

The meanings of climate change policy: implementing carbon reduction in the East Midlands.

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For Tash, Theo and Felix.

Abstract

The UK 2008 Climate Change Act transferred a global policy issue into national legislation, establishing unprecedented targets for reducing emissions justified by scientific evidence. The Act prompted a question: could such stretching targets be achieved? This question is addressed through an embedded case study within the East Midlands region between 2010-2011. The research makes an original contribution to knowledge, taking an interpretive, decentred approach to subnational climate policy implementation, focusing on the policy meanings created and acted upon during the introduction of the Cameron Government's austerity and localism agendas. These meanings are recovered using a mix of conversational interviews and meeting observations with policy actors.

Subnational climate policy met significant challenges in being translated into action, being seen as peripheral to local policy concerns. Managers attempted to 'embed' climate policy within local authority practice, but were met with resistance and passivity stemming from climate policy's diverse meanings amongst policy actors.

Performance management was important in symbolising rational policy-making, rather than for its instrumental effectiveness. This briefly raised the priority of climate policy, but where locally compelling political arguments for implementation were absent, programmes became vulnerable to budget cuts. With stronger local arguments focusing on kindred policy areas such as fuel poverty and reducing local authorities' own energy use, vulnerability was reduced. Localism brought such arguments into focus, as regional partnerships weakened and the National Indicators performance management framework was removed. Responses to these developments highlighted how perceptions of the location and flow of power contributed to meaning construction.

The shift to kindred policy aims brings into question the plausibility of climate change targets predicated on scientific evidence rather than local policy meanings. The endurance of local climate policy is explained as a policy myth, enabling short-term continuity with the promise of longer term change.

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Acronyms

CCC: Committee on Climate Change

CEM: Climate East Midlands

CERT: Carbon Reduction Energy Target

CESP: Community Energy Saving Programme

CRC: Carbon Reduction Commitment

DCLG: Department for Communities and Local Government

DECC: Department of Energy and Climate Change

DEFRA: Department for Environment, Food and Rural Affairs

EMDA: East Midlands Development Agency

EMRA: East Midlands Regional Assembly

EMRCCP: East Midlands Regional Climate Change Partnership

EU: European Union

GHG: greenhouse gas

GOEM: Government Office for the East Midlands

HECA: Home Energy Conservation Act

IPCC: Intergovernmental Panel on Climate Change

LA21: Local Agenda 21

LAA: Local Area Agreement

LG Group: Local Government Group

LGA: Local Government Association

LOCE: Logics of Critical Explanation

MoU: Memorandum of Understanding

NI: National Indicator

RDA: Regional Development Agency

Epigraph

“[G]uidance of modern society will fail as long as it tries to circumvent politics.”
(van Gusteren, 1976, pp.150-151)

I. Why study the meaning of climate policy?

In early 2011, the fieldwork for this research was well underway. I was engaged in a particularly intensive period of research, criss-crossing the country to interview key individuals involved in climate change mitigation policy. I spent my waking hours (and some of my sleeping ones) thinking about what the challenge of reducing carbon dioxide emissions meant to local and regional policy-makers. I took a break from my deepening immersion in the world of subnational climate policy to meet a friend, who I will call Finn, in the local pub. Finn asked what I was researching, so I explained that I had just come from interviewing a local authority manager about the organisation's climate change policy. Finn looked incredulous at the entire scenario, remarking:

“Climate change? What can the city council do about climate change?!”

The riposte was said partly in jest, but its meaning was clear, summarily dismissing the idea of local climate policy which I had come to take for granted during the research. How could the local authority of a modestly sized English city do anything meaningful about the global problem of climate change?

I.1 Why study meaning?

Finn's remark pulled me up short. I recount it here to illustrate two key concepts which underpin this research:

1. The concept of subnational climate change can be *interpreted in diverse ways*. In the above example, local authority climate policy was a given for me. For Finn, it was a category that had not even occurred to him as existing, let alone one that ‘made sense’. As this research will demonstrate, considering the meanings of such categories to different individuals is a crucial constituent of investigating the social world.
2. The idea of local climate policy carries *inherent contradictions*. Climate change is generally understood as a global issue, with policy discussions being dominated by negotiations at the United Nations and European Union. The effects on climate from rising greenhouse gas emissions arise from the global aggregate of such gases; temperature changes are not confined to the parts of the world where the emissions originated but are diffused across the Earth. Environmental problems do not respect national boundaries.

The importance of diverse interpretations and meanings, with particular regard to how they play out around the contradictions of local climate policy, are a key theme of this research. This focus on meanings is not just theoretical, but based upon the observation that “interpretation is ubiquitous” in social interactions (Bevir and Rhodes, 2006a, p. 15).

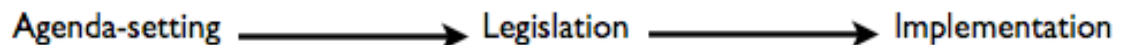
1.2 Why study subnational climate policy?

The focus on local and regional climate change policy, taken together as *subnational* climate change policy, is prompted by the passing of the UK 2008 Climate Change Act. The Act (s.1) states that it is the Secretary of State’s duty to ensure that the UK’s emissions of carbon dioxide and other greenhouse gases are at least 80 per cent lower in 2050 than in 1990.¹ The Act marked a landmark in the development of climate policy, and “a tremendous success” for the environmental groups who had

¹ This target was heavily influenced by scientific evidence regarding the limit required on atmospheric carbon dioxide concentration if global temperature rises were to be kept to acceptable levels. See section 2.7.1

campaigned to have such targets enshrined in law (Big Ask, 2008). This research is motivated by a desire to look beyond this success, to discover the ways in which policy has been transferred into action. In short: *how could such stretching, unprecedented targets for reducing greenhouse gas emissions be achieved?* This question identifies closely with a traditional ‘stagist’ view of public policy in which agenda-setting and legislation are followed by implementation:

Figure 1. The essence of a ‘stagist’ approach to the policy process



Source: Yanow (1996 p.17)²

This research will highlight the limitations of this representation of the policy process by showing how the meanings of climate policy created and acted upon by individuals within government have roots stretching back a long time before the Act’s passing. However, as a commonly used heuristic within both public policy and political science (e.g. Chapman, 2012; Hardman, 2012), the concept of implementation will be used as a means of framing the research questions which this research addresses.

²Yanow, a critic of the stagist approach, deliberately omits the feedback loop between implementation and agenda-setting (usually intermediated by an evaluation phase) which is often used to turn the process into a cycle (e.g. Parsons, 1995, p.77). Yanow’s simplified model is useful here as the Climate Change Act 2008 only permits the 2050 target to be amended as a result of “developments in scientific knowledge ... or international law or policy” (p.2), not as a result of the experiences of implementation.

I.3 Research questions

This research takes as its focus the English East Midlands and the regional agencies and local authorities operating within it. In general, regional and local tiers of government have a history of activity in environmental issues, sustainable development and, latterly, climate change policy (Bruyninckx *et al.*, 2012). In particular, the East Midlands was chosen as an exemplar case of such activity, having been the first region to have all of its local authorities sign the *Nottingham Declaration*, which committed them to develop plans for addressing “the causes and impacts of climate change” and to “contribute, at a local level, to the delivery of ... the target for carbon dioxide reduction by 2010” (*Nottingham Declaration on Climate Change*, 2005).³

Following the initial motivation of investigating implementation of the Climate Change Act, three main research questions will be addressed:

1. What factors do subnational actors find the most important in implementing climate change mitigation policy?
2. How do actors’ perceptions of change affect implementation of policy?
3. To what extent is subnational policy implementation driven by the centre?

As well as providing an in-depth case study of an English region and its local authorities, practical knowledge of policy actions ‘on the ground’ will illuminate similar cases elsewhere (Griggs and Howarth, 2012, p.170).

³ A fuller exposition of the choice of case study can be found in Section 4.2.

1.4 Limits to this study

So far, this introduction has established the subject of the study, the approach to be adopted and the questions to be answered. This section identifies three important limits to the research: the demarcation between mitigation and adaptation within climate change policy, the scientific evidence for climate change, and the atmospheric gases covered by policy.

1.4.1 Mitigation and adaptation

The climate change literature has been strongly characterised by a separation between mitigation (reducing greenhouse gas emissions to reduce the severity of climate change impacts) and adaptation (improving the resilience of society to these impacts) (Cohen *et al.*, 1998, pp.359-360). This separation remains within current approaches to policy, including the most recent reports by the Intergovernmental Panel on Climate Change (Metz *et al.*, 2007; Parry *et al.*, 2007), the UK's Committee on Climate Change (2011a; 2011b; 2012) and the National Indicator (NI) performance management framework for local authorities, which included separate indicators for reducing carbon emissions from local authority operations (NI185), across the geographical areas of local authorities (NI186), and for planning adaptation to climate change (NI188) (Department of Communities and Local Government, 2008, p.51).

Policy-makers' attention to mitigation has been much greater than that afforded to adaptation, with some critics arguing that the latter has been a "taboo" subject

representing a tacit admission of defeat in averting dangerous climate change (Pielke Jr. *et al.*, 2007, p.597). This research acknowledges that the separation between mitigation and adaptation is a potential weakness in the current approach to climate change policy, and that mitigation may be more fruitfully thought of as part of society's wider adaptation to the climate impacts still to arise from historic emissions (Cohen *et al.*, 1998, p.,360; Wigley, 2005). However, to make the research subject manageable within the resource constraints of doctoral study, it was decided to set aside adaptation policy and focus on mitigation.⁴ As a consequence, and for the sake of readability, the term 'climate policy' is used throughout this research as a convenient shorthand for 'climate change mitigation policy'.

1.4.2 Climate science

Scientific evidence has played a pivotal role in the problematisation of climate change (Demeritt, 2001, p.307) with great emphasis placed on the consensus amongst climate scientists regarding the role of human activity in increasing greenhouse gas emissions and the consequential rise in global temperatures (Oreskes, 2004). Against this, some in the field of climate science have suffered persistent criticism for their use of data (e.g. Montford, 2010) and of alleged malpractice (Grundmann, 2012; Nerlich, 2010). Such criticism has been amplified in the media by journalistic norms of personalisation and dramatisation (Boykoff, 2011,

⁴ For an overview of adaptation, see Pelling (2011). More focused studies of adaptation include a detailed case study of South East England (Keskitalo, 2010), a focus on issues within compact cities (Williams *et al.*, 2010), the potential for links between national, subnational and urban governance (Corfee-Morlot *et al.*, 2011) and a focus on the role of local authorities' planning function (Measham *et al.*, 2011).

pp.99-120).⁵ While scientific knowledge plays a key role in the creation of climate policy meanings, it is not within the scope of this research to offer a critique of the scientific evidence base. Rather, this research notes the recent controversies but regards disagreement over climate *science* as a proxy for disagreement over climate *policy* (Pielke Jr., 2005, p.954), arguing that while the scientific evidence is constantly evolving, the available evidence is compelling enough to make climate change a public policy priority. However, this does not necessarily equate with support for the decarbonisation policies and targets which have been derived from this evidence (Pielke Jr., 2009, p.6).

1.4.3 Carbon dioxide and other greenhouse gases

The term ‘greenhouse gases’ refers to those atmospheric gases which absorb and emit thermal infrared radiation, trapping heat within the atmosphere (the ‘greenhouse effect’) and increasing global surface temperatures (Baede *et al.*, 2007, pp.81-82). While the UK reports annually on a national inventory of ten greenhouse gases, reporting at local authority level is restricted to carbon dioxide (MacCarthy and Watterson, 2010, p.1; p.8). This is justified by the level of uncertainty in local reporting of greenhouse gases other than carbon dioxide, and the latter’s status as the gas possessing the greatest global warming potential (AEA Technology, 2008, p. 15).

⁵ See von Storch (2012) for an insight into the obstacles to reflection on such criticism in the academic literature.

I.5 Structure and argument of the thesis

Chapter 2. A history of climate policy: from the United Nations to the East Midlands sets the scene for the field of study. It identifies the emergence of concern within the scientific community and its development into a global policy issue. It shows how climate change subsequently became a policy issue within supranational, national and subnational government in the UK. Particular focus is placed on developments since 2008, with the passing of the Climate Change Act and the subsequent introduction of NIs monitoring local carbon emissions. It is established that climate policy has been made using a rational policy-making approach, with targets derived directly from the scientific evidence and passed down from central to subnational government. The challenges of implementing such policy is a central theme of the thesis.

Chapter 3. Interpretation and policy: a decentred approach develops an approach to researching the scene set in Chapter 2, specifically through an analysis of meaning in public policy. It outlines the roots of positivism and interpretive approaches while highlighting the extent to which the two have become intermingled. Examples of interpretive approaches in the arts are used to illustrate the broad differences they make to the study of public policy. The implications of an interpretive approach on the study of public policy are then discussed, focusing on Bevir and Rhodes's decentred approach. Finally, this approach is linked to the well-established field of implementation studies. The chapter argues that an interpretive approach is well

suited to 'wicked' problems, such as climate change, which affect large numbers of actors and are likely to foster multifarious interpretations.

Chapter 4. Transparency and trust: applying interpretive theory to research design and practice covers research methods, showing how the theoretical approach in Chapter 3 is operationalised within the scene in Chapter 2. In particular, it explains the researcher's task of choosing in three areas: the setting of the case study, the methods for accessing information, and the methods for data analysis. It makes the case for choosing the English East Midlands as the research setting and details the key participants from the region. The choices of conversational interviews and meeting observations as research methods are explained. The experiences of using these research methods in the field are then reflected upon. Moving from fieldwork to deskwork, three key categories for analysis are identified: objects, acts and language. Finally, the differences an interpretive approach makes to research design and practice are summarised.

Chapter 5. Moving to the mainstream? Embedding climate policy discusses the global, scientific roots of the issue outlined in Chapter 2 in conjunction with the entrenchment of fossil fuel use in society. Taken together, these explain how climate change and other environmental issues are seen as apart from, rather than a part of, mainstream local policy concerns. In short, climate change is often interpreted as being an 'extra-local' policy issue. The separateness of climate change is used to

explain the idea of policy embedding, a term which local managers used to describe their own practices, in preference to 'policy implementation'.

Two cases of embedding within local authorities are examined. First, the introduction of an environmental management system highlights the diverse meanings of policy for the climate change 'experts' within the specialist policy team and the climate change 'amateurs' within a department focused on service provision. The case highlights the gap between policy and practice, showing how Service I saw the implementation of policy as contingent on its primary task of service delivery. This resistance to new policy is explained by showing how Service I's understanding of climate change was anchored in professional identity. Second, there is an analysis of the practice of inter-departmental board meetings to aid policy implementation in local authorities. It is argued that passivity was prevalent and that the meetings functioned as policy rituals, embodying tacit meanings beyond those expressed openly. One such meaning was that of a policy myth: the persistence of the rational, 'evidence-based' model of public policy alongside a continued prioritisation of economic growth based upon abundant fossil fuels. The emergence of this myth enabled policy work to continue, despite its inherent contradictions.

Chapter 6. Flawed indicators and kindred policies continues this theme of practices which enable policy work, focusing on the indicator NII86, which measured local area carbon dioxide emissions. The indicator's flaws are analysed, and contrasted

with its adoption by seven out of the nine local authorities. Managers chose to include the indicator in their local priorities despite being aware of the flaws, a course of action explained by the importance of establishing climate change within the prevailing 'audit culture' of local government. NII86's role as evidence supporting local policy is discussed, showing how indicator data was the 'wrong' evidence for motivating action in the absence of political consensus. The 'right' evidence was the use of political argument, rather than data, to persuade councillors and the public of the need to act.

The chapter then goes on to highlight two 'kindred policies' - reducing fuel poverty, and energy management of local authorities' own estates - which provided stronger local arguments for action than mitigating climate change. In both cases, the barriers to the policies leading to reduced carbon emissions are discussed, highlighting the potential weakness of using costs as a driver for behaviour change.

Chapter 7. Meaning and power in the policy network reviews the development of the climate policy network within the East Midlands, which has been marked by increased institutionalisation and weak links with central government. Conditions changed significantly with the Cameron Government's abolition of key regional agencies and the NI framework, creating new meanings within the network. These meanings are analysed using the *Memorandum of Understanding*, a government document which attempted to establish a new framework for local climate policy within the new localism agenda. Three key themes are identified: vagueness of

language, dislocation between the national and local and the role of power in motivating partnership working.

Power is also used to explain local councillors' attitudes to central regulation, showing how inconsistency in a councillor's stated policy preferences can be explained through their own political weakness. While the meanings created by actors remained key, they have also revealed the importance of power in shaping those meanings. In particular, network members' meanings were situated within a context shaped by the policy agendas of two government departments outside of the network: the Treasury's austerity programme and the Department of Communities and Local Government's localism agenda.

Chapter 8. Decentring climate policy summarises what the research has contributed to knowledge in terms of theoretical development, methodology and empirical findings. The three research questions are answered, followed by a review of the decentred approach as applied to climate policy and how extending explanation into an exploration of policy myths can provide a fuller account of continuity and change. Finally, two sections look to the future. First, the implications of the research are assessed for studies of policy implementation. Second, the future direction of subnational climate policy is discussed.

2. A history of climate policy: from the United Nations to the East Midlands

2.1 Introduction

This chapter traces the journey of climate policy from a global issue to becoming the subject of subnational concern and local performance management targets, setting the policy context for this research. Within this journey, some key phases are identified:

- developing concern across a range of environmental issues, giving rise to the concept of sustainable development as a policy issue;
- the emergence from the scientific literature of climate change as an urgent environmental policy issue;
- the adoption of these concerns at a local level, particularly through local authorities' work on Local Agenda 21 (LA21) which expanded capacity and enabled many councils to introduce policies aimed at reducing carbon dioxide emissions;
- the later expansion of regional governance organisations and their role in climate policy; and
- the introduction by national government of specific targets for local authority carbon dioxide emission reduction.

Running through this history is a tension between the global and scientific roots of the issues, and the attempts by subnational policy-makers to translate them into locally relevant policy. The chapter will examine the tools used to try to localise climate change as an issue in the late 1990s and 2000s: the *Nottingham Declaration* and National Indicators (NIs) covering local authorities, the programmes and

strategies of regional organisations and partnerships, and the Carbon Reduction Commitment which governs the carbon dioxide emissions of specific organisations. The chapter concludes with a reflection on the development of climate policy since the late 1980s, and how its focus on the scientific notion of greenhouse gas emissions has placed climate policy at a distance from social and political concerns. is a recurring theme within the data presented in Chapters 5, 6 and 7. This chapter provides context for the understanding that climate policy was interpreted as an extra-local concern by policy actors. The persistence of such an interpretation is key in explaining the processes of continuity and change within subnational policy.

2.2 Global concern for the earth's environment and climate

Evidence of human behaviour causing environmental deterioration exists from prehistoric times; the earliest intercontinental movement of species had dramatic effects on indigenous populations and ecosystems (Held *et al.*, 1999, pp.382-383). The development of the industrial economy in the late eighteenth century heralded a new era of environmental impacts as a result of human behaviour as coal became a widely used energy source, and pollution, deforestation and species extinction all increased (Simmons, 2008, pp.112-113). The mid-twentieth century marked the beginning of an acceleration in these trends, with rapidly increasing consumption in developed countries and industrial production expanding to many developing countries. With these trends came an emerging awareness that the means and pace of economic development could not be sustained indefinitely without severely

impacting on the earth's capacity for supporting life, leading to the emergence of sustainable development as a means of continuing human progress with greater regard for environmental limits (Study of Critical Environmental Problems, 1970; Meadows *et al.*, 1974; International Union for Conservation of Nature and Natural Resources, 1980; Lele, 1991).

A key aspect of global change resulting from human development was the rise in coal, oil and gas usage (Held *et al.*, 1999, p.391; Simmons, 2008, pp.172-175), with global energy usage increasing by a factor of 16 over the course of the twentieth century (Prins *et al.*, 2010, p.28). The emissions concomitant with fossil fuel usage began to be recognised in the scientific literature as possibly adding to carbon dioxide and other atmospheric gases responsible for transmitting heat by radiation, otherwise known as the “greenhouse effect” (Study of Man's Impact on Climate, 1971; Sawyer, 1972). While there had been scientific interest in climate change for over two hundred years, only in the second half of the twentieth century did the understanding develop that such change could be dangerous to humans (Hansen *et al.*, 1981; Kellogg, 1987; Hulme and Turnpenny, 2004, p.107). The US National Academy of Sciences published an assessment of the relationship between carbon dioxide and climate which it said “may be comforting for scientists but disturbing for policymakers” (Charney *et al.*, 1979, p.vii), but it was not until 1988 that climate change emerged on to the policy agenda significantly, with the establishment of the United Nations Intergovernmental Panel on Climate Change (IPCC) and a powerful Congressional testimony by Professor James Hansen, an atmospheric physicist from

the US National Aeronautics and Space Administration (Jaspal and Nerlich, 2012). Hansen told Congress that “it’s time to stop waffling so much and say the evidence is pretty strong that the greenhouse effect is here”, raising the media profile of the issue (quoted in White and Radford, 1988). Following this, Prime Minister Thatcher began to address the issue in her speech to the 1988 Conservative Party conference (Thatcher, 1988), in Prime Minister’s Questions (e.g. *Hansard*, 2 May 1989, col.15) and in a speech to the 1990 World Climate Conference where she proposed “a joint international effort to curb greenhouse gases ... and carbon dioxide” and that the UK was prepared to adopt “the demanding target of bringing carbon dioxide emissions back to this year’s level by the year 2005” (Thatcher, 1990). The latter speech was a response to the first reports of the IPCC, which provided a weight of evidence that further convinced policy-makers of the need for action (Hulme and Turnpenny, 2004, p.107). The UK’s response to the 1992 United Nations Conference on Environment and Development, commonly known as the Rio Summit (Laffertey, 2001, p.1), was a commitment to a small reduction in greenhouse gases which would only be enough to postpone projected temperature rises by 4-5 years (O’Riordan and Rowbotham, 1996, p.260). While this represented a modest response, this marked the beginning of a new set of domestic policy responses to an agenda which had been set in the scientific community and politically negotiated at a global level.

2.3 The European role in climate policy

Besides the United Nations, UK climate policy was subject to another supra-national influence: its membership of the European Union (EU). Greater integration within

the EU is in part a response to the pressures exacted on nation states by globalisation; their interests are better served by compromising within the EU in order to negotiate internationally as a single bloc, rather than having greater freedom of position but carrying far less political weight (Cope, 1999, pp.51-52).⁶

The importance of the global dimension within climate policy prompted the EU to follow this path at negotiations prior to the adoption of the Kyoto Protocol in 1997. The EU overcame their lack of legal competency in environmental policy to act as a single bloc and advocate tougher emissions targets than many other actors were arguing for (Bretherton and Vogler, 2006, pp.12-13). This emerging leadership in global negotiations can be traced back to a core of EU member states with strong environmental traditions such as Germany and Sweden, which spurred the EU as a whole to improve environmental protection and raised standards in EU laggard states (Bradbeer, 2001, p.91; Connelly and Smith, 2003, p.274). The UK was seen as part of the latter category in the 1980s, attracting fierce criticism within the EU for its part in the acid rain controversy which spurred it into taking a more active role when climate change appeared on the policy agenda (Hajer, 1993, p.43; Cass, 2007, pp.40-42). In particular, the UK encouraged the development of an emissions trading group for businesses in the late 1990s (Jordan *et al.*, 2003a, p.189). sensing an opportunity for British business and financial services to gain "first-mover advantage" in an area of potential international growth (Smith, 2004, p.89; Glachant and de Muizon, 2006, p.5). Although government enthusiasm was as much motivated by the potential for economic advantage as emissions reduction, such an attitude

⁶ Globalisation is a contested notion. A diversity of conceptions and misconceptions about globalisation can be found within the discourses of elite political opinion (Smith and Hay, 2008).

supported the notion of a newly energised approach to environmental policy within the UK.

The support for emissions trading proved to be well-placed, with the EU starting their own Emissions Trading Scheme in 2005. The policy was initially formulated at European level then 'handed down' to national governments to implement through the setting of National Allocation Plans capping the number of permits available for trading (House of Commons Environment Audit Committee, 2007a, p.22). It was at this stage that the policy's effectiveness in reducing emissions foundered, as most countries set targets very close to their usual levels of emissions. While the UK did impose a more restricted number of permits to be traded than most, the aggregate cap was too weak to deliver any reduction in emissions during its first phase (House of Commons Environment Audit Committee, 2007a, p.22-24). Although the trading scheme has been described as the UK's "cornerstone" climate policy (House of Commons Environment Audit Committee, 2007a, p.16), local and regional bodies have had no involvement in its implementation, with national government instead taking up the role of 'local implementer'.

Within the overall target agreed by the EU at Kyoto, the UK agreed to a target of reducing greenhouse gas emissions by 12.5 per cent by 2012, using 1990 levels as a baseline. While the choice of baseline was in part due to the availability of data, using 1990 was also favourable to the UK as it marked the beginning of a 13 per cent fall in greenhouse gas emissions up to 2000 caused by a shift from coal to natural gas

supplies (Jordan, 2002, p.346; Liverman, 2009, pp.290-291). This shift in supplies along with the effects of the 2009 recession means the UK is likely to significantly exceed its Kyoto target, although there are doubts whether decarbonisation can be maintained without such one-off events (ENDS Report, 2010). Uncertainty over climate policy intensified after attempts to agree on a successor to the Kyoto Protocol at the 2009 Copenhagen Summit ended without a binding agreement to cut emissions in the future (United Nations Framework on Climate Change, 2009; Bodansky, 2010; Rogelj *et al.*, 2010).

2.4 Local environmental policy

As well as being a watershed year for global climate policy, 1988 was also a time of significant development for environmental policy within local government, with Kirklees Metropolitan Council becoming the first local authority to undertake an environmental audit of its own activities, publishing its report the following year (Church and Young, 2001, p.107; Connelly and Smith, 2003, p.340). There followed an upsurge in interest in local environment policy with the publication of a number of advisory reports (Ball and Wright, 1991, p.81). The most influential of these reports, *Environmental Charter for Local Government*, set out a systematic approach to alleviating the environmental effects of local government operations (Friends of the Earth, 1989; Jay, 1991; Tuxworth, 1996, p.284). This nascent local agenda was largely overlooked by the national government's first environmental strategy, *This Common Inheritance* (Department of the Environment, 1990). The publication echoed Prime Minister Thatcher's interest in climate change with a dedicated chapter on "Global

Warming and the UK” (Department of the Environment, 1990, pp.63-78), but where opportunities were identified for improved energy efficiency in council housing and schools, there was little offered in the way of support to local authorities seeking to make progress (Department of the Environment, 1990, pp.285-287; Ball and Wright, 1991, p.82).

While these developments pertained specifically to environmental protection and tackling specific environmental issues in local areas, the wider agenda of sustainable development gained a firmer foothold in the local government agenda after the agreement of Local Agenda 21 (LA21) at the 1992 Rio Summit (Laffertey, 2001, p.1). Sustainable development can be broadly defined as the integration of society’s environmental, social and economic needs in the present day, meeting them in a way that does not compromise future generations’ capacity to meet their own needs (World Commission on Environment and Development, 1987, p.8; Levett, 1998; pp. 295-296; National Audit Office, 2010, p.8). LA21 was the part of a wider “action plan for sustainable development” agreed at Rio explicitly designed for local authorities to implement, seeking consultation with communities to find ways of advancing sustainable development locally (Laffertey, 2001, p.1). Although there were no statutory duties attached to LA21, a wave of “early adopter” local authorities took up the challenge of developing a plan and introducing more sustainable ways of working within their area (Church and Young, 2001, pp.108-109). National government continued to show little interest in these local developments, and although this meant there was little in the way of central funding to support local

activity such disengagement may not have hindered policy development. Local government had seen its powers cut back by the centre which may have made LA2I an attractive option for local authorities seeking to expand their influence into new areas (Tuxworth, 1996, p.294). In a 1996 survey, almost 40 per cent of local authorities strongly supported LA2I and almost 50 per cent more offered “more tentative support” (Tuxworth, 1996, p.281).

Although LA2I took a holistic view of sustainable development, covering social, economic and environmental issues, responsibility for its implementation often sat within local authorities’ environment departments (Bond *et al.*, 1998, p.776; Tuxworth, 1996, p.281). Coming at a time when local authorities were beginning to recognise their own environmental impact through internal audits, LA2I was often pigeonholed as another aspect of environmental policy rather than something to be considered within multiple aspects of local policy (Connelly and Smith, 2003, p.346). Building on the audit approach reflected local authorities’ belief that they could not implement LA2I without “getting one’s own house in order” (Wild and Marshall, 1999, p.160). This inward-facing work was challenging enough but efforts to expand LA2I work into the community proved even more difficult, where high expectations were soon grounded by the challenges experienced in obtaining widespread public involvement in the sustainable development programme (Wild and Marshall, 1999, p.161). As well as the danger of a narrow focus on their own activities, local government’s response to LA2I continued to be dominated by environmental issues at the expense of a wider consideration of the linkages with the social and

economic. This reflected the national context, where the Department of the Environment's guidance on sustainable development indicators suggested 105 environmental and only 13 social and economic indicators (Bond *et al.*, 1998, p.774; Levett, 1998, p.298).

While much of LA21's implementation became more focused on environmental issues than was originally intended, it did stimulate local officers and residents to develop their awareness of the environment and its relationship to social and economic issues (Church and Young, 2001, pp.125-126). Local authorities had responded to an international agreement which specifically sought to transfer the concept of sustainable development to local areas. Despite the problems faced by local authorities in meeting the ambitious sustainable development agenda, LA21 marked a step change in their environment policy activity, altering the way such issues were perceived and how they could be 'joined-up' to a more holistic approach to local policy (Church and Young, 2001, p.126). These developments prepared the ground for local government's response to climate change as it continued to emerge as a global issue. As progress on LA21 continued steadily during the 1990s, climate change also continued to develop as a national policy issue. As research within the UK clarified the potential impacts of climate change, the focus shifted to what action could be taken to avert the threat, establishing climate change as a significant public policy issue (Hulme and Turnpenny, 2004, pp.107-111).

Like sustainable development before it, climate change was placed within the remit of central government's environment department (first, the Department of Environment, then the Blair Government's Department of the Environment, Transport and the Regions). Officers working within local government were likely to be specialists, working within an area of policy over a number of years (Gains, 2009, p.54). This was the context for the emergence of "wilful individuals" in local environmental policy, who developed environmental expertise and enthusiasm working on LA21 throughout the 1990s and seized on climate change as a new manifestation of that agenda (Centre for Sustainable Energy, 2005, p.20-22). This minority of council officers created the local conditions for increased action on climate change, aided by the new prominence of environmental issues brought about by LA21, but in the absence of any agreement similar to the latter which interpreted global issues specifically for the local context.

The absence of a document equivalent to LA21 for climate change reflected the separateness of the sustainable development and climate change discourses. While sustainable development attracted some ecocentric criticism for being excessively anthropocentric (Gladwin *et al.*, pp.886-889), the explicit links made between human activity, environmental limits and economic development provided a political context which clarified potential policy responses (Cohen *et al.*, 1998, pp.357-358).

Conversely, the IPCC's influential reports were more narrowly focused on the effects of greenhouse gas emissions under less complex scenarios of future development and growth and without reference to the socio-economic context in

which policy decisions had to be made. While one might have expected this to make the climate change discourse less relevant for policy-makers, the more scientific worldview that it espoused was of greater appeal than the complex social linkages implied by a focus on sustainable development (Cohen *et al.*, 1998, p.359). Climate change could be more easily problematised than sustainable development through a focus on greenhouse gas emissions, which in turn could be easily incorporated into a performance management framework, an approach which had become increasingly the norm in dealing with new policy issues (Hoggett, 1996, p.23).

Similarly to LA21, some local authorities interpreted the emergence of climate change as a public policy issue in the late 1990s as an opportunity for policy activism in the absence of any guidance from national government. However, any enthusiasm to act was constrained by an absence of relevant policy competences (in particular, restrictions on revenue raising and allocation) which left UK local authorities with “probably uniquely unfavourable circumstances for the implementation of local policies” (Collier and Löfstedt, 1997, p.38). At the national level, the Blair Government’s election in 1997 provided an opportunity for new climate policies to be introduced; its manifesto committed to a tougher reduction target than Kyoto, requiring new measures if it were to be met (Smith, 2004, p.85). Policy measures were given impetus by the Royal Commission on Environmental Pollution with the Blair Government committing itself to its recommendation of a 60 per cent cut in UK carbon dioxide emissions by 2050; a marked increase in aspirations from previous governments driven by the evolving scientific evidence on the level of

emissions required to limit global warming to an acceptable 2°C (Lorenzoni *et al.*, 2008, pp.105-108; House of Commons Environmental Audit Committee, 2007a, p. 31, Jordan, 2002, p.346; HM Government, 2006, p.4). However, these developments were not expanded to the local level, with the potential contribution of councils to reducing carbon dioxide emissions overlooked by central government before 2006 (House of Commons Environmental Audit Committee, 2008a, p.6; HM Government, 2006, pp.106-109).

2.5 Regionalising climate change

The Government Offices established by the Major Government in 1994 marked a step towards increased regional activity (Wilson and Game, 2006, p.182), but it was the early years of the Blair Government which heralded a much sharper focus on regions as a spatial unit of governance, with the introduction of Regional Assemblies which were intended to form a new tier of elected government, and Regional Development Agencies (RDAs) with the responsibility to drive economic growth (Wilson and Game, 2006, pp.89-92). Regions were seen as a means of improving the integration of policy in key strategic areas such as planning and transport, both of which had implications for climate policy. On their introduction in 1998, one of the RDAs' five purposes was to "contribute to the achievement of sustainable development in the United Kingdom" (Regional Development Agencies Act 1998, s. 4), although no linkages were specified either with local authorities' existing LA21 work or other regional organisations (Gibbs and Jonas, 2001, pp.280-281). A statutory duty appeared to be a step forward for the embedding of sustainable

development in regional policy, although analysis of supporting policy documents and guidance suggested a very narrow definition of sustainability in which environmental protection was a means of achieving further economic growth (Gibbs, 2000, pp. 15-16).

While RDAs had responsibility for Regional Economic Strategies, the Regional Assemblies produced Regional Spatial Strategies which covered social and environmental issues along with planning (Pearce and Ayres, 2009, p.550). The separation of these elements between parallel strategies and organisations highlighted that sustainable development, emphasising the interlinkages between the economic, social and environmental, was hard to implement as a priority issue within the new regional tier of governance. Including the regional Government Offices, there were three significant regional bodies with overlapping agendas and ambiguous relationships, often resulting in a reluctance to lead on specific issues (Sustainable Development Commission, 2005, p.6; Pearce and Ayres, 2009, p.551) and feeding into concerns that insufficient capacity existed at both regional and local levels for effective implementation of national climate policy (Demeritt and Langdon, 2004, pp. 334-335).

As the evidence base around climate change impacts for the UK became more concrete, so the issue became established on the regional policy agenda as it had for local authorities. The East Midlands Sustainable Development Round Table, an independent body with members from regional agencies, local authorities, voluntary

organisations and business, commissioned the region's first report analysing the potential impacts of future climate change and the effects of new national greenhouse gas emission targets (East Midlands Sustainable Development Round Table, 2000, p.1; Devine-Wright *et al.*, 2001, pp.165-166). With the demise of the Round Table, the East Midlands Regional Assembly (EMRA) developed climate change as a policy area as part of the Integrated Regional Strategy, moving from one small sub-section of the Environment Strategy (EMRA, 2002, pp.37-39; EMRA, 2003a, pp. 31-33) to becoming a primary consideration within the Energy Strategy two years later (EMRA, 2004, p.3). The Energy Strategy attracted some funding from the Department for Trade and Industry, which constituted the first central government funding directed towards regional climate change mitigation work (Chadwick, 2012). During this process a Climate Change Steering Group emerged with members from a similarly wide representation as the previous Round Table (*Climate East Midlands*, 2009). That such a group could be drawn together with little associated budget reflected the appetite within the region for trying to address the issue. The group was successful in attracting new members, with the number of attendees increasing from 11 to 19 between 2003 and 2006 (EMRA, 2003b; 2006). However, this increased participation also led to a loss of focus for the Steering Group and moves by the larger regional organisations - EMRA, East Midlands Development Agency (EMDA), Government Office and Environment Agency - to develop a regional programme of action on climate change (EMRA, 2007). These organisations went on to form a slimmed down East Midlands Regional Climate Change Partnership

(EMRCCP) which superseded the Steering Group and published the final Programme of Action (EMRCCP, 2009; Chadwick, 2012).

These changes took place against a background of the national government's subnational review in 2007, which made only perfunctory references to climate change and lacked detail on local and regional approaches to the issue (HM Treasury, 2007a; Jones, 2008, p.1). Notably, the review failed to develop a previous White Paper identifying RDAs as "the leading strategic economic and sustainable development body in the regions" with a key role in delivering energy policy and emissions reduction (Department for Trade and Industry, 2007, pp.276-277). The Local Democracy, Economic Development, and Construction Act 2009 which emerged from the subnational review did give RDAs responsibility for spatial planning within new single regional strategies which had to "include plans to tackle climate change" (HM Government, 2009, p.94). This approach sought to overcome the previous separation of environmental, economic and social considerations between Regional Assemblies (abolished by the new Act) and RDAs in the early 2000s. However, bringing all strategic issues into a single organisation did not ensure a more 'joined-up' policy approach. The introduction of single regional strategies gave RDAs responsibility for the regional contribution to emission reduction without elevating such a goal to the same priority as economic considerations; RDAs' performance became judged in terms of Gross Value Added (equal to Gross Domestic Product, plus product subsidies, minus product taxes), an economic measure of contribution to the economy excluding social and environmental factors

(House of Commons East Midlands Regional Committee, 2009, p.39). Within the East Midlands, the reluctance of EMDA (or any other organisation) to lead on sustainable development continued to hinder policy, with critics highlighting that EMDA consistently elevated economic development above environmental considerations, a priority reflected in the absence of any environmental expertise on EMDA's Board (House of Commons East Midlands Regional Committee, 2009, pp. 35-39). While RDAs were originally conceived as contributing to sustainable development, EMDA's weak commitment to environmental concerns supported Gibbs's argument that such an aim would evolve into "*business-as-usual* with a slight green tinge" (2000, p.17). For climate policy, the obligation to include it in the regional strategy did provide a stronger context for the new East Midlands Regional Climate Change Partnership to introduce its new *Programme of Action* (2009, p.8). The new partnership did formalise links in climate policy between EMDA and other regional organisations, through staff time and some funding, but the activity was peripheral in the context of EMDA's overall priority for economic growth.

