

## **Research Project: Climate Change and Carbon Reduction: Understandings of Climate Change.**

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### **Background:**

As scientific evidence of climate change and its current and likely future impact grows, so does the urgent need to promote change through policy and practice. To meet the UK's national and international greenhouse gas (GHG) emissions reduction targets, there is an urgent need to better understand and enable societal engagement in mitigation. The response of individuals in their varying roles as consumers, citizens, managers, policy makers or investors, to climate change is strongly influenced by their understandings of, and perceptions about, that issue. BRASS researchers are interested in exploring how climate change understandings and perceptions evolve and are shaped. This research also links into other projects concerning how those understandings and perceptions influence behaviours in relation to climate change, energy, transport and food in particular (See also A33, A2 and A5-10).

### **Aims & objectives:**

- To explore how people understand and relate to climate change as an issue;
- To identify underlying attitudes towards climate change risks and their role in influencing responses;
- To examine particular approaches to engaging people with climate change in ways that improve their understanding and willingness to respond in terms of behaviour change.

### **About the research:**

This research has included a number of distinct strands including:

- **Climate Change Attitudes:** Part of this work involved qualitative research probing people's unprompted conceptions of climate change and global warming. BRASS Researcher Dr Lorraine Whitmarsh was also the lead author in a major review of research into climate change attitudes for the RCUK Energy Programme. The *Climate Change and the Future of Brands* research, although having a strong element of understanding climate orientated behaviours (see A33), also explored a range of perceptual issues. These mainly concerned the associations consumer made between particular products, brands and companies and the issue of climate change, and where they felt the responsibility lay for both causing climate change, and responding to the challenges it presents.
- **Carbon capability:** The policy goal of engaging the public in climate change orientated behaviours implies a need for public understanding of the causes and consequences of carbon emissions, as well as the ability to reduce emissions. However, little has been done to consider the situated meanings of carbon and energy in everyday life and decisions. BRASS research sought to explore the concept of 'carbon capability', a term which captures the contextual meanings associated with carbon and individuals' abilities and motivations to reduce emissions. Survey data was used to explore public engagement with climate change and carbon capability, focusing on both individual and institutional dimensions.
- **Public perceptions of climate change in Wales:** This representative survey of public perceptions in Wales was funded through the Climate Change Consortium of Wales (C3W) and was run in partnership with Aberystwyth University. The survey has a particular focus on gauging public perceptions about climate change adaptation – for example, whether there is seen to be a need for individuals, communities and Wales itself to adapt to climate change. Following the flooding experienced in parts of the country during 2012, the survey also examined whether there are links between people's experience of flooding and their views about climate change.

- Climate change and personal identity: How people frame climate change as an issue and see themselves in relation to it are important determinants of their responses. This work included an investigation of the importance of ‘green identity’ – i.e., seeing oneself as an environmentally-concerned person – on adopting certain sustainable behaviours, particularly consumer choices (i.e. environmentally orientated shopping).

### Results and outputs:

The work on attitudes showed that the public tended to dissociate themselves from the causes, impacts, and responsibility for tackling climate change/global warming. It also revealed important differences between public understanding of “climate change” and of “global warming,” with the latter term evoking the greater concern. The work on carbon capabilities revealed very diverse public understandings about ‘carbon’ amongst the UK public encompassing technical, social, and moral discourses. This provides further evidence of an environmental value-action gap in relation to adoption of low-carbon lifestyles. The work on identities found that climate-related travel habits and energy saving behaviours in the home are less influenced by psychological factors than by contextual factors, such as residential location and age. This may be because shopping for material objects (unlike energy) is ‘conspicuous consumption’ and more likely to be an expression of identity. On the other hand, knowledge and concern about climate change were shown to have little influence on adoption of climate-orientated behaviours which are often constrained by various psychological, social and structural barriers.

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### Impacts achieved/potential for impact:

This work has fed directly into policy making through submissions to UK and Welsh government. Much of this work has the potential for direct impact in helping those seeking to communicate with or influence consumers/citizens in relation to climate change either in relation to marketing particular goods or services to them, or for encouraging particular pro-environmental behaviours within peoples’ lifestyles.