"The Good Life": Engaging the public with community-based carbon reduction strategies

Stephen Axon

School of Natural Sciences and Psychology, Liverpool John Moores University, James Parsons Building, Liverpool, England L3 3AF, United Kingdom

A B S T R A C T

In recent years the UK has positioned itself to become a global leader in addressing climate change. Along with this positioning, there has been an increasing emphasis on the role of communities to facilitate, increase and sustain carbon reduction practices. Previous research into community-based carbon reduction projects has highlighted the difficulty of engaging the public in community initiatives and sustaining pro-environmental behaviours. The importance placed on addressing climate change necessitates an understanding of how individuals respond to, and engage with, (or even ignore) community-based carbon reduction strategies. The paper presents findings from focus groups in three urban communities and investigates individual engagements with community-based carbon reduction strategies. Focusing on the three dimensions of engagement: cognitive; affective and; behavioural, the paper discusses what people know, feel and do about addressing climate change at the community level. An "information-vacuum" is reported that leads to an "awareness-involvement gap" that inhibits sustained engagement with community projects. Drawing on these findings, the paper advances a new theoretical framework and a "what works" approach for community-based initiatives attempting to meaningfully engage the public with addressing climate change and sustainable living.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The IPCC have repeatedly called for governments, businesses and communities to tackle the dual challenge of addressing climate change: mitigation and adaptation. The recent Paris agreement outlines a global deal to limit global temperatures "well below" 2 °C above pre-industrial levels with the ultimate objective to reduce this to 1.5 °C (UNFCCC, 2015); limits associated with mitigating dangerous climate change (Dessai et al., 2004). Despite being questioned recently regarding its changes in energy and climate policy (BBC News, 2015), the UK has become a leading proponent of global long-term CO_2 reduction. The UK Climate Change Act 2008 aims to facilitate and establish the transition to a low-carbon society that focuses on the long-term target of reducing greenhouse gas emissions by at least 80% by 2050 from a 1990 baseline (DEFRA, 2008). Along with this positioning, there has been an increasing emphasis on the role of communities to facilitate, increase and sustain carbon reduction practices. This has substantial implications for individual lifestyle choices and behaviour, including the social contexts and governance structures

that these take place (Whitmarsh et al., 2011). With over one-third of many developed nations' carbon emissions attributed to domestic energy use and private travel, individuals and communities have a key role in the transition towards a low-carbon sustainable society and future (Middlemiss, 2011; Whitmarsh et al., 2013).

Individuals can choose to act in various ways to promote a low-carbon society, such as measuring their carbon footprint; voting for "green" policies; fly less; purchasing energy efficient appliances; or promoting and campaigning for a low-carbon future (Moloney et al., 2010; Whitmarsh and O'Neill, 2011). Community-based approaches to addressing climate change have the potential to address barriers to action where other individualistic approaches have failed (Alexander et al., 2007; Heiskanen et al., 2010; Peters et al., 2012, 2013), taking into account the social nature of behaviour (Jackson, 2005; Darnton, 2008) and the ability to ground the acceptability of sustainable living in homes and communities (Barr and Gilg, 2006; Barr et al., 2011; Middlemiss, 2011). Yet despite the growth of such community approaches there has, to date, been little empirical research into the multitude of ways in which the public engage with addressing climate change within community projects and identifying the enablers of, and barriers to, (sustained) participation. Previous research has so far failed to

E-mail address: S.J.Axon@ljmu.ac.uk (S. Axon).

explicitly explore the character of individual engagements with community-based sustainability initiatives that ground practices towards addressing climate change and their meanings for those who choose to (not) engage with them. This is, therefore, a topical yet under-researched area of investigation. The importance placed on major environmental issues such as climate change necessitates an understanding of how individuals or 'publics' respond to, and engage with, (or even ignore) the issue(s) of addressing climate change in their communities.

This paper contributes new understandings of how, and why, residents in their communities engage on a number of cognitive, affective and behavioural levels with community-based carbon reduction strategies (CBCRS). In so doing, the paper illustrates the multiple ways in which individuals engage with such projects or justify their choice for nonparticipation in a community approach that aims to facilitate, increase and maintain sustainable lifestyles to address climate change. The paper advances a new theoretical concept that outlines the processes of engagements and the factors affecting (sustained) participation. These advances in knowledge relating to how individuals engage with addressing climate change at the community level provide not just an academic contribution to fields of geography; environmental social science; environmental psychology; and community engagement, but also deliver value in terms of their practical application. The findings in this paper are of particular relevance to practicing communities that have established, or are considering establishing, CBCRS seeking to build, and sustain, or even refresh, effective citizen participation. The paper concludes with practical applications to actively and meaningfully engage residents, demonstrating what will, and will not, work to encourage and sustain engagement with CBCRS that go beyond tokenistic participation. This addresses fundamental research gaps and practice-based issues highlighting the difficulty of maintaining public engagement in community initiatives and sustaining pro-environmental behaviours to address climate change (Alexander et al., 2007; Peters et al., 2013; Clayton et al., 2015). While the focus of this paper is the UK, the discussion and conclusions are relevant further afield.