Despite this generally pessimistic view, EMDA did develop the Regional Index of Sustainable Economic Welfare, intended to broaden the traditional focus on economic measurement to include environmental and social issues (EMDA, 2006, pp. 176-177). Discussion of the index highlighted the narrowness of Gross Value Added as a performance indicator, excluding key sustainability concerns such as depreciation of natural capital, which would be accelerated by increasing greenhouse gas emissions (House of Commons East Midlands Regional Committee, 2009, pp.

37-39; Jones, 2008, p.2). For example, a large scale renewable energy infrastructure project would be unlikely to provide economic returns in the short term, but would be more highly valued within an assessment of its longer term contribution to sustainable development and emission reduction.

A new addition to the regional tier in 2008 were the Regional Improvement and Efficiency Partnerships, part of a joint national initiative by the Department for Communities and Local Government (DCLG) and the Local Government Association (LGA) (DCLG and LGA, 2008). These Partnerships differed from other regional tier organisations and networks in focusing exclusively on local authorities, aiming to help them improve efficiency, work collaboratively, innovate and build capacity (East Midlands Improvement and Efficiency Partnership, 2010). The Partnerships received dedicated funding totalling £4 million over two years from both DCLG and the Department for the Environment for Food and Rural Affairs (DEFRA) for climate change best practice programmes to support local authorities who had included climate change National Indicators in their Local Area Agreements (Pearce and Cooper, 2011, pp.200-201; DEFRA, 2008). This was the first stream of funding from central to English local government dedicated to climate change policies and represented a notable increase in the resources available to local authorities in this policy area (National Audit Office, 2007, p.4).

2.6 Localising climate change

Parallel with these regional developments, the local government response to climate change became more formalised under the banner of the *Nottingham Declaration* (Gearty, 2007, p.38), a voluntary agreement which committed signatory councils from across the UK to “develop plans with our partners and local communities to progressively address the causes and the impacts of climate change” (*Nottingham Declaration on Climate Change*, 2005). The increasing number of councils signing the Declaration demonstrated the rising priority of climate change as a local government policy issue and their desire to show their commitment to local residents as well as partner organisations (House of Commons Environmental Audit Committee, 2008a, pp.20-21). After its establishment by Nottingham City Council in 2000 and a co-ordinated launch to all of local government in 2005, 340 local authorities in the UK had signed the Declaration by 2009 (Footitt *et al.*, 2007, pp. 12-13; Gearty, 2007, p.9; HM Government, 2009, p.94). While a significant achievement for a document initially designed for one local authority, this still represented a “long tail” of local authorities who had not demonstrated any commitment to climate policy (Carty and Hislop, 2007, p.4). This was not the case in the East Midlands, which was the first English region to have all of its local authorities sign the Declaration (EMRCCP, 2009, p.3). However, such commitment did not necessarily translate into actions. Desktop research undertaken by the Tyndall Centre in 2007 indicated that only a third of signatory councils in the UK had climate change strategies in place, few of which encompassed all areas of local authority control (Carty and Hislop, 2007, p.8). There was a danger that local

authority engagement with climate policy would not go beyond “a framed copy of the declaration hung in the reception area of a council building” (House of Commons Environmental Audit Committee, 2008a, p.22). Whether or not this proved to be the case, the public nature of local authorities’ commitment through the Declaration would prove significant in the negotiations of Local Area Agreements in later years.

The UK Government’s 2007 Comprehensive Spending Review set policy priorities up to 2011 through thirty Public Service Agreements, which established the basis for performance management within Whitehall up to 2011 (HM Treasury, 2007b). Climate change was identified as a priority in its own right, forming the sole focus of Public Service Agreement 27 (HM Treasury, 2007c) while remaining environmental issues were bundled together in Public Service Agreement 28 (HM Treasury, 2007d). This encapsulated the rise of climate change up the national policy agenda to eclipse sustainable development and shift the focus of what could be loosely described as the ‘environmental agenda’ (National Audit Office, 2010, p.12). Public Service Agreement 27 made scant reference to sustainable development, explicitly casting climate change as a “global issue that demands a global response” and saying that the UK would “adopt and promote policies which reduce greenhouse gas emissions” within its own borders (HM Treasury, 2007c, p.3). The role of local government was confined to one paragraph (3.38), listing councils’ key areas of potential influence within climate change mitigation (HM Treasury, 2007c, p.15): transport, planning, development control, buildings control, waste authorities, service delivery, local

government's own estates, operations and supply chain, influencing local partners, and regeneration.

While highlighting key areas, the document did not set any level of ambition for local government policy or make any linkages between councils and other parts of the agreement's delivery strategy, continuing the trend of disconnect between the spatial tiers in both sustainable development and climate policy. However, the document did provide the context for the later introduction of performance management for local carbon dioxide emissions within National Indicators.

The Comprehensive Spending Review and Public Service Agreements set the context for the NIs introduced in 2008, intended to provide central government with a single set of measures to track local government progress in priority policy areas (DCLG, 2008, pp.5-7). Local authorities formed Local Strategic Partnerships with local stakeholders which negotiated Local Area Agreements (LAAs) to cover the period 2008-11 with the regional Government Office, setting local policy priorities with targets measurable using NIs (DCLG, 2007, p.5). Two NIs covering carbon dioxide emissions were created in relation to Public Service Agreement 27 as shown in Table 1 (DCLG, 2008, p.12).

Table 1. Definitions of National Indicators relating to climate change mitigation

NI	Title
185	CO2 reduction from local authority operations
186	Per capita reduction in CO2 emission in the local authority area

Adapted from DCLG (2008, p.51)

NII85 had a narrow focus, reporting only emissions from a local authority's own operations (Department of Energy and Climate Change, 2009, p.55) (DECC). NII86 was a broader measure based on new official statistics issued by the Office for National Statistics for area-wide carbon dioxide emissions per capita, but omitting large point emissions sources which were judged to be beyond the influence of local authorities, such as motorways and members of the EU Emissions Trading Scheme (for example, large power stations) (DCLG, 2008, p.51). Out of 150 LAAs within England, 100 set targets for the reduction of either NII85 or NII86 over three years (Eadson, 2008, p.140). Such was climate change's rapid rise to prominence that it was the fifth most selected policy priority in LAAs, proving more popular than more established issues such as crime, childhood obesity and educational achievements (Schroeder and Bulkeley, 2009, p.324).

Climate change indicators were even more prevalent in the East Midlands, featuring in all nine LAAs negotiated within the region (EMRCCP, 2009, p.15). Such widespread commitment should be seen in the context of the entire region's local authorities signing the *Nottingham Declaration*. While this was a voluntary, non-binding document it opened the door to further policy development, converging with central government (through Government Office) pressure to establish climate change mitigation within all local authorities' performance management regimes. Only two of the nine East Midlands LAAs selected NII85 as their indicator, the remainder choosing the wider NII86. On the surface, NII86 may have appeared the more sensible indicator to adopt; its area-wide focus meant that it already included

the local authority operations measured by NII85, enabling local authorities to get “both indicators ... for the price of one” and rendering NII85 superfluous (Pearce and Cooper, 2011, p.209). However, local authorities had concerns over NII86 which, whilst not preventing inclusion of the indicator in LAAs, were to play a role in subsequent implementation.

Targets set within the region’s LAAs amounted to an aggregate reduction of 10 per cent per capita in area-wide carbon dioxide emissions by 2011 (compared to 2005 levels), mostly comprising the commitments made under NII86 (EMRCCP, 2009, p. 15). A national study supporting NII86’s initial development found that the potential influence of local measures on emissions reduction was small in comparison to that of measures enacted nationally without local input (AEA Technology, 2008, p.36; Eadson, 2008, p.146):

1. Purely national measures but still influencing community emissions, (71.2 per cent);
2. National measures but can be improved in performance with influence by local authorities (25.9 per cent);
3. Purely local measures implemented by local authorities or other organisations (2.8 per cent).

The second category seemed to provide the greatest potential for local influence but requires detailed analysis to discover the degree of influence organisations had in implementation. Even if the latter was significant, the overall picture was one of local performance under NII86 being largely determined by national policies.

Central government estimated that by 2010, the second and third categories above would only produce a total reduction of 5.1 per cent on 2005 levels (DECC, 2009, p.

56). Compared with the East Midlands' aggregate target of 10 per cent, this suggests that organisations within the region had influence over only half of the emissions they had committed themselves to reduce.

The adoption of these indicators raises questions about the extent to which 'governance' is replacing government from the centre in climate policy. There is evidence that DEFRA (the government department then responsible for climate change mitigation) applied pressure on regional Government Offices to include NII86 in their LAAs, although other central government departments also lobbied for their indicators to be prioritised (Eadson, 2008, p.140; Pearce and Cooper, 2011, p.209). The East Midlands' approach is described as "bottom up" in that only local areas set targets for emission reduction, not the region as a whole (EMRCCP, 2009, p.15). The levels of these targets were negotiated locally; central government were involved in negotiations through Government Office but did not intervene to ensure that the aggregated ambition of local authorities was equal to that implied by national policy (something that would be hard to do without universal sign-up to climate change indicators). Instead, central government control was imposed through the definition of NII86, with local areas being unable to deviate from the single methodology set by DEFRA (Eadson, 2008, p.145). As well as applying the same criteria to diverse local areas, by focusing on reducing an area's carbon dioxide emissions the indicator left local authorities and their partners trying to achieve outcomes which they had limited power to address.

Greenhouse gas emissions enjoyed a privileged position in the construction of climate change as a policy issue which led to their adoption as a measure of performance in global policy (see pages 28-33). This filtered down to the national and subnational levels, but had unintended consequences for local authorities. Within the range of greenhouse gases, the only local area data available when LAAs were introduced were for carbon dioxide emissions (this remains the case at the time of writing) (AEA Technology, 2008, p.2). Local authorities' policy options were in danger of being constrained by the lack of performance management data. By taking carbon dioxide emission reduction to be synonymous with tackling climate change, local areas risked diverting resources away from areas where they had greater influence over policy. For example, local authorities have statutory powers in waste management which could be used to reduce the release of methane from landfill sites, a powerful greenhouse gas but not one measured within the NII86 methodology (Eadson, 2008, p.145). This is similar to the "output distortions" chronicled in the literature on the Blair Government's healthcare targets, a case of "hitting the target but missing the point" (Hood, 2006, p.516). In the case of NII86, hitting the target may not have constituted missing the point, carbon dioxide being an important contributor to climate change. Rather it would be *attempting* to hit the target that would be missing the point as local authorities had only peripheral influence over the level of emissions. Local actors faced a dilemma about doing the "right job" in terms of performance management - attempting to maximise this influence over their NII86 targets - or focusing on more effective policy 'levers' which lay outside the boundaries of NII86 (Hoggett, 1996, p.24). These weaknesses

in NII86, and the role they played in subsequent policy activity, are discussed further in Chapter 6.

2.7 Legislating and regulating for climate change

While the subnational picture evolved, there were two further key developments at a national level: the passing of legislation establishing a legal basis for emission reduction targets, and the development of the Carbon Reduction Commitment, regulation to encourage organisations outside the EU Emissions Trading Scheme - including many local authorities - to reduce their own emissions.

2.7.1 Climate Change Act 2008 and the Committee on Climate Change

Parallel to the introduction of NIs, the Climate Change Act was passed in late 2008, making the UK the first country in the world to establish legally binding targets for reducing greenhouse gas emissions by 2020 and 2050 (Department of Energy and Climate Change, n.d.). The Act also created the Committee on Climate Change (CCC), an independent public body consisting of academic experts from a range of disciplines which was responsible for setting carbon budgets which set the trajectory for reducing emissions in the years up to 2050 (Ares, 2008, pp.34-35; CCC, 2008, v; McGregor *et al.*, 2010, pp.29-32).

Scientific evidence was at the heart of the UK Government's emissions target prior to the Climate Change Bill's introduction. In 2000, the Royal Commission on

Environmental Pollution recommended the UK should cut its greenhouse gas emissions by 60 per cent by 2050 (against 1990 levels), a marked increase on the aspirations of the 1992 Rio Summit stabilisation agreement (Lorenzoni *et al.*, 2008, pp.105-108) and a “bold challenge” to the Blair Government to set targets well in excess of their international and European obligations (Jordan, 2002, p.346). The new target was accepted by the Government as part of a global objective to keep the atmospheric concentration of carbon dioxide below 550 parts per million, with a view to restricting the global mean temperature increase on pre-industrial times to 2.3°C by 2100 (Department for Trade and Industry, 2003, p.8; Committee on Climate Change, 2008, p.9). Such a rise would be slightly above the 2°C which came to be regarded by policy-makers in later years as a “guard rail” against the most dangerous impacts of climate change (New *et al.*, 2011, p.6). However, such a temperature rise would still be likely to cause worsening disease, crop yields, fresh water supply and flooding for many parts of the world, as well as significant species extinction and the potential for irreversible decline of the Greenland ice sheet (Stern, 2007, pp.66-67).

The 60 per cent target was maintained as the Bill’s centrepiece until less than two months before its Royal Assent, when the Brown Government accepted the interim advice of the shadow CCC to increase the 2050 target to 80 per cent (Turner, 2008; Committee on Climate Change, n.d.). The CCC’s subsequent report specified that they were “responding to developments in science” in recommending the increase (Committee on Climate Change 2008, p.31). It was notable that new

scientific evidence could motivate such a change near the end of the Bill's passage through Parliament, particularly as the government had rejected a Liberal Democrat proposal for an 80 per cent target earlier in the year (Ares, 2008, pp.46-47). The issue of climate change has long been constructed as a scientific problem caused by the heat-trapping properties of greenhouse gases, while largely overlooking the political or economic dimensions that were more prevalent within previous discussions of sustainable development policy (Cohen *et al.*, 1998, pp.360-361; Demeritt, 2001, pp.328-329). The narrow framing of greenhouse gas emissions as the 'problem' to be addressed has inevitably led to a focus on the reduction of these emissions as climate policy's *raison d'être*. This way of seeing climate change has also contributed to a focus on technological solutions (Eastin *et al.*, 2011, p.24-25), manifested in the CCC's focus on the potential for emissions reduction by sector (e.g. surface transport, power, shipping) rather than by spatial area (CCC, 2008, pp. 116-133).

The narrow focus on scientific evidence as a source for policy-making has resulted in legislation that sets an unprecedented, time-sensitive challenge for the UK Government. Meeting the 2050 target would require the reversal of almost constant growth in emissions since the Industrial Revolution (Stern, 2007, p.5) followed by an unprecedented level of decarbonisation. Successfully implementing the number of programmes required to do this is an exceptional challenge given the increasingly complex linkages in the public policy process across space and time, of which climate policy is an example (Helm *et al.*, 2003, pp.447-448; Stern, 2007, pp.65-160;

Hill and Hupe, 2009, p.41). With such an unprecedented and ambitious policy commitment, there must be doubt about whether such targets are domestically attainable (Pielke Jr., 2009; New *et al.*, 2011, pp.8-10), and whether they will turn out to be consistent with the broader aim of restricting the global temperature rise to 2°C (Bows *et al.*, 2009, pp.9-11).

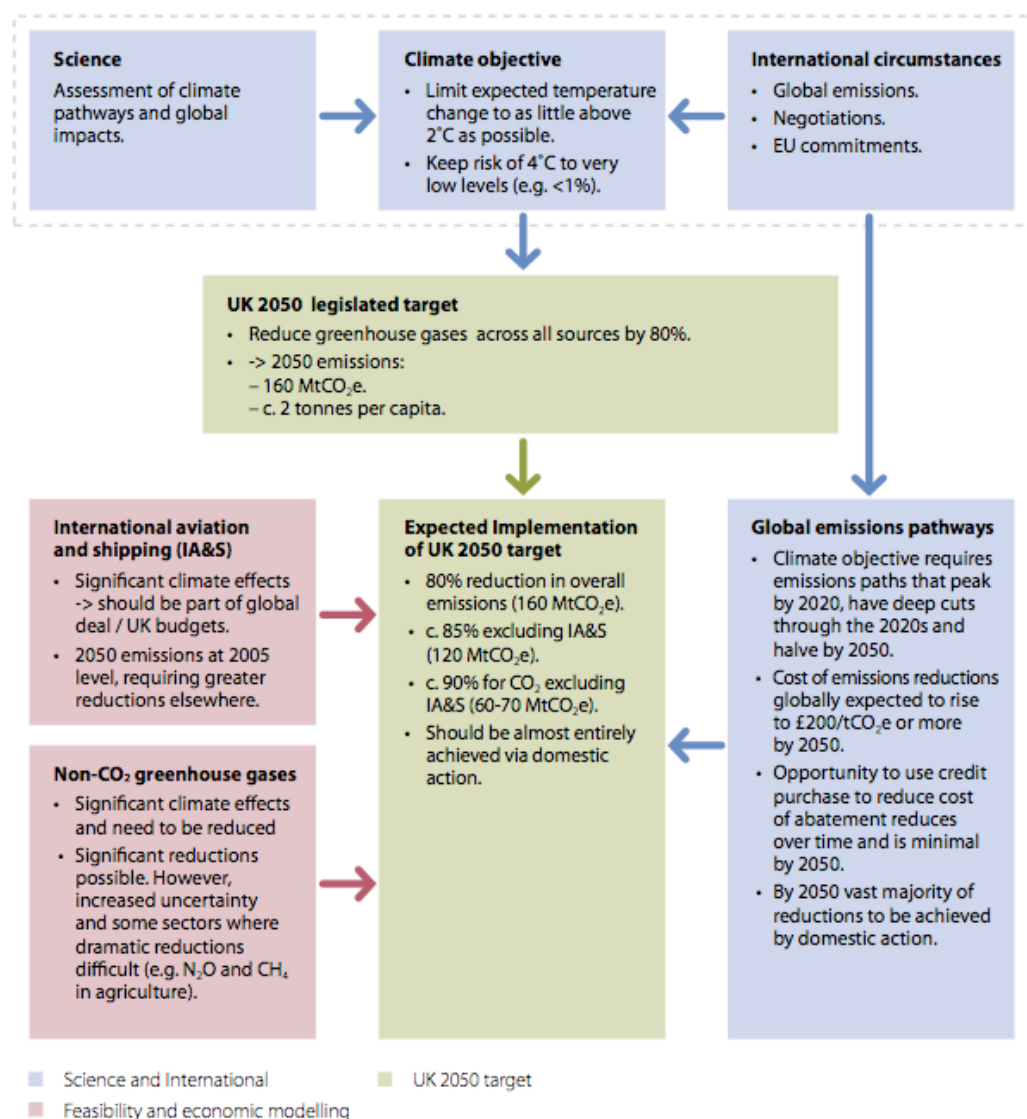
In sum, the passing of the Climate Change Act reinforced the continued primacy of scientific evidence, and the consequent focus on reducing greenhouse gas emissions, within the making of climate policy (Demeritt, 2001, p.310). While this mode of policy-making was consistent with restricting global temperature rises, it downplayed the political dimension of such policies (see Figure 2), a trend exacerbated by the introduction of the CCC as an independent, statutory body responsible for recommending policy goals as well as the policies required to achieve them. This deficiency in political context was not an accidental feature of the CCC; it was established with the intent of recommending policy measures over the medium and long terms independent of short term political considerations. However, this brings with it a decreased relevance in the public sphere, particularly for subnational policy-makers who have received little guidance. The government attempted to fill this gap in 2012 by requesting that the CCC offer guidance to local authorities (House of Commons Environmental Audit Committee, 2011, p.12; CCC, 2012)⁷.

⁷ The CCC report was consulted on and published subsequent to the period of research fieldwork. It is considered further in Chapter 8.

2.7.2 Carbon Reduction Commitment

The Carbon Reduction Commitment (CRC) was originally conceived to start operating as a 'cap and trade' scheme in April 2010. Organisations were required to purchase allowances for their carbon dioxide emissions, a limited number being available from government with the ability to buy additional allowances from other

Figure 2. The development of UK climate policy



Source: CCC (2011, p.103)

organisations if the initial allocation was insufficient (Environment Agency, 2010, pp. 4-5). The scheme regulates the largest public and private sector organisations which fall below the threshold for membership of the similarly market-based EU Emissions Trading Scheme or are not covered by Climate Change Agreements, covering most of England's upper tier local authorities.

The scheme's name was changed before launch to add the words 'energy efficiency', suggesting a perception that the financial benefits of action must be emphasised rather than an appeal to reducing emissions for their own sake. The CRC was "designed to raise awareness" for improving energy efficiency and reducing carbon dioxide emissions (Department of Energy and Climate Change, 2010a). This echoed the successes attributed to the Climate Change Levy introduced in 2001, with the policy being at its most effective prior to full implementation as industry hurried to increase efficiency in order to reduce the cost of the Levy once it was introduced (Ekins and Etheridge, 2006, p.2080; House of Commons Environmental Audit Committee, 2008b, p.11). Financial benefits are also provided by returning permit revenues to organisations according to their performance compared with other participants during the year (Environment Agency, 2010, p.4). The potential for bad publicity from poor performance has the potential to spur greater high-level action within an organisation than uncertain financial benefits.

This policy design provided the basis for local authorities' planning on how best to respond to the CRC. However, the scheme was altered significantly in the early stages of the fieldwork for this research project. The first Comprehensive Spending Review under the new Cameron Government removed the trading element, significantly increasing the likely costs to local authorities (HM Treasury, 2010, p.62; Williams, 2010). The implications of this for local authorities are examined in section 6.6.3 (see pages 225-228).

2.8 Conclusion

This chapter has set out the historical context for researching subnational climate policy, from its emergence as a global issue in 1988 to its prominent position in public policy twenty years later. The developing strategic role of local authorities within the broader realm of environmental policy in the late 1980s became more concrete and widespread following the arrival of LA21. This development of local capacity and space for environmental policy was a precursor for the localisation of climate change as a policy issue. This extension of sustainable development from being primarily a global agenda to one having a strong local dimension was mirrored by later developments in climate change mitigation, which moved from being an issue driven by scientific evidence and global negotiations to one also of interest to local policy-makers. Climate change fitted well with the existing growth in local environmental concerns as it was typically painted as an environmental issue by national government, with climate policy documents being issued by government's environmental departments (Department of the Environment, 1994, 1997; DEFRA,

2006a, 2006b). However, without clear guidance on the local relevance of climate change as a policy issue, a piecemeal approach developed within local authorities with a large gap developing between the most active councils and the 'long tail' who were doing little or nothing to engage with the issue.

While the Blair Government provided new impetus in the shape of greater prioritisation and stronger targets for emission reductions, there remained a disregard for the role of local authorities in climate policy. In the continued absence of central government setting a clear role for local authorities, the *Nottingham Declaration* developed as a 'bottom-up' symbol of local government's commitment to the issue. The Blair Government was clearer on the responsibilities of the new regional organisations for sustainable development in conjunction with strategic issues such as economic growth, planning and transport. As with local authorities, an initial focus on sustainable development created the conditions for climate change to emerge as a regional policy issue. Within the East Midlands, this led to the formation of a new climate change partnership between a small number of regional actors which developed a regional Programme of Action.

Almost twenty years after climate change first became prominent within global policy, its climb up the policy agenda was such that it became by far the dominant environmental issue within the 2007 Comprehensive Spending Review, a set of documents which provided the context for the NIs and new local government performance framework. This marked the first instance of explicit top-down

direction to local authorities on climate policy in the form of indicators by which the carbon dioxide emissions of local areas and local authorities could be measured. These provided a focus for local government action and targets for emissions reduction were enthusiastically adopted by local authorities across England and particularly within the East Midlands where all Local Strategic Partnerships made reducing emissions a core priority. This provides a key context for researching the work done by East Midlands councils in implementing climate policy, particularly with the focus being placed on the reduction of carbon dioxide emissions rather than other areas over which local authorities potentially hold more influence.

More generally, the waxing and waning of sustainable development as a policy issue echoes Downs's issue-attention cycle, which proposed that environmental issues begin with expert knowledge, gain notoriety with public discovery before gradually falling in priority as the scale of the problem becomes clear and newer issues vie for a limited supply of public attention (1972, pp.39-42). The emergence of climate change overtook sustainable development as the environmental issue of primary concern to policy-makers in the 2000s as UK media coverage of climate change grew significantly (Boykoff, 2011, p.26). As local authorities begin to face the difficulties of implementing policies to reduce carbon dioxide emissions, exacerbated by significantly reduced budgets (Travers, 2011, pp.8-9), climate change may suffer a similar decline in attention as sustainable development and other environmental issues have done previously (Lockwood, 2011).

The 2008 Climate Change Act continued the trend for scientific evidence providing the primary input for climate policy, setting policy goals and timeframes commensurate with modelling by climatologists looking to keep global temperature increases below levels seen as dangerous to society. While this appeared a rational approach, it risked understating the difficulties of introducing measures which would bring about unprecedented decarbonisation across all areas of public policy. It is argued that this constituted a “*knowledge-driven model ... [where] ... it is assumed that research leads policy*”, scientists providing the initial impetus before government investment brings a policy to fruition (Young *et al.*, 2002, p.216, original emphasis). This rational-scientific approach to policy-making again raises the question of the extent and effectiveness of climate policy implementation.

In summary, focusing on carbon dioxide emissions as an indicator of progress places climate policy at something of a disconnect from more everyday issues of public policy. The late 2000s marked a period of enthusiasm for action to achieve significant reductions in carbon dioxide emissions but without strong guidance from the centre on how subnational actors could meet such ambitions. With the use of carbon-intensive energy intrinsic to almost every aspect of society there was the potential for policy-makers to address a plethora of sources for carbon dioxide emissions. These various interpretations of climate policy could become further complicated by the emphasis on partnership working between local and regional actors. Rather than bringing about an agreement between partners on addressing climate change (Bulkeley and Kern, 2006, p.2255), partnerships may provide only a "shallow

consensus" displacing a discussion of the more fundamental economic and social implications of carbon reduction targets (Davies, 2009, p.81). Whereas sustainable development explicitly ties together the environmental, social and economic, climate policy rests far more on evidence from the scientific world, leaving a gap with the socio-political world of public policy. Multiple, diverse interpretations can be expected to flourish in each approach, but in sustainable development, the inclusion of social concerns holds out a greater prospect for such interpretations to be considered as part of the policy-making process. The rational-scientific approach to evidence and targets embodied within climate policy implies that such interpretations are more likely to be seen as deviant than diverse, leading to the perception of an implementation 'gap'.

The next chapter develops these ideas further, with a review of the interpretive approach in the social sciences, a broad view of how this has been applied in the public policy literature, and a specific examination of Bevir and Rhodes's decentred approach and the its links to implementation studies.

3. Interpretation and policy: a decentred approach

3.1 Introduction

The last chapter argued how climate change has become a prominent public policy issue since the late 1980s, with the UK introducing stretching targets for reducing greenhouse gas emissions in the Climate Change Act and many local authorities, including all those within the East Midlands, committing themselves to reducing carbon dioxide emissions between 2008 and 2011 through Local Area Agreements (LAAs) and National Indicators (NIs). These targets reflected the general scale of decarbonisation ambition across much of the developed world, and although many stakeholders in climate policy were pleased that legislation had been introduced in support of these targets (Confederation of British Business, 2007, p.4, 2008; Trades Union Congress, 2007; Friends of the Earth, 2008; Joint Public Issues Team, 2008), it also opened up a new set of questions about how policies intended to contribute to emissions cuts were being implemented (Pielke Jr., 2010, pp.107-111). Put simply, could these ambitious new policies be acted upon 'on the ground'?

This chapter progresses from a macro-level discussion of theories of knowledge to focus down on the case for adopting a decentred approach to studying the subnational implementation of climate policy:

- tracing the roots of interpretive enquiry within the social sciences, and its influence in the production of a theory of knowledge;

- the application of interpretive enquiry within public policy research, with a particular focus on the strengths and weaknesses of Bevir and Rhodes's decentred approach;
- a re-examination of the decentred approach's strengths and weaknesses within the context of policy implementation studies;
- how this critique impacts on the particular case of subnational climate change policy.

The chapter will locate interpretive policy analysis within the broader debate around the theory of knowledge since the mid-nineteenth century. In doing so, it will establish the theoretical bases for the remainder of the thesis, demonstrating that regardless of the import one attaches to the concept of reality within the social world, interpretations are fundamental to understanding a field of study. These insights will be taken forward into studies of public policy, critiquing the decentred approach with insights from alternative interpretive approaches and the policy implementation literature.

3.2 Interpretive approaches to social science

3.2.1 The roots of positivism

To understand the “interpretive turn” from the positivist approaches pre-eminent in public administration and public policy studies (Rhodes, 2011a), it is helpful to review the developing critique of positivism across the social sciences in the second half of the twentieth century (Hawkesworth, 2006a). The roots of positivism can be traced to the work of Auguste Comte (Benton and Craib, 2001, p.22), who saw all branches of human knowledge as passing through three stages of development: theological, metaphysical and positive (1853, pp.1-2). Comte characterised the first two stages as

a vain search for forces which were inherent in all beings, before alighting on a third stage of using “reasoning and observation” to discover laws founded on “invariable relations of succession and resemblance” (1853, p.2). This positive philosophy, which came to be known as ‘positivism’, sought to reduce these laws to the smallest number possible in a manner analogous to the natural sciences. While several branches of knowledge were seen as having undergone this transition, Comte regarded the study of social phenomena as remaining within the first two stages (1853, p.7). Following Comte, positivist research has sought to apply natural science method within the social sciences; making objective knowledge claims based on the identification of causal relationships between variables (Haverland and Yanow, 2012, pp.403-404). In the practice of research, empirical data is collected and analysed in a manner assumed to be replicable across a range of circumstances, allowing research results to be comparable across cases and general principles to be derived and applied to other cases. Such principles can be treated as predictive of societal phenomena and used as the basis for disciplines within the social sciences (Benton and Craib, 2001, pp.26-27). This includes the branch of knowledge of interest in this project, public policy. The implication is that the human world can be known in the same way as the physical world, that the relationship between actors in the policy process can be understood in the same way as the relationships between atomic particles in a laboratory (Comte, 1853, pp.5-6).

3.2.2 From causation to meaning

Moving outside of the laboratory into the social world, the positivist search for correlation and causation in the relationship between variables meets two significant challenges. First, the researcher must control for variables which offer possible alternative explanations for a policy outcome (Haverland and Yanow, 2012, p.404). One review of the policy implementation literature identified over 300 such variables (O'Toole, 1986, pp.185-188; Matland, 1995, pp.145-146). Second, even if it were possible to prove correlation in such a complex environment, such associations are unable to reveal causal mechanisms (Archer, 1998, p.69). While it may be possible to model relevant variables for a *particular* phenomenon, the complexity and contingency of society's open systems mean such a model cannot be expected to provide *general* predictions of cases (Clegg, 2006).⁸ In response to the positivist approach, interpretivism marked an epistemological transformation in recognising the differences between the physical and human (social) world as subjects of knowledge, the former typified by closed laboratory conditions of scientific study, the latter being an open system containing multifarious variables (Archer, 1998, p.69; Clegg, 2006, p.185). This change marked a turn from a search for a phenomenon's causes to its meaning (Weber, 1922/1978, p.7). This meaning is contingent on an actor's particular position and perspective on an issue at a point in time (Weber, 1922/1978, p.21; Benton and Craib, 2001, p.82). The interpretive approach recognises that a number of different views of the same object can co-exist and can be represented within an account presented by a researcher.

⁸ Variables within the social sciences are themselves constructed by the researcher, and do not have the same physical presence as variables in the natural sciences.

3.2.3 Interpretations and ways of seeing⁹

The development of interpretive epistemology within social sciences was mirrored by similar ideas in the arts (Berger, 1972a, p.155). One example each from the early and late twentieth century will be used here to represent interpretive ideas and as metaphors for undertaking interpretive enquiry within the social sciences. The cubist art movement emerged between 1906 and 1908 (Cooper, 1971, p.11), with artists such as Picasso, Braque and Gris seeking to undergo “the task of representing things as informatively, suggestively and from as many different aspects as possible” (*Museum of Modern Art*, 2010). Rather than seeking to faithfully represent a subject from a single perspective, the artist created a new representation from the overlapping of fragments from a variety of different perspectives. The resulting image remained recognisably of the subject, while challenging orthodox notions of the relations between time and space.

One example of this is *The Breakfast*, by cubist artist Jean Gris (see Image 1). Gris’s re-editing of a typical breakfast scene provides an example of how the constituent elements of a particular subject may not fit together in the way the viewer anticipates. Rather than sitting in the background, the striped wallpaper flows across the table. The left edge of the foremost cup and saucer is not visible.

⁹ Hatch and Yanow (2008) review the links between particular moments in art history, including cubism, and different methodological approaches in the social sciences.

Image 1. A different way of seeing



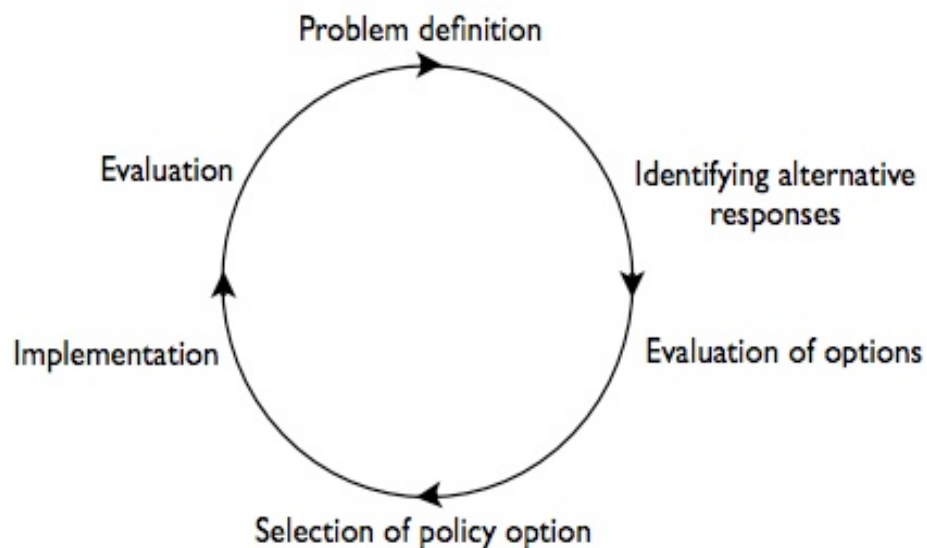
Source: Gris (1914)

The table which the scene rests upon appears to be an amalgam of two separate tables, with corners and legs found in unusual places. By drawing attention to a range of views with which one could view the breakfast scene, Gris reminds the viewer that a *single* perspective cannot provide the absolute truth of a subject; different angles bring some elements into the foreground while pushing others to the back.

By juxtaposing fragments of these views within one image, the role of the viewer is brought into focus. One cannot set oneself apart from the subject one is studying. Rather, the viewer's way of seeing is contingent on their position within the world judged in terms of criteria such as time, space and prior knowledge (Berger, 1972b, pp.16-19).

Returning to our field of study, public policy, we can contrast Gris's view with a depiction of a policy process from the literature:

Figure 3. The policy cycle: a 'stagist' approach to studying public policy



Adapted from Parsons (1995, p.77).

Figure 3, above, is a development of simple representation of the policy process in Figure 1. Rather than the latter's linear progression towards an end-point of implementation, Figure 3 closes the circle through an evaluation of the policy which

opens the way for an eventual reappraisal of the problem. Clearly, a diagram of the policy cycle is not intended to be aesthetically compared to that of any artistic work. However, they can be compared in their ways of seeing the world. The policy cycle presents the world as tidy, parcelling up particular aspects of policy-making into discrete phases (Parsons, 1995, p.79). In contrast, while the overall subject of Gris's painting is discernible, there are unexpected intrusions and omissions and the relationships between the elements are harder to grasp. This messiness highlights the heuristic value of the policy cycle diagram but also acts as a reminder that such heuristics are not the only way to think about the social sciences.

Highlighting that life itself does not resemble ideal types is not a novel observation (Weber, 1922/1978, p.10), and without the certainty provided by diagrams and causal relationships, understanding public policy could quickly become a thankless task, dissolving into a fragmented morass without any means of appraising the associations between them (Parsons, 1995, p.80). However, it is worth reaffirming that neat typologies and diagrams can only go so far in aiding understanding of the social world, and that such heuristics may obfuscate if they offer an over-simplified depiction of a policy issue. Gris offers an artistic interpretation which, while limited in its own way, allows for fluidity, uncertainty and variability without losing sight of his aim to depict a simple breakfast scene. In the case of this research, the aim is to understand the complexity of climate policy implementation, an area of study where one can imagine an abundance of potential viewpoints yielding fresh insights into the process of public policy.

3.2.4 Multiple interpretations and *The Matrix*

Cubism's focus on multiple perspectives continued to exert an influence in the late twentieth century. An example from the world of cinema illustrates how an interpretive approach can aid thinking about the research process. The 'time slice' technique developed in the early 1990s by Macmillan (2009) placed multiple cameras around a subject and edited together the resulting still images, giving the impression of a single camera moving around the subject. The effect became common in popular cinema following its use in *The Matrix* (Wachowski and Wachowski, 1999), where it was known as "bullet time" (Green, 1999; Oreck, 1999; Cotton, 2011). Image 2 shows the rig built on the film set to create the effect.

Image 2. Multiple cameras to create 'bullet time' effect on set of The Matrix



Source: Cotton (2011)

The bullet time rig provides a metaphor for the interpretive research process within the social sciences. Each camera represents a different way of seeing the world. Two adjacent cameras may provide very similar views of the subject while cameras on opposite sides of the rig will reveal little or no material common to both views. The researcher cannot know how many 'cameras' they will look through during a project, and what they see through the lens will likely be less predictable than the fixed view of a single subject shown in Image 2. The bullet time rig is a reminder that there are multiple perspectives on any one subject, although the practicalities of research will limit the number of 'cameras' that the researcher can look through; choices will have to be made about which to include and which to exclude. These choices may be based on 'knowns', such as time constraints, or 'unknowns', such as those potential perspectives which remain unnoticed by a particular researcher (these perspectives not necessarily being in such plain sight as the cameras shown in Image 2). Such perspectives may reveal themselves part way through the project requiring flexibility in research plans and methods, or may remain hidden throughout.

