0.435 |

Base: 847

* significant at 95% level

** significant at 99% level