1.1. Community-based carbon reduction strategies

Behavioural change programmes have increasingly been viewed as the "holy grail" of sustainability policies (Jackson, 2005; Darnton, 2008), yet previous attempts to change behavioural responses have utilised economic incentives, education, communication and persuasion campaigns (Barr et al., 2003; Barr and Gilg, 2005; Heiskanen et al., 2010). These attempts have repeatedly failed to change the interactions between people, energy consumption and use, and the environment; and account for the socially grounded nature of human behaviour, communicated messages and the heterogeneity of media and audiences (Verplanken, 2011; Whitmarsh and Lorenzoni, 2011). Community level initiatives hold the potential to ground climate policy and action in a much more visible way to the everyday practicalities of energy use and lifestyle choices than more 'top-down' measures have been able to realise (Ockwell et al., 2009). These assertions signpost the great potential for application of behavioural change initiatives tailored towards communities.

Community-based carbon reduction strategies (CBCRS) are one example of action designed to contribute towards addressing climate change and facilitate sustainable low-carbon living (Alexander et al., 2007; Middlemiss and Parrish, 2010; Middlemiss, 2011), bringing together citizens to act collectively in creative ways on energy, climate and sustainability issues (Heiskanen et al., 2010; Mulugeeta et al., 2010). This paper offers a new definition of CBCRS as a network of organisations and residents working in collaboration that aim to reduce domestic and whole-community carbon

emissions in the local community through changing behaviour and using green technologies to facilitate, increase and maintain sustainable low-carbon lifestyles. This definition takes into account the number of stakeholders involved in the organisation, and delivery, of community-based carbon reduction and the diversity of interventions utilised to change behaviour and the application of small-scale technical solutions, that comprise grassroots action and innovation (Seyfang and Longurst, 2013; Feola and Nunes, 2014); becoming a product of local experimentation (North, 2010). Additionally, this definition outlines that these projects operate and seek to change individual lifestyles in the short and long term to meaningfully engage the public; cognitively, affectively and behaviourally.

CBCRS fit firmly within broader notions of sustainable living (Middlemiss, 2011). For sustainable lifestyles to become the norm within society, they must be enabled and encouraged by the socio-technical systems and institutions that surround us (Geels, 2002; Geels and Schot, 2007). Given the rise of local sustainable development and the emphasis placed on individual actions for sustainability, incorporating a range of behavioural responses as part of a broader community-based approach to addressing climate change is necessary for transitions towards low-carbon living (Barr and Gilg, 2006). CBCRS are therefore potentially a very useful approach to facilitate, increase and maintain the uptake of sustainable lifestyles and frame decision-making and actions within the context of local communities, where the co-production, co-governance, and co-delivery of a community project can utilise multiple interventions, embedding sustainable living as part of everyday life (Axon, 2015). Examples of CBCRS include the Ashton Hayes Going Carbon Neutral Project aiming to become the first carbon neutral village in England (Alexander et al., 2007; Forrest and Wiek, 2014), and the Transition Towns Network seeking to reduce carbon emissions, adapt to the consequences of climate change and prepare for a world following peak oil (Aitken, 2012; Feola and Nunes, 2014). These community projects demonstrate that actions taken to address climate change at the community level can be cost effective; foster cohesive and resilient communities; larger emissions reductions are possible; and importantly, local people are involved in the low-carbon future of their communities (Middlemiss and Parrish, 2010; Moloney et al., 2010; Barr and Devine-Wright, 2012).

In recent years CBCRS and other grassroots innovations has grown exponentially (Middlemiss, 2011; Feola and Nunes, 2014). Community initiatives could play a significant role in climate stabilisation efforts if scaled-up (Geels and Schot, 2007; Dietz et al., 2009; Mulugeeta et al., 2010; Seyfang, 2010). Despite its many definitions and interpretations in academia and practice, the concept of 'transition' has become increasingly central to futures-oriented thinking (Feola and Nunes, 2014). CBCRS, while congruent with notions of sustainable lifestyles (Middlemiss, 2011) and grassroots innovation (Seyfang and Longurst, 2013), are consistent with 'strategic niche management' and 'transitions management' that characterises community projects as niches of innovative opportunities to experiment with new practices and norms with the potential for wider social transformation that may become accepted more generally in society (Middlemiss and Parrish, 2010; Seyfang, 2010; Seyfang et al., 2014). Such niches allow for widespread participation and focus on learning methods of sustainable living (Seyfang and Smith, 2007) that fit within the Multi-Level Perspective nested hierarchy (Geels, 2002; Geels and Schot, 2007). Niches are conceived as protected spaces where novel socio-technical configurations are established, experimented with, and developed; linked together by networks and intermediary organisations (Seyfang et al., 2014). Niche development is seen as a necessary condition for wider diffusion of innovative ideas and practices that transitions from a local phase