In using the bullet time rig as a metaphor for ways of seeing, it is important not to get carried away by the concept of a 360° view of a subject. Even if all the possible cameras focusing on the subject were visible and available to the researcher, it is not a means by which a detached, objective view point can be arrived at. The prior values and concepts held by the researcher still exert an influence on what they see (Wittgenstein, 1958, pp.204-205). The researcher attempts to take account of this

prior knowledge and their place in the world, and how they provide a backdrop for their way of seeing through particular lenses (Barton, 2006, p.70). To provide an example, in Image 2 imagine a line of people waiting behind the photographer to take their turn looking through that particular lens. Each person in the line will bring different banks of prior knowledge to the camera which will influence their way of seeing (Bevir and Rhodes, 2006a, p.27). If the subject visible through the lens was a dog, then a breeder may pay particular attention to how it compares to Kennel Club breeding standards, a veterinarian may concentrate on the dog's health, a cynophobic may find that they focus on the size of its teeth, and so on. This echoes phenomenology's notion of 'lifeworlds' (*Lebenswelt*), the individuals' fields of consciousness which are used to produce and reproduce meaning in the world around them (Husserl, 1970 p.108; Yanow, 2006a, pp.12-13).¹⁰ It is this background knowledge that each of the viewers of the dog utilises to create their own meaning of the animal. This knowledge may derive from professional training in the case of the veterinarian, or personal experience in the case of the cynophobic (Yanow, 2000, p.6). Similarly, researchers coming from different traditions of policy analysis will come to differing conclusions on the meaning of the subject being studied and the lessons (if any) which can be drawn for the future (Allison and Zelikow, 1999).

This emphasis on multiple perspectives and meanings, both of actors within the field being researched and the researchers observing them, leave us with a much messier picture than that presented by the positivist approach, and has implications for the

¹⁰ This is a broad re-interpretation of the term. For a critique of Husserl's original usage of the concept, see Carr (1970).

knowledge claims of research. By extension, eschewing generalisable models and embracing the messiness of 'real life' leaves the interpretive approach open to the charge of relativism which can only support description, not understanding:

“Science gave way to sitting in on a multitude of local language games, which lacked common sense and thus were only amenable to aesthetic appreciation and never to practical evaluation.” (Archer, 1998, p.71)

Now, any 'practical evaluation' of others' interpretations is dependent on sharing the same prior knowledge or "forms of life" (Wittgenstein, 1958, pp.88-89, p.226). Our prior knowledge is borne of our experience and remains rooted within that experience (Husserl, 1913/1931, p.51; Berger and Luckmann, 1967, p.15). Hence, a *shared* understanding between individuals can only come through them having *shared* previous experiences. Where actors interpret a subject in different ways, one can attempt to bring them closer together by giving them the same texts to read. However, the actors' reading of the new material is still contingent on their own prior knowledge, so a further background text is required to bring the interpretations together, and so on *ad infinitum* to form a "hermeneutic circle" (Taylor, 1971, p.6). Such an argument implies that relativism is an inevitable consequence of interpretivism since the prior knowledge which people bring to a situation is contingent, leaving individuals only with the ability to appreciate, not evaluate. However, it is possible to withdraw from the ideal type described above by Archer and take a more nuanced approach to the role of interpretations within the social sciences.

3.2.5 Resisting relativism

Returning to the example of the dog, hermeneutics argues that if a number of veterinarians observe the animal, they will all bring their own, particular bank of prior knowledge to the camera (see Image 2). As veterinarians, their observations are still likely to centre on the dog's health, but there may be differences between them based on their own specialist knowledge and experience; for example, holding specialist knowledge about animal ophthalmology, dentistry or parasitology may lead to differences between veterinarians' observations of the same animal (American Veterinary Medical Association, 2012). Alternatively, there may be something outside of veterinary knowledge which they all observe in the dog; for example, wearing a dog jacket. This illustrates some of the interactions between knowledge and interpretations. Being a veterinarian will *influence* a certain way of seeing, but need not *determine* it (Bevir and Rhodes, 2006a, p.27). While the veterinarians' specialist knowledges may be important in some cases, they are unlikely to determine their way of seeing a dog jacket. Hermeneutics reminds us to be conscious of the differences between individuals' interpretations, but there will also be occasions when individuals have sufficient elements of prior knowledge in common for an interpretation to be shared. On many occasions, one might expect veterinarians to share broadly similar views of the dog, while veterinary specialisms will provide different insights at particular times.

Relativist approaches emphasise the innumerable and irreconcilable perspectives with which the world can be seen, contrasting with interpretivism's employment of a

restricted number of analytic categories, expressed as traditions (Bevir and Rhodes, 2006a, pp.7-9). There is a focus on the characteristics which are common to a set of actors, rather than those which separate them. While this shifts interpretivism away from postmodernists such as Lyotard and Baudrillard (Hay, 2011, p.171), it also appears to re-engage with the positivist trope of generalised categories (in this case, traditions). What maintains the interpretive approach as distinct from both positivism and relativism is the fluidity of these categories as units of analysis. In the current example, traditions of dog breeding and veterinary practice could be identified as the sources of knowledge upon which actors draw when interpreting the world around them. While such traditions would be sensible in a study of the position of dogs in society, they would be rather less sensible to employ in a study of climate policy. Such traditions, based upon the reproduction of agents' practices over time, should be (Bevir and Richards, 2009a, p.11; 2009b, p.138; Hay, 2011, p.177):

- treated as contingent concepts rather than fixed typologies;
- judged pragmatically in terms of the phenomena being investigated; and
- not the basis for generalised models within the social sciences.

Traditions provide a “bridging concept” from micro-level case studies to wider accounts of society (Bevir and Richards, 2009b, p.135), providing a means of engaging with Wittgenstein's concept of ‘family resemblances’ (Bevir and Rhodes, 2006a, p.167), described as “a complicated network of similarities overlapping and criss-crossing; sometimes overall similarities, sometimes similarities of detail” (Wittgenstein, 1958, p.32).

So we may be able to identify some resemblances between the implementation of local climate policy and other cases; for example, the actions of those within environmentalist or libertarian traditions may be similar across different areas of climate policy (Roe, 1994, pp.124-125). Rather than looking for rules and models which can predict such actions, we can find reasons that certain aspects of these traditions can be found in different cases (Bevir and Rhodes, 2006a, pp.166-167).

3.2.6 Blurring the boundaries: critical realism and interpretivism

In setting out her critical realist approach to sociology, Archer presents her thinking as located between the two “extremes” of ‘positivism’ and ‘relativism’ (1998, p.71). While these have been used here to frame the discussion, one should not let such ideal types become ‘straw men’. In particular, positivist thought has evolved in response to the rise of interpretivism within political science (Caterino and Schram, 2006, pp.5-7). Using the ‘bullet time’ metaphor in Image 2, it is easy to dismiss positivists as restricting themselves to only one view of the world, that which can be determined to be objective truth. While such a dualism may aid the argument for a particular theoretical approach (Haverland and Yanow, 2012, pp.403-404), it oversimplifies the relationship between the natural and social sciences (Hawkesworth, 2006b, pp.153-154). Comte’s initial proposition of using natural science methods in the social sciences was more nuanced than often portrayed, acknowledging that the positive method has different meanings in different branches of knowledge (Lenzer, 1998, p.lxxiv-lxxv). The importance of scepticism within the

natural sciences means that experimental results are regarded as provisional and dependent on subsequent replication and possible rejection (Laitin, 2006, p.39).

Critical realism sees this as a process of moving closer to understanding the real world. While accepting that this understanding is mediated through constructed models, rational judgement of the utility of such models brings the policy analyst ever closer to knowing their research subject's factual nature, which exists independently of any individual's knowledge (Archer, 1998, p.71; Bates and Jenkins, 2007, p.59; Marsh, 2008b, p.738). Put another way, even if a scientist understands a particular discovery to be such a truth, it still requires complementarity; that is, a complementary explanation through language (Laudan, 1971, p.51; Apel, 1972, pp. 22-23). Narrowing the gap with the interpretive approach, this critical realist position retains the foundationalist notion that there is a world of pure facts 'out there' but admits that humans are unable to access it in a pure sense. The interpretive view is a more nuanced one. While accepting that there is "a real world 'out there'" (Bevir and Rhodes, 2008, p.729), the premise does not imply that there are "given truths, whether based on pure reasons or pure experience" (Bevir and Richards, 2009a, p.7). Within climate policy, it would be hard to quibble that the events reviewed in Chapter 2 took place in the real world: for example, the Congressional testimony of James Hansen, the signing of the *Nottingham Declaration* by various local authorities, and the passing of the 2008 Climate Change Act. What is key is that taken in isolation these events do not make sense without the prior categories individuals bring to bear (Bevir and Rhodes, 2006a, p.28). It is the job of

the researcher to make sense of the events using them as the raw materials for the construction of their own account, making decisions on which facts to include and exclude and how they are linked (Collingwood, 1946, pp.131-133). These actions encapsulate the unique nature of society, being constructed from both objective facts and the expression of meanings through action (Berger and Luckmann, 1967, p. 30).

Laitin accepts that narrative explanations are likely to be useful in supplementing “formal analysis” but that it is the latter which must retain methodological primacy (2006, p.54). Rather than positivism being one of many theoretical interpretations which could be adopted, the argument is turned inside out: the social sciences must operate within a “scientific frame” where interpretations function as an aid to positivist understanding (Laitin, 2006, p.54). While this represents an inversion of the interpretive critique, Laitin’s position does have aspects in common with Yanow (2000), who emphasises that interpretivism involves methodological steps of a similarly careful nature to positivism.

3.2.7 Taking the interpretive approach forward

This section has sought to outline the theoretical position on which this research is based. It has positioned an interpretive approach between two ideal types of positivism and relativism. It has also juxtaposed an interpretive approach within the arts - cubism - to suggest alternatives to network diagrams and heuristics as ways of seeing public policy, emphasising some of the weaknesses of a positivist approach.

However, this should not be equated with a dismissal of positivist thought. An interpretive position is reflexive in that it recognises the multiple perspectives with which one could gaze upon a subject, thus implying that a researcher can never hope to have the 'complete picture'. But by looking at differing perspectives, the researcher can develop a deeper understanding of the research subject and a stronger explanation of their results which speaks to a range of audiences.

The mixing of theoretical traditions emphasises two characteristics of the philosophy of social sciences. First, one can say that the social sciences are themselves interpretive. The bullet time rig (see Image 2) has been adopted as a metaphor for the perspectives of actors within a particular research project, but could equally be used as a way of understanding different theoretical approaches: cameras could represent critical realism, post-structuralism, ethnomethodology, modernist empiricism and so on (Bevir and Rhodes, 2006a, p.54). The social sciences are non-paradigmatic in that they do not undergo the same revolutions or shifts that Kuhn (1970, pp.104-110) understood to take place in the natural sciences (Flyvbjerg, 2006a, p.64). Rather, different approaches to the social sciences can co-exist, but may be so far apart as to be incommensurable (Burrell and Morgan, 1979).¹¹

Second, by moving beyond the ideal types and dualisms used as heuristic shorthand in the literature (e.g. Haverland and Yanow, 2012), this discussion has begun to

¹¹ For two examples in public policy, see the exchange between Marsh and Smith (2000; 2001) and Dowding (2001), and between Marsh (2008a; 2008b) and Bevir and Rhodes (2008).

expose the overlapping and intermingling of various theoretical perspectives, which one can imagine to be not dissimilar to Gris's depiction of a breakfast scene (see Image 1). Articulating one's perspective on the world is an important part of this research, but the blurring of theoretical boundaries demonstrates how difficult and unwise it is to tie one's colours to a particular mast. Such discussions have a role in building cogent and convincing arguments, but should not be a straitjacket to subsequent development, particularly in the light of research findings 'on the ground' (Seale, 1999, pp.475-476). With this in mind, the next section takes the interpretive approach and outlines its application within public policy.

3.3 Decentring public policy

3.3.1 The interpretive tradition within public policy

The interpretive tradition has steadily gained ground within the field of public policy, with studies in the symbolic nature of politics (Edelman, 1964), the interaction between policy analysis and values (Vickers, 1995; Rein, 1976), implementation as re-interpretation of policy (Lipsky, 1980), policy analysis as critical, interpretive and empirical endeavour (Torgerson, 1986), the contribution of non-expert knowledge to policy analysis (Schmidt, 1993), public policy as argumentative practice (Fischer and Forester, 1993; Hajer, 1995), competition between policy narratives (Roe, 1994), policy as expression of identity (Yanow, 1996) and challenging the notion that actors can agree what is real within policy discourse (Fox and Miller, 1996). An extensive review of these contributions has been conducted by Yanow (2006a). While acknowledging the breadth of this evolving literature, this section focuses on the

contribution of Bevir and Rhodes to establishing an interpretive approach to studying British policy and politics, and the implications for such an approach on the study of policy implementation.

3.3.2 Bevir and Rhodes's decentred approach

a) Overview

Bevir and Rhodes' approach is to decentre governance, explaining policy actors' beliefs "by locating them against the background of traditions and dilemmas" (2012, p.202). Their approach is an anti-foundationalist perspective, rejecting the concept of "pure facts" within the social world in favour of a constructivist ontology, concentrating on how individuals make and remake their own meanings and beliefs (Bevir and Richards, 2009a, p.7). These constructions take place against the background of any number of political traditions, defined as sets of beliefs and practices which displays a degree of consistency and have been passed between generations (Bevir and Rhodes, 2006a, pp.8-9). Traditions are not static, ideal-type categories, but families of beliefs which change over time (Bevir et al, 2003, p.8), acting as a first influence on individuals who use their "local reasoning consciously and unconsciously to modify their contingent heritage" (Bevir and Rhodes, 2006a, p.9). This gives rise to the concept of situated agency, recognising that individuals' actions cannot be wholly autonomous while being under the influence of traditions, but also that:

"people have the capacity to adopt belief and actions, even novel ones, for reasons of their own. In doing so, they can transfer the social background." (Bevir and Rhodes, 2006a, p.5)

Bevir and Rhodes' constructivist ontology demands a non-essentialist approach to deploying particular traditions within policy analysis. While drawing on Tory, Whig, Socialist and Liberal political traditions in explaining British governance reforms, the authors highlight how such traditions are contingent between particular cases and do not equate to a set of properties appearing in every instance of governance (2006a, p.166).

b) Exogenous events

Bevir and Rhodes' decentred approach highlights the weaknesses of using discrete variables in an attempt to explain change. By focusing on a limited number of variables, there is an implication that other variables are treated as external to the subject of study. However, treating factors as exogenous overlooks the role of interpretation in how actors interpret what is happening 'outside' of a particular model (Marsh and Smith, 2001, p.9). Such exogenous factors are cognitive constructions rather than existing as concepts in the real world (Parsons, 1995, p. 201). By accepting cognitive activity as inseparable from the social world, it is individuals who become the research subjects; exogenous (structural) factors are only given meaning through individuals' responses to them (Vickers, 1995, p.30; Bevir and Richards, 2009a, p.8). This recognises that, although this research focuses on a limited number of interlinked actors, these actors' interpretations are not confined to the same boundaries set by the researcher. Adopting an interpretive approach implies that the boundaries placed around a research project due to limits in

resources and time are permeable. In other words, while the focus of the research is on a certain group of actors, the focus of those actors may be elsewhere.

Bevir and Rhodes express this as a concern with the holistic nature of meanings; that is, in order to explain a particular observed phenomenon it is necessary to interpret it within a wider web of beliefs (2006a, pp.2-3). The decentred approach recognises that exogenous events are interpreted by individuals in different ways; for example, the act of central government cutting a local authority's budget could prompt a variety of actions by local officers: focusing on 'joining up' government in order to ensure greater cooperation between policy silos or opting to marketise services as a means of increasing the efficiency of public service delivery. However, such interpretations can only be fully understood within the web of beliefs and intersecting traditions which influence the actors involved. For example, joined-up government may be identified with the Socialist tradition, whereas service marketisation belongs to a Liberal tradition of shrinking the size of the state (Bevir and Rhodes, 2006a, p.77). However, this focus on contextualised interpretations, dissolving the barrier between exogenous and endogenous events, creates a fresh methodological problem. Even if one accepts the importance of actors' internalised constructions of the social world, are concepts such as beliefs and assumptions researchable (Parsons, 1995, p.379)? A less structured approach to research methods can be taken, using conversational interviews to tease out the accounts and assumptions of practitioners (Young, 1979, pp.13-14). This has the potential to bring richer accounts of the ways policy is implemented, but using actors' beliefs as the

basis for analysis makes the task of making sense of the data more challenging than for a more limited number of pre-defined variables.

By emphasising the importance of cognitive activity, the decentred approach offers an account of change which goes beyond the totalisation of structures towards a focus on individuals' intentional responses to events and dilemmas. However, can convincing answers to research questions be based upon these intentional responses alone? Glynos and Howarth offer a poststructuralist critique of this position, arguing that *complete* explanations must go beyond actors' self-interpretations and address the non-intentional dimension of actors' responses (2007, p.83). That is not to say that they disagree with Bevir and Rhodes' forceful argument for "specific studies of governance rather than comprehensive accounts" (2006a, p.175). Rather, Glynos and Howarth argue that the parameters for social science explanation can be expanded beyond self-interpretation and intentionality while avoiding overreaching into the realm of general causal laws (2007, p.83). This critique is important, as it seeks to challenge the notion that the agency of actors is necessarily central to explanation. The analysis in Chapter 7 of actors' responses to localism and austerity will show that while actors interpret new circumstances in their own ways, these circumstances, rather than actors' agency, will sometimes be the decisive pressure shaping the response to a dilemma (Finlayson et al., 2004, p.151).

c) Joining the dots: constructing interpretations

A key tenet of the decentred approach is the replacement of empiricism with constructivism (Bevir and Richards, 2009a, p.8). This emphasises that the contexts within which situated agents operate are ideational, rather than structural, differentiating the interpretive approach from critical realism which sees the latter as ontologically real (Hay, 2011, pp.166-167). This is not to say that Bevir and Rhodes entirely deny the existence of a 'real world', rather that events that do occur are only made sense of through the interpretations of actors, and that these interpretations may in turn alter the ideational contexts (traditions) which they function (see pages 77-81).

This opens up the danger that focusing on actors' own interpretations risks losing sight of the factual nature of their behaviour. Individuals may interpret events in different ways, but that does not preclude the existence of the event itself (Finlayson et al, 2004, pp.140-1). The salient facts within the field of study are only given meaning by the interpretations given to them initially by research participants, and subsequently by the researcher. It is possible to move away from the idea of a researcher taking a 'pure' objective viewpoint without rejecting the reality of the events themselves (see pages 71-74). Dowding is correct in that "we only have interpretations" which also contain certain "truth-values" (Finlayson et al, 2004, p.142). However, these truth-values cannot be alighted upon in an objective (in the positivist sense) manner as the world cannot be bracketed off from our own beliefs (Bevir and Rhodes, 2008, p.729). Taking a decentred approach does not entail an

acceptance of relativism. The researcher can accept the inevitability of different interpretations, and the possibility of knowledge being mistaken, while still trying to find the most appropriate means of explaining the research topic (Bevir and Rhodes, 2006a, pp.26-8; Archer, 1998, p.71). Rather, the interpretive researcher's role is to weave evidence from the field into their own convincing interpretation. This can be critiqued with the introduction of new facts or linkages which the interpretation may or may not be able to resist or incorporate (Bevir and Rhodes, 2006a, p.29). Hence, more persuasive accounts can be provided regarding the salience of certain facts to a variety of actors, without ever claiming to have reached a definitive exposition of the field of study.

This interpretive process of agreeing upon, and making sense of, certain matter of facts within public policy is akin to a process of 'joining the dots', seeking to establish which linkages are important in order to build up a cogent, robust account of a policy issue. However, what the decentred approach is less clear upon is how these dots become joined together. In particular, the *political* aspects which are inherent within the process of joining the dots; defined as "the taking of decisions in a contingent and 'undecidable' terrain, which involves radical acts of power and institution" (Glynos and Howarth, 2007, p.114). Crucial to this observation is the role of rhetoric, emphasising that it is intrinsic to the rejoining of the dots, not merely a neutral, *post hoc* means of reporting the rejoining (Howarth and Griggs, 2006, p.30). For example, on page 154 it is highlighted how a local authority manager is able to distance themselves from the implementing climate change policy without

overtly contradicting the local authority's aims, by describing climate change as a "theoretical" concern. And on pages 252-254, it is shown how the rhetoric used by a government minister to convey the localism agenda placed particular constraints upon the options available to climate change policy actors. These examples show that rhetoric needs to be considered beyond being something that actors deploy strategically in order to act on their beliefs, as argued by Bevir and Rhodes (2006a, p.23). While rhetoric is often deployed strategically by actors, it is not separate from their beliefs. Rather, rhetoric is constitutive of their beliefs (Glynos and Howarth, 2007, p.75).

d) Accounting for change

Within the decentred approach, Bevir and Rhodes identify dilemmas as key to understanding change:

"A dilemma captures the way in which situated agents are able to bring about changes in beliefs, traditions and practices....A dilemma arises for an individual or group when a new idea stands in opposition to existing beliefs or practices and so forces a reconsideration of the existing beliefs and associated tradition. Political scientists can explain change in traditions and practices, therefore, by referring to the relevant dilemmas." (Bever and Rhodes, 2006a, p.9)

Dilemmas cause actors' beliefs to be "pushed and pulled" in order to be reconciled with the traditions which influence their outlook on the world (Bever and Rhodes, 2003, p.37). This helps to justify Bevir and Rhodes' use of 'tradition' rather than 'structure' as a counterpoint to agency; traditions imply a greater openness to being remoulded by actors than the notion of structures, which imply constraints.

Three criticisms can be levelled at this approach to accounting for change. Firstly, Bevir and Rhodes appear to privilege the notion of change over stability (Marsh, 2008a, p.254; 2008b, p.737), arguing that “as individuals respond creatively to dilemmas, it follows that we will recognize (*sic*) change everywhere” (2006a, p.10). While it would be fruitless to argue with the assertion that many beliefs and practices change, it may be that a desire to recognise change everywhere implies a certain blindness to the extent to which circumstances may remain the same. Beyond certain ontological disputes over the nature of reality, the issue here is of where one draws the line between an agent’s autonomy and the circumstances which constrain them. A decentred approach sees change as ubiquitous, with people “developing, adjusting and changing” traditions and practices, even if they do not realise it (Bevir and Rhodes, 2006a, p.10). Marsh’s critical realist critique agrees that these micro-level changes are taking place, but argues that the dominant political tradition is so deeply ingrained into institutions that it is much more resilient to such changes than a decentred approach suggests (2008b, p.737). In short, the question is whether change takes place within conditions of situated or constrained agency.

A second critique arises from this concern over actors’ relationship to change: how can dilemmas explain the resilience or otherwise of particular traditions over time? A decentred approach argues that people change their beliefs based upon local reasoning rather than any compelling causes, and that traditions are susceptible to such changes as they do not possess any inherent logic which fixes their

development (Bevir and Rhodes, 2003, p.35). The dilemmas which prompt these changes in beliefs are fundamental to explaining change, but cannot be reduced any further (Bevir and Rhodes, 2003, p.37). This emphasis is in tune with the decentred focus on change and dynamism outlined above. However, critics have worried that relying on self-interpretations to explain change in traditions falls short in providing an account of why some practices endure and some change, with the accompanying effect on the nature of prevailing traditions (Glynos and Howarth, 2007, p.108).

A third and final critique of the decentred approach to change focuses on the way in which traditions are defined. In short, traditions may be too blunt an instrument with which to explain change, and stand in the way of a “fine-grained ethnography of political behaviour” (Wagenaar, 2012, p.94). Whereas the critiques above accuse Bevir and Rhodes of privileging dynamism, the argument here is that deploying broad, easily recognisable political traditions from the literature smothers the potential for teasing out the dynamics of change sprouting from self-interpretation and practice. Wagenaar argues that the ethnographic sensibility of interpretive research inevitably challenges the kind of boundaries invoked by a study of broad traditions (2012, p.94). Ironically, a focus on political tradition may close down opportunities for fruitful new lines of enquiry by relying on well-worn narrative boundaries, rather than an attempt to move past such political heirlooms to make discoveries grounded in everyday practice. Bevir and Rhodes respond to Wagenaar’s remarks by emphasising the existence of multifarious traditions which are demarcated by researchers, based on the particular case they are trying to explain

(2012, p.204). However, for traditions to do any work at all as a bridging concept necessitates a return to examining the “family resemblances” between particular traditions (Wittgenstein, cited in Bevir and Rhodes, 2006a, pp.166-167), which seems likely to presage a return to familiar typologies of political thought.

The remarks so far have provided a broad theoretical critique of the decentred approach. The next section re-examines its strengths and weaknesses within the context of policy implementation studies.

3.3.3 Interpretive implementation

a) Overview

The ‘discovery’ of policy implementation studies stemmed from a top-down view of the policy process influenced by Weber’s ideal-type of a bureaucracy, where everyone shares the same norms and does what they are told (Hood, 1976, p.8; Parsons, 1995, pp.465-466). Those actors holding the power to formulate policy see subnational actors as responsible for implementing policy. However, Pressman and Wildavsky’s (1984) concept of the implementation deficit showed how the policy-maker’s “expectations ... are dashed” as an increasing number of linked organisations widen the divide between a policy-maker’s intention and the outcome on the ground (Hill and Hupe, 2003, p.472). This focus has proved influential, leading to many “misery studies” in the implementation literature (Hill and Hupe, 2009, p.107). If policy-makers at the top have such a poor record of having their policies carried out in the way they intended, the implication is that actors must be influencing

policy at the implementation stage, strengthening the case for studying those policy practitioners at 'street level' (Lipsky, 1980). This section takes the features of the decentred approach discussed above and examines their implication for the study of policy implementation.

b) Exogenous events

Heather Hill observes that the implementation literature has not evolved to account for the influence of actors not actively engaged in the 'doing' of public policy, thereby underplaying these actors' influence on policy meaning (2003, pp.267-268). This echoes the already identified weakness of drawing impermeable boundaries around research subjects, and is reinforced when considering climate change as a "wicked problem" where there is no "stopping rule" limiting the number of actors potentially involved in policy implementation (Rittel and Webber, 1973, p.162; Hill and Hupe, 2009, p.69). While the drive for a 'joined-up' approach to policy may have recognised the 'wickedness' of climate change, it also implies a search for high-level strategic solutions which may be incompatible with the multifarious and contradictory facets of the policy problem (Hulme, 2009, pp.334-335). As is shown in Chapter 5, there are actors who will place very different meanings on policy implementation than those intended by the core climate change policy teams (see pages 153-165). These meanings can be fundamental to the progress made in implementation, notwithstanding the status of a particular policy 'on paper'. Acknowledging the presence of multiple policy meanings implies that some form of agreement on interpretation must be reached if progress is to be made. In particular, "implementation of a policy designed to produce changes in the behavior [sic] of a

target population depends on the ‘target’ agreeing to the terms of transition” (Yanow, 1990, p.222).

c) Joining the dots: constructing interpretations

Applying a logic of constructed interpretations to policy implementation has two key key implications. Firstly, that agents tasked with implementing policy are likely to hold diverse interpretations of the policy’s meaning, a phenomenon overlooked in much implementation research (Hill, 2003, pp.267-268). As a result, policy language may be vague (Yanow, 1996, pp.129-131) or practical guidance scant (Matland, 1995, p.158). The top-down approach which typified the early implementation literature implies that policy-makers should respond to this interpretive flexibility with more tightly worded language or more prescriptive implementation guidance (Yanow, 1993, p.55). However, policy-makers often keep language deliberately vague in order to encompass different actors’ values and meanings and help enable political agreement (Yanow, 1996, p.129; Matland, 1995, p.171). In many, perhaps most, cases multiple interpretations of a policy should be regarded as the norm, not an aberration, and seen as fundamental to the evolution of a policy (Yanow, 1993, pp. 55-56). As demonstrated in Chapter 2, climate policy holds the potential for such multivocality (Yanow, 1993, p.55), as the case for action has been largely based on scientific knowledge of a kind which policy-makers may find difficult to relate to. Terms such as ‘carbon emissions’ and ‘carbon mitigation’ have a specific meaning in their original scientific sense, but take on new metaphorical meanings within the realm of public policy where they are relatively novel (Koteyko et al, 2010; Koteyko,

2011, pp.33-34). Such meanings are a key focus of analysis within policy implementation (Gains and Clarke, 2007, p.137).

Secondly, if there are numerous, co-existing meanings of a policy, then we might also expect multiple definitions of policy implementation itself. Top-down, bottom-up and hybrid models of implementation are no longer seen as in competition, but are merely different lenses which co-exist and supplement each other in a similar way to the multiple perspectives on view within Gris's cubist painting (see Image 1, page 68) (Yanow, 1990, p.221). If there ceases to be a single definition of policy implementation, then there is also a question over who are acting as implementors. For example, the establishment of targets for local authority carbon reduction appeared to mark central government placing responsibility for policy implementation onto local government (see pages 45-52). However, as shown in Chapter 6, some local authority managers pushed back against this notion, arguing that they had relatively little power to enable emissions reduction, highlighting instead the potential for central government to use taxation to make progress on climate policy implementation (see pages 195-197).

d) Accounting for change

The decentred approach to change suggests that the introduction of a new policy is likely to present a dilemma for those charged with implementation. This chimes with bottom-up models which emphasise how implementors adapt policy on the front line, rather than as envisaged by central government policy makers (Lipsky, 1980). So a decentred approach emphasises that policy change takes place during

implementation, not just as a result of central government decisions to begin or end particular programmes (Hogwood and Peters, 1980, p.35). However, if such implementation change equates to the dilution of a radical policy programme, then this may result in stability, rather than change, predominating overall. This foregrounds the concern raised in the previous section that a decentred approach privileges change over stability. For climate change, a policy area which implies a requirement for radical change if national targets are to be met, one might expect progress in implementation to be difficult, making a regard for stability as important as one for change. Related to this question of stability and change is the extent to which agency is situated or constrained. For example, where local actors resist attempts at implementation, what do the concepts of dilemma and tradition explain about this process? This may support the decentred argument for the importance of self-interpretations, particularly where they form diverse meanings of the same policy to different groups (see pages 149-165). However, one might also argue that policies to rapidly reduce carbon emissions are outside of the purview of actors who operate within particular traditions of professional practice (see pages 155-158). Instead of actors resisting implementation through their own agency, they are constrained, perhaps unknowingly by the weight of historical practice. Such accounts of implementation must also show how and why traditions influence actors, and consider whether a focus on dilemmas as responses to traditions provides a sufficiently detailed explanation of why actors act as they do.

3.3.4 Summary

This section has focused on Bevir and Rhodes' decentred approach, a key part of the interpretive policy analysis literature over the last decade and a half. It has identified three areas which highlight the strengths and weaknesses of the approach: addressing the notion of exogenous events, the importance of constructed interpretations and the ability to explain change. These areas have then been assessed in the context of the implementation literature. In short, the decentred approach provides a powerful rejoinder to studies of public policy which lean too heavily on formal models to explain change. In particular, a focus on diverse policy meanings is key to understanding the implementation 'gap' between policy expectation and result as the "ongoing working out of societal values about the policy issue which is being implemented" (Yanow, 1990, p.225). In the light of these advantages, the decentred approach will be used as a framework within which research methods will be justified (see Chapter 4) and empirical data analysed (see Chapters 5-7). However, the concerns set out above regarding Bevir and Rhodes's treatment of political factors will be kept in mind, alongside a concern over how to explain how certain traditions prevail over time, and whether their notion of situated agency places too great an emphasis on the ability of actors to change their circumstances through self-interpretation. Having presented and analysed the data using the decentred approach, the importance of these theoretical concerns and will be assessed in a final theoretical critique at the end of this thesis (see pages 309-316).

3.4 Conclusion

This chapter has reviewed the interpretive approach within the social sciences and identified the evolution and blurring of elements of the positivist and interpretive positions in the latter twentieth century. It has also used elements of interpretivism from the arts as metaphors for ways of seeing within public policy. Bevir and Rhodes's decentred approach has been introduced as part of the interpretive tradition, identifying meanings as central to an understanding of public policy. These meanings are the product of an individual's beliefs within the context of political tradition. Applying these ideas in the field of policy implementation, the researcher aims to understand how actors interpret the policy process, with particular attention paid to the gap between the evidence from the scientific community and the knowledge base of policy-makers. The extent to which practitioners share each other's interpretations and understandings is likely to be a key element of this process.

Beyond this theoretical discussion, the suitability of the approach has been assessed for investigating climate policy. As a wicked problem, climate change spans out to a large number of actors. As well as a large number of actors potentially involved in climate change mitigation, such actors are drawn from a broad range of institutions as almost all areas of modern society entail the emission of carbon dioxide. This intensifies the multivocality likely to be found within climate policy implementation, as individuals draw on their own banks of prior knowledge to interpret what the scientific constructions of 'climate change' or 'reducing carbon emissions' mean for

them. The prior knowledge of policy practitioners is likely to be very different from that of those producing the scientific knowledge and evidence which has driven the conception of climate change as a policy problem. These two broad ways of seeing climate change, as an unfolding area for scientific research and as an issue for society to address, provide still greater space for diverse interpretations of climate policy. Understanding and explaining these interpretations is a necessary aspect of investigating policy implementation.

A recurring theme of this chapter has been the blurring of boundaries and the inherent weakness of many academic constructs in explanation. While the decentred approach seeks to address this through the notion of traditions, the flexibility that this requires presents a different set of challenges in the realm of research methods to the more traditional testing of a 'formal' model. The next chapter will demonstrate how such an approach can be applied to research design.

4. Transparency and trust: the interpretive approach to research practice

4.1 Introduction

The previous chapter set out the interpretive tradition of enquiry upon which this research draws and its application within the public policy literature, with a particular focus on Bevir and Rhodes's decentred approach. This chapter takes this approach into methodology, linking the theoretical discussion with the practicalities of ensuring both the data collection in the field and the research results on paper are robust. In doing this, the researcher has to attend to the task of 'choosing' in three areas:

- a) the case study;
- b) methods for accessing information; and
- c) methods for data analysis.

In any research project, these choices must be justified, but the way in which this is done rests on the theoretical assumptions discussed in Chapter 3. By taking an interpretive approach, such justifications must take a different form from criteria which have their roots in the positivist tradition (Schwartz-Shea and Yanow, 2012, p. 113). The concept of 'trustworthiness' is used as a means of ensuring robust research without attempting to meet criteria such as validity, sampling frames and replicability, which are theoretically incommensurable with interpretive enquiry (Lincoln and Guba, 1985, pp.289-331). Demonstrating researcher reflexivity is a key

ingredient of trustworthiness; examples of such reflection during fieldwork and deskwork will be used to bring transparency to the researcher's task of making sense of climate policy (Schwartz-Shea and Yanow, 2012, pp.100-109).

4.2 Choosing the case

While case study research may be “one of the main ways in which public administration research is carried out today”, one may identify the methodological literature on case studies as being too closely tied to positivist assumptions to be applicable to an interpretive approach (Haverland and Yanow, 2012, p.406). Yin's widely cited text defines case study research as “an empirical inquiry that investigates a contemporary phenomenon within its real-life context” (2003, p.13). Although such terminology implies that a researcher can achieve a ‘real’ account of a particular case, Yin does acknowledge the difficulties in establishing boundaries around research in the messiness of the social world, and that it may not be possible to generalise from a particular case study (2003, pp.13-17). However, Yin's text pays little attention to interpretive approaches,¹² so it is appropriate to draw on the earlier theoretical discussion of Chapter 3 to unpack the term ‘case study’.

A key point of difference an interpretive approach makes to case study analysis is a focus on the meanings found within a particular case. In section 3.2.5 (see pages 75-77), it was argued that traditions *can* be used as a bridge from these micro-level

¹²Yin refers to the theoretical challenge to realism (e.g. Guba and Lincoln, 1989) in one paragraph in the third edition of *Case Study Research* (2003, p.15). The section is expunged from the fourth edition (2009, p.19)

meanings to identify macro-level family resemblances across society but *cannot* be used to produce generalised and predictive models. Traditions are constructed by the researcher based on micro-level research findings, with the value of the tradition as an analytical category primarily judged on their use within that case. This marks an inversion of Yin's approach which states that "a case study is an empirical inquiry that investigates a contemporary phenomenon" (2003, p.13). The identification of a general phenomenon precedes the selection of the case, the latter being an exemplar of the former (Haverland and Yanow, 2012, p.406). Beginning a project with a strong conception of what a particular research subject is actually a case of can be counterproductive, potentially closing down fruitful avenues of enquiry which present themselves during fieldwork (Ragin, 1992a, pp.5-6).

At this point, a tension emerges between the interpretive approach being adopted and the project's earliest foundations in a research proposal to the Economic and Social Research Council. The project was pitched and funded as one looking at subnational policy implementation (Cope, 2008). While the interpretive approach will be shown in this chapter as shaping fieldwork and data analysis, it is also important to acknowledge the role of prior knowledge as embodied within initial research questions (see pages 72-75). Research can proceed with some basic ideas and themes in place, while acknowledging the likelihood of new ideas developing which may require new lines of enquiry to be followed. To illustrate this, there follows an outline of the process of focusing down on the case being studied in this research (following Ragin, 1992b, pp.221-224).

First, there is a broad interest in public policy as a concept “which flows through all the ways in which we organize [sic] our life” (Colebatch, 2002, p.vi) with a focus on “the public and its problems” (Dewey, 1927). Second, there is an interest in UK climate policy following its rapid rise up the national agenda, as discussed in Chapter 2 and exemplified by the utterances of leading politicians (Blair, 2004; Brown, 2008; Cameron, 2010b; HM Government, 2010, p.16), scientists (King, 2004; Beddington, 2009), doctors (Boseley, 2009) and defence planners (Arnold-Foster, 2007), amongst others. Third, there is a recognition that within UK policy, the Climate Change Act 2008 set stretching, possibly unachievable, targets for greenhouse gas emission reduction (Pielke Jr., 2009). This pulled the behaviours of policy actors subsequent to the passing of the Act into sharper focus. Following O’Toole (2000, p.273), one can characterise these behaviours which occur between the instigation and impact of a policy as ‘implementation.’¹³ Fourth, within the implementation of climate policy, we can look at a number of spatial levels of governance. For this case, the local and regional levels were identified as significant following the global framing of climate change as a policy issue (see pages 28-33), the local tradition for wider environmental action (see pages 33-39) and government action attempting to bridge the gap between the two (see pages 39-52). Fifth, the East Midlands region of the UK was selected as a setting for subnational implementation of climate change mitigation policy. The region is geographically diverse, containing densely populated

¹³ The case of climate change mitigation is temporally stretched; that is, one may anticipate a number of decades before a reduction in emissions could impact on global temperatures (Wigley, 2005; Armour and Roe, 2011)

urban areas and an above average rural population, as well as showing signs of being the most advanced on local climate policy, having been the first region to have all its local authorities sign the *Nottingham Declaration* (see pages 45-48). Sixth, and finally, it was established that it would not be possible to satisfactorily study all nine of the region's upper tier and unitary local authorities to a similar depth with the resources available. This prompted the selection of a smaller number of local authorities within the region to be studied in greater depth. Following Flyvbjerg's case study strategies, this final selection of four local authorities was "information-oriented" (as opposed to random) with local authorities chosen according to which National Indicator (NI) they selected (NI185 measuring a local authority's own emissions, NI186 measuring emissions across a local area), and whether they were covered urban or rural areas (2006b, p.230). Table 2 classifies the region's local authorities by location and core NI, showing the number selected in each strata.

Table 2. East Midlands' nine upper tier or unitary local authorities classified by climate change National Indicator selection and location type

	Urban	Rural
NI185	0	2
NI186	3	4

Source: author calculations from Local Area Agreements (Derby City Council, 2010, p.4; Derbyshire County Council, 2010, p.24; Leicestershire Together, 2010, p.9; Lincolnshire County Council, 2010, p.37; Northamptonshire County Council, 2010, p.4; Nottingham City Council, 2010, p.43; Nottinghamshire Partnership, 2010, p.29; One Leicester, 2010, p.14; Rutland County Council, 2010, p.3)

The NIs for climate change mitigation were identified at the start of the research as a significant element within local authority policy (see pages 45-52), having been

highlighted as the centrepiece of regional and local policy within the regional *Programme of Action* (East Midlands Regional Climate Change Partnership, 2009, p. 15). Seven out of the nine authorities adopted NII86 (area wide emissions) within their Local Area Agreements (LAAs), the remaining two adopting NII85 (local authority emissions from their own operations) as a core indicator. A local authority adopting NII85 was included in the sample to try to identify any difference in policy implementation associated with a narrower focus in emissions reduction. The second criteria for selection was whether local authorities were urban or rural, which one might expect to shape the policy priorities in particular ways. For example, it may be easier to reduce carbon dioxide emissions from private transport through increasing public transport provision in densely populated urban areas than sparsely populated rural ones.

The sample was selected to represent the three cells in Table 1 containing a non-zero value. As there were no urban local authorities with NII85, the urban/NII86 sample was increased to two. Within these cells, selections were made according to an opportunity to learn from the differing emphases identified in preliminary email exchanges with practitioners. This selection was closest to the “extreme/deviant cases” example within Flyvbjerg’s strategies for selection, looking to “obtain information on unusual cases, which can be especially problematic or especially good in a more closely defined sense” (2006b, p.230). An overview of the four local authorities is provided in Table 3.

Table 3. Overview of local authority sample

Local authority	Population (000s)	Area (000s hectares)	Density (people per hectare)	Relative rank based on 2007 Index of Multiple Deprivation	Number of policy priorities	Climate change policy	Core climate change National Indicator	Number of full time positions in climate change/energy team
City 1	200-350	7-8	30-45	11 (most deprived)	6-10	A part of one priority	NI1186	6-10
City 2	200-350	7-8	30-45	2	>10	Specific priority	NI1186	6-10
County 1	600-800	>200	0-5	4 (least deprived)	6-10	Specific priority	NI1185	6-10
County 2	600-800	>200	0-5	3	0-5	A part of one priority	NI1186	0-5

Sources: Office for National Statistics (2012) and author calculations from interview data and policy documents.

This process of case selection invokes broad analytical concepts and geographical boundaries taken from the initial research proposal. The subject for study is the implementation of climate policy at two spatial levels: the East Midlands *region* and an information-oriented sample of *local* authorities within that region. This is a starting point for the research rather than a predefinition of a general phenomenon. Identifying analytical concepts, such as traditions, which bridge between micro- and macro-level findings is part of the *ongoing research process* and not something determined at the project's onset and remaining unchanging throughout (e.g. Flyvbjerg, 2006b, p.231). Ragin refers to this process as "casing" (1992b, pp.217-226). Casing does not preclude an initial strategy for case selection; after all, one has to start somewhere. Carefully setting out the initial assumptions and ways of choosing the research subject in advance provides the researcher with the confidence to "momentarily feel baffled and lost" when fieldwork takes an unexpected turn (Maynard-Moody and Musheno, 2006, p.318). Research plans can be changed, but only if a plan already exists. Researchers inevitably enter a project with certain preconceptions about the research subject. The test of the project's trustworthiness is whether these preconceptions are challenged and checked during the course of the project. Holding in mind this commitment to fieldwork flexibility, and having chosen the site for the research, the next choice to be made is in research methods.

4.3 Choosing the methods

4.3.1 Interpretation and method

As discussed in Chapter 1, three research questions have been identified to guide the research process:

1. What factors do subnational actors find the most important in implementing climate change mitigation policy?
2. How do actors' perceptions of change affect implementation of policy?
3. To what extent is subnational policy implementation driven by the centre?

In choosing research methods, one must acknowledge how an interpretive approach shapes the process of answering these questions. Hay identifies six of these methodological implications, of which three are of direct relevance to method choice (2011, p.169):

- “the goal of political analysis is to capture the meaning to political actors of their actions and practices ...”;
- “this entails embedded research and an ethnographic method ...”; and
- “though a focus on beliefs and meanings may entail a certain practical preference for qualitative techniques there is still value in quantitative methods.”

The argument that a focus on meaning entails embedded, ethnographic research is supported by many examples in the public policy literature (for example, Blau, 1963; Crozier, 1964; Lipsky, 1980; Yanow, 1996; Shore and Wright, 1997; Stein, 2004; Rhodes, 2011b). While ethnography is a term encapsulating many different meanings, one typical characteristic is the study of people in their “everyday contexts, rather than under conditions created by the researcher” (Hammersley and Atkinson, 2007, p.3). A review of the contributions to a special edition of *Public Administration* on

decentred networks refers to many of the researchers adopting an “ethnographic method” (Bevir and Richards, 2009b, p.135), yet the prevalent method within the literature covered in the review is the semi-structured interview (Davies, 2009; Durose, 2009; Gains, 2009; Poulsen, 2009). This is a much broader use of ‘ethnographic method’ than implied by Hay’s formulation which, in the second bullet point above, explicitly links ethnography to the embedding of a researcher.¹⁴

While ethnographic methods entailing embedded research are well suited to an interpretive approach, they also presents two main risks. First, attempting to capture and represent as much detail as possible through the ‘thick description’ (Geertz, 1973) of a research subject carries with it some realist connotations. A goal of early ethnographic researchers was “to discover and represent faithfully the true nature of social phenomena” (Hammersley, 1992, p.44), although new strands of ethnography have emerged shifting the focus from this “naïve realism” (Hammersley, 1992, p.50) to a focus on social constructions which cannot be observed directly but still shape the world (Shehata, 2006, p.260). Second, no matter what the epistemological treatment of ethnographic data, accessing such data requires the researcher to spend an extended period in the field,¹⁵ giving rise to practical considerations regarding the resources available to a doctoral student. Where such an approach can be adopted to great effect in a limited number of sites (e.g.

¹⁴ Although Gordon et al. (2009) uses an embedded ethnographic approach, and is included in the decentred networks issue of *Public Administration*, the paper makes no reference to the policy network literature.

¹⁵ For example, Rhodes (2011b, p.8) spent a total of 420 hours on observation and shadowing, in addition to interviewing. For multi-site ethnographies, the time taken gaining access to research sites also multiplies.

Greener, 2011), the amount of time required in each research setting makes the method challenging to operationalise within the time constraints of a doctoral study. This constraint in the number of sites in which an embedded ethnography could be carried out also risks insufficient exposure to the multiple “webs of meaning” which one might expect to encounter within the interpretation of a policy (Schwartz-Shea and Yanow, 2012, p.87). This risk is increased when considering a network of multiple local, regional and national actors, which is likely to span multiple sites, actors and linkages. In sum, the consequence of studying such a network is that data is required to be accessed on multiple sites, but to carry out embedded ethnographies within each network site would be beyond the scope and resources of a doctoral study. However, such a research design remains an intriguing avenue for future study.

These practical considerations suggest a turn away from embedded ethnography as a method for this research, while maintaining an interpretive approach. While political ethnography may be the most notable contribution of interpretive political science to date, the focus of the approach is on the way data is analysed in terms of meaning rather than the manner in which data is collected (Hay, 2011, pp.173-174; Bevir and Rhodes, 2005, p.178). While this leaves the way clear for the use of quantitative, as well as qualitative, methods within a decentred network approach (e.g. Needham, 2009), such methodological openness does not bring all ‘mixed methods’ approaches under the same epistemological umbrella. Bringing together quantitative and qualitative methods may be done using a positivist epistemology aiming to discover

causal linkages (e.g. Brady and Collier, 2010). Consequently, codifying methods in terms of interpretive-positivist is a more appropriate shorthand than quantitative-qualitative, emphasising the importance of how data is analysed over how it is accessed (Yanow and Schwarz-Shea, 2006, p.xviii).¹⁶ The methods employed here are qualitative, a mix of observations and interviews drawing on ethnographic influences while avoiding the drawbacks and constraints discussed above (Durose, 2009, pp. 39-40). In particular, efforts were made to make interviews as informal and conversational as possible (Hammersley and Atkinson, 2007, p.3). These methods are now explored in greater depth, along with reflections on their usage.

4.3.2 Interviews

a) Interview structure

An interview gives the researcher an opportunity to hear a person tell their own story in their own words (Atkinson, 1998, p.2). This may include the reconstruction of experiences which the researcher was not present at, or provide a different perspective on events and processes which the researcher has already had access to (Rubin and Rubin, 2005, p.3). The interview is not a neutral process, the data collected is the result of a co-production between researcher and participant. Even during the most unstructured interviews the researcher will prompt and react to what they are being told, influencing what is subsequently said (Fontana and Frey, 2005, p.718). Conversation and the sharing of stories may be an every-day occurrence, but the interview places these characteristics within a setting

¹⁶ While bearing in mind the developing nuances and dialogue between paradigms discussed in Chapter 3. See also, Guba (1990).

constructed by the researcher for the purposes of research. While appropriate measures should be taken to make the interview environment as comfortable as possible for the participant, analysis must reflect on how the data collected has been influenced by the method employed. Recognising the imperfections of interviewing, as with any research method, helps to build the case for the use of multiple methods in a research project.

The literature refers to a continuum of interview styles categorised by structure; ranging from a structured survey-style interview associated with quantitative methods to an unstructured 'life-history' style focusing on the participant's own story, as guided by the researcher (Atkinson, 1998, p.2). In between these lies the semi-structured interview, where the researcher has key topics they would like the participant to address within the time available, but without a rigid structure or wording to be replicated across all interviews within the research. The focus on actors' own interpretations as a source of data requires the ability for them to direct the information being used in research, relatively free of imposed hypotheses. Data collection must be primarily directed by the concerns of those participating in policy implementation on the ground. This will help ensure that the researcher does not find themselves addressing a research question which has little or no significance to those practising public policy. This theoretical advantage had to be balanced by what was feasible using the resources available. While a small number of interviews lasted two hours or more, the limited availability of most participants, particularly those in senior roles, meant interviews could not be truly 'open-ended'. Interviews

were typically around an hour in length, half an hour for directors and civil servants. In the latter cases, the use of some kind of 'structure' was necessary to ensure that the time was used effectively. A semi-structured style can still be open enough to allow participants to present the elements of their story which they regard as significant while allowing the researcher time to probe some of the unspoken assumptions lying beneath the surface (Stephens, 2007, p.206). For example, Durose's decentred study adopts a methodology for interviewing front-line workers that emphasises the collection of personal stories while also listing eight common aspects of the stories that provide "anchoring points" for the researcher's analysis (2009, p.40).

An alternative way of seeing interviewing styles is to contrast between the cultural and the topical interview (Rubin and Rubin, 2005, pp.9-11). This was used as a basis for interviewing most participants twice. The first wave of interviews, which took place between June 2010 and March 2011, were cultural, letting the participant explain the generalities of behaviour, norms and values. While this was more 'unstructured' in character, data from participant observations and follow-up interviews were used to uncover aspects which may be so taken for granted that the participant may not immediately highlight them as a feature of their culture (Rubin and Rubin, 2005, p.10). The second wave of interviews, which took place between March and August 2011,¹⁷ were more topical in style, aiming to piece together the participant's narrative of particular issues which had already been

¹⁷ Second wave interviews with two participants had to be carried out earlier, in January 2011, as they were due to leave their posts shortly afterwards.

highlighted by themselves and others as key within policy implementation. Here, I employed a little more structured approach to questioning in order to construct a cogent account of the meanings created and acted upon (Rubin and Rubin, 2005, p. 11); what Roe describes as a meta-narrative derived from the different narratives of the individuals involved (1994, p.156). However, this had to be balanced with maintaining the space for participants to talk about topics of their choosing within second interviews. This mix of styles enabled a focusing down on particular topics between the first and second interviews, facilitated cross-checking of meanings between different participants, and allowed an identification of changes in participants' concerns over time.

b) Local participants

The process of choosing participants stemmed from the concerns identified in the process of choosing the site: the principle focus fell on individuals working within local and regional government with responsibility for climate change mitigation policy. As discussed above (see pages 103-106), two city and two county local authorities were chosen to study in greater depth. In these organisations, interviews were conducted with:

- climate change managers responsible for overall climate policy;
- energy managers who were responsible for monitoring the local authority's own carbon emissions and reporting NI185;
- the director whose department or directorate included climate change (the director was sometimes the direct line manager of the above positions, depending on staff structure); and
- the elected councillor whose portfolio included climate policy.

As befits a network approach, additional research participants were ‘snowballed’, at the end of each interview participants were asked for contacts and recommendations for which individuals who I might usefully interview next (Bevir and Rhodes, 2006a, p.110). Such an approach carries the risk of insufficient exposure to different webs of meaning (see pages 107-112). Attempting to overcome this problem required some supplementary, purposive selection of participants from both the core local authorities and other organisations active within local climate policy (Yanow, 2006b, p.77).

In one local authority (County 1), this resulted in a significant increase in the number of participants interviewed: eight in the first wave, nine in the second wave. The greater number of participants reflected a larger than average core team dealing with climate policy and the inclusion of individuals holding significant roles in policy implementation but who operated outside of the core roles identified above. These latter individuals were first identified during an observation of a cross-department meeting within the local authority, at which a policy controversy emerged, with differing views being aired on the introduction of a new initiative. To accommodate these “new angles” discovered within County 1, a decision was made in the field to increase the number of interviews undertaken (Yanow, 2000, p.85). Additional participants who were active in climate policy were also sought from outside local authorities, leading to interviews with individuals from community projects, a business network, a social enterprise for energy, a Transition Town group and district-level local authorities. Being mindful of alternative views of climate policy is

part of the interpretive approach's "ethnographic sensibility" (Pader, 2006, p.171), discovering the multivocality which is key to understanding policy implementation (see pages 97-100) (Yanow, 1997). This approach to snowballing followed the fieldwork maxim succinctly expressed by Bevir and Rhodes: "[w]e took whatever interviews we could get" (2006a, p.110). While this was important in ensuring a wide range of participants, it did result in an unexpected abundance of data (see page 124).

Besides the four core local authorities, referred to as 'County 1', 'County 2', 'City 1' and 'City 2', interviews were carried out with climate change managers in the remaining five city and county local authorities. This served two main purposes. First, by widening the accessing of local knowledge, valuable context was provided for the core sample, providing a contribution to multivocality. Second, the inclusion of each local authority within the regional climate change partnership demonstrated to participants that their views were important in the production of knowledge which they subsequently wished to use to reflect upon and modify their own practices. A summary of the local participants interviewed is shown in Table 4.

Table 4. Local participants interviewed (core sample of local authorities shown in bold)

Local authorities	Wave 1	Wave 2
County 1	8	9
County 2	5	2
County 3	1	1
County 4	1	1
County 5	1	1
County 6	1	1
City 1	5	4
City 2	4	5
City 3	1	1
District council 1	1	2
District council 2	1	1
Other local participants		
Transition group	1	1
Social energy enterprise	2	1
Inter-local authority partnership coordinator	1	1
Local charity	1	0
Community project coordinator	1	1
Community member	0	1
Total	35	33

c) Regional participants

The starting point for determining regional-level participants was the management group of Climate East Midlands (CEM), the region's climate change partnership. At the beginning of the research project, the regional organisations active in climate policy within CEM were:

- East Midlands Development Agency (EMDA) (charged with promoting economic growth within the region);
- East Midlands Regional Assembly (EMRA) (strategic organisation bringing together region's elected councillors);
- East Midlands Improvement and Efficiency Partnership (promoting sharing of good practice and resources between region's local authorities);
- Environment Agency (working on renewable energy schemes and operating the Carbon Reduction Commitment); and
- Government Office for East Midlands (GOEM) (representing Whitehall departments within the region).

A focus group was carried out including representatives from all of these organisations, along with the partnership's co-ordinator, following a CEM meeting at the beginning of the fieldwork, which helped to clarify the issues these individuals found most meaningful in implementing climate policy and which could be explored further in subsequent interviews. These interviews were carried out in the second half of 2010 against a backdrop of rapid change within the regional tier, as the new Cameron Government scrapped Regional Strategies (Pickles, 2010a), a key function of EMRA, and began the process of abolishing GOEM (Pickles, 2010c) and EMDA (Department for Business Innovation and Skills, 2012). This ongoing process of 'de-regionalisation' meant that fewer repeat interviews were conducted at this level as individuals left their posts and were not replaced. Interviews were carried out with individuals from two organisations brought into the CEM management group following the regional changes: Business In The Community and the National Health Service. Individuals from the East Midlands office of Energy Saving Trust, a national organisation advising local authorities and the public on energy efficiency, were also interviewed. The regional office closed part way during fieldwork, meaning one of

the two participants had left post by the time of the second wave of interviews. A summary of the regional participants interviewed is shown in Table 5.

Table 5. Regional participants interviewed

Organisation	Wave 1	Wave 2
EMDA	3	2
GOEM	2	2
East Midlands Improvement and Efficiency Partnership	1	1
CEM	1	1
EMRA	1	0
Energy Saving Trust	2	1
Business in the Community	0	1
National Health Service	0	1
Environment Agency	1	0
Total	11	9

d) National participants

While being one step removed from subnational policy implementation work, interviews with national actors provided background to the main study and alternative perspectives on the relationship between the national and subnational in policy implementation. These individuals were only interviewed once, as they provided more contextual information rather than forming the main subject of the study. The organisations identified as important (number of individuals interviewed in brackets) were:

- Department of Energy and Climate Change (DECC) (3) (Whitehall department responsible for local climate change mitigation policy);
- Local Government Group (1) (national organisation representing interests of local authorities);

- Carbon Trust (2) (government funded organisation working with regional and local organisations on carbon management);
- Committee on Climate Change (2) (organisation formed under Climate Change Act, providing independent policy advice to government on meeting carbon targets); and
- Friends of the Earth (1) (non-governmental organisation campaigning on local authority climate policy).

A summary of the national participants is shown in Table 6.

Table 6. National participants interviewed

Organisation	Wave 1	Wave 2
DECC	0	3
Local Government Group	0	1
Carbon Trust	0	2
Committee on Climate Change	0	2
Friends of the Earth	0	1
Total	0	9

e) Summary of interview participants

In total, 29 participants were interviewed twice and 39 were interviewed once, the latter number including a number of individuals who either left or came into their post during the fieldwork. Interviews were recorded and transcribed. Before each interview began, the participant was given a brief verbal recap of the purpose and style of the interview before being invited to read a participant information sheet and sign the form providing consent for the interview data to be used in the project (appendix 1). Interviews were usually carried out in participants' own offices, reducing the disruption to their work schedule and helping to offset some of the

ethical concerns about the amount of power afforded to researchers in one-to-one interviews by using what the participant sees as ‘home ground’ (Fontana and Frey, 1998, p.64). A summary of the research participants is shown in Table 7.

Table 7. Summary of participants interviewed by spatial level

	Wave 1	Wave 2
Local	35	33
Regional	11	9
National	0	9
TOTAL	46	51

f) Reflections on interviewing

“‘Reflexivity’ refers to a researcher’s active consideration of and engagement with the ways in which his own sense-making and the particular circumstances that might have affected it, throughout all phases of the research process, relate to the knowledge claims he ultimately advances in written form.” (Schwartz-Shea and Yanow, 2012, p.100)

Reflexivity is a key theme of the phenomenological literature which has become part of the evaluative criteria for interpretive research (Schwartz-Shea, 2006, pp. 101-102). Three aspects of reflexivity will be drawn upon here: (Schwartz-Shea and Yanow, 2012, p.101):

- efficacy of initial research mapping for exposure to different meanings;
- revising research design in the light of experiences in the field; and
- the co-construction of researcher identity by participant and researcher, and the implications for the co-generation of data.

Two notable issues from fieldwork, developing a local outlook and researcher identity, will be discussed to demonstrate reflexivity and build reader confidence in the fieldwork process.

Developing a local outlook

I began this project working for Regeneration East Midlands, a regional-level organisation which contributed to the funding of the research. As part of a particular network, I had already come into contact with a number of individuals working in regional organisations, and far fewer who worked within local authorities or other bodies. Although I was unaware of it at the time, this was the foundation for my initial sense-making about the research; being based in a regional organisation led me to unconsciously place that spatial level at the centre of my thinking. I imagined CEM as the central hub for climate policy in the region, with the local authorities as spokes coming off into the region's local areas. This cemented the notion of the 'subnational' in my mind, a combination of the regional and local working to implement policy beneath the national level. As I began to interview local authority participants, it became clear that this was far from an accurate way of conceptualising the relationship between the spatial levels (for an example, see pages 244-270). The hub/spoke metaphor implies that the local authorities were dependent upon the regional tier; when interviews revealed officers were ambivalent to much of the regional organisations and partnerships.

This provides an example of reflection on themes i) and ii) from the above list. For i), the initial mapping was too centred on the regional tier as a result of my own

positioning and personal circumstances. That this was identified quickly in the light of “field realities”, leading to a greater focus on local actors, provides a demonstration of theme ii) and further contributes to the trustworthiness of the research (Schwartz-Shea and Yanow, 2012, p.101).

Researcher identity

As discussed above, I offered a short precis of my research to participants at the beginning of each interview, outlining the research topic as “subnational implementation of climate policy”. Most of the participants had climate policy as a significant part of their responsibilities, so in using this description I (unwittingly) put many of the participants at ease from the outset. They could be confident that the interview would cover familiar ground. While I did not state any personal views about the importance of climate change as a policy priority, the role as a ‘climate change researcher’ located me within a similar interpretive community to themselves. Conversations were held on the basis of some implied, shared assumptions that climate change was a national policy priority and that the scientific evidence that it was based upon was sound.

Interviewing the head of a local authority section other than climate change was a different experience. Here, the participant belonged to a different interpretive community, seeing climate change as peripheral, not central, to the task of maintaining their service within the organisation. The interview took place in the context of an ongoing disagreement over policy between senior managers from the section and the climate change unit. Introducing myself as a ‘climate change

researcher' may have positioned me in the mind of the participant as 'one of them' rather than 'one of us'. I was conscious of the issue during interviews, and although I was already aware of the struggle between the section and the climate change team, I strove not to ask questions which explicitly aligned me with the latter's position while still exploring the issues at the root of the disagreements. While these efforts went some way towards mitigating the issue, the possibility remains that my position as researcher may have increased the likelihood of the service head presenting an 'environmentally friendly' position. He struck a diplomatic tone in the interview and was, on the surface at least, much more supportive of climate policy than I had been led to believe both from previous interviews and from informal discussions within the organisation. While a positivist methodology would be concerned that the gap between the participant's self-presentation and their actual preferences shows up a weakness of interview data (Dowding and James, 2004, p.187), an interpretive approach sees such a 'performance' as interesting data in itself (Schwartz-Shea and Yanow, 2012, pp.110-111). The careful diplomacy employed by the participant contrasted with the much more open conversations that typified most other interviews. This interview experience is not recounted as being representative of a greater number of interviews; the majority were conducted under much more relaxed conditions. However, the data accessed during the interview, both the language used and the performance of self-presentation, was important in providing a different angle on the policy controversy within County 1 (see pages 153-158).

This example illustrates the importance of theme iii) and how my role as ‘climate change researcher’ took on a different meaning when in confluence with the participant’s role as someone sceptical of climate change’s relevance to their work. Particular attention had to be paid to the language used to express their commitment to climate policy, illuminating the gap between their understanding of the issue and that of climate change officers (see pages 155-158). The data generated from the interview was of a different nature of that from an interview with a climate change manager, where ‘climate change’ as an issue was integral to the identities of both researcher and participant.

g) What would I do differently? Curb my enthusiasm.

A preoccupation with applying my theoretical approach to fieldwork led me to overlook the practicalities of processing and analysing an abundance of data within a period of time constrained by personal¹⁸ and institutional¹⁹ contexts. While one can never be sure in advance whether the data arising from an interview will be of importance to the final research, greater reflection on this issue in the field could have curbed my enthusiasm for data collection and made data processing and analysis more manageable once fieldwork came to an end.

¹⁸ With the research stipend coming to an end after three years, any continuation of writing into a fourth year would have to have been done alongside paid work.

¹⁹ There is increased pressure on institutions to better manage their doctoral completion rates (Park, 2005, p.194), exacerbated by a concentration of the Economic and Social Research Council’s PhD student funding in fewer universities through the new system of Doctoral Training Centres (Corbyn, 2009)

4.3.3 Meeting observations

a) Structure

The prevalence of governance through partnership working and network management provided a range of meetings for observation as part of the study (Durose, 2007, p.24). Observation forms part of the wider suite of ethnographic methods which provide the opportunity to discover the acts, objects and language involved in policy implementation which may be less evident from interviews (Yanow, 2000, pp.38-9). Observation appears to enable a researcher to get closer to organisational activities than is possible within interviews, although what is noticed in the field and then subsequently deemed worthy of further analysis is, of course, subject to the researcher's own interpretive frame. There is no such thing as a 'pure' source of data but data derived from observation will be subject to a relatively consistent set of biases throughout the project, providing a valuable means of triangulating data collected by other methods (Adler and Adler, 1998, pp.89-90). Note taking during meeting observations had to strike a balance between collecting data relevant to the research questions and remaining open to the range of acts, interactions and use of objects which may provide useful information (Yanow, 2000, pp.38-39). Observations of meetings were also helpful in uncovering the meanings of acts beyond their literal purpose when analysed in the context of data collected from other methods (Yanow, 2000, pp.76-78). For examples of the value of this data, see section 5.4 (pages 163-179).

b) Participants

A total of 27 meetings were observed. These can be characterised as non-participant observations, although I was asked to contribute to discussions on rare occasions - a trend which developed as I became more familiar to those attending the meetings. While wanting to accommodate any such requests in order to maintain goodwill, I kept these contributions to a minimum in an attempt not to unduly influence proceedings. Most observations were carried out at either inter-organisational network meetings or cross-department meetings within local authorities. A summary of meetings and events observed is in Table 8.

Table 8. Meetings and events observed

Invite-only meetings	Wave 1	Wave 2
National	0	1
Regional	4	4
Local/national meeting	2	0
County 1	2	1
County 2	1	0
City 1	2	1
City 2	2	1
District level network	0	1
Public events		
Regional	5	0
TOTAL	18	9

Audio recordings were not made of observed meetings. Instead, extensive written notes were taken. I recorded my own reflections about each meeting soon after its

completion, often using a voice recorder while walking back from the meeting location to the train station.

c) Reflections

One episode which occurred while undertaking observation in the field provides an opportunity to reflect on the effect of my presence on the actions of participants and the consequences for the data collected (Schwartz-Shea and Yanow, 2012, p. 101). It was my first time observing a cross-departmental meeting within a particular local authority. Other than the climate change manager who was my primary contact within the organisation, the meeting was attended by a range of more senior section managers involved in climate policy and was chaired by a director. My contact introduced me at the start of the meeting and I gave a short summary of my research. The director quipped that I was very welcome at the meeting “as long as none of this ends up in the local paper tomorrow” (anonymised local authority meeting, field notes). While the comment was delivered with a smile, it did reflect a sharpened political sensitivity of those in more senior positions within local authorities. At a different local authority meeting, a section head joked that “we’re struggling to get them not to kill their residents at the moment, let alone do this! [prioritise a climate policy]” (anonymised local authority meeting, field notes). The chair quickly followed this with a comment, again delivered humorously, that the joke should be struck from the minutes. While this comment betrayed a little nervousness on the part of the chair about the picture of the organisation presented to an outsider, that the comment was made at all suggested I was inconspicuous at the meeting. Similarly unguarded comments were made at most

other observed meetings, supporting the view that my presence did not unduly restrict the ability of attendees to speak freely. In sum, even though my observations were largely non-participant, that did not mean I was invisible to those attending meetings. However, in the main meeting participants did not acknowledge my presence and were generally relaxed in their conduct, suggesting that I could be confident that the effect of my presence on discussions was relatively minimal.

4.4 Choosing the data analysis

Yanow identifies three symbolic aspects of policy which can be analysed interpretively: objects, acts and language (2000, pp.41-84). Examples of each of these are outlined below.

4.4.1 Objects

Policy programmes communicate meaning through their definition of key concepts and the ways in which these correspond or diverge from those of policy actors and the public (Yanow, 2000, p.69). As argued earlier, climate change is a socially constructed issue more usually associated with global, rather than local, spatial scales (see pages 28-30). 'Carbon dioxide' has a particular meaning within the scientific evidence upon which climate policy is based, but within the policy itself it can take on different meanings beyond its literal, chemical definition. For climate change managers it could be a key performance indicator; for managers elsewhere in a local authority it could mean an unwelcome new policy which challenges their existing work practices. While carbon dioxide is a central concept within climate policy,

particular policy texts can also embody diverse meanings. Chapter 7 demonstrates the multiple meanings attached to one short document, the *Memorandum of Understanding* (DECC and LG Group, 2011), by actors within the network. Policy programmes' meanings may be dynamic, not static (Yanow, 2000, p.71). As discussed in Chapter 6, climate policy as an object itself has undergone 'morphing', perhaps to the extent where its constituent programmes are becoming more distant from some of climate change's original meanings.

4.4.2 Acts

One of the underlying assumptions of this research is that the targets implied by the Climate Change Act are highly challenging for policy-makers to implement (see pages 52-55). This Act (upper case) is an example of the numerous acts (lower case) within public policy which individuals and groups can find meaning in (Yanow, 2000, p.74). As discussed in section 3.2.4, these meanings are created within the context of prior, local knowledge, leading to i) different interpretations of the acts of others and ii) new acts being committed (see pages 71-74). This hermeneutic process opens up space between local acts and written policies, which can then be compared as a way of understanding the 'implementation gap' (Yanow, 2000, p.76; Pressman and Wildavsky, 1984, p.143). One local authority act within climate policy was that of adopting a target to reducing carbon dioxide emissions within their Local Area Agreement (see pages 47-52). The meaning and significance of these acts are explored in sections 6.2, 6.3 and 6.4 (see pages 188-208). The act of holding a meeting within an organisation is also likely to carry meaning, for those invited (who

may or may not attend) and those excluded (Yanow, 2000, p.76). Interactions within the meetings may be of particular interest, analysed during observations. Examples of the meaning embedded in meetings are explored in section 5.4 (see pages 165-182). Such meetings are often scheduled regularly; for example, on a monthly or quarterly basis. The meeting will have a title such as climate policy group or climate change network which expresses its literal function and/or membership. However, some characteristics of these meetings may not make sense when considered as part of their stated function, but instead make more sense when the meetings are also understood as ritualised acts. Yanow uses the example of a meeting where the director regularly asked what the organisation's goals were, even though they were clearly expressed in a mission statement (2000, pp.77-78). The role of ritual in intra-organisational and network meetings is considered in section 5.4.4a (see pages 175-177).

Finally, one may consider the creation and performance of myths to be another type of symbolic act, helping to ease the tension between irreconcilable values within policy (Yanow, 2000, p.80). The decentred approach sees such tensions as causing any given policy-maker to encounter a dilemma, which has to be "pushed and pulled" to be reconciled with the tradition which influences their outlook on the world (Bevir and Rhodes, 2003, p.37). The Climate Change Act provides the legal basis for policy which will ensure the UK reduces its greenhouse gas emissions to a level which scientific evidence suggests will avert the most serious consequences of climate change. However, an extended analysis may locate the Act's targets within the

context of other policy decisions made within government, leading to a questioning of any literal reading of the Act as the basis for policy. For example, the Labour Government's decision to build a third runway at Heathrow (later reversed by the Cameron Government) appeared to contradict the stated aim of reducing greenhouse gas emissions, and led Colin Challen MP, then chairman of the All Party Parliamentary Group, to describe the Act as "well beyond our political capacity to deliver" (Harrabin, 2009). If decisions continue to be made at a national level which make achieving the Act's emission targets less, not more, likely, then the legislation may be seen as the enactment of a myth that dangerous climate change can be averted while other government policies which increase emissions continue unchanged (Bellamy and Hulme, 2011, p.58; Howarth and Griggs, 2006). With local authority mitigation policy being predicated on similar emission targets to national government, comparing and contrasting policy with action at the local level may highlight similar contradictions.

4.4.3 Language

Implicit in any consideration of symbolic objects or acts is language, the use of which within organisational texts or individuals' speech may be analysed in various ways. Yanow identifies two types of language use: metaphor and category (2000, p.41). An interpretive approach sees the notion of a 'policy cycle' as itself a metaphor for the relationships between policy actors (see pages 69-70). This can be described as a model *of* action, and differentiated from a model *for* taking action in a certain situation (Yanow, 2005). While the two are interrelated, it is the latter which is of

primary concern during data analysis, uncovering the ways in which individuals see policy through language. One might expect this to be of particular interest in the field of climate policy, where the highly complex nature of the evidence may only be understood by policy-makers through metaphors, rather than a grasping of the science itself (Hulme, 2008, p.11). Category analysis is often used to identify the labels used to describe groups of individuals who are affected by a policy (Yanow, 2000, pp.48-49). Within this research, categories are used in a slightly different way, as a means of differentiating between policy-makers and the general public as well as between different groups of individuals within policy organisations. These categories highlight a number of characteristics about the legitimacy and implementation of local climate policy. Language also plays a political role in the form of rhetoric, which can apply pressure on actors (see pages 253-258, 309-316).

4.4.4 Reflections on data analysis

As outlined above, analysis of observations and interviews began straight away in the field, through the taking of written and spoken notes. In particular, the use of the latter provided added flexibility in note taking, not having to wait to make written notes before recording reflections on a piece of fieldwork. So data analysis begins in the field, with an ongoing interaction between fieldwork and deskwork, with emerging themes helping to shape the second round of topical interviews (Yanow, 2000, pp.84-85). More formalised analysis followed, with transcripts, field notes and reflections from interviews and observations coded using NVivo. The software was preferred to a more 'analogue' pen and paper approach, in order to readily retrieve

the codes already used, and compare and collate themes across a large amount of transcripts and notes. Formulating the arguments included in this research necessarily implies the exclusion of much data from the abundance collected. Inevitably, given the anti-foundationalist, interpretive framework I am adopting, such “world-making” through the authoring of texts is itself an interpretation, and not an attempt to provide a mirror on reality (Yanow, 2000, p.87). However, with this approach comes a responsibility to continuously test and check the data to ensure that my interpretation is robust, and has not flowed uncritically from my initial preconceptions (Schwartz-Shea and Yanow, 2012, pp.104-105). Where possible, voices dissenting from the majority view are highlighted to demonstrate the multivocality within policy implementation. Member checking, the sense-checking of the results of analysis with research participants, began in the second wave of topical interviews, where themes which had emerged in the first round of interviews were revisited (or introduced when they had not previously been discussed by a participant). Further member checking with participants took place once the analysis was complete, both informally at a number of co-attended events and at a formal presentation to the research advisory group which met towards the end of the writing-up process.

4.5 Ethics

Ethical approval was gained for the research from the School of Sociology and Social Policy in the University of Nottingham. A consent form and participant factsheet was given to interview participants in advance (see appendix). It was not practical to

circulate such forms to everyone attending meetings which I attended. However, attendees were made aware of the purpose of my presence both in advance, as part of the circulated agenda, and at the start of the meeting itself. At both stages, attendees were asked if they had any objections to my observing the meeting, and reminded that even if they did consent, this could be withdrawn at any stage (the same assurance was also given to interview participants). By providing clear information to participants before they took part in the project, the principle of informed consent was adhered to (Social Research Association, 2003, pp.28-29).

The greatest ethical challenge for the project has been maintaining participants' anonymity while ensuring findings are reported in an intelligible manner to the reader (Social Research Association, 2003, pp.38-39). The four local authorities can be anonymised as they are not unique within their category but could still be potentially recognisable if reference to any distinct characteristics is necessary within the research. In one case, information that could have supported explanations has been omitted due to anonymity concerns (see page 280n45). An additional challenge to maintaining confidentiality is the 'gossip factor'. It would be unwise to assume that the identity of local authorities included in the research will remain secret within a relatively small regional network. While accepting that total confidentiality may not be achievable, the researcher maintains an obligation to reduce the possibility of inferring identity from attributes of the participant which can be ascertained from the text (Social Research Association, 2003, p.39). The potential of participants being identifiable, particularly by fellow network members,

are highlighted in the research ethics form and consent form (see Appendix) in line with the principle of informed consent.

4.6 Codes used to identify participants

Following this ethical approach, participants are referred to here by a code consisting of the type of organisation they belonged to and their role within it. City 1, City 2, County 1 and County 2 are the four core local authorities, with other local authorities referred to with sequential numbers (see pages 113-116). The regional organisations are identified as Regional 1, Regional 2, Regional 3, and so on. At the national level, while individuals remain anonymised, they are identified as being from DECC or the Local Government Association as essential context for the interview data presented. The second part of each code consists of the role each participant fulfils: *Climate Change Manager* represents a senior member of staff within a climate change or environment team, *Climate Change Officer* is a more junior member of the same team. *Director* is at a more senior level, typically reporting to the Chief Executive, with a remit including, climate change alongside a range of other issues. In County 1, two additional roles at similar levels are identified within the local authority which do not deal directly with climate change: *Service Head*, a senior manager with responsibility for delivering a particular local authority service, and *Department Head*, who heads a corporate section of the local authority. *Councillor* refers to an elected member who holds the portfolio for climate policy. *Adviser* is used for participants within both DECC and the Local Government Association, referring to middle-ranking staff with a specialty in climate policy.

4.7 Conclusion

This chapter has explained the choice of research sites, data collection methods and data analysis methods in relation to the interpretive approach. Key elements of the design are:

- located at two spatial levels:
 - the regional level of the East Midlands;
 - local authorities and their associated areas within the East Midlands;
- repeat interviews, characterised as ‘cultural’ and ‘topical, with participants from both local and regional organisations;
- additional contextual interviews carried out with participants from national organisations;
- meeting observations, predominantly within local authorities and the regional network;
- analysis of interview transcripts and notes from interviews and observations for three categories of data:
 - objects
 - acts
 - language
- a commitment to continual reflection and transparency of method to build research trustworthiness.

This chapter has also demonstrated the translation of interpretive theory detailed in chapter 3 into research design. A broadly ethnographic approach to data collection has been balanced with the practical limitations of researching multiple actors and sites as a doctoral student. This brought about a use of conversational interviews and participant-observations across a broad range of sites, rather than embedded ethnography within a limited number of settings.

Finally, this chapter and chapter 3 have demonstrated the translation of interpretive theory into research design in six key areas, summarised in Table 9.

Table 9. Theory and practice of interpretive research design

Theory of interpretive design	Translating design theory into design practice
Research orientation	Focus on meaning
	Appreciation of individuals' diverse interpretations of a policy
Design attitude	Awareness of researcher prior knowledge, located within a regional network
	Flexibility in design through an open-ended 'snowballing' approach to finding participants
Getting going	Research setting as site for open investigation, not a case of a pre-ordained phenomenon
In the field	Expanding number of research participants to ensure exposure to multiple webs of meaning
	Focusing on locally significant issues of participants, not those previously assumed to be important
Analysis of evidence	Communication of multiple meanings through objects, acts and language
	Producing a robust, coherent argument for a particular interpretation of policy implementation
Evaluative standards	Trustworthiness built through a demonstration of reflexivity and transparency

Adapted from Schwartz-Shea and Yanow (2012, p.113)

The ordering of Table 9 broadly corresponds to a chronological journey through the research process (Schwartz-Shea and Yanow, 2012, p.114). While all six characteristics have been covered in the current and previous chapters, the final two - analysis of evidence and evaluative standards - will continue to feature in the

remainder of the research. Through a focus on the multiple meanings found within the local knowledge of individuals within the network, a cogent interpretation of climate policy will be developed; an argument supported by an underlying commitment to researcher reflection and transparency.

5. Moving to the mainstream? Embedding climate policy

5.1 Introduction

As discussed in Chapter 1, the research interest in implementation of climate policy developed from a curiosity about the 'next steps' in UK public policy after the passing of the 2008 Climate Change Act. While the popularity of 'implementation studies' as a sub-discipline of public policy has fluctuated, it remains a well-established area of research (O'Toole, 2000, pp.263-265). However, while policy acts may be analysed chronologically as following legislation or regulation, describing such acts as 'implementation' connotes local areas carrying out the bidding of central government (Hill, 1997, p.383). As a result, it was perhaps unsurprising that local officials rarely described themselves as 'implementing' policy. This chapter is about one of the policy acts they did describe themselves as doing or aspiring to do: embedding.

The concept of 'embedding' climate change considerations into other areas of local authority policy was mentioned, unprompted, by managers in all four local authorities studied in depth. The word 'embed' and its related stems were used 103 times in interviews with local participants, compared with 76 mentions of 'implement' and its related stems. What makes this comparison more striking is that implementation was often used by myself at the beginning of each interview to remind the participant about the research project. Despite these cues, the word was

rarely repeated by the participants themselves. In contrast, embedding was a concept introduced by participants in interviews, talking about it of their own accord rather than echoing my choice of words. Embedding was a not term that was anticipated during research planning, as it features rarely within the public policy literature. Bührs (2008, pp.62-63) does write specifically of embedding climate policy within a wider sustainability agenda using “policy synergies” between carbon emission reduction and issues such as energy security, fuel efficiency and reducing air pollution. During interviews for this research embedding took on a slightly different meaning, broadly referring to the consideration, and likely calculation, of carbon dioxide emissions within all aspects of local authority policy. The word ‘embed’ is defined as to “implant (an idea or feeling) within something else so it becomes an ingrained or essential characteristic of it” (*Oxford Dictionaries Online*, 2010).²⁰ The need for climate change to become integrated with other policy issues such as social care, education and transport provision echoes the notion discussed in Chapter 3 of climate change being a ‘wicked problem’, spreading its tentacles into other areas of public policy rather than remaining within discrete boundaries.

Three aspects of embedding will be examined in this chapter:

- the concept of climate change and environment being apart from, not a part of, mainstream policy concerns will be explained and how the presence of these attitudes within local authorities sparked the drive for embedding policy;
- a case study of a local authority environmental programme will show how attempts to introduce a new system awoke a dormant battle over policy

²⁰ Although a figurative, rather than literal, definition, it is sufficiently well established to be included in the Oxford Dictionaries. For historical examples see *OED Online* (2012a)

implementation and the deeper understandings and values upon which it was based; and

- the practices carried out within local authority board meetings focused on embedding climate policy, and how the passivity of many of the participants suggested such meetings held meanings beyond their literal function.

This chapter focuses on local authorities, where the issue of embedding was most prevalent, as they tried to reduce the emissions arising from their own activities.²¹

Although only two out of the nine upper tier local authorities included the relevant National Indicator (NI), NI185, within their Local Area Agreements (LAAs), all nine were still obliged to report progress to central government, as well as having a financial incentive for action through the reduction of their energy costs and Carbon Reduction Commitment burden. However, these incentives did not translate into effective action on emissions reduction. To explain this puzzle, this analysis begins with some dominant ideas within Western society and policy.

5.2 Apart from, not a part of, the environment

5.2.1 Growth, energy and the natural world: a tradition of Western public policy

Humans' conceptions of their relationship with the natural environment are multifarious and complex. The literature identifies a broad trend of increasing separation between nature and its cultural context in late modern Western societies, leading to a dualism rarely found in non-Western traditions (Hulme, 2009,

²¹ The regional tier is largely absent from this chapter as its relevance declined with the Cameron Government's de-regionalisation strategy which coincided with the research fieldwork period (see Section 4.3.2c).

p.15). This has contributed to a “Dominant Social Paradigm” where the natural world is seen as a separate, inert set of resources which can be controlled by humans in the pursuit of progress (Koger and Winter, 2009, pp.38-61).²² Linked to these ideas is a policy imperative for economic growth which has become inculcated within the “mental infrastructures” of society (Welzer, as cited in Sachverständigenrat für Umweltfragen, 2012, p.13). Taken together, these concepts form a broad tradition of public policy as the pursuit of growth coupled to the extraction of energy from fossil fuels (Connelly and Smith, 2003, pp.68-69; Jackson, 2009, pp.48-52).

Climate change, in conjunction with “the end of cheap oil” (International Energy Agency, 2011, p.3), has implications for society which challenge this tradition of public policy (New Economics Foundation, 2010, pp.17-24; New *et al.*, 2011; Tverberg, 2012; Evans-Pritchard, 2012).²³ As energy costs have increased and evidence of the effects of carbon emissions has emerged, some policy-makers have begun to re-examine their assumptions, leading to the national and local policy developments traced in Chapter 2. Despite these developments, climate change has

²² Such a broad definition captures a key aspect of the human/nature relationship but also elides some important nuances which cannot be captured by the ‘part of’/‘apart from’ dualism (Schroeder, 2007, p.307). For example, humans may identify themselves as being part of nature while simultaneously seeing natural environments as those free of human interference (Vining *et al.*, 2008, p.10). Such a dissonance reflects that ‘nature’ represents multiple, often contradictory, social constructions (Macnaghten and Urry, 1998, p.8).

²³ While it is unclear whether global oil production has reached its peak, the experience to date in the twenty-first century suggests such a point is imminent or has already passed (Hirsch, 2008; Tsoskounglou *et al.*, 2008). More certain is that global population growth and economic development is driving significant increases in the demand for energy (International Energy Agency, 2011, pp.1-2) and that any new fossil fuel sources are likely to come at greater cost than in the past (Murphy and Hall, 2011 pp.64-68).

continued to face a battle for the attention of local policy-makers more used to dealing with long-established issues such as adult social care, transport and schools. When trying to reduce emissions within their own local authority, officers have often struggled to get the issue treated as a priority by other parts of the organisation. A fundamental part of this problem, as seen by many climate change officers, is a reflection of the dominant social paradigm; a perception by many within local authorities that climate change and the environment are apart from, not a part of, their organisations' day-to-day business.²⁴ Two aspects of this are explored here: first, climate change and the environment as peripheral to mainstream public policy; and second, climate change as being an extra-local issue.

5.2.2 The peripheral environment

These dominant attitudes towards nature within Western societies provided context for a continuing belief amongst some policy-makers that climate change was a fringe concern. One climate change officer summed up how the problem affected their efforts to reduce the local authority's own carbon emissions:

“It's generally seen as someone else's problem, people don't relate it to their own activities; people don't see how they can address it in their own work lives, in their own work environments.” (County 1 Climate Change Manager 1, interview 2)

As discussed below, this observation manifested itself in the divergent meanings placed on policies to reduce carbon emissions by climate change teams and organisational colleagues working in other departments or service delivery areas. An

²⁴ This is not a normative comment that climate change should be seen as an environmental issue, rather that it has emerged as an issue within, not transcending, environmental policy (Roberts, 2010).

extreme example of antipathy towards climate policy from policy practitioners came from a regional organisation, where one officer was given the nickname ‘Swampy’ by colleagues:²⁵

“That’s taking it to the real nth degree, but it’s that attitude of ‘that’s something separate and I don’t quite understand how it fits with me. It’s not part of the mainstream’.” (Regional 1 Climate Change Officer, interview 1)

The officer was offering advice to local businesses on cutting carbon emissions through improving energy efficiency. While such advice would appear relatively benign to climate change officers, for some colleagues from outside the field it meant an association with a fringe movement, apart from the mainstream. While not usually expressed in such stark terms, the use of the nickname provides a vivid example of the barriers many officers described between climate change and more mainstream policy areas. Other barriers that were identified included the unfamiliar lexicon of climate change, the challenge of relating climate policy to established organisational priorities and the long-term nature of the policy goals, expressed respectively in the following interview extracts:

“People don’t like the term ‘climate change’, ‘carbon’, things like that. They just go ‘errrrm’! It can be a big turn-off for people. Generally people still haven’t got their head around carbon dioxide. ‘What is that, so many balloons?!’ [...] You can paint some pictures of polar bears and that doesn’t mean that much to me.” (County 2 Climate Change Manager 1 interview 1)

“I’ve just been asked ‘what have we got to sell from a climate change perspective? How could I demonstrate that I have any value to add to anything? [...] Do they [the board] value it? I don’t know if they do or not

²⁵ Named after the environmental campaigner who became famous in the UK for living in tunnels as part of a campaign of direct action against the construction of a new road in Newbury (Caulfield, 1997).

really, climate change is not high enough profile.” (Regional 2 Climate Change Manager, interview 1)

“How embedded is it really? It's very hard... I think the times we're going through now, even getting staff to focus on 2020 as [you think] will we all be here [the organisation] or what will we be doing?! But when you start talking about 2050, 2080, I struggle with that.” (District 1 Climate Change Manager 1, interview 1)

Faced with such attitudes, one local authority officer explicitly saw running community events which sought to make environmental and climate change issues more meaningful locally as a part of their role. By working with existing communities, such as religious groups, sports clubs and arts festivals, the local authority can communicate more successfully than speaking as an outsider:

“That's what we want, to make environmentalism mainstream and not something that sits alongside. I think part of the problem is that it's seen as a kind of green, weird people that sit over here somewhere. That's partly our fault because we have given that kind of image. You wanna get away from that and go 'no, it's not weird stuff that happens behind closed doors, it's something that is affecting how we do our job and how we live'.” (City 1 Climate Change Manager 1, interview 1)

A director from the same local authority who had responsibility for climate change echoed similar sentiments, describing the period prior to their arrival, in which environmental specialists dominated the agenda, was described in disparaging terms:

“[There were] a lot of like-minded people talking to each other, the outcome from which I don't think was immediately obvious. Friends of the Earth group, Health and Environment partnership group ... I couldn't see what changed other than media activity. City planning, city infrastructure wasn't taking place, in my mind.” (City 1 Director, interview 1)

On delivering these comments, the director adopted a mocking tone of voice and a facial expression suggesting that these groups could not be taken seriously,

expressing them as apart from the mainstream council activities of planning and infrastructure (City I Director, interview I, field notes). Once in post, the director took steps to move the agenda away from these specialist groups and become more in step with mainstream council activities; the focus shifted from public awareness-raising and communication towards infrastructure programmes.

In both of the above quotes from City I, the environment was depicted as something apart from the everyday business of local public policy, with those focusing on environmental and climate policy seen as being unserious or even strange. As a result, policy-makers have been forced to find new routes to some of the outcomes bound up in climate policy. As will be discussed in Chapter 6, progress has been made by talking about issues *other than the environment*, rather than a change in traditional attitudes.

5.2.3 Climate change as extra-local

Peripheralisation of the climate change issue does not only arise from doubts about environmental experts and campaigners. The intangibility of climate change's causes and effects also plays a key role. As discussed in Chapter 2, the emergence of climate change as an issue has been dominated by a scientific framing which makes it difficult to grasp. Greenhouse gas emissions are invisible to the human eye so their local consequences do not impact immediately on the local environment in the same way as previous issues; for example, the London smog which prompted the Clean Air Act of 1956 (Brimblecombe, 2006). Environmental concerns have become increasingly

globalised (Fenger, 2009), with climate change emerging as an issue only due to advanced scientific inquiry and complex computer modelling, setting it apart from everyday lived experience (Demeritt, 2001, p.309).

Environmental problems typically do not respect the boundaries between the different jurisdictions of humans, but climate change is particular in that it is the global tally of greenhouse gases (GHGs), including carbon dioxide, which affects change. The location of GHG emission production does not relate to the locations in which effects are most keenly felt. As a result, collective action has been seen as the only effective means of arresting the growth in emissions. A local area acting alone could only make a very small impression on the global stock of GHGs.

While the causes of climate change are global, the consequences are likely to be felt locally, with particular areas, such as low-lying ground, suffering special vulnerabilities. This weakens the appeal of climate change mitigation to local policy-makers. If the causes are global, why act locally? A local action has its place within the world, but the vast majority of the emissions causing climate change are from sources external to the local area. As a global problem, climate change becomes external to the local sphere, externalised from local action.

From this perspective, the director's criticisms of environmental policy in the previous section become clearer. Other than 'raising awareness', there are few policy responses that the local area can practically do about something perceived to be a

global problem. The director can be both concerned about climate change but also reluctant to commit resources to solve a problem conceived as requiring large scale, collective action. Of course, action to reduce carbon emissions can have other benefits and, as we shall see later in Chapter 6, these have contributed to the evolution of the climate change agenda in some local authorities (Prins *et al.*, 2010).

Local authority officers were often happy to accept this framing of climate change as being an extra-local policy issue, emphasising that councils had limited scope to affect emissions within their local area:

“When you look at the impact a local authority can have in terms of area-wide carbon emissions, it’s minimal. The biggest impact anyone can have is national government in terms of policy and fiscal measures. Our role is not as a do-er, it’s to facilitate this to try and get others on board.... We’re doing well because of the national influences that are driving down our carbon emissions within this period, and the trajectory looks very promising that we will exceed our targets ... nothing to do with local intervention, it’s to do with...well we don’t really know what it’s to do with.... We were joking the other day and saying we should make more of this and pretend it’s all to do with everything we’re doing!” (City 2 Climate Change Manager, interview 1)

National, rather than global, policy is highlighted by this climate change officer as the main driver for reducing GHG emissions, but this still represents an emphasis on a scale of action which cannot be replicated by a local area. Within this view local authorities’ “minimal” impact when acting alone leads them to look for a facilitating role, establishing a partnership of private and public sector organisations from the local area with the aim of encouraging and embedding climate change as a priority in the plans of local actors. Once this is established, collaborative action on a scale making a significant difference to a local area’s emissions is intended to follow.

5.3 New system, different meanings

5.3.1 Context

The peripheralisation of the environment and the prioritisation of growth set the broad policy contexts within which climate change officers operated. They often talked of climate change and the environment being peripheral issues which they wanted to move to the mainstream of local authority policy. From this came a desire to 'embed' climate policy across their organisations.

The climate change team in one local authority (County 1) took steps to introduce an environmental management system as a way of formally embedding climate policy within organisational processes. The remainder of section 5.3 charts how this move reawakened battles over the implementation of existing policy, and shows how diverse interpretations of policy led to an impasse in the acceptance of council-wide climate change action.

5.3.2 Introducing a new policy framework

One local authority made a decision to introduce an environmental management system, to provide evidence that the organisation was in control of its environmental impact. Integral to the system's introduction was the assembling of a register of environment risks within the council. The compiling, distribution and subsequent negotiation of the register illustrated the competing values of council staff which led them to different ways of seeing climate policy.

The climate change manager compiling the register identified the risks of the local authority not meeting its environmental objectives, grading carbon dioxide emissions as a high risk activity on a par with legal compliance issues. Risk registers were compiled for different services within the council to inform them about the level of environmental risks they were subject to. All sections of the council were assigned a high risk rating that emissions would not be reduced as a result of excessive energy use, requiring mitigating action to be taken. The climate change manager aimed to ensure that when writing the system manual, the amount of new procedures required of staff was kept to a minimum, estimating that 90 per cent of it was already present within existing local authority processes. In a further attempt to smooth the system's introduction, the environmental risk register was compiled using existing corporate risk methodology:

“Any operation that manages significant amount of operational waste, polluting, uses a lot of natural resources, they were deemed as high risk. Things like transport, property, facilities management, I went round to each of them, talked about what they did and how they did it, and produced a register of how their activities risk damaging the environment, including breaching legislation. I assessed those risks against the council's environment strategy objectives.” (County I Climate Change Manager 2, interview 1)

It is important to note here that the officer was doing little in addition to what the council already had in place in its own strategy. Council activities were being assessed for their risk of breaking *existing* council policy which service heads were expected to be following already.

5.3.3 Uncovering the policy/practice gap

The process of risk assessment highlighted that this expectation was not realised in practice; something being written in a strategy did not mean that it was necessarily carried out within council services. While climate change officers were not naive enough to expect 'by the book' implementation of council policy on the ground, the scale of transgressions discovered within one particular service (hereafter referred to as 'Service 1') was unexpected. When asked about any new information uncovered by the writing of the risk register, the climate change officer had to tread carefully:

"Umm, there were a lot of surprises about environmental legislation I think. Umm, I don't know how confidential to be here! Particularly, the management of contractors was - is - very wanting... [Long pause]. I was surprised." (County 1 Climate Change Manager 2, interview 1)

Others were more forthcoming about the problems faced in getting the head of Service 1 to take environmental issues seriously:

"The head has, on a number of occasions, said that the risk of getting caught and the consequences of getting caught are far outweighed by the risks of putting things right! You start off with that approach and it's almost like saying, if a shoplifter goes in and doesn't get caught, then shoplifting hasn't taken place. Our climate change officer would argue that being happy to carry that risk of prosecution, because the impact will be less than changing everything else, is professionally irresponsible. The head would say 'well it's just part of how we manage our business, we always carry risks.' Yeah, but we don't knowingly break the law!" (County 1 Department Head 1, interview 2)

"We ask them about where they are at risk of breaching legislation. Even that's a battle. In that service [Service 1] they will have this little contractor, what does he do with his waste? We have a duty of care under that legislation to ensure that waste is disposed of properly. Has this guy got a waste carriers licence for sticking it in his van? [Service 1 tell us] 'no'. Well we're going 'that's completely outrageous, it's not meeting our duty of care!' And they go 'well even if we get caught with a

£500 fine we can live with it' because in the grand scheme of things, the costs of imposing a structure that makes it happen means a small contractor may not be able to do the business, meaning we've got to go to somebody else with a bigger overhead that costs more money." (County 1 Climate Change Manager 1, interview 1)

The service head referred to in these quotes (County 1 Service Head 1) is depicted as seeing environmental concerns as peripheral to the practicalities of running Service 1. The slim risks of being caught breaking environmental law, (primarily focused on waste disposal) means that it was not worth allocating time and resources to address the underlying problems. With such a flexible approach being taken to complying with environmental law, it was unsurprising that the service head was even more sceptical of local authority policy to reduce carbon emissions which wasn't backed by government legislation. While staff are expected to comply with such policy, monitoring can be weak without strong leadership:

"If it's there in black and white as a strategy, you have to comply with that, you're going to be assessed against whether you're complying with the strategy ... if the whole system works through then it would be quite difficult for people to ignore it. But it's not worked through of course, because I don't think there's an awful lot of commitment from anyone at the top in that service, so nobody actually evaluates them on whether they're meeting their requirements." (County 1 Climate Change Manager 2, interview 1)

The risk register was largely a repackaging of existing environmental policy which was afforded different meanings by the climate change officers, for whom it was central to their work, and Service 1, for whom it was a peripheral concern. This variation helps explain the standoff which followed the writing of the register.

5.3.4 “You’re way too aspirational, let’s get real”

Department Head I became a mediator between the climate change team and Service Head I, and explained the reaction to the risk register and the impasse that followed:

“Each of these risk assessments ran to a dozen pages and there were dozens of recommendations. Faced with that fog of material and having to take reluctant managers and say ‘OK, you have to move your position from there to there’ I’m finding a real challenge...I’ve gone back to the climate change officers and told them that managers are saying ‘you’ve got your heads in the clouds, you’re way too aspirational, let’s get real’.” (County I Department Head I, interview I)

Service heads perceived that a large number of recommendations had essentially been dropped out of nowhere, and bristled at the idea of implementing such a large programme of measures in pursuit of outcomes they saw as marginal to their own concerns. From the climate change team’s viewpoint, the risk register was uncontroversial; a prioritisation of the environmental risks arising from processes which the council *should already be doing*. Crucially, this meaning given to the risk register by the climate change team was a long way from the meaning given by the service heads. Whether or not the measures should already have been taking place, a full implementation of the actions required by the risk assessments would have meant the service heads moving too far, too fast without the additional resources they required to act.

The presentation described above by County I Department Head I of a “fog of material” deepened the problem, particularly as the climate change managers only had the power to recommend, not insist, what action service heads took. Service

heads were unclear how the recommendations related to their own values, reinforcing the notion of environmental policy being apart from their core concerns. Service Head 1 saw the proposals espoused by the climate change team as impractical to absorb into their business, and was polite, but firm, in the need to moderate the drive for increased environmental action:

“There’s a balance to be had here between taking on board every environmental opportunity you’ve got, compared with looking at what’s practical in terms of actually delivering a service. There’s always the ultimate, and we do have disagreements with our environmental colleagues about things...we’ve got to look at the practicalities of delivering the service and how that might be done, whereas *some of our environmental colleagues might take a very theoretical view of trying to maximise what can happen.*” (emphasis added) (County 1 Service Head 1, interview 1)

The service head’s talk externalised the environment as a “theoretical” concern, an abstract idea which does not take into account the practicalities of “delivering a service”. Reducing carbon emissions was a key priority for the local authority, so the head could not be totally dismissive of the environmental agenda. Indeed, the head goes further than the bare minimum in emphasising how environmental action is no longer a fringe activity:

“I mean, I’ve not come across anybody who says ‘I don’t want to do what’s right for the environment’, but it’s trying to get that balance isn’t it?” (County 1 Service Head 1, interview 1)

There is, at least in the section head’s talk, an acceptance of the case “to do what’s right”, but this doesn’t square with the frustration shown by the climate change manager:

“We try and help as much as we can, but we haven’t got all the time in the world. So we had a couple of head-banging sessions and I tried to

follow up: 'what are you doing, you have the risk register now, do you have any ideas about which ones you're going to prioritise this year in your business plan?' Hitting my head against a brick wall. So I'm now working with another service who are a lot more receptive [laughing], I'm leaving them alone." (County I Climate Change Manager 2, interview 1)

The next section will explore some of the potential factors driving the divergence in perspectives.

5.3.5 Explaining resistance

As already outlined, the initial positions of both sides were much further apart than they realised; without a shared understanding of the importance of action on climate change, there was a tendency for the two sides to 'talk past' each other. In this analysis, the declaration of support for the environment by the service head was a politically correct gesture unsupported by significant action. While a senior manager might indeed be expected to demonstrate support for council priorities, deeper explanation of the service head's behaviour can be found through a reading of social representation theory (Whitmarsh *et al.*, 2011, pp.57-58).

This suggests another possibility: that the service head does indeed accept the broad case for increased environmental action but that this will not necessarily result in any new policy implementation. Breakwell (1993, p.213) argues that awareness and understanding of an issue does not necessarily lead to a change in behaviour. An individual will assimilate the social representation of an issue and accommodate it within their existing identity and perspective (Breakwell, 1993, pp.204-207). This echoes the decentred network concepts of traditions and dilemmas. An individual

has ‘situated agency’, possessing the freedom to act when confronted with a policy dilemma, but is greatly influenced by their own particular web of beliefs, expressed as a tradition of action (Bevir and Richards, 2009a, pp.9-10). The importance of identity and tradition for Service I was discussed by the manager-turned-mediator:

“These people have been doing it the way they’ve been doing it for years and years and years. They don’t want to change and their managers aren’t going to change...I think that’s a huge cultural issue for us in that service.” (County I Department Head I, interview I)

The ‘business-as-usual’ availability of cheap, plentiful energy is part of this tradition of practice within Service I. Climate change challenges this, provoking a dilemma for those within Service I who are faced with a threat both to their tradition of service delivery and their identities as individuals within that service (Bevir and Richards, 2009a, p.5).

As well as discovering the wider problems of environmental law compliance discussed earlier in the chapter, the climate change manager found that the local authority already had a policy in place obliging Service I to use ‘whole life costings’ to take account of long-term energy costs when on large capital projects. This means of expressing environmental impact, often referred to in the literature as life-cycle assessments, seeks to calculate the total environmental impact of a particular good or service (Wiedmann and Minx, 2008). For energy usage, this requires expanding the definition of a building’s costs beyond those incurred through construction to also include the ongoing energy supply costs throughout the building’s life cycle (Whole Life Cycle Costing Forum, n.d.). The climate change

manager elaborated on the technologies involved, and how the approach was not implemented despite the local authority's policy:

“Whole life costings are actually required in the strategy. But the idea of us suggesting that they do them [laughs]....They'd often come up with quite energy efficient things - solar water heating, grey water recycling, things like that - but when they costed them up, they wouldn't meet the budget, so they'd start value engineering them and cut out all those things, and they'd cut down to the bone of building regulations [Where] whole life costings would come in, if you use renewables it's going to cost x thousand pounds more to build, but much less a year to run. The whole life cycle cost comes out as much less, bit more capital upfront....At the moment, the client gets presented with ... [Service 1's] ... recommendation, whereas they should get presented with: you could do this, this or this, and this is how they work out over the lifetime” (County 1 Climate Change Manager 2, interview 1)

This highlights the way in which Service 1 understood climate change. Acceptance of the issue relied on an anchoring within their own prior knowledge (Whitmarsh *et al.*, 2011, p.63), in this case the association of climate change with technologies of energy efficiency and renewable energy. By including these features in initial project designs, Service 1 saw itself as understanding climate change. However, this understanding remained situated within a prevailing tradition of cheap energy which treated the ongoing costs of running a building as negligible, so not judged over the long term. The criteria for judging new renewable energy technologies were assimilated within existing modes of short term cost-benefit analysis, under which they became more likely to be removed from a project than if the alternative system of whole life costings were to be adopted.

This assimilation of renewable energy technologies within the social representation of climate change also acts as a defence of continuity within Service 1, and of

individual self-esteem in the face of significant policy changes proposed by an external source (Breakwell, 1993, p.205). While Service I held considerable power within the local authority as instrumental in providing a service to local residents, the political priority placed on climate change meant they could not reject the issue outright. They instead accommodated the technological aspects of the social representation of climate change with which they were familiar, but not those underlying principles likely to upend their tradition.

5.3.6 Experts, amateurs and mediators

The previous section has shown some of the difficulties in policy implementation when different parts of the same local authority holds divergent meanings about a policy, in particular when a policy is perceived to be incompatible with existing working practices and therefore seen as beneficial to neglect (Pressman and Wildavsky, 1984, pp.99-100). This has implications for the way in which we think about a local authority. Rather than being a monolithic organisation with a single view it is a site for multivocality; a competition between often conflicting individuals and interests (see pages 100-102, 113-116). In the example above, two sections of the local authority, each with different core priorities, found themselves in conflict over an already established policy agenda. This turned out to be not a dispute over the implementation of new policy but the lack of action on existing policy. This inaction emphasises the interactive nature of policy implementation, a recursive process of action and reaction (policy formulation and reformulation) rather than a

transfer of ideas from core to periphery (Barrett and Fudge, 1981a, pp.25-26; Barrett and Fudge, 1981b, p.251).

There were very different expectations of what should happen to policy once it had been 'made' and written into corporate strategies. The climate change managers wrote the new risk register on the assumption that Service I had made reasonable efforts to implement existing policy. The service head felt that policy - at least on climate change and other environmental issues - should be applied according to its fit with the requirements for service delivery. If this resulted in a policy not being implemented or legislation not being complied with, then these were risks that could be borne by Service I, and ultimately by the local authority, as both external and internal monitoring was seen as ineffective.

Department Head I felt obliged to act as a mediator between the two sides as part of their wider role as departmental lead on environmental and climate change issues, particularly as they already had a good relationship with both parties:

"I know the climate change team had really struggled to get good engagement from Service Head I's deputy and, as I know that person well, I felt I could get the issue moved along. It often comes down to personalities you see!" (County I Department Head I, personal communication)

These duties were in addition to the core responsibilities of Department Head I's role, meaning they were unable to commit much time to the task of mediation.

However, their actions did help to foster a continuing dialogue following the publication of the risk register, helping to move the two sides closer together as

someone free from association with the traditions and perceived excesses of either side of the argument. A more challenging aspect of this distance from either side was that the mediator was entering into dialogue in the field with no previous experience of environmental issues:

“I think part of the problem is with me being a complete bloody amateur on this so I’ve had to learn. I remember having a couple of meetings with the climate change officer where I just got to the end of the meeting and said ‘I’m sorry, I still don’t get it, we’re going to have to meet again’ and getting quite cross and frustrated really.” (County 1 Department Head 1, interview 2)

In the interview, I put the argument that it was useful to be seen as an amateur in a situation where environmental ‘experts’ were being viewed with some suspicion:

“Well yes, possibly, possibly, but I think the downside of that was more evident than the upside, because I think we were seen as having a foot in the idealistic camp anyway, but we weren’t expert enough to get stuck in. It felt a bit like being in a swimming pool and saying ‘OK, teach these kids to swim’ and not being able to swim yourself ... Over here, you’ve got a bunch of amateurs driving it with reluctance and over there, you’ve got stropky stakeholders.” (County 1 Department Head 1 interview 2)

While the mediator found this inability to easily grasp some of the issues as a hinderance to participation in the policy dialogue, this ‘amateurishness’ was also a strength, establishing their credentials as a non-expert and as a more palatable bearer of the message to increase environmental policy activity. Learning about the issues ‘on the job’, in conjunction with a shortage of time to contribute to breaking the impasse, did contribute to the dialogue becoming drawn out. While the mediator did succeed in edging Service 1 towards greater engagement with the risk register, the small amount of time that Department Head 1 was able to contribute to the task meant that progress was slow. While more common ground between the sides

had been established over the course of a year's mediation, little substantive progress had been made on implementation.

5.3.7 Doing policy 'to' people

Reflecting on the situation, Department Head I saw the risk register conflict as rooted in a top-down approach to policy, both within the local authority and from central government down to local level. The local authority was obliged to take account of the NIs established by central government, adapting policy accordingly and setting targets for reducing carbon dioxide emissions within the LAA (see pages 45-52, 188-208). Department Head I saw this policy work as having been too insular, being kept apart from the service areas who would have to implement it, with a few people in the middle such as himself trying to communicate the changes with limited knowledge and time.

Both Department Head I and Climate Change Manager I offered an alternative model where policy was less something 'done' to people from the top down.

Instead, environmental experts would be seconded to service areas of the council:

"They're not outside the gates, lobbing the instructions over, they're actually part of the department [and] do some learning around the departmental challenges and risks." (County I Department Head I, interview 2)

"If we had two more people, we'd go out and have more conversations with people and embed it and really make it real for people ... we wouldn't do anything differently, we'd just do it quicker. We'd embed the system, we'd go out and do more training.... We'd go out and handhold more, run programmes in departments which were much better supported so we'd say 'right, we're going to work inside this department,

go through a programme throughout the department and make it real'." (County 1 Climate Change Manager 1, interview 2)

Here a more nuanced view emerges than the environmental experts and service being intrinsically opposed to each other. In this analysis, the lack of understanding stems from the different parts of the council focusing on policy and ensuring that written strategies fit together correctly. While this area of work was later described by Department Head 1 as being "in good shape", it had involved those writing the policy spending too much time behind the "gates" of their own department (interview 2).

This corresponds to a classical top-down view of the policy process with policy initially drawn up by experts in response to the new issue definition of climate change established in central government through the NIs. There was a shared assumption of local authority officers and managers that this was the natural order of things; strategy must come first. For a cross-cutting issue such as climate change, this presents a problem less obvious than where policy initiatives fall within the boundaries of traditional service delivery silos:

"I think the safe approach to take, and that's not meant in any critical way, is to say 'OK let's ... decide what as an organisation we need to do ... that will be a combination of the relevance to the organisation, what the political steer is locally and whether or not it slots neatly within existing departmental structures of the organisation. If it does, theoretically you've got your sponsor straight away in the chief officer. If not, there's a whole set of issues around who's going to own this, how it's going to be managed and governed within the organisation, so those early discussions almost set the route map for you because you're thinking of those sorts of issues. You're not thinking about the manager down at the bottom who's been working for 30 years doing things the way he does, and this is

all going to be a huge challenge when it eventually gets to him.” (County I Department Head I, interview 2)

An issue such as climate change absorbs more of senior managers’ time as they try to work out how it will be accommodated within the established services of the local authority. This effort absorbed resources to such an extent that it left little opportunity for engagement with service delivery officers who had to deal with the consequences of the policy. The gap in understanding between both sides in the risk register debate highlights the consequences of discussion coming only after a policy has been written.

This lack of engagement did not mean that the policy was sprung on Service I without warning; rather, that the advance information was of a kind that exacerbated misunderstanding. The initiatives were accompanied by press releases and a steady drip-feed of unofficial information on the organisational ‘grapevine’. When this simplified, indirect communication was the only source of information regarding a policy, officers typically missed out on an explanation how the policy was relevant to them:

“They’re thinking two things. [First], what a load of idealistic twaddle! Come on, get real! [Second], these people are thinking ... “oh God this is coming isn’t it, this is going to be bad news”. So when it does arrive they think there’s a bunch of idealists paddling in a different direction to them.... Maybe the trick is not to change the way in which you do things, because you have to get your leadership and political governance right, but make sure that the gap between that coming into place and the crunchy stuff happening is as tight as possible. So the middle bit is not filled with gossip, rumour and ... ‘you’re on that side, I’m on that side’ and so forth.” (County I Department Head I, interview 2)

So while policy-making on a cross-cutting issue such as climate change has shown weaknesses in the top-down approach, neither can a bottom-up approach alone provide the answer. A policy initiative will not gain the necessary traction within the organisation relying on low-level officers alone; the political leadership must 'buy in' to the policy and demonstrate to the wider organisation that it is a priority. But as has been demonstrated by the risk register story, that is not enough on its own to get results. While a written strategy, often signed off by a council's Cabinet, served a democratic function in presenting policy to members of the public and partner organisations, such documents were not consulted on a day-to-day basis by officers and management making decisions. Policy and strategy set the broad context, but were only a first step towards action, as a climate change officer from a different local authority explained:

"Policy is the thing that underpins, but it's not the be-all and end-all.... There are a lot of people out there who want to get involved in climate change and sustainability who care about the issue but don't know what to do as it's not part of their main job. So we come along [and say] 'can we somehow embed what we do within your work, we think we've got some ideas'. That's the interesting bit." (City I Climate Change Manager I, interview I)

Effective policy implementation did not automatically flow from the careful crafting of a policy within a small coterie of experts. Without wider engagement in policy formation at an earlier stage, the perception grew amongst those outside the coterie that policy was an externally imposed irrelevance. Those individuals who were expected to implement it as a non-core issue within service delivery areas, were unable to relate it to their own traditions and identity as service-providers. The next section explores local authority board meetings which, similar to the

environmental management system, sought to embed climate change across the organisations.

5.4 Board meetings: passivity and ritual as a means of embedding?

5.4.1 Context

Two of the four local authorities studied in depth set up inter-departmental board meetings as a means of embedding climate change as a priority. Board meetings typically took place every two to three months and were chaired by a director. The boards in both local authorities were associated with strategies focused on their own corporate emissions: County 1's board was charged with delivery of the environment strategy; City 1 more loosely associated with the council's carbon management plan. I observed two meetings at each authority. This section will examine the rationale for these meetings and explore the idea of passivity which was common to both authorities.

5.4.2 Rationale

The meetings were seen by climate change officers as a way of getting service heads together from across the council in an attempt to get shared ownership of the issue. There was a consensus in both local authorities that the right people were being invited to the meetings; typically, service heads or senior managers who were the environmental leads for those services. Whether those people actually attended

the meetings proved to be an issue in both local authorities, as heads increasingly delegated their service's representation at a meeting down to less senior staff.

The model of gathering together peers to discuss a 'cross-cutting' issue such as climate change was well established and seen as valuable. One service head discussed how its perceived success had led to something of a "bandwagon" effect, with a proliferation of such meetings placing an ever-increasing strain on people's time (County 1 Service Head 1, interview 1). This led to senior managers having to pick and choose the meetings they attended. When thinking about priorities, the environment often remained as a second order issue:

"When you're dealing with vulnerable children or adults - you know, major political issues - then you can see why someone might not come to that meeting, because it's seen as the next layer down." (County 1 Service Head 1, interview 1)

"They [service heads] are just engaged with so many other things. Service Head 2, who I've got a lot of time for, has said to me 'well I'd love to but if you can find me another 20 million pounds more savings, I'll be at your meeting. I've been asked to find another 20 million pounds this week. So running their department is their primary concern. This idea that they are responsible for resource consumption still doesn't seem to me to be where they are.'" (County 1 Climate Change Manager 1, interview 2)

Here, social care is explicitly described as "political", reflecting both the statutory duties of local authorities and the ongoing public and media interest in the issue.

There was a widespread acknowledgement amongst participants that climate change would always be secondary to some key issues for local authorities, in particular social care. This prioritisation was in part based on the lack of statutory requirements to act on climate change, as well as the emerging issue of public

spending cuts. While these issues were high profile and 'political', climate change also reflects a lack of public pressure on local politicians, particularly on an internal, technical issue such as corporate carbon emissions. As one councillor succinctly put it:

"You go out door-knocking, the Carbon Reduction Commitment is not the thing they raise with you..." (City 1 Councillor, interview 2)

The comparatively low public pressure for climate change action suppressed its political importance, and therefore its prioritisation within local authority practice. The problem that the board meetings were intended to address - a relatively low priority being given to climate change - remained evident through the limited engagement from service heads.

5.4.3 Passivity

Managers from different parts of both local authorities raised, without prompting, the problem of passivity in the meetings. When service representatives did attend, it was often a challenge to elicit contribution from them:

"My feeling is that it's very passive. Finding things for the board to genuinely make a decision about is difficult.... They tend to be focused on how it impacts on their staff, which is not unreasonable at all, I understand that. However, I don't feel they bring much to the party in terms of strategy and challenge ... my overwhelming sense is that they tend to be passive recipients." (County 1 Climate Change Manager 1, interview 2)

"At the moment, they're all going along and basically [just] listening to what the climate change team is having to say... My feeling is after the meeting they all walk out the room and forget about it for a few months." (City 1 Climate Change Manager 2, interview 2)

This section will outline three aspects of passivity. Two of these aspects - language and a lack of issue ownership - were identified by local authority staff during interviews. The third aspect, the partnership ethos, uses the work of Davies (2009) to uncover an inherent problem of the inter-departmental meeting format.

a) Language

County I Service Head I reported the tendency for such meetings to be dominated by environmental experts (interview I), and this was supported by meeting observations. County I meetings consisted largely of reports and presentations from climate change officers, often of a detailed and/or technical nature. In one observed meeting, a climate change officer delivered a verbal report about future options for reporting carbon dioxide emissions following the demise of NII85 (Meeting 4, field notes). The report was of a technical nature that was hard for the policy 'amateurs' in the meeting to engage with. The options presented at the end of the report were too similar to spark debate and, other than a brief comment by the chair, the officer's recommendation was accepted without further discussion (Meeting 4, field notes).

The climate change team and the remaining non-climate change managers attending the meeting created different meanings for the report. For the climate change team, the report was meaningful to the evaluation of future climate policy, and the team were observed informally discussing the report in an informed manner prior to the meeting (Meeting 4, field notes). For the wider board meeting, the report's technical

language was not meaningful for attendees focused on running their own departments and services. Using such language in the presentation of the report contributed to the passive acceptance of the climate change team's recommendation, feeding into the broader peripheralisation of climate policy and a lack of shared ground between 'experts' and 'amateurs'.

b) Lack of ownership

Issues with data and performance management were common to both local authorities. For County I, the meeting was tasked with delivering the environment strategy, but producing the data with which this could be measured was proving difficult for the climate change managers. While data on emissions from stationary sources was improving through the widespread installation of gas and electricity meters which could be remotely monitored in 'real time', there was still distrust of the overall quality of the data. An 8 per cent reduction in emissions from stationary sources was reported to the board by County I, Climate Change Manager I as being a somewhat suspicious statistic (Meeting 6, field notes).

Like most local authorities, County I paid attention to performance management. Uncertainties around carbon dioxide data dampened the potential for services to take action to reduce emissions, although it did stimulate work to improve data for benchmarks against which future activity could be measured. For City I, the board was formed as a number of strategies were being refreshed and rewritten, and was

consequently left without a clear focus on policy delivery. The director who chaired the board was equivocal about its effectiveness:

Interviewer:

“It’s good to have a lot of people in the room [for the board meeting] because you’re getting representation, but the more people you get round the table it can be harder to get input from all the people if you like. It’s a hard one to balance out.”

City 1 Director:

“I wouldn’t disband it, but it’s coming to the point where it needs a ‘what are we trying to achieve’ discussion. My team have to lead that in terms of an action plan or you just have another conversation [laughing]. You need the plan, then the performance regimes behind it.” (City 1 Director interview 1)

This assessment was very similar to that delivered within County 1, even though that board meeting was more formally tied to the delivery of an existing strategy document:

Interviewer:

“I just want to get a view on how the board is working.... If the right people are sat around the table, if it’s the right level of responsibility within the departments, what the attendance is like, that kind of thing.”

County 1 Department Head 1:

“I wouldn’t go so far as to say it’s dysfunctional but it’s not an effective board, in the sense that it’s 90 per cent discussion between this lot [the climate change team] and then bits of intervention between the rest of us.... If you want more engagement from these people ... give them a task, come back and tell us what you’ve done about this, this and this.” (County 1 Department Head 1, interview 2)

Both analyses begin with references to failure, either in terms of the disbandment or dysfunction of the board meetings, followed by a highlighting of the lack of clear goals for attendees from services and departments outside of the climate change

team. According to these assessments by senior management, County I's longer established strategy did not lead to greater clarity on the goals of the board than in City I. This was supported by the meeting observations undertaken, where service heads typically contributed little to the discussion, only being called on to volunteer updates to colleagues on matters of interest, rather than reporting on progress on specific goals. A more structured meeting might see service representatives tasked with relevant strategic goals, and then pressed to explain their progress at subsequent board meetings. Without such a process of making abstract emission targets meaningful to service areas, the latter suffered an ongoing lack of ownership of the carbon reduction policy, which continued to be viewed as the responsibility of the climate change team.

Officers in both authorities saw this as stemming from an absence of measurements of carbon emissions which service areas could affect through policy. This contributed to an air of vagueness becoming readily apparent at many of the observed meetings. Climate change managers were seeking to introduce new metrics for service areas, allowing the latter to adopt better defined targets on which they could be monitored and more easily challenged where poor performance was an issue. In both County I and City I, plans to rectify this centred around passing on the Carbon Reduction Commitment (CRC) liability to different service areas based on their own energy usage. In both local authorities, there was resistance from service areas to the idea, as calculating energy usage had to be based on proxy measures of desk space used within shared corporate headquarters. As well as raising further

questions about data quality, services were also sceptical about the influence they could exert on energy usage within such buildings. Even if these concerns could be overcome, there remains the problem of it being treated as a 'below-the-line' cost which is absorbed into service delivery budgets and does not stimulate activity to reduce energy usage (see pages 218-231 for a further discussion of the CRC and energy costs as an incentive for action).

c) The partnership ethos

Both language barriers and a lack of issue ownership are factors affecting the implementation of policy, but could be addressed within the recognised framework of the board meeting through a move away from technical reports and an improvement in data quality. However, the board meeting also had a more intrinsic flaw. Davies's (2009, p.90) research into local partnerships within the British cities of Hull and Dundee found that the prevailing ethos of working together displaced political conflict and the discussion of fundamental values. Although internally focused, rather than an area-wide partnership, there was evidence to support a similar phenomenon occurring in the board meetings of both County I and City I.

On the way to a board meeting, County I Climate Change Manager described how there had to be a lot of advance discussion of the agenda with service heads to ensure that "no-one got cross" in the meeting (Meeting 4, field notes). This statement appears to contradict the plea from the same manager for service heads to provide a greater challenge to strategy (see page 172). Such inconsistency can be

interpreted in the light of the different meanings attached to climate policy by individuals within County I. The wish for greater challenge and debate stems from an aspiration for shared meaning; that service heads saw the reduction of carbon emissions as intrinsically desirable; the 'right thing to do'. However, the Manager's pre-meeting negotiations signalled that this was not a plausible portrayal of policy within County I. The board meeting was a practice prompted by the organisational imperative to reduce carbon emissions, as expressed through policy documents. However, this did not equate to individuals within the organisation changing their worldviews. Rather, there was a thin consensus amongst those attending the board meeting that the meaning of carbon emission reduction was a new addition to the list of performance management targets, rather than something that would fundamentally change the nature of the local authority's business. Dislodging the dominant social paradigm guiding local authority practice was not on the agenda (Rutland and Ayett, 2008, p.644), discussions instead being restricted to mundane subjects in order to avoid political conflict (Davies, 2009, p.93).

As discussed above, both local authorities' boards suffered from key service heads not attending meetings. After those attending a City I meeting gave feedback on their current emission reduction programmes, the director chairing the board summed up the problem:

"It's quite therapeutic to hear what everyone round the table is contributing [but] those here are self-selecting. Those not around the table need to be there [reducing carbon] as well." (City I Director, Meeting 5, field notes)

The feature of note here is not the non-attendance, although that was problematic enough, but the lack of any significant redress from the board chairs. City I Director later noted (interview I) that there was “no pressure to comply” on those services who did not have the issue in their “DNA”. Financial accountability tied to carbon emissions was seen as the solution, along with a move to the board being chaired by the councillor holding the portfolio for climate change, which, it was felt, would provide more kudos and make service heads more likely to attend. In both City I and County I, a range of meeting participants noted that levels of attendance fluctuated significantly in the absence of any compunction to attend.

As discussed in the previous section, officers in both City I and County I saw greater performance management through disaggregated emissions data, enforced through financial penalties as a solution to fluctuating attendance and engagement by service heads. Such measures may be of some help, but attitudes to data and financial incentives are complex. If carbon emissions are seen as being outside of a service’s control, introducing more performance management data will not necessarily change that perception, particularly when data quality continues to be questioned. Stronger performance management would be more likely to promote the implementation of carbon reduction programmes if introduced in conjunction with a more open debate about values which underpin the diverse attitudes to environmental issues within the local authorities. These are political questions which may not fit easily within board meetings of the type discussed here. However, the

discussion of such questions is fundamental to bringing about more understanding between individuals operating within different traditions of practice.

5.4.4 The meanings of meetings

a) Meetings as policy rituals

The analysis here suggests that board meetings were a response to the perceived peripheralisation of climate change in comparison to local authorities' core priority of service delivery. Bringing together service heads to discuss the reduction of carbon emissions was an extension of the partnership ethos which had emerged under New Labour (Davies, 2009). Board meetings, in support of a written strategy, could 'embed' the priority of climate change within all areas of local authority business. However, three questions emerge from this analysis:

1. Why did senior participants in both local authorities characterise the meetings as requiring a refocusing on goals, when the ostensible *raison d'être* of the meetings was the implementation of existing policy strategies?
2. Why was there so little input from service heads into the board meetings?
3. Why was there no questioning of the need to continue board meetings, when they were viewed as ineffective by many of its participants?

In both local authorities, the meetings were established as a means of implementing organisational strategies, yet there was a desire to refocus on goals. The meetings were specifically designed to include representatives from across the local authority, yet their role was largely passive. Despite reflection on these flaws by a range of participants from both local authorities, no-one voiced the possibility of scrapping

the meetings. From a top-down perspective on implementation one may see such events, particularly the passivity of service heads, as indicative of an implementation “gap” or “failure”, an outcome deficient to that expected (Hill and Hupe, 2009, pp. 9-10). However, such an approach does not fully make sense of participants’ willingness to persist with board meetings when they were seen as ineffective. This inclination towards regularised meetings suggests they served an alternative purpose than as an instrument of policy implementation. The meetings were acts which can instead be analysed as policy rituals (see pages 129-131):

“Ritual action ... follows highly structured standardized [sic] sequences and is often enacted at certain places and times Ritual action is repetitive and, therefore, often redundant, but these very factors serve as important means of channeling emotion, guiding cognition, and organizing [sic] social groups.” (Kertzer, 1988, p.9)

Utilising the concept of policy rituals enables an explanation of the board meetings beyond a normative judgement of implementation failure or a presumption of irrationality on the part of those who wished to continue the meetings. The meetings served each of the three functions of the rituals proposed by Kertzer in the above quote - channeling emotion, guiding cognition and organising social groups:

- channeling emotion: County 1’s board meetings were organised to try and minimise conflict, in line with the partnership ethos prevalent within local authorities (see pages 175-177);
- guiding cognition: climate change teams’ cognitive processes were guided by the passivity recognised within the meetings, indicating the agenda’s peripheral status to the local authorities’ core work of service provision; and
- organising social groups: the meetings served as a means of organising and classifying groups of individuals within both local authorities who had responsibility for climate policy.

These qualities point to the meetings being examples of ritualised behaviour, particularly when considered alongside their regularised scheduling throughout the year. However, for a policy act to be defined as a ritual, it must also contain “an expressive, symbolic quality, which is not found in technical thought or activity ... [requiring] ... the comprehension of the meanings which the participant’s ideas and acts have, or may have, as symbolic statements” (Beattie, 1970, p.240).²⁶ Policy rituals can be symbolic expressions of policy myths (see pages 129-131). It is argued here that the board meetings were symbolic of a myth which arose out of the need to maintain climate policy despite the latter encompassing incommensurable elements. Yanow made the link between policy ritual and myth in her study of an Israeli government agency, identifying the practice of restating goals at annual meetings as a ritual expressing “a ‘myth of rationality’ which resolved, at least temporarily, the tension between two incommensurables; the agency’s inability ... to implement its explicit mandate, and its ability to make this failure explicit, because that would have required making tacit goals explicit and would have undermined its continued existence” (1993, p.52). The board meeting rituals in County I and City I were similarly expressive of a myth. The next section outlines the emergence of the policy myth within these local authorities.

²⁶ Without such symbolism, the act could only be said to be a habit or custom, rather than a ritual (Kertzer, 1988, p.9).

b) Meetings as expressions of policy myth

The myth's development can be understood as an attempt to reconcile two facets of human action brought into conflict by the emerging dangers for society of its inherent fossil fuel usage:

- i) economic growth based upon an abundance of fossil fuels; and
- ii) societal progress through rational-scientific decision-making based upon the available evidence.

Basing policy on evidence from climate science directly challenged the sustainability of fossil fuel-based growth, providing policy-makers with a dilemma of how to reconcile the two in a way which made sense for future policy (Bevir and Rhodes, 2006a, pp.9-10). Rather than being able to push and pull the two in order to reconcile them (Bevir and Rhodes, 2003, p.37), they were (and remain) so deeply embedded within society that neither could be reshaped or reinterpreted by local policy-makers. A reliance on fossil fuels as the basis for economic growth forms part of the Western world's dominant social paradigm, establishing a potent path dependency as the context for new policy developments (Eastin *et al.*, 2011, p.17) (see pages 143-146).

The role of rationality in society is also highly significant, dominating the rhetoric of organisations and the accounts provided for decision-making (Manning, 1992, p.47). Under such conditions, demonstrating organisational rationality to others is key to maintaining the status of a policy area (Sapolsky, 1972, p.247; Yanow, 1996, pp. 208-209). Although the notion of 'rational policy-making' has been subject to various

critiques (e.g. Lindblom, 1959; Kingdon, 1984, pp.82-83; Majone, 1989; Vickers, 1995; Simon, 1997, pp.72-91), the model on which policy-making was based under New Labour (Cabinet Office, 1999) persisted with rational idealism:

“From the outset the model is predicated on a centralised top-down view of what policy-making is about.... Policy-making ... is narrowly conceptualised as translating ‘vision’ into delivery. Perfect implementation is a function of perfect policy design. In large part this neglect of politics derives from the way in which the approach which it adopts to strategic policy-making is so utterly grounded in a deeply rationalistic, positivistic and mechanistic approach to strategic management.” (Parsons, 2001, p. 108)

The emergence of local climate policy under New Labour traced in Chapter 2 suggests a rational-scientific mode of policy-making; the identification of a problem (climate change) followed by the introduction of a policy (i.e. reducing carbon dioxide emissions) (Parsons, 1995, p.87). This process reflected the widely accepted science-policy model of ‘speaking truth to power’, where ‘neutral’, ‘apolitical’ scientific evidence forms the basis for informed public policy (Parsons, 1995, p.273; Hulme, 2009, p.103), a process embraced by a New Labour administration who saw policy as best created in the “laboratory” (Hallsworth *et al.*, 2011, p.88). By introducing policies to address the problem of climate change, politicians and policy-makers expressed their own authority within this rational paradigm (Colebatch, 2002, p.58), particularly when presented with a serious problem whose potential consequences became described in increasingly extreme terms after the terrorist attacks of 2001 within the US (Hulme, 2009, pp.66-68). Those in power could not be seen to be doing nothing in response to such significant claims from scientists, pressure groups, media and the public. However, the introduction of targets for

reducing carbon emissions - the central element of climate policy - overlooked society's ability to achieve the "truly gargantuan task" of rapidly eradicating fossil fuels from energy supplies which such targets implied (Smil, 2012). While the claims for new policy to be introduced proved irresistible, the decarbonisation targets therein appeared beyond policy actors' capacity to achieve. Rather than radical proposals for decarbonising the local authority, or an overt decision to reject the salience of scientific evidence for policy, a myth arose that local authorities could achieve significant cuts in their carbon emissions through a rational-scientific process of establishing targets that would prompt shared values and policy priorities, and that this could be done in lieu of a "reorientation of public values away from consumption at all costs" (Eastin *et al.*, 2011, p.25). The next chapter will show how this myth was embodied in the use of performance management and NIs (see pages 188-199).

Local authority board meetings were expressive of this myth. On recognising the pervasiveness of carbon emissions within their organisations, climate policy-makers sought to embed policies for reducing emissions across their local authorities. The board meetings which were designed to be instrumental within this process actually contributed little to emissions reduction, instead acting as a ritual for the production and reproduction of the policy myth. That the meetings simultaneously had their effectiveness questioned and their future secured indicated that their actual function was enabling the coexistence of incommensurable values and priorities.

In evoking the concept of policy myths, it is easy to see how this analysis could be construed as reflecting negatively on the participants involved; as well as the meaning of 'myth' intended here as "a traditional story", the word can also mean "a misrepresentation of the truth" (*OED Online*, 2012b). It is important to emphasise that policy myths are social constructions arising from the "needs of the moment", rather than being specifically created by policy-makers (Yanow, 1996, p.191). There was no evidence that senior managers were motivated to perpetuate board meetings by a desire to present a façade of activity on climate change. There was no reason to doubt the good intentions of policy-makers in their desire to cut emissions. Rather, that they found themselves on the horns of a dilemma between a fossil-fuel based economy and evidence-based policy which they could not easily resolve, particularly with the dwindling resources and powers available to local government. Scrapping board meetings would have symbolised an admission that policy-makers have weak authority within climate policy, as well as a rejection of the joined-up, partnership approach to wicked problems which had become ingrained in local government.

The emergence of the climate policy myth also served an important purpose for local authorities. While the barriers to achieving national targets may prove insurmountable, the existence of targets had an important meaning beyond their literal capacity as a rational policy goal. The targets created the space for local policy-makers to engage with the issue of climate change, even it was not possible to attain international policy's ultimate goal, keeping the rise in the Earth's temperature

to below 2° Celsius (New et al., 2011, pp.8-10). Maintaining board meetings marked a continued commitment to climate change on the agenda and legitimised further policy developments, even if the meetings themselves did little to contribute to the process. Performance management indicators for climate policy similarly created opportunities for action beyond their literal meaning, a case discussed in Chapter 6.

5.5 Conclusion

This chapter began by explaining how the concept of policy embedding came to prominence through research participants' own talk, in contrast to my initial focus on policy implementation. The figurative definition of 'embedding' was taken as a starting point, but in conclusion it is relevant to cite its literal definition: "to fix firmly in a surrounding mass" (*Oxford Dictionaries Online*, 2010). This implies a need to apply force in order to overcome resistance suggesting that climate change managers, in using this term rather than the more common 'mainstreaming', showed prescience in understanding how challenging their task would be.²⁷ Policy embedding has been explained in the context of a broad tradition within Western society of seeing human activity as apart from, rather than a part of the natural world. The existence of a similar separateness between mainstream public policy issues and climate change provides a way of understanding the importance of 'embedding'; it represents the (re)placing of the natural environment into "the substance of what government does" (Dearlove, 1973, p.2).

²⁷ The term is occasionally used in climate policy (e.g. Kok and de Coninck, 2007) but is particularly prevalent in gender equality policy, which similarly requires introduction across the breadth of organisations (e.g. Verloo, 2005; Benschop and Verloo, 2006; Krizsán and Zentai, 2006, McGauran, 2009).

The difficulty of embedding was first illustrated by the case of County I's environmental management system. Here, conditions for the system's introduction appeared favourable; climate change was an established priority area for the whole local authority and the new system was largely a collation of existing policy rather than an introduction of new processes. Yet implementation still prompted a drawn out battle between the climate change team and service heads which remained largely unresolved. For the former the new system was predominantly the repackaging of existing policy, for the latter it represented the attempted imposition of an extensive new programme. This diversity stemmed from a different perspective on the function of policy; the climate change team assumed that existing policies were being followed within the local authority while Service I saw policy as secondary to the pragmatic concerns of service delivery. Service I was not overtly hostile to the climate change agenda, but their understanding of it was anchored within their own tradition of practices so as not to challenge their own professional identities. The role of these identities echoes the importance of prior knowledge in the interpretive approach (see pages 71-77), and how this knowledge can be applied tacitly rather than explicitly.

The concept of professional identity also helps to explain the apparent contradiction in Service I's resistance to the environmental management system: if they had felt able to be selective in the policies they implemented in the past, why not simply acquiesce in the new system before following a similarly piecemeal approach to

future implementation? When seen as a threat to their identity and working practices, it makes sense for those within in Service I to resist the new system. As well as the symbolic power of such policy action/reaction, even if Service I could continue to adopt a piecemeal approach in the future (not a certainty), this still implies having to implement some of the new policies.

While the organisational characteristics and individuals involved remain unique to County I, the case provides a demonstration of the divergent meanings attached to those carrying out climate policy and those having it applied to them. Within the fieldwork period, shared policy did not equate to shared meaning. One may also surmise that County I's experiences form a "critical case"; that is, if the baby steps towards embedding constituted by the environmental management system were so faltering, implementation of the more radical measures implied by long-term carbon targets becomes less plausible (Flyvbjerg, 2006b, p.230).

Board meetings showed a different aspect of the divergent meanings applied to climate policy, with passivity at the forefront rather than resistance. The meetings invoked the partnership ethos within local government, recognising the cross-cutting nature of implementing climate policy. However, while such meetings were intended to foster policy embedding, their default towards harmony over dispute meant the displacement of discussion of the deeper values and assumptions at stake. Interviews with participants highlighted a different barrier to embedding - a paucity of internal data which hindered the ability of service areas and departments to 'own' the policy.

As will be examined in Chapter 6, having the means to measure and evaluate performance was an important ingredient in embedding climate policy. However, as that analysis will show, the instrumental power of quantification cannot be taken as read. Depicting an increase in data as the primary means of increasing policy 'ownership', and thus successful implementation, can be read as "a fantasmatic narrative ... that promises a fullness-to-come once a named or implied obstacle is overcome ..." (Glynos and Howarth, 2007, p.147).

The board meetings were also sites for the practice of passivity by the policy 'amateurs' in the face of the expertise of the climate change 'experts' - a significant divergence from their founding rationale for further policy embedding. This practice was acknowledged by participants occupying a range of positions in both local authorities. However, this only prompted them to reflect on the level of participation within the meetings, not the status of the meetings themselves. The disinclination to challenge the latter pointed to a meaning beyond the literal; that the meetings were rituals which reproduced a policy myth in which a common priority of cutting carbon emissions could be achieved through a discussion carried out within a framework of shared values and beliefs. This myth was a construction that enabled the resolution of an irreconcilable dilemma between the need to maintain an appearance of rational-scientific policy-making and the ingrained usage of fossil fuels in society. This goes beyond the notion of a dilemma causing conflicting elements to be "pushed and pulled" in order to be reconciled (Bevir and Rhodes, 2003, p.37). The case of the board meetings has illustrated how, when such elements

are both ingrained in society and incommensurable with each other, a policy myth emerges, enabling policy work to continue. Crucially, the myth allowed the meeting participants to remain connected in the face of implausible long term goals. As discussed above, the placidity of the board meetings displaced debate about the fundamentals of policy. If, by keeping the network together, the myth facilitates such debate in the future, then one can see how the continuation of passive team meetings may provide the foundations for a deeper analysis of how local authorities' activities fit within the new context of climate policy. However, this scenario is questionable when considering the partnership ethos within the local authorities which, if it remains dominant, will continue to suppress the questions about fossil fuel usage and service provision which lie behind the setting of rational-scientific goals for carbon reduction.

This chapter has argued that rational-scientific goal setting as an apolitical practice has not been able to escape the diverse meanings placed on climate policy, and the deeper political arguments which underpin them. That is not to say that rational-scientific goal setting has not played an important role in the implementation of local climate policy, only that its role has been one other than its literal function of establishing objectives. The next chapter explores this symbolic function of goal setting through an analysis of the performance management of climate policy, and the consequences of this symbolism for implementation.

6. Flawed indicators and kindred policies

6.1 Introduction

The last chapter argued that while scientific evidence thrust climate change onto the public policy agenda, local policies designed to address the problem of carbon emissions were subject to both passivity and resistance from those outside of local authorities' specialist climate change teams. A myth of rational-scientific goal setting emerged to resolve the irreconcilable dilemma between the scientific evidence and the ingrained usage of fossil fuels in society. This chapter explores the preeminent example of such goal setting within local climate policy, the adoption of National Indicator (NI) 186, which measured the reduction in carbon dioxide emissions across a local area. The indicator's flaws are analysed, highlighting that local authority managers were largely aware of the problems before taking the decision to include it within their Local Area Agreements (LAAs). This course of action is explained in the context of the burgeoning "audit culture" within local government (Geyer, 2012, p.20). NI 186 is then discussed as a piece of evidence within policy implementation, showing how data alone was insufficient evidence to justify local climate policy in the absence of consensus on the social and political aspects of reducing carbon emissions. Drawing on the work of Weiss (1991), it will be shown that political argument, rather than quantitative data, provided a more robust form of evidence for the continued implementation of climate policies within local authorities.

However, this process led to a shift in focus away from a central goal of area-wide emissions reduction towards what will be termed here ‘kindred policies’ of reducing fuel poverty and improving local authorities’ own energy management. Kindred policies are defined as those which are related, sharing some features while remaining distinct from each other.²⁸The relationship of these two policies to climate change are then assessed, arguing that, although responsibility for them often lies with the same local authority managers, they are not equivalent to the broader aim of reducing carbon emissions.

6.2 The three flaws of NII86

As discussed in Chapter 2, the National Indicator (NI) framework of performance management was introduced in 2008 to measure progress on a range of policies, determined locally but drawn from a single list of 198 indicators representing national priorities (Department for Communities and Local Government, 2008, p.6) (DCLG). NII86 measured carbon dioxide emissions from across a local authority area, encompassing business and commercial, road transport, and domestic emissions, but excluding large point source emissions included within the European Union Emissions Trading Scheme, diesel railways, motorway traffic and emissions resulting from changes in land use and forestry (Department of Energy and Climate Change, 2011a, pp.1-4) (DECC). Three flaws in the indicator are analysed below:

²⁸The term ‘kindred policies’ has previously been utilised, but not defined, in the literature (Teichmueller, 1895, p.375; Bain, 1943, p.54; Penna, 2003).

delays in data publication, the use of a single central methodology, and the lack of local authority control over the emissions measured.

6.2.1 Delayed data

A key flaw in NII86 was the 21 month lag between the end of a monitoring period and the publication of data for local carbon dioxide emissions (Audit Commission, 2011). This resulted from limitations in data collection and the greater priority placed on international climate obligations as compared to local policy. Over the course of a three-year LAA, figures for the first year, 2009, only became available in September 2011, making it almost impossible for practitioners to make timely policy responses to changes in the indicator (at least, with a view to reaching their final LAA target) (Audit Commission, 2009, p.18). The delay in publication is a product of the means of data production; priority is given to the UK Inventory of Greenhouse Gas Emissions, which the government is obliged to report to the United Nations Framework Convention on Climate Change. This takes just over a year to compile, after which a further nine months is taken to disaggregate local area emissions from the national inventory (DECC, 2011a, pp.1-2). Here, the pre-eminent global framing of climate policy interfered with the efficacy of local policy; the focus required on completing the national figures delayed the local dataset to such a degree that it became of little use for policy evaluation. That is not to downplay the importance of accuracy in the data collection, and if attempts were to be made to aggregate emissions data from the bottom up it would still be advisable to compare them to the national inventory. However, a balance needs to be made between data accuracy

and usefulness, and local authority managers believed that data had to be made available more quickly for it to meet their needs.

This flaw was familiar to local authorities as they entered the LAA negotiation process, as a preliminary version of the data had already been issued with a similar time delay (Goodwin *et al.*, 2005; King *et al.*, 2006). In interviews, it was clear that climate change managers were aware of the problem at the outset:

“The data at that stage was two years behind, so how does that help you do something in a three year LAA...? There’s so many uncertainties about the data, and it’s such a time lag. It wasn’t a particularly helpful indicator.” (County 3 Climate Change Manager, interview 1)

“I’ve just seen the [new] figures from DECC ... I think the statistics are dubious as hell, if I’m honest. They’re historic 2008 figures. What can we do with that?!” (County 1 Climate Change Manager, interview 1)

“I think the problem with 186 is the data isn’t reliable in my view. It’s two years out of date....” (City 2 Climate Change Manager, interview 1)

“They’ve said they are still going to produce the 186 figure ... even though it’s two years out of date it’s not worth anything anyway, but we will still have a figure.” (City 1 Climate Change Manager, interview 2)

The terminology used to disparage the data is notable: there is ‘such a time lag’ on the data, which is so ‘historic’ as to be practically irrelevant to climate policy work taking place within the local authorities. This view is hard to challenge within the context of a three-year LAA containing annual targets which imply a cycle of action, evaluation and feedback into policy based upon the evidence of local carbon dioxide emission figures. While the time lag does not preclude such a cycle over the longer term, it provides little scope for evidence-based policy adjustment within the LAA timeframe. While this was seen by managers as a weakness in the NI 186 data, the

suitability of a three-year policy cycle for addressing carbon dioxide emissions should also be questioned. The relationship between human action and atmospheric reaction is temporally stretched. There is a “climate change commitment” of unavoidable temperature rises well into the twenty-first century as a result of greenhouse gases already emitted (Wigley, 2005). As a result, any benefit from reduced emissions today would likely take several decades to be felt in terms of curtailing atmospheric warming (Armour and Roe, 2011). Attempting to evaluate climate policy over such a time scale would be a significant challenge for local authorities who operate under four-year electoral cycles.

6.2.2 Centralised data

Managers’ observations about the time lag in emissions reporting were linked to wider concerns about data accuracy. As outlined above, the NII86 data was issued by central government, allocating carbon emissions to ‘end users’ at the local level (King *et al.*, 2008, p.3). In interview, a central government official (CSI) stated that 56 per cent of the data came from local sources, principally gas and electricity meter readings, while 44 per cent was derived from models used to disaggregate national datasets. In the published methodology for NII86, it was estimated that the figures for most local authorities were subject to a potential error of less than 2.5 per cent (King *et al.*, 2008, pp.35-36).²⁹ Along with this transparency regarding data accuracy,

²⁹ Three authorities within the East Midlands had uncertainties of over three per cent.

the overall local emissions dataset³⁰ was ‘kitemarked’ as complying with the national Code of Practice issued to improve confidence in statistics (UK Statistical Authority, 2009, p.3). Viewed within established criteria for data accuracy, the statistics were trustworthy. However, these were not necessarily the criteria used by local authority managers, many of whom were distrustful of the NII86 data. One manager held a general scepticism about the accuracy of area-wide emission measures:

“The robustness of that data is very questionable anyway. You’re carbon footprinting the ... [whole area]. There’s so many inaccuracies with this whole exercise when you’re trying to carbon footprint your own authority, let alone an area. You factor that up, it’s just quite mindboggling.” (City 2 Climate Change Manager, interview 1)

Another manager focused on the similarities between the emissions trends of different local areas, casting doubt on the 44 per cent of data derived from disaggregated modelling:

“If you look at the data, nearly everywhere follows the same sort of trajectory, which makes you wonder. Obviously it’s a difficult thing to put statistics together on, but it’s just a bit odd that all the trajectories are exactly the same. And there’s so much top-down disaggregated stuff isn’t there, rather than aggregating actual impact from the community areas.” (County 3 Climate Change Manager, interview 1)

While such misgivings about the data were common amongst managers, they did not invoke any statistical analysis of their own to counter the NII86 methodology. Instead they used their own local experiences and observations as the basis for scepticism, reflecting criteria established in the literature for lay judgement of expert opinion (Wynne, 1992, p.298). While local authority officers could be termed

³⁰ NII86 emissions data was not a national statistic in itself, but was a subset of the overall emissions data for local authority areas. The subset was derived by the removal of those emission sources over which local authorities were deemed to have least control (Department for Environment, Food and Rural Affairs, 2008b, p.10).

‘expert’ on policy, this expertise did not extend to data collection. When asked about the details of a project to collect local carbon data, one officer replied “I don’t know how you go about doing it, that’s why I get experts to do it” (City I Climate Change Manager I, interview I). In one local authority adopting NII86, the manager attempted to address negativity over the data by commissioning their own study of local area emissions based on a methodology taking greater account of local knowledge in the sources of energy production and patterns of energy usage, rather than conforming to the centrally determined NII86 methodology. The data which resulted from the study, carried out by a local university, was largely consistent with the NII86 data. Despite this apparent confirmation of data quality from a local source, the authority’s climate change manager continued to take a dim view of the reliability of the centrally produced statistics:

“We had a lot of very good local carbon data which actually cross-referenced against the data produced for I86, and it was pretty similar.... [But] to be basing the whole of our targets on I86 data is not reliable.” (City I Climate Change Manager, interview I)

The persisting scepticism about data reliability, even after the corroborating ‘second opinion’ from a local expert source, suggests managers held an inherent distrust of centralised data production, regardless of the statistical validity of the data itself. The introduction of NII86 was intended to move power and responsibility from central to local government, but the means of monitoring progress remained controlled by central government departments. The NI framework made a virtue of the small number of new datasets on which local authorities were required to report in the new performance management framework, described by Whitehall as “reducing data

burdens” on local government (DCLG, 2008, pp.22-3). This may have eased a strain on local government resources, but also contributed to a disengagement with NII86 as managers saw the indicator’s methodology as being outside of their capacity to influence. One manager expressed a feeling of passivity in the process when referring to the NII86 data as being “pumped out to us every year” (City 2 Climate Change Manager 1, interview 1). Local authorities were also denied the opportunity to check the NII86 data before publication to comply with pre-release secrecy rules for official National Statistics (DECC, 2011a p.5).

Another local challenge to the accuracy of NII86 data was based on the changes made to the ‘baseline’ emissions figures upon which targets were based. In an attempt to reduce the level of uncertainty in the data, changes were made to the methodology from year to year. Such changes were applied retrospectively so that data for all years remained comparable using a consistent methodology (DECC, 2011a, p.3). These actions were intended to help improve the accuracy of NII86, but were instead interpreted locally as affirming the indicator’s questionability:

“I think the ongoing problem is every time they tweak the reporting, it means the baseline needs to be tweaked. So you have a constantly evolving baseline which isn’t healthy and is something councillors or public can’t understand: ‘why all of a sudden have you changed the baseline again?!’” (City 2 Climate Change Manager, interview 2)

Overall, the centralisation of data production fostered suspicion and a lack of understanding and in NII86 from the very people who it was intended to help, local climate change managers. The methodological complexity of the indicator lay outside of the expertise of climate change managers, who were experts in policy, not

statistical techniques. This gap in understanding left the production of NII86 appearing as a 'black box' to local managers, a process which remain closed to the contribution of local knowledge. While central government may have taken this route with the good intentions of producing a consistent dataset and reducing data burdens on local authorities, their actions occasioned a negative local perception of NII86, which in turn provided the context for weak implementation of climate change mitigation policy.

6.2.3 Lack of control

Suspicion of centrally produced data was a manifestation of a wider worry for local managers: a lack of control over policy. There was a widely held view that local authorities' scope for influencing emissions was tiny in comparison to the potential for central government action:

"I don't think what we're doing in that plan is going to have much effect on it, it's only ever going to have a 1 per cent impact. The government must recognise it has a lot more power to affect carbon dioxide emissions." (County 2 Climate Change Manager, interview 2)

"The impact a local authority can have in terms of area-wide emissions is minimal. The biggest impact anyone can have is national government in terms of policy and fiscal measures." (City 2 Climate Change Manager, interview 1)

These views were supported by central government reports showing that local policy measures would have no influence over the majority of an area's emissions (see Table 10).

Table 10. National policy exerts the greatest influence over local emissions measured by NII86

Policy measures influencing local carbon dioxide emissions	Percentage
1. Purely national measures but still influencing community emissions	71.2
2. National measures for which local authority influence can improve performance	25.9
3. Purely local measures implemented by local authorities or other organisations	2.8

Sources: AEA Technology (2008, p.36); Eadson (2008, p.146)

While there was considerable uncertainty about the degree of influence local authorities could exert over Category 2 (Table 2), the overall picture was one of local performance under NII86 being largely determined by national policies. One central government estimate was that Categories 2 and 3 in Table 2 would produce a total reduction of just 5.1 per cent between 2005 and 2010 (DECC, 2009, p.56). This compared with East Midlands local authorities' aggregated target of a 10 per cent reduction over the same period (East Midlands Climate Change Partnership, 2009, p.15), suggesting that local authorities had influence over only half of the emissions they had committed themselves to reduce.

This contradicts one of the fundamentals of the performance management approach to public management, that an indicator should have controllability, only measuring what is the responsibility of the manager (Jackson, 1988, p.12). Instead, over 70 per cent of NII86 measured emissions over which the local manager had *no* control, with less than three per cent of emissions being purely influenced by local measures

(although these were the responsibility of the local partnership, rather than the local authority manager in isolation). As with the issue of time lag in publication, the apparent lack of control over a local area's emissions was known during the LAA negotiation process. In sum, the problem of control within NII86 was dual-layered:

1. Centrally controlled data production overlooked the potential role of local knowledge and context in the process, leading to misunderstanding of methodology and doubts over data quality; and
2. The resulting indicator provided untimely data on emissions predominantly outside of local control.

6.3 Choosing NII86 despite the flaws

This prompts the question: if NII86 was recognised as a poor indicator, why did seven out of the nine local authorities in the East Midlands include it in their LAAs? While research in the West Midlands suggests central government pressure during LAA negotiations as a potential factor (Pearce and Cooper, 2011, p.209), this was not significant within the East Midlands. Several local authority managers referred to some pressure from central government, by way of Government Office, for local authorities to select NII86 as their climate change mitigation indicator. However, in most cases this was analogous to pushing at an open door. A willingness to tackle carbon dioxide emissions had already been demonstrated as the East Midlands became the first region to have all of its local authorities sign up to the *Nottingham Declaration*, a voluntary commitment to addressing climate change locally (East Midlands Regional Climate Change Partnership, 2009, p.3). While signatory authorities were far from certain to follow up this action with a coherent climate change strategy (Carty and Hislop, 2007, p.8), it underscored the increased public

awareness of the issue prompting local councillors to respond with a statement of intent (House of Commons Environmental Audit Committee, 2008a, pp.20-21). This response was reinforced by “wilful individuals” working within local authority environment units, who developed expertise and enthusiasm working on Local Agenda 21 throughout the 1990s and seized on climate change as a new manifestation of the sustainability agenda (Centre for Sustainable Energy, 2005, p. 20-22) (see pages 33-39). Local authorities’ engagement with the agenda implied a willingness to adopt an indicator measuring area-wide emission reduction, but this jarred with the flaws in NII86 outlined above. The resulting dilemma was summarised by one local authority manager familiar with the LAA negotiation process:

“Our view was when I86 came out, well we're not going to say no because we've been asking for this for a very long time, but a) we have no resources, and b) we have no control.” (County 5 Climate Change Manager, interview 1)

While two local authorities felt strongly enough about NII86’s weaknesses to reject it in favour of NII85, most did not want to be seen as backing away from the more ambitious NII86 indicator. However, demonstrating credibility to central government and the public was not the only salient issue in indicator choice. In selecting NII86, local authorities prioritised its symbolic importance over the flaws in its design to demonstrate that carbon dioxide reduction was a local priority within an institutional context. To do this, carbon emissions reduction had to be established within the performance management regime which has become increasingly important within local government since the 1980s (Andrews *et al.*,

2005, p.640; Hood, 2006; Wilson and Game, 2006, pp.361-364). By including NII86 within their LAAs, climate change mitigation became a mainstream policy area towards which resources could more justifiably be directed:

“NII86’s power is to raise the profile of climate change within a formal performance management structure. The fact we have NII86 ... within our LAA is a good indication of our commitment to the climate change agenda.” (City 1 Climate Change Manager, interview 1)

Climate change managers seized the opportunity of raising the issue’s priority within their local authorities. By introducing a carbon dioxide emissions metric into council performance management frameworks, climate change would no longer be seen as an issue of fringe concern. For central government and senior management in local authorities, the meaning of NII86 was the transformation of climate change into an area of policy that could be measured and managed in the same way as others within the existing performance management regime:

“It’s meaningless really but the politicians and performance management people for the LAA use it [NII86] as ‘have we passed or not?’” (City 2 Climate Change Manager, interview 1)

For climate change managers, NII86’s flaws rendered the data itself ‘meaningless’ for policy evaluation and implementation. Instead, it was the very acts of measurement and monitoring that were important, as they gave climate change new meaning as a mainstream policy concern and created the space within which they could introduce new programmes. This meaning emerged as a result of the acts themselves, rather than the data they produced.

6.4 NII86 as evidence

6.4.1 The 'wrong' evidence

Since 1988, climate change mitigation rapidly moved up the public policy agenda (Jaspal and Nerlich, 2012), becoming an issue of cross-party consensus in the second half of the 2000s. This set the context for the local commitment to climate change action through the *Nottingham Declaration* and the adoption of LAA climate change targets (see pages 45-52). Under such conditions of agreement about the direction of policy, one might expect NII86 data to be an important form of evidence in policy evaluation:

“Research as data is more likely to be influential in situations of consensus on values and goals. Research can pinpoint the problem and clarify its parameters, and it can serve as the basis for good estimates of the efficacy of correctives.” (Weiss, 1991, p.41)

However, the consensus was not as firm as it appeared (Jordan and Rayner, 2010).

Since the passing of the Climate Change Act in 2008, events have threatened the increasing priority afforded to climate change since it was declared, in 2004, to be the most important long term issue faced by the world by the then Prime Minister, Tony Blair (2004). Following the Climatic Research Unit email controversy of 2009 (Leiserowitz *et al.*, 2010),³¹ there was a significant decline in the number of people believing climate change to be a man-made occurrence, although the sustained period of cold weather in Britain at the time may have been more of a contributing factor (Climate Sock, 2010a). 2009 also saw governments at the Copenhagen climate

³¹ Commonly, but pejoratively, referred to as 'Climategate'. A number of emails between climate scientists entered the public domain, some of which contained inadvisably worded comments which critics used to question the scientists' integrity.

change conference failing to reach the legally binding deal to reduce greenhouse gas emissions that was expected (Rogelj *et al.*, 2010). While the precise effects of these events on public opinion are hard to disentangle, they coincided with a decline in interest in climate change in the UK, although this was also true of a range of other public policy issues in the wake of the financial crisis (Climate Sock, 2010b). In addition, many of those people who agreed climate change was an important issue demonstrated only a 'thin' commitment to action, being happy to take 'easy' measures such as recycling but unwilling to take 'difficult' steps such as energy conservation or reducing car use (Whitmarsh, 2009, p.21).

Interviews with managers and councillors also suggested that public support for climate policy may not have been as strong as previously thought. None of the elected councillors interviewed who held responsibility for climate change issues described the issue as one which voters remarked upon 'on the doorstep': while managers were used to thinking about such strategic issues, they did not have the same resonance for members of the public and, by extension, local authority members. There was a view that this disjoint between the perspectives of managers and the public was an issue when it came to securing support for action:

"I'm not necessarily 100 per cent popular with my officers for this view, but if you walk out and say to somebody on the street out there, 'we're going to save the planet by cutting down CO₂, right?' I don't think you're going to get an amazing amount of people leaping up and down about that." (County 1 Councillor, interview 1)

As well as noting public apathy on climate change, this quote also underlines the disjoint between expert and lay opinion. While climate change had been prioritised

as an overarching theme or agenda by many local authority councillors and managers, its peripheral status within public concerns left it short of political support within an environment of increased public and media scrutiny of local authority expenditure. Managers who were personally convinced of the need for strong local climate policies also came to recognise this gap:

“I think that’s one of our problems with the general public, we talk glibly about climate change. Why do they need to bother about climate change? They just need to know about practical things they can do which can help them improve their quality of life, and that can be energy efficiency, saving a bit of money on your fuel bills. I just think we put ourselves on a pedestal with this and don’t really understand what’s happening around us and how our customers view this agenda.” (City 2 Climate Change Manager 1, interview 1)

This gap can be explained by the divergence between global framing and local understanding. ‘Climate change’ quickly established itself as a policy issue in the 2000s, a commonly used label that entered into the public lexicon very quickly (Nerlich *et al.*, 2010, pp.97-99). While this had benefits in getting the issue onto the local agenda, its power at that spatial level soon dissipated. In its rapid rise to prominence, climate change had already become established as a global, long term problem, both in the discussion of its causes and its political solutions (Demeritt, 2001). As a result, climate change did not hold significant meaning for individuals thinking about their local environment or, crucially, their day-to-day lives. By continuing to be described as ‘climate change policy’, the agenda became understood as aspirational and hence left vulnerable to the arrival of austerity and localism.

NIs and LAAs were an early casualty of the new localism agenda, abolished in 2010 as part of a drive to empower local authorities to pursue policies more closely suited to local circumstances (Pickles, 2010b). This reduction in local authorities' reporting obligations was implemented alongside the Cameron Government's austerity programme which brought cuts in local government grants of 10.2 per cent in 2011-12, the beginning of a package of 27 per cent cuts up to 2014-15 which signalled the disproportionately high percentage of the government's cuts being absorbed by local government (Hayman, 2010; Jones *et al.*, 2011, pp.9-10; Lowndes and Pratchett, 2011, p.23). This prompted a refocusing of budgets onto those policy areas encompassing significant statutory duties such as adult social care and safeguarding children.³² In comparison, climate change work was largely non-statutory, becoming discretionary and more vulnerable to cuts by local authorities as NIs were abolished by central government (Green Alliance, 2011, pp.14-15).

The cuts in local climate change work which followed the break-up of the LAAs revealed that performance management indicators alone provided a fragile justification for policy. In particular, NI186 was rooted in the long-standing construction of climate change as a scientific problem caused by the heat-trapping properties of greenhouse gases (Demeritt, 2001, pp.328-329). The narrow framing of greenhouse gas emissions as the 'problem' to be addressed led to a focus on the reduction of these emissions as climate policy's *raison d'être*, expressed locally

³² A central government review found a total of 1338 statutory duties for local authorities, of which only three pertained directly to climate change and greenhouse gas emissions: compliance with Carbon Reduction Commitment, improving domestic energy under the Home Energy Conservation Act and reporting large emissions sources under the European Union Emissions Trading System (DCLG, 2011b, 2011c). The last of these did not apply to any East Midlands local authorities.

through NII86. While this established the conditions for consensus, it was the 'wrong' consensus for legitimising public policy:

“By excluding any obviously, social or political matters, the scientific reductionism of CC [climate change] makes consensus possible, but the result is, in some sense, irrelevant. The things that can be known with scientific certainty are not necessarily the most important to know. So, for example, the science of CC can agree about the physical sources of carbon emissions, but only by refusing to consider the far more important and deeply political question of why they are increasing and how (or if) they should be curtailed.” (Cohen *et al.*, 1998, pp.360-361)

While an initial, consensual decision was made to cut greenhouse gases based on the scientific evidence, “[i]n order to bring along the organizations [sic] and individuals who will carry out decisions, there is a continuing need for legitimation” (Weiss, 1991, p.42). This legitimation was overlooked within local climate policy as social and political aspects were neglected in favour of a focus on the quantification of the problem (through carbon dioxide emissions) and monitoring of the solution (through performance management). Following policy decisions, such as the one taken to tackle climate change, Weiss identifies the need for evidence to take the form of arguments, rather than data, to maintain the support of the actors needed to assist implementation (1991, pp.41-42). Within a local context, the ongoing renewal of legitimation through argument was even more vital to counter the dominant framing of climate change as a global, not local, issue.

Policy-makers' misunderstanding of the consensus left a dearth of usable evidence on which actions to address NII86 could be based. While NII86 legitimised new

projects and partnerships with local organisations, local managers found themselves faced with a vexing question: ‘where do we start?’

“NII86 has been hard to get our heads around...nobody seems to know how to tackle it and nobody seems to have the confidence of understanding it ... I think NII86 was too big and it has taken almost three years for local authorities to do some stuff on it.” (Regional 2 Climate Change Manager, interview 1)

Besides the three flaws discussed previously (see pages 188-199), the struggle to find policy responses to NII86 stemmed in part from the problematisation of carbon dioxide emissions as one of many indicators to be influenced, rather than as a “persistent condition” of the everyday functioning of a local area (Prins *et al.*, 2010, p.16). This echoes the earlier analysis of local authority board meetings in which discussion of how public policy norms would be altered by decarbonising society was absent. It was hard for managers to identify a way of affecting NII86 because it was an *apolitical* performance indicator eliding difficult *political* arguments. Managers intended NII86 to legitimise new programmes and policies. Instead, the indicator’s inherent failings stifled their ability to conceive ways to proceed. In terms of evidence for policy, NII86 represented a premature move to data, before a deeper consensus on what decarbonisation meant for policy had been reached through argument (Weiss, 1991, pp.41-42). In contrast, there were much stronger arguments for local authorities to concentrate on their own corporate emissions rather than those across their local area. The next section analyses how this trend developed.

6.4.2 The 'right' evidence

The previous discussion highlighted how vulnerable climate change programmes were to budget cuts without local authorities continuing to argue for their local relevance. That this was often not the case was reflected in a national survey which found that many local authorities were narrowing their ambition in the area, and only 35 per cent were maintaining the same commitment to climate change work following the demise of LAAs (Green Alliance, 2011, pp.14-15). One councillor provided a straightforward view of how resources were to be allocated to climate change work in this new context:

“So I said to the team, if we need x per cent effort into ... regulations - things we have to do whether we like it or not, and if we don't there will be a consequence - then I wanted a significant amount of resources... pushed into those areas. Then we worked out what was left.” (City 2 Councillor, interview 2)

In practice, this meant resources were prioritised for the Carbon Reduction Commitment (see pages 218-231) while posts and projects aimed at addressing area-wide emissions disappeared (City 2 Climate Change Manager 1, interview 2). While the austerity programme required budgets to be cut across much of the local authority's service areas, the percentage reductions made to climate change programmes were considerably larger than the average across the organisation as a whole.

This contrasted with City 1 local authority, where the climate change budget continued largely unchanged despite suffering a similar overall funding cut and being subject to the same regulations as City 2. While City 1 had been one of the earlier

local authorities to take steps on climate policy, councillors were not naturally sympathetic to the agenda. Indeed, this early work was seen by a director as being of limited relevance:

“We see climate change locally ... as a little bit of a damaged brand almost. We're not trying to change the climate particularly, we're trying more short term objectives around energy - people understand the fact energy bills are increasing Certainly locally, when we stopped talking about carbon emissions and [started talking about] real life stuff that resonates on the doorstep, that resonates much more with our local councillors.” (City I Director, interview I)

This quote encapsulates the difficulty of talking about climate change locally. The roots of climate policy are inescapably global: macro-scale strategic policy with the aim of minimising global temperature rises (Demeritt, 2001, p.307). However, the rapid rise of the issue onto the policy agenda brought it to the attention of local authority officers who had built a strong tradition of environmental action since the early 1990s (Tuxworth, 1996; Church and Young, 2001; Hulme and Turnpenny, 2004, pp.107-111). While this early work by local officers helped establish the agenda locally, climate change as a topic in itself could not be invoked politically as an effective driver for policy. However, elements of the agenda did resonate locally and were supported by the local authority's political leadership.

Councillors within City I were more heavily involved in policy discussions with their managers than was usual within the rest of the region's local authorities, where managers often saw councillors as distant. Despite none of the relevant councillors within City I having backgrounds in environmental issues, their greater engagement with managers enabled them to identify those elements of the climate change

agenda which could gain political support locally; for example, installing insulation and renewable energy technology as a means of tackling fuel poverty and improving public transport. This brought greater political legitimacy to programmes associated with climate policy, enhancing the arguments for policy beyond that of 'reducing carbon emissions'. That such a close interest in the agenda was the exception, rather than the norm, within local authorities was reflected in successive regional-level programmes which aimed to engage more with local councillors on climate change issues (East Midlands Improvement and Efficiency Partnership, 2009, p.36; Climate East Midlands, 2011, p.2). This indicated a general ambivalence towards climate change in local authorities' political leaderships, despite the commitments made to the *Nottingham Declaration* and LAAs in the late 2000s. Within this context, the use of data as evidence had little purchase within *local* policy-making, as the legitimacy of climate change as a policy issue had come from a different spatial level.

This section has shown how attempting to use quantitative data such as NII86 as evidence for policy-making was misconceived in the absence of discussion over the meaning of decarbonising for policy. Where there was a greater degree of political involvement in local authority policy, as in City 1, there was a keener awareness of the need to justify and argue for climate policies. Within City 1, this manifested itself through policies to address fuel poverty.

6.5 Kindred policy 1: fuel poverty

6.5.1 Arguments for fuel poverty policy

The number of households in fuel poverty, defined as those needing to spend over 10 per cent of their income to maintain a satisfactory level of warmth, has increased in recent years, largely as a result of changes in energy prices (DECC, 2011b, p.3, Ekins and Lockwood, 2011, p.7). Reducing fuel poverty and carbon emissions has been seen as possessing a natural fit, with the installation of energy efficiency measures (typically, cavity wall and loft insulation) as a policy response common to both issues (Boardman, 2010, p.119). Historically, housing has been a key function of unitary and district local authorities. While its importance has been eroded by central government policy since the 1980s, housing still accounted for 16 per cent of local government's total net current expenditure in 2010-11 (Wilson and Game, 2006, pp.135-8; DCLG, 2011a, p.69). Since the late 1990s, improving domestic energy efficiency has become an increasing priority, with some measures aimed particularly at low-income households (Ekins and Lockwood, 2011, p.8). The Home Energy Conservation Act 1995 (HECA) obliged all unitary, district and metropolitan authorities to report to the Secretary of State a plan to improve energy efficiency in domestic properties by 30 per cent over 10-15 years (Association for the Conservation of Energy, 2005). However, in recent years the effectiveness of the Act has reduced as it was scheduled for repeal.

Efforts to reduce fuel poverty have been incorporated into the largest energy efficiency scheme, the Carbon Reduction Energy Target (CERT), with just over half of the 2008-11 budget used for households in receipt of certain benefits or where an occupant was over 70 years old (Ekins and Lockwood, 2011, p.8). This was complemented by the Community Energy Saving Programme (CESP) which was aimed specifically at households in the lowest income decile (Gough and Marden, 2011, p.13). Local energy efficiency schemes utilising CERT or CESP funding emphasised the potential both for reducing householders' bills and their carbon footprint (e.g. Leicester City Council, n.d.; Nottingham Warm Zone, n.d.; Daventry District Council Home Energy Conservation Scheme, 2011). Analysis to support CERT's forerunner, the Energy Efficiency Commitment, reinforced this link by assuming that efficiency savings would be converted entirely into a reduction in energy usage, and consequently lower carbon dioxide emissions. Subsequent policy evaluation showed this to be an unrealistic picture, with many householders choosing 'comfort taking', using increased efficiency to improve thermal comfort and well-being rather than minimising energy bills (Oreszczyn *et al.*, 2006, p.252; Office of the Gas and Electricity Markets, 2008, p.9). Revised analysis showed priority groups in receipt of benefits as taking 'comfort factors' of up to 40 per cent of the efficiency benefits from insulation measures and up to 25 per cent of those from heating measures (DECC, 2010b, pp.17-18). Increased comfort was a higher priority than reducing energy bills, despite the low household incomes of those in fuel poverty (Heyman *et al.*, 2011, p.131). This led to a significant downgrade in the estimated emissions cuts from schemes. While figures were not available for any East

Midlands local authorities, one national leader in insulation installation, Kirklees District Council, had to cut the estimated emissions reductions arising from insulation by 50 per cent once comfort taking and heat leakages from poor fitting were included in modelling (Butterworth *et al.*, 2011, p.17). Reductions in carbon emissions can still be expected from increased energy efficiency, but the Kirklees experience suggests a far more uncertain relationship than previously assumed.³³

6.5.2 Fuel poverty and climate change

This development highlights further problems regarding the performance management data for climate policy. With the widespread disquiet among officers about N186 data, some participants raised the possibility of using proxy data measures more closely aligned to areas which local authorities could influence. One such area would be the installation of domestic energy efficiency measures, which as well as being a policy area traditionally associated with local authorities, provides the potential for more locally tangible policy outcomes than reduction in carbon dioxide emissions. However, one manager highlighted the potential pitfalls of this approach:

“The problem with these proxy measures is what do they really tell you...? It doesn’t become a measure of carbon reduction at all ... potentially it is how well you’re addressing fuel poverty, and you don’t know whose houses they are and the nature of those people is ... I’m not suggesting ... these things are worthless. You’ve just got to be very cautious about what they mean. The absolute measure is carbon emissions, the other things are measuring activity, not outcome. You’ve got to ask ... ‘Why are we insulating lofts?’ If the purpose is to reduce carbon emissions, that’s what you measure. The reason might be multifaceted, one

³³ Carbon savings from energy efficiency measures may be further reduced by the ‘rebound effect’, in which householders use a percentage of the avoided energy costs on other goods and services responsible for further emissions (Druckman *et al.*, 2011, p.3578).

reason is carbon, the other is to reduce people living in fuel poverty. So then you measure the number of people in fuel poverty....The problem of measuring is you're asked for multifaceted things, they're all interrelated, and single actions have an impact on more than one outcome." (County I Climate Change Manager I, interview 2)

With carbon reduction and fuel poverty having weaker synonymity than previously thought, this quote illustrates a dilemma about how to evaluate the policy of energy efficiency installation. Such installations in fuel poverty households may reduce emissions, but will not be as effective in achieving that aim as once assumed. In addition, the fuel poor are likely to already be living "low-carbon lifestyles" (albeit likely not out of choice), implying that it is not the most effective means of reducing total emissions within a local area (Jenkins *et al.*, 2011, p.25). Instead, targeting energy efficiency measures at low income groups implies a priority being placed on fuel poverty, with carbon reduction as a "co-benefit", not the primary aim (Prins *et al.*, 2010, p.13). While this may appear a semantic difference, establishing priorities has implications for policy design. While the element of CERT aimed at households in fuel poverty has increased, its focus has remained on carbon reduction (as its name implied) and has not succeeded in reaching the very poorest in society (Ekins and Lockwood, 2011, p.8). This is intended to change under the Energy Company Obligation, which will succeed CERT in 2012 and is intended to be more strongly focused on low income households while still maintaining a carbon reduction target (DECC, 2011d, p.3; DECC, 2012a, pp.84-85).

Notwithstanding the funding details, the political steer in some local authorities was clearly towards a focus on fuel poverty rather than a general reduction in carbon emissions. One councillor discussed their misgivings about the Green Deal, a scheme due to begin in 2012 under which households will be able to borrow the money required for energy efficiency measures and pay back out of energy bill savings:

“The danger with the Green Deal is it will go to all the people who don’t really need it, who could have paid for it [energy efficiency measures] anyway, who’ve got the £7,000.... It’s about getting it to those people where it makes the most difference - in fuel poverty.” (City 1 Councillor, interview 2)

For those households who ‘could have paid for it anyway’ there are other barriers to using their own funds to improve their home’s energy efficiency, such as availability of information and the length of time families remain in the house subsequent to measures being fitted (the latter typically being less than the amount of time taken to recoup installation costs through energy savings). Respectively, the Green Deal is intended to address these through home energy assessments and the loan being tied to the energy bills of the property, rather than householders (Committee on Climate Change, 2012a, p.34) Addressing barriers to those with the “£7,000” identified by City 1 Councillor makes sense if the policy priority is reducing carbon emissions. Spending on domestic energy increases with income levels, suggesting that higher income households have a greater potential to, in the councillor’s words, ‘make the most difference’ in reducing overall carbon emissions in an area (Palmer and Cooper, 2011, p.23). However, the councillor’s use of the

phrase demonstrates a re-interpretation of policy to focus on fuel poverty over carbon emissions.

Such a shift was not the case in all local authorities. In particular, fuel poverty was far less prioritised in City 2 than in City 1. This cannot be explained in terms of the relative scale of the problem. Both had similar figures for fuel poverty with all East Midlands cities having between 21 and 23 per cent of households classed as “fuel poor” in 2009 (DECC, 2011c). There was also little difference between the cities in the proportion of their carbon emissions coming from the domestic sector, varying between 30 and 33 per cent for 2009 (AEA, 2011). One manager within City 2 gave an account of how fuel poverty had fallen off the local authority’s agenda:

“Its got lost a bit in the conversation around climate change....At the moment the dialogue is about carbon emissions. It doesn’t talk about fuel poverty, it’s hidden in there as part of reducing carbon dioxide emissions ... We haven’t got much of a [political] steer at the moment ... I’ve always seen my job as half and half about carbon dioxide reduction and making sure people can heat their homes ... [now] I’m not sure. There are no specific fuel poverty projects at the moment. We are looking to do a bit of work with health and Primary Care Trusts to do some promotion.” (City 2 Climate Change Manager 2, interview 2)

Here is a further example of how climate change has crowded out other kindred issues from policy discussions (see also page 46 on national government’s Public Service Agreements). While there are clear links between policies for climate change and fuel poverty, seeing the latter as subservient to the former continues a long term peripheralisation of fuel poverty which has left it poorly served within UK

public policy (Boardman, 2010, pp.119-121). The predominance of climate change over fuel poverty in policy priorities was further illustrated by the dwindling of central government interest and funding related to HECA.³⁴ The national commitment to fuel poverty targets through HECA was effectively diluted under the NI framework, with local authorities able to choose whether or not they established such targets (Association for the Conservation of Energy, 2007, p.5).³⁵ However, the intention to repeal HECA has since been scrapped, prompting a renewal of the obligation for local authorities to report their plans to central government (DECC, 2012b).

This renewed obligation on local authorities to act on fuel poverty accompanied a rapid rise in domestic fuel bills, which more than doubled between 2004 and 2011 (Office of the Gas and Electricity Markets, 2011, p.4), prompting increased public concern (Barrow and Reynolds, 2012), public protest (Davies, 2012) and a new prominence on the political agenda (Wintour, 2012). The experience of City 1 demonstrates how rising energy costs can provide a more influential argument for local action than addressing climate change. However, merely reframing or relabelling existing policy as addressing fuel poverty rather than climate change muddles the meaning of policy, which history suggests makes the attainment of fuel poverty aims far less likely (Boardman, 2010, p.119). Moving the aim of policy from

³⁴ Symbolising this shift, the national network of local authority energy efficiency officers changed its name from 'UK HECA' to 'Carbon Action Network' (Carbon Action Network, 2008).

³⁵ Only three out of the region's nine local authorities adopted a NI target for fuel poverty reduction within LAAs.

decarbonisation to reducing fuel poverty may be more meaningful in the local context. As the above discussion has shown, these aims may be related but they are not as synonymous as sometimes claimed.

Another kindred policy to climate change is that of energy management; local authorities increasing energy efficiency and reducing associated emissions within their own organisation. Like fuel poverty, this policy may not be as closely related to climate change as often thought, as the next section demonstrates.

6.6 Kindred policy 2: energy management

6.6.1 NII85: a dearth of data

Local authorities were obliged to report on the entire suite of NIs to central government, regardless of those they had prioritised within their LAAs; the region's seven authorities who had adopted NII86 still had to report on their own corporate emissions through NII85 (DCLG, 2008, p.17). As work began to establish the latter's baseline data, it became clear that most local authorities needed to direct significant resources into the process of accurately identifying energy usage within their organisations. A regional officer provided an overview of the fundamental problems that had to be addressed:

“Frankly, before local authorities looked at this, it was quite startling how little information they had on what their energy usage and emissions were...it is very problematic. There are serious issues around billing from suppliers, where they get estimated bills rather than ones from meters. When they do have meters they often don't know where the meters are,

large county authorities can have several thousand meters to try and find. Not all the authorities knew how many buildings they owned. Streetlights tend to be on an unmetered supply. These are the kind of issues to get to the bottom of.” (Regional 3 Climate Change Manager, interview 1)

Such issues required action far beyond collating existing data on energy and fuel usage into a spreadsheet. By revealing the paucity of accurate information available to climate change officers, the NII85 reporting process highlighted the extent to which energy use had become unconscious within local authorities. Besides the resources required to complete the spreadsheet, the scale of the challenge outlined by Regional 3 Climate Change Manager required climate change officers to establish contacts with other local authority departments. While the process did not suffer from the same degree of resistance as policy of a more overtly environmental nature, mobilising activity across a local authority was time consuming for climate change teams, with it typically taking around 18 months to improve corporate emissions data. While this constituted what Regional 3 Climate Change Manager described as “a pretty major headache for local authority officers” (interview 1), there was a general view among local and regional officials that it was important to improve the standard of data from what had been a very low base.

A performance management regime requires baseline data to evaluate future implementation. The lengthy process of establishing a NII85 baseline contrasted with the centrally provided data of NII86. This disparity in the amount of work required to fulfil these two reporting requirements was the same for all councils, unaffected by which of the indicators they had chosen to prioritise. As a result, there

was a much greater focus on NII85 than was initially expected within those local authorities adopting NII86. While these councils' performance management frameworks emphasised area-wide emissions, their implementation of policy became focused on their own corporate emissions. The time spent on data collection provides part of the story for the focus on corporate emissions. That local authorities continued to focus on them over reducing area-wide emissions rested on the more persuasive evidence for addressing the former. Three facets of this evidence are highlighted here: cost cutting, influence and leadership.

6.6.2 Arguments for energy management

a) Cost cutting

With renewed pressure on local authorities' budgets from the Cameron Government's austerity programme, the potential for cost savings resulting from reduced energy usage provided the clearest incentive for reducing corporate emissions. The work to produce NII85 benchmark data intensified the focus on energy usage, changing the perception of utility costs from being fixed to variable and illuminating the potential for cost savings from energy efficiency measures. Many of these measures could recoup the initial financial investment within five years, qualifying them for government funding through Salix Finance, a body providing loans for investment in energy efficiency which are then paid back out of the resulting savings in energy bills. Typical schemes included improved lighting for buildings and voltage optimisation for large offices.

The Salix scheme proved to be a powerful means of funding energy efficiency measures which provided a financial return in less than five years. However, these 'low-hanging fruits' only went some way to meeting energy reduction targets, and took place against a background of energy rises elsewhere within local authorities, both through incremental changes in technology and new infrastructure such as schools and leisure centres. As schemes compliant with the Salix funding criteria become harder to find in some local authorities, then it becomes harder to invoke cost as an incentive for implementing carbon reduction policies as financial return timescales become longer and more uncertain. However, even if these timescales for return were persuasive for finance managers, the importance placed by local authority service managers on maintaining working practices, rather than pursuing possible cost reductions, should not be underestimated (see also pages 227-230).

Improved monitoring of buildings also sparked an interest in estate rationalisation as a way of reducing energy costs, particularly as the data collection process has brought to light some buildings that local authorities did not realise they had responsibility for. While closing a building would seem a more straightforward and effective way of reducing emissions than energy efficiency, it had potential side effects. Where buildings were associated with particular council services, such as libraries or community centres, the added incentive of a 'quick win' on energy costs potentially increased the likelihood of services being closed rather than local authorities trying to provide the same services using less energy. Also, attempts to rationalise estates proved problematic to implement. One local authority had

attempted to switch from a diffuse range of buildings to one large, central office. The local authority found it difficult to sell the old properties during the recession, leaving it with a number of buildings whose utilities had to be maintained to avoid them falling into disrepair. While these buildings' costs were still reduced, the local authority found itself with a net increase in its energy costs once the move to the new office was complete. This story also illustrates the shortcomings of a rationalisation strategy within an area-wide approach to climate change. Any buildings jettisoned by a local authority are still a source of energy and carbon dioxide emissions, no matter who they are owned by, unless they are demolished and the sites returned to nature.

b) Influence

Besides the financial incentives to cut carbon in their own estates, local authorities had another motive for prioritising NI185 over NI186. Simply, they were able to more easily exert influence over their own operations than over the behaviour of residents and businesses in the area. It made sense to focus on their own organisation's behaviour, both in terms of the tools available to them to influence others, and their resources:

“The view of the team is that 186 is nice and fluffy. It's a really nice idea but we're a little council spending relatively little money in the face of a huge [issue]...What practical influence can we have out there in any significant way?...Carbon emissions are much more influenced by national energy policy, our mix of production systems, the decisions of business people, they've much bigger influence than we have as a local authority.” (County 1 Climate Change Manager 1, interview 1)

Here there is a shrinking of the view of the 'local' over which the local authority has influence. Rather than having influence over their local area, the council is only able to exert authority over its own internal organisation. As illustrated by the case of County I's environmental management system, even implementing policy within the local authority was not straightforward (see pages 150-167). Once these problems became apparent, it would reinforce officers' view that they had to concentrate their efforts on reducing corporate emissions, particularly if they wanted to demonstrate any leadership in the community.

c) Leadership

Besides the greater influence officers could have over their own organisation, there was a more fundamental desire for local authorities to 'practice what they preach' on carbon emissions before attempting to influence others. Two aspects to this were discussed by local authority officers. First, by concentrating on reducing its own carbon emissions, a local authority could demonstrate what it is possible for an organisation to achieve:

“We don't have any significant influence on people directly. I think our biggest influence is to model good behaviour, to demonstrate what we can do at the moment, and when we've done something successful shout about it.” (County I Climate Change Manager I, interview I)

Here, the officer sees action on local authority corporate emissions, and then telling the story of their success, as a more effective means of influencing others than more general communications intended to raise public awareness on climate change. In this view, policy to reduce corporate emissions is intrinsic to reducing area-wide

emissions. Any attempt at the latter without the former will founder on the local authority's lack of resources and influence in the community.

Second, there is the risk to local authorities' reputation from being seen not to reduce their own emissions. Nominally, this relates to the entirety of NII85 data but was more often expressed in terms of discrete, tangible aspects of energy consumption:

"It's a very visible office. Everyone knows it's a council building so if the lights are on post-eight o'clock it's a bit of a visible example of us saying wonderful things about reducing our carbon footprint. Everyone else doing their bit, but if we're not doing ours.... Being seen to be [doing something] is almost as important as the unsexy bit which is reducing your carbon footprint and your costs which people don't see. The heating temperatures in that building make no difference to the people outside, they make a lot of difference to the people inside. The visible part is what the lighting does" (City 1 Climate Change Manager 3, interview 1)

While reducing energy costs as a whole is important to the organisation, the manager was clear that being *seen* to act was more meaningful than published statistics in terms of external engagement. The emphasis was on avoiding bad practice, with the risk to reputation that holds for the local authority, rather than 'shouting about' good practice. Turning off office lights promptly could still be used as a good practice story, but the prevailing risk is that the most tangible aspect of the organisation's energy use could weaken its credibility in advocating action. While this was not checked through interviewing members of the public, public sector organisations have been criticised in the media for apparent hypocrisy in advocating

private individuals reduce their carbon emissions while not addressing emissions accruing from their own operations (e.g. Newton Dunn, 2010).³⁶

Overall, the ability to demonstrate leadership within a local area was depicted by officers as a strong driver for local authorities to prioritise reducing their own emissions. Illuminating a path towards emissions reduction for other organisations was part of this and holds potential for sharing aspects of good practice both within a local area and between local authorities. However, officers were very cautious on the potential to be seen as hypocritical if local authorities were to take a leadership role before taking action on energy usage. As discussed previously, local authorities' own information on energy usage, and in many cases their wider asset management processes, required significant improvement before baseline data could be compiled (see pages 216-218). While this ongoing process contributed to officers' concerns, it was the most tangible energy uses, irrespective of their overall contribution to emissions, which were seen as the greatest threat to the local authority's legitimacy as an actor in climate policy.

d) Summary of arguments for energy management

The financial benefits of cutting corporate carbon emissions and the importance of demonstrating community leadership on the issue were clearly articulated by officers as drivers for action to reduce NII85, whether or not NII85 was their core indicator. Following this, the idea of 'tackling climate change' changed in meaning for

³⁶ In a consideration of the links between the recommendations and actions of researchers, this is termed "holistic credibility" (Nordhagen *et al.*, 2012, p.13).

many local authorities during the period up to the revoking of NIs and LAAs by the Cameron Government. Many local authority managers thought that, in contrast with reducing their own emissions, they lacked the necessary resources and policy tools to cut area-wide emissions. This view contributed to the rapid fading of NI186 as a priority in local policy implementation, contrary to its continuing prioritisation within most LAAs. This inward turn was intensified by the volume of work required to meet the obligation to provide NI185 data, forcing local authorities to look in depth at deficiencies in their own record-keeping. This 'bottom-up' production of data contrasted with the 'top-down' production of NI186 data, officers characterising the latter as of dubious quality and lacking in local context. Whether or not these were valid criticisms, it is notable that they were not made of the locally produced NI185 data. The experience of NI185 shows that while local data collection may be a burden on local authority resources, it can also enhance policy implementation when compared with policy areas which while free of such burdens are also regarded as out of a local area's control.

During the implementation of LAAs, local authorities moved to tackle the aspects of climate change they felt they could best influence, which in many cases corresponded to a move away from their written policy. The policy agenda for local authorities was beginning to change, but still within the context of addressing climate change. However, this latter idea was itself beginning to morph into something different. The next section looks at how this was driven by a political

context of austere localism and the disconnect between climate change and local priorities.

6.6.3 Regulatory pressure for energy management: Carbon Reduction Commitment

As discussed earlier, local authorities put much of their efforts into reducing their own corporate emissions. The three drivers for this - leadership, influence and cost-cutting - were unaffected by the demise of NIs. At the same time the introduction of the Carbon Reduction Commitment (CRC) provided a significant enhancement to the financial incentives for reducing emissions, subjecting large local authorities to financial levies based on their carbon emissions. Although the CRC covered much of the same emissions as NII85 had done previously, it was regarded by officers as a more significant driver for cutting emissions. The process of compiling NII85 data had prompted action on some of the most serious shortcomings in local authorities' energy use data, but had been limited as a driver in emissions reduction. Energy usage was still regarded as a fixed cost, albeit one that was now being more accurately measured. The increased priority given to corporate emissions as a result of CRC was described by one local authority manager:

“We talk about carbon footprints - and people like that - but CRC has added another cost and raised it to the top of most corporate agendas. That's a good thing. If you can relate carbon to cost because you can at least get people's attention to focus on it. What always amazes me is that most people don't take into account that the emissions they already generate come at a huge cost.... I spend £9m a year on utilities for this council. I'm only going to spend a small proportion of that, albeit a considerable amount of money, on the CRC. Now why are the corporate board bothered about the small sum of CRC money, why are they not bothered about the £9m I've spent on utilities?” (City I Climate Change Manager 3, interview 1)

Carbon footprints may have been something that 'people like' to discuss, but their priority is much enhanced when linked to financial cost. CRC augmented this link, but raised the issue's priority disproportionately to any rise in energy costs which local authorities may have incurred in the scheme's initial incarnation. In City I Climate Change Manager 3's view, it was not the percentage rise which was important. Energy bills had simply been paid as a matter of course over a long period of time, reflecting the ingrained nature of fossil fuel usage (see pages 141-143), and the incremental cost increases attributable to CRC were not of a scale to drive activity in their own right. Rather, it was the *novelty* of the CRC, not the direct financial penalty, which attracted the interest of senior management and sparked discussions over the possible disaggregation of energy costs to council departments. Besides the financial aspect was the 'reputational' impact on a local authority of being placed low down on the CRC league table. This was a key issue for senior management, who were generally keen to extend their own performance management culture to a comparison against other local authorities. CRC's tighter rules for data collection than NII85 aimed to provide greater comparability between organisations, and expanded the scope beyond local authorities to include other public sector organisations as well as the private sector. The wider pool of participants increased the scheme's visibility and prestige, providing a further stimulus for action.

This changed following the 2010 Comprehensive Spending Review, when the Cameron Government significantly altered the fundamentals of the scheme (HM Treasury, 2010, p.62). The scheme was much simplified by the removal of the ability to trade allowances meaning the money spent on allowances to emit carbon dioxide was now to be kept by the Treasury, and not recycled to participants as previously planned (Environment Agency, 2010, pp.52-53). But there was also a ten-fold increase in the cost per tonne of emissions, making the CRC roughly equivalent to a 10 per cent levy on energy costs (DECC adviser 3, personal communication). The changes were unexpected, having not being consulted on in advance, further jolting senior management to act on the issue just as the scale of their overall budget cuts was starting to become apparent (Murray, 2010).

It is worth noting that all of this activity was occurring in the very early stages of the CRC, before the first figures were published in 2011 (an introductory year before financial liabilities began in 2012). The policy maintained its novelty as management and officers worked out what meaning it had for them. But this meaning was subject to the policy's novelty, and began to fade even before the first set of figures was released, with one energy manager describing how interest had already “gone off the boil again” and that the cost of the CRC had quickly gone from being a priority to becoming another ‘below the line’ cost that was paid automatically (City 1 Climate Change Manager 3, interview 2). The only scope for this changing would be to increase the cost of the CRC to a point at which it really hurt local authorities. Managers did not perceive this to be the case at the current costs of buying carbon allowances, although one did voice an expectation that CRC would increase in a

similar fashion to landfill tax since the latter was introduced in 1996 (HM Government, 2011, p.96).³⁷

The CRC significantly raised awareness within senior management and finance departments of the need to cut corporate emissions, increasing the visibility of energy usage after a long period of it being treated as a fixed cost. This bore similarity to the Climate Change Agreements negotiation process between energy-intensive industries and central government in 2001. This obliged managers to pay greater heed to opportunities for increased energy efficiency, an “awareness effect” which brought greater energy savings than would have been expected from similar charges being administered through a non-negotiable flat tax (Ekins and Etheridge, 2006, p.2080). However, the absence of the negotiation element that was central to Climate Change Agreements brings into question whether CRC will have a longer term effect on councils’ energy usage. There is a danger that, as the novelty of CRC wears off, it will be overtaken by new policy priorities and the financial penalties will become seen as part of the fixed costs of energy usage, which local authorities see themselves as being able to do little to affect.

6.6.4 Cost cutting: a weak incentive?

Cutting energy costs was an attractive proposal for local authorities in a time of severe budgetary pressure, but while it became an increasingly common strategy

³⁷ In 1996 landfill tax was £7 per tonne, rising to £56 per tonne in 2011 and is planned to increase to £80 per tonne in 2014/15.

pursued by climate change officers, questions were raised over how it might work in practice. While energy managers attempted to reduce energy usage, competing priorities and agendas saw the implementation of policies which increased demand for energy usage. New schools were built with a high level of IT equipment to help improve skills. New kitchens were installed in old schools to provide hot school dinners. New leisure centres were built to improve the health of local residents. All examples of local authority policies which increased energy demand, but were outside the remit of energy managers. While savings can be made at the margins through efficiency improvements, it is questionable whether they can offset the ongoing increases prompted by infrastructure improvements and technological change.

As well as these large scale projects, there were smaller scale, incremental increases in energy usage which managers also found out of their control:

“The proliferation of people with two monitors on their desks is quite phenomenal. You think ‘how has that been allowed to happen, who’s making that decision in the light of our carbon target?’ If I wanted a second screen, I stick a request into ICT and I get one. Seems to be the rule. No attempt to evaluate what the impact of that is on all policy...It’s not factored in to some of this decision making, it’s about service delivery and financial efficiency. A single screen costs us about £100 a year. It’s just not seen as a relevant number in the grand financial scheme of the local authority.” (County I Climate Change Manager 1 interview 2)

Local views within the organisation about what constitutes better work practices and service delivery often involve technological change which increases consumption. Local authorities were able to make inroads in some areas, for example, in reducing idle time on office IT equipment, but new ways of using energy

appeared as quickly as existing ones were reduced. Metaphorically, officers were trying to walk up a down escalator, having to move fast to offset these incremental increases in energy use in the hope of achieving any net reduction in corporate emissions.

Interpreting climate policy as energy management represented a route of least resistance for local authorities. Chiefly, by taking cost as an incentive for reducing carbon dioxide emissions, it appeals to one of the central principles of classical economics. Rising energy costs should provide a strong incentive for local authorities to act. This section has shown that this may not be the case, with energy usage potentially remaining inelastic to changes in price and delivering little in the way of emissions reduction. Prospect theory supports the notion that financial incentives to action are “neither necessary nor sufficient to ensure ... cooperativeness, thoughtfulness or truthfulness” (Tversky and Kahneman, 1992, p. 316). The way in which individuals frame a particular problem of choice yields “systematically different preferences” (Tversky and Kahneman, 1992, p.298). In the case of reducing energy usage, it is plausible to imagine that those climate change ‘amateurs’ (see pages 158-165) working in local authority service delivery frame the problem in a way which places a greater value on *avoiding the loss* of existing working practices than *pursuing the gain* of cost savings (Kahneman and Tversky, 1979).³⁸ Existing work practices rely on the use of fossil fuels, itself a practice so deeply

³⁸ In formulating theories of problem choice, Tversky and Kahneman acknowledge that “theories of problem choice are at best approximate and incomplete.... [C]hoice is a constructive and contingent process” (1992, p.317).

ingrained in society that contemplating its loss far outstrips the potential for marginal financial gain to the organisation (see pages 141-143). Following this argument, one can see how incremental increases in utility bills are unlikely to lead to significant changes in policy. However, legislative changes such as the introduction of CRC jolted officers and management into action to a degree out of proportion to the amount it added to local authorities' total energy costs.

The main potential impact was that some local authorities were attempting to pass on the cost of CRC to their departments, in an attempt to encourage behaviour change at a lower level and get service heads to take greater responsibility for their own energy use. By bringing energy costs closer to managers, the aim was to show how such energy saving could free up resources for service delivery. This was an approach favoured by many officers, but the above discussion about the weakness of financial incentives compared to the loss of working practices raises questions about its potential effectiveness. While it may make energy usage and its (financial) consequences more tangible, departments may have less capacity than a corporate budget holder to carry out efficiency measures due to their smaller scale. Estate rationalisation has also increased the likelihood of departments sharing office space, making the assigning of responsibility for energy use more difficult. One climate change officer discussed how the passing on of CRC was their ultimate goal, but was politically sensitive and being kept within their team for the time being, demonstrating the organisational difficulties of implementing such a move even if it was to lead to reduced costs.

6.7 Conclusion

This chapter has traced the morphing of local climate policy in terms of a search for persuasive evidence for action. NII86 was analysed as a key piece of evidence with which policy-makers might have judged implementation, determining the extent to which their programmes were affecting the level of carbon dioxide emissions across their local areas. However, three key flaws in NII86 were identified which led managers to distance themselves from the indicator in interviews, stating that the data was too slow to be published, that they distrusted the methodology and that it measured emission sources largely out of their control. This gave rise to a puzzle: why did seven out of nine local authorities adopt NII86 rather than NII85 despite the former's flaws being evident during the LAA negotiation process? The puzzle was answered in terms of local government's audit culture: that by placing climate policy within the world of performance management metrics and targets, climate change was deemed to have moved from the periphery into the mainstream of local public policy. While such a move established the agenda's legitimacy, the focus on data did not constitute sufficient evidence for programmes to be implemented, leading to uncertainty about how to tackle area-wide carbon emissions. This became particularly apparent as climate change programmes became vulnerable following the Cameron Government's cuts in local government funding. Chapter 5 showed how setting goals for carbon reduction targets helped to perpetuate the notion of rational-scientific policy-making in the face of society's ingrained use of fossil fuels. The above analysis of NII86 shows the roles that one such target has played in implementation, acting as a passport for climate change into mainstream public

policy but also as an elision of arguments over the social and political implications of attaining such targets. NII86 sustained the myth of rational-scientific goal setting as a solution to rising carbon emissions, keeping the issue on the agenda. However, the weakness of such apolitical goals was ultimately demonstrated by managers' disowning of the indicator and a re-focusing on other kindred policy areas.

Two such areas of policy were discussed: fuel poverty and energy management. Both issues have risen up the public policy agenda, were locally meaningful and more likely to be evidenced through political argument than a broader climate policy. For fuel poverty, improved insulation of domestic properties was a key measure. For energy management, local authorities looked to reduce their own energy usage through a range of efficiency measures and changes in working practices. While there was a range of sound reasons for undertaking these policies, the discussion has shown that these policies are related to, not the same as, climate policy. Fuel poverty carries increasing public salience as domestic energy bills continue to rise and the economic recession continues. Some reduction in carbon emissions is possible as a result of improved insulation, but even though such a reduction would be accompanied by falling fuel bills, householders in fuel poverty prioritise thermal comfort and wellbeing over such financial incentives.

The link between cutting carbon and cutting costs is also a key argument for improved energy management, particularly in the context of cuts in local government funding. If a local authority is aiming to reduce emissions across its local

area, that effort clearly must include its own operations, out of both quantitative necessity and a desire to demonstrate leadership (or, alternatively, to avoid being labelled as hypocritical). However, focusing on cost cutting did not prove as powerful an incentive for improved energy management as might have been expected. Cost remains important when making policy choices, but may not be a sufficient incentive to reverse the carbon-dependent working practices built up during a local authority's development. The controversial implications of a high level of decarbonisation such as reduced provision of social services, massive renewable energy installations and restrictions on car usage in cities need to be confronted on a political level if climate policy is to move forward. Reducing these questions to a performance management indicator cannot bypass discussion of these challenges to public policy norms. It may well be that kindred policies such as energy management and fuel poverty co-exist more easily with the "political reality" of public policy than the scientifically framed issue of climate change (Dryzek, 1993, p.216). Such kindred policies may deliver some reductions in carbon emissions, particularly in the short term (Prins *et al.*, 2010, p.36). However they cannot be a substitute for confronting the fundamental questions raised by established decarbonisation targets, which presume that "the focus of UK climate policy is on the production of emissions" (HM Government, 2011, p.118). If the focus shifts to kindred policies, there may be a greater level of political acceptance, but it also becomes more questionable whether decarbonisation targets can be achieved.

Finally, this chapter has addressed the notion raised in the conclusion of Chapter 5 that greater data availability within local authorities would lead to greater 'ownership' of climate policy by service heads and other non-climate change managers (see page 185). That such a notion is fantasmatic is supported by the experience of NII86, a dataset which local authority managers distanced themselves from, even though they had requested and subsequently adopted it. The ability to measure progress on a policy could not lead to improvements in implementation when isolated from the local meaning of decarbonisation. Indeed, the process of quantification was a symbol of rational-scientific policy-making which acted as a placeholder for discussion of such meaning. This is not to say that quantitative data is unnecessary within climate policy. However, an issue which challenges the use of energy across society requires more than performance management measures if it is to be addressed in a meaningful way.

This chapter has highlighted the importance of local political argument in justifying and remoulding climate policy which has been predicated on scientific evidence. The next chapter shows how climate policy was also subjected to national political pressures. In particular, the struggle for meaning within climate policy following the introduction of austere localism.

7. Politics, power and the struggle for meaning

7.1 Introduction

This chapter adopts a different lens with which to examine climate policy, shifting focus from indicators and policies towards sets of actors at a range of spatial levels: central government, the Local Government Association (LGA), regional organisations, local authority managers and councillors. The analysis focuses on their struggles over climate policy meaning following the abolition of National Indicators (NIs) and the introduction of budget cuts. These struggles are shown to be founded upon political concerns over actors' positions within this new landscape. After a brief background of the regional climate change partnership, this chapter focuses on two analyses. First, the interpretations of a key climate policy document, the *Memorandum of Understanding (MoU)*, are assessed. The *MoU* was an agreement between the Department of Energy and Climate Change (DECC) and the Local Government (LG) Group which set out a new approach to local climate policy. The meanings placed on the document by different actors are discussed before drawing out themes of vagueness and dislocation between local and national actors. Second, local councillors' perceptions of the Carbon Reduction Commitment (CRC) are evaluated, contrasting one councillor's focus on criticising CRC with the comparative silence on the issue by councillors within other local authorities. The inconsistency between the councillor's criticism and their support for climate policy is used to uncover hidden meanings of policy preferences.

Throughout both of these sections, the concept of power will be discussed, responding to the observation that “power appears wherever people interpret and respond to one another” (Bevir and Richards, 2009b, p. 140). Power will be shown to be a mitigating factor upon policy preferences - the latter being contingent upon the need to maintain position and influence within the policy network. The chapter concludes by identifying a significant flow of power out of the established network to the Department for Communities and Local Government (DCLG) as a consequence of the latter’s localism agenda. In addition, the *MoU* is identified as the onset of a new myth, enabling continuity against a background of local government funding cuts.

7.2 Background of the policy network

The regionalisation of climate policy was reviewed in section 2.5 (see pages 39-44), showing how a climate change network developed in the East Midlands. The network became increasingly institutionalised, moving from an informal Climate Change Steering Group which was “a largely self-selected community of interest” to a slimmed-down, more formalised partnership, latterly named Climate East Midlands (CEM) and dominated by the larger regional organisations (Chadwick, 2012).³⁹ One manager with experience of this transition placed the move in the context of

³⁹ East Midlands Development Agency, East Midlands Regional Assembly, Government Office for the East Midlands, East Midlands Improvement and Efficiency Partnership and the Environment Agency.

developments in other regions and at the Department for Environment, Food and Rural Affairs (DEFRA):

“There was a national network running which had been facilitated by the UK Climate Impacts Programme, which was basically a self-help group for climate change coordinators. It became clearer and clearer to me ... [that we could move] ... to a more formalised arrangement which mimicked what was going on in other parts of the country.... [B]ecause they were becoming better organised and doing more interesting work, they were successful in lobbying DEFRA to provide some funding.” (Regional 4 Climate Change Manager, interview 1)

Improved organisation was emphasised as a driver towards the establishment of similar networks within each region, which in turn came together to form a national network. Regional 4 Climate Change Manager also recognised the increased potential for national funding in shifting from the loose membership structure of the Steering Group to a more formal partnership arrangement between the main regional-level agencies. While the extra resources were helpful for initiating programmes, the funding had a meaning beyond its monetary value. For a regional partnership in its infancy, it opened up a line of communication to those in positions of power:

“Direct engagement with a government department is enormously helpful even if they don’t provide you with huge amounts of money. The funding from DEFRA is modest, only £45,000 a year, but it’s the fact that you know you have some recognition within central government, that what you’re doing is important to them. That in itself provides a listening ear within Whitehall, potential connection to ministers and so on. It’s not to be underestimated.” (Regional 4 Climate Change Manager, interview 1)

The manager put more meaning in the act of funding than the level of funding itself. Despite the annual sum from DEFRA being ‘modest’, it was a symbol of official approval from central government of regional adaptation work. Although an explicit

demand for partnerships was not made by DEFRA in this case, the prevailing trend influenced Regional 4 Climate Change Manager in the decision to move to a more formal partnership model. The attainment of government recognition through partnership working contrasted with the situation on mitigation policy, where regional activity within England was more patchy and the responsible Whitehall department (first DEFRA, latterly DECC) did not fund regional partnership work.⁴⁰

A desire for simplification helped to explain why partnerships in environmental management became institutionalised through funding decisions (Blanco *et al.*, 2011, p.302-303). This trend was not restricted to the national level. A regional official also described the impracticality of dealing with a plethora of local authorities:

“We’re a kind of pinch point, we actually have very few people you need to talk to at a regional level to manage the networks.... When you get down to local authorities you’ve got 46 in our region all flying off in different directions, a bit like herding cats. Whereas with the climate change partnership, you’ve got ten or twelve people in a room and you’ve got access to a lot of big networks through those people.” (Regional 5 Climate Change Manager, interview 1)

While it was appealing to regional organisations to try to streamline the policy goals of a disparate collection of local authorities through a partnership, no regional organisation had any authority to *represent* councils on the partnership. Despite this, some regional actors perceived the partnership as representing local authorities, with one regional sustainability head describing it as their main source of interaction with local authorities:

⁴⁰ Some central government funding flowed into regional working from the Department for Trade and Industry, but this was focused on energy matters rather than climate change *per se* (Chadwick, 2012).

“We principally work through Climate East Midlands because it’s much more sensible to work through a single strategic entity that is representative of local authorities than have 27 [sic] different discussions. I would say that’s principally our relationship.” (Regional 1 Climate Change Manager 1, interview 1)

Both Regional 1 Climate Change Manager 1 and Regional 5 Climate Change Manager highlighted the difficulty of dealing with the diverse views and priorities of a range of local authorities. Distilling these views down to a manageable scale was seen as a key function of the partnership.

This brief background to the development of connections between organisations operating at different spatial tiers illustrates some of the different meanings put on such linkages by the actors involved. Regional organisations saw a more institutionalised partnership as a means of obtaining funding and opening up lines of communication with central government. The regional partnership was also seen as a means of simplifying the local authorities’ sometimes diverse perspectives into a format which regional organisations and central government found more manageable, even though local authorities were not directly involved in the partnership. Under the Cameron Government, regional organisations within the partnership were wound down, NIs were abolished and funding to local authorities cut. Taken together, these developments constituted very different conditions for network relationships than those which developed in the 2000s. The changes are summarised in Figures 4 and 5 below.

Figure 4. East Midlands climate change network, 2010

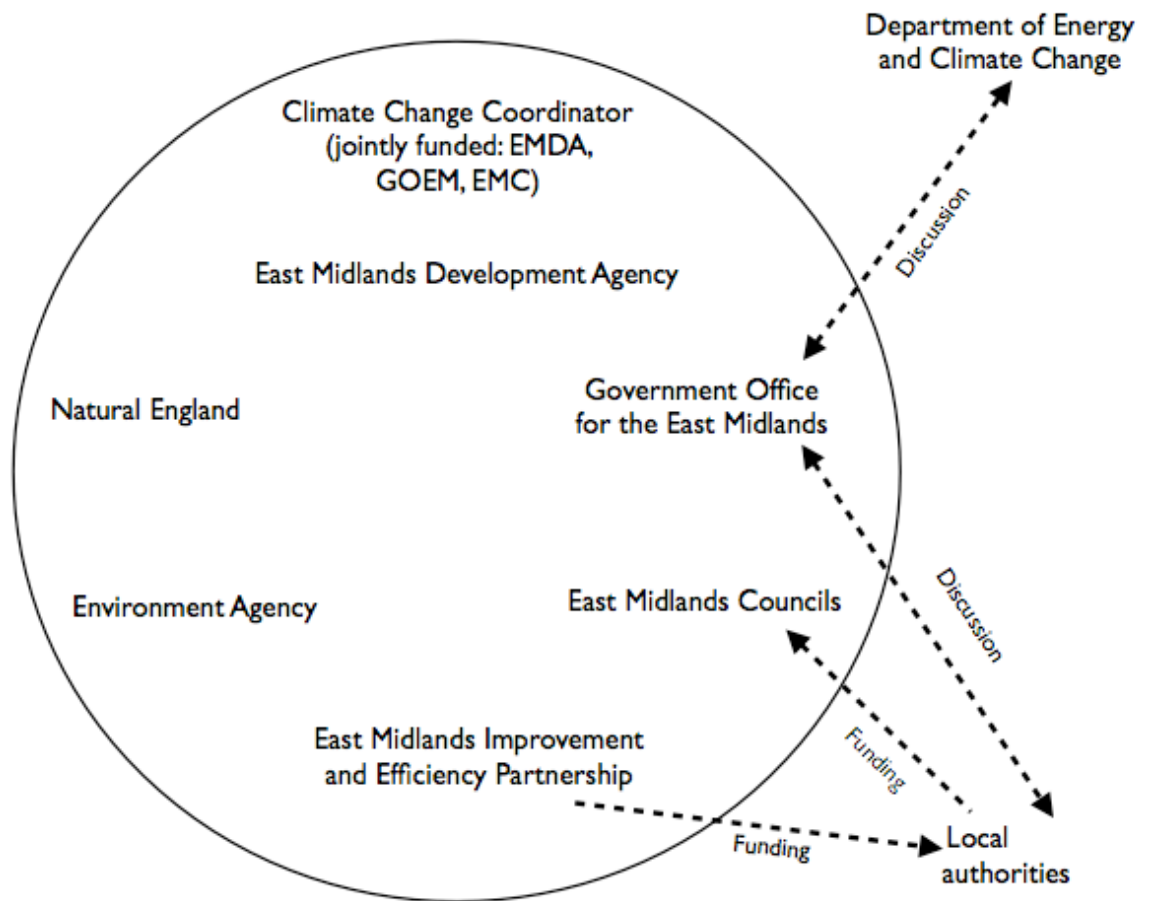
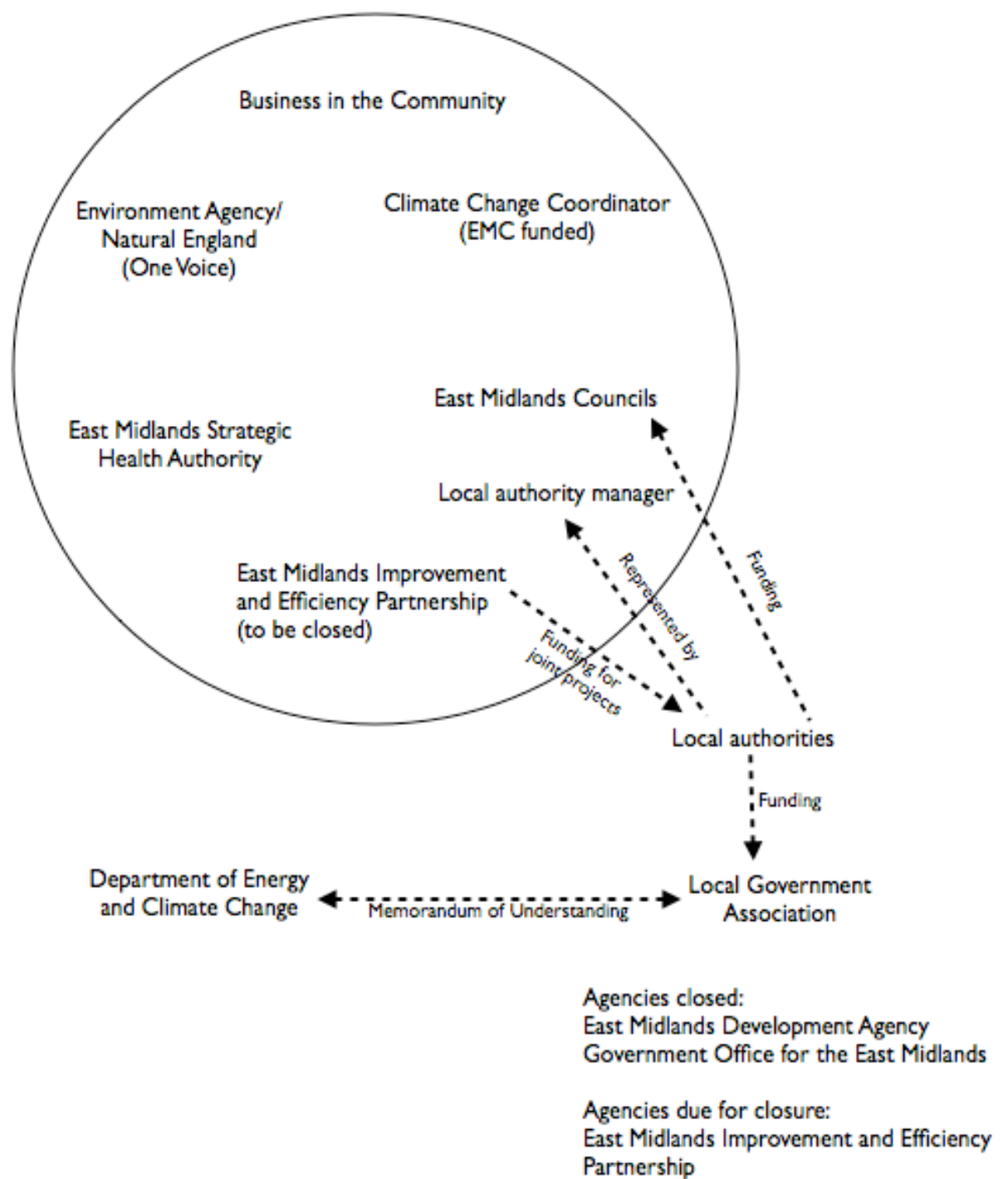


Figure 5. East Midlands climate change network, 2011



The next section continues the theme of the diverse meanings which actors put on these relationships through an analysis of the *MoU*, which attempted to reformulate the links between national and local climate policy.

7.3 Memorandum of Understanding: birth of a new partnership?

7.3.1 Background and content of the MoU

The history of weak linkages between central and local government on climate change mitigation policy continued with the initial development of the Green Deal under the new Cameron Government in 2010. The programme was conceived without a well-defined role for local authorities, prompting the LG Group to lobby DECC for greater engagement on the issue within the context of councils' history of action on mitigation and the new government's localism agenda. These discussions led to a wider dialogue between LG Group and DECC on local climate policy, culminating in their joint publication of the *MoU* in March 2011. The document stated their arrangements for working in partnership and the milestones against which progress on LG Group's original offer could be measured (DECC and LG Group, 2011, p.3). Covering five pages of text, the *MoU* did not go into detail on policy. It instead highlighted the national mitigation targets providing context for local action and set out five criteria for evaluating the *MoU*'s success:

Table 11. Criteria for evaluating success of Memorandum of Understanding

1	Progress in meeting MoU milestones
2	Proportion of councils signing up to New Nottingham Declaration
3	Council progress against their commitments set out in New Nottingham Declaration
4	The extent to which the MoU is successfully helping the UK to meet its national obligations
5	The extent to which councils are playing an active role in delivering climate change mitigation and related policies, such as Green Deal

Adapted from DECC and LG Group (2011, p.5).

The document marked a fresh turn in the relationship between local and central government in climate change mitigation policy, situated within a context of the new localism agenda. Fieldwork undertaken in the weeks following the document's publication highlighted actors' diverse interpretations of the *MoU*'s role and significance within policy-making. Interpretations of the *MoU* by four sets of actors (the LGA, DECC, local authorities and regional organisations) will be analysed, providing a window on their attempts to produce and reproduce power within the network.

7.3.2 Local Government Association

A key section of the LG Group was the LGA,⁴¹ which aimed to be “the national voice of local government” (2012a, p.20) under the direction of local authority elected members serving on the organisation’s boards, including an Environment and Housing Board (LGA, 2012b). An LGA officer emphasised that it was local government’s initial exclusion from the Green Deal that had sparked a wider effort to increase local government involvement in climate policy. DECC responded to this pressure with a request to the LGA:

“Government said ‘OK, we recognise you’re pivotal but we need a bit of help to work out your role. Can you submit a document?’ So we submitted the local government offer on climate change.... We saw it as more of a deal, I suppose, than a one-way offer.... Number one ... you recognise the key role that councils play in achieving climate change objectives. Number two, by recognising that you [also] recognise the need to be resourced to be able to deliver it.” (LGA Adviser 1, interview 1)

The officer was clear in describing their proposal to DECC as a “deal” rather than the “offer” which had been initially proposed by the Secretary of State (Huhne, 2010), although the subsequent document’s official title was *Local Government’s Offer on Climate Change*, a document containing 15 proposals for local authority action on climate policy (LG Group, 2010). While many of these proposals were not subsequently agreed on by the LGA and DECC, the document provided the groundwork for the eventual publication of the *MoU*. The LGA sought recognition from DECC for the work local authorities were already undertaking on climate

⁴¹ The other sections were Local Government Leadership, Local Government Improvement and Development, Local Government Employers and Local Partnerships (LG Group and DECC, 2011, back cover). Local authority managers referred to the LGA, rather than the broader LG Group, in interviews, but the latter was named as the author of the relevant documents.

change mitigation, against a background of continuing divides and misunderstandings between central and local government (Wilson, 2003, p.338). The LGA's rationale for the introduction of the *MoU* reflected such divides, providing an account of *ad hoc* interactions and misunderstandings between themselves and DECC:

“The LG Group has often been asked to come in to meet civil servants, who are required to make policy decisions for local government, with no knowledge or experience of local government. This has led to LG Group staff time being spent in informally getting civil servants ‘up-to-speed’ on local government.... The LG Group has often experienced approaches where civil servants suddenly want ... help in promoting a piece of work ... where there has been no previous involvement.” (LG Group, 2010, p.91)

The document goes on to recommend tackling this issue through training for DECC civil servants to improve their knowledge of the local government sector (LG Group, 2010, p.83). While this did not end up being explicitly included in the *MoU*, DECC did take responsibility for working with LG Group to ensure the impact of policy on local authorities was to be considered at an early stage, although no detail was included on how this would be implemented (DECC and LG Group, 2011, p.7). Echoing the previously discussed institutionalisation of the regional network (see pages 238-244), LGA Adviser 1 (interview 1) expressed a hope that a greater recognition of local government's role in climate policy would be the precursor to central government funding.

In addition to gaining Whitehall recognition for local activity, LGA Adviser 1 emphasised the importance of local authorities determining their own goals for

climate policy through the planned update to the *Nottingham Declaration* (see pages 45-46):

“What central government got out of ... [the MoU was] a commitment from LG Group to get councils to sign up to a new Nottingham Declaration ... [which] will give councils an opportunity to express their ambition on carbon dioxide emission reductions from their own estate, from their area, and the role they are going to play in the Green Deal.... Instead of having top-down targets, something we averted, we’re saying that if local government is left to its own devices it’s often a lot more ambitious.... Don’t give them a top-down indicator because that’s all they will do.” (LGA Adviser I, interview I)

Although this reflected the dominant view expressed by East Midlands climate change managers that the NIs were important in establishing the issue on the agenda, LGA Adviser I was averse to any return to top-down targets. While it was the case that some local authorities’ targets for corporate emissions reduction were more ambitious than suggested by DECC, as claimed by LGA Adviser I, there were also many examples nationally of local authorities scaling back their climate change work (Green Alliance, 2011, pp.14-17). In addition, as shown in Chapter 6, the presence of such targets had not previously compelled local authorities to implement programmes specifically aimed at cutting area-wide carbon emissions.

As an alternative to centrally imposed targets, LG Group proposed a new version of the *Nottingham Declaration* allowing local authorities to “sign up to locally appropriate targets and goals” and detail the relevant programmes they would implement (DECC and LG Group, 2011, p.6). Whether this initiative would reverse the national trend for local authorities reducing their climate change work was openly questioned by some working within the sector (Johnston, 2011; Scott, 2011).

The previous incarnation of the *Nottingham Declaration* was successful in encouraging political leaders to engage with climate change as it emerged on the policy agenda, committing local authorities to develop action plans, participate in local and regional partnerships and monitor their results (*Nottingham Declaration on Climate Change*, 2005). The new version would be introduced under conditions of budget constraints and fading interest in climate change, following the difficulties with local implementation identified in Chapters 5 and 6.

7.3.3 Department of Energy and Climate Change (DECC)

For DECC, the *MoU* marked a new turn in their relationship with local government action on mitigation, moving from a detached contentment with any activity being driven by NIs to a recognition that the latter's demise required a signal from central government that such activity remained legitimate. Along with this change in the policy framework, the localism agenda presented additional difficulty for DECC; with the abolition of the Government Offices in the regions, the main conduit for communication between Whitehall and local authorities was lost. It was in this context that the *MoU* specified a role for LG Group in gauging the opinion of their members:

“The LG Group will actively seek their council members’ views on the MoU, LG Offer on Climate Change, subsequent action plans and DECC policy. These views will form part of the Annual Report on the MoU. This does not exclude individual councils from expressing their views on DECC policy directly to DECC.” (DECC and LG Group, 2011, p.8)

DECC acknowledged the work already undertaken by the LG Group (e.g. LGA, 2007), which lent it some legitimacy as a potential representative of local

authorities, but one policy adviser from the department expressed caution when questioned directly over how effective they could be in that role:

“It is [a bridge]....We’ve always had a concern that they talk to the top 10 or 20 per cent of the councils who want to engage with energy and climate change, but not the laggards at the other end. I think that’s a work in progress at the moment. It’s in the MoU and one of the good things about going to events ... [out of London] ... is to find out whether they’re being successful in talking to local authorities and getting our messages as well as their messages across.... I suspect they’ll get better at it, but every time I go to an event and hold up the MoU, I seem to get blank faces at the moment.” (DECC Adviser 1, interview 1)

DECC’s wish for the *MoU* to cover all councils was expressed in the LG Group’s responsibility to “develop and implement plans for reaching out to those councils that do not take a full and active part in reducing emissions” (DECC and LG Group, 2011, p.8). While this symbolised the DECC officer’s concerns about ‘laggard’ councils, the officer also stated in a subsequent meeting with local authority officers that this responsibility was “carefully worded so as not to be too specific” (Meeting 1, field notes), an admission that the details of such plans were uncertain and left unspoken in the *MoU*. The LG Group’s aversion to top-down emissions targets meant such plans were likely to be confined to persuading councils to sign the new *Nottingham Declaration*, reflecting the *MoU*’s focus on process over implementation. A further constraint on any such plans lay in the resources within the LG Group, which cut its staffing level by half in 2010. Without any significant increase in resources, the potential scope of any encouragement offered to lagging councils is likely to be limited.

DECC Adviser 1's comment that the *MoU* had been met by "blank faces" within local government was supported by a fieldwork observation of a well attended meeting of district local authority officers to discuss the Green Deal. DECC Adviser 2 concluded their presentation by holding up a copy of the *MoU* and asking if those present were aware of the document. Only four of the twelve council officers present raised their hand (Meeting 2, field notes). DECC Adviser 2 responded to this by ensuring everyone knew who the key contact for climate policy was within LG Group, and emphasising the organisation's importance as a representative for local government in policy discussions. The low awareness of a document intended to be central to future local policy suggested ineffective communication between the LG Group and the local authorities they were representing, and supported DECC Adviser 1's concerns about whether the LG Group could be considered a legitimate representative of local authority views. One local authority manager further substantiated the weak links between themselves and the LG Group:

"I think the LGA can play a really good role in getting clarity from central government about what local government should do and protecting local government against excessive demands with no resources to support it.... But they'll play it with or without us. They do consult us but barely.... I don't think we get any direct communication from the LGA and environment group at all. I only found out about the *MoU* through DECC, not the LGA." (County 1 Climate Change Manager, interview 2)

By definition, there is a limit to the extent to which any one organisation can accurately reflect a large and diverse body of opinion but DECC intended to use the *MoU* as a framework for partnership with local authorities. The 'blank faces' of local authority officers exposed the limitations in mediating a relationship with the local government sector through a single representative organisation, while supporting

the perception that the LGA concentrated its efforts on a small number of leading local authorities.

As well as working with a LGA reluctant and unable to coerce local authorities into action on emissions reduction, DECC also had to interpret a localism agenda being articulated strongly by the DCLG. The latter department's zeal for removing local government targets was made clear within a letter from its Secretary of State, Eric Pickles, announcing the revocation of NIs along with the wider performance management framework:

“[T]he annual cost to each authority of the National Indicator Set and statutory data returns is half a million pounds. We are committed to relieving you of the bureaucracy that diverts money away from the frontline. So today I am announcing the end of other burdensome aspects of the old command-and-control regime My aim is to give you the flexibility you need to protect key services, by ... Getting rid of unnecessary top-down targets and their related bureaucracy.” (Pickles, 2010b)

This passage presents a challenge to local climate policy on two fronts: the disparaging of top-down targets and the emphasis on frontline services. First, by associating NIs or other top-down targets with the phrase ‘command-and control’, Pickles’s letter associates such targets with the view that “bureaucratic control has replaced democratic accountability”, presented in the Conservative Party’s 2010 election manifesto as a central flaw of New Labour’s approach to local government (Conservative Party, 2010, p.73). With the demise of NI186, some local authorities supported a Friends of the Earth campaign to introduce Local Carbon Budgets (Friends of the Earth, 2010; *Local Government Chronicle*, 2010), an area-based cap on

carbon dioxide emissions linked to the national budgets issued by the Committee on Climate Change (2011a). DECC Adviser I made it clear that such a move was not government policy and did not fit with the localism agenda. Some local authority managers interviewed suspected that some in DECC might favour such a move, but that the strength of language used by DCLG's political leadership in relation to top-down targets made such a policy development unlikely.

The second challenge to local climate policy was Pickles' framing of local government's spending decisions in the above quote in terms of protecting the 'frontline' and 'key services'. This contrasted with the perception of the work undertaken by climate change officers as being associated with 'bureaucracy' or even as being "non-jobs" (Taxpayers' Alliance, 2010). Such a hostile interpretation of climate change work can be traced to the previous discussion of climate change being perceived as extra-local (see pages 146-149). Although the notion of frontline services was used extensively within funding cut debates around funding cuts, its precise definition remained unclear (de Castella, 2011; Keeling, 2011). Such ambiguity, in conjunction with climate change's extra-local nature, allowed the issue to be portrayed in the media as separate from the frontline and so a priority for cuts (e.g. Chapman, 2011; Copping, 2011). Pickles could not be explicit in his letter about climate change officers being 'non-jobs', as climate change had been one of the first, high-profile priorities for the Cameron Government (Cameron, 2010a). However, the meaning of Pickles's language within the letter left climate change as an

issue of secondary importance to local government, and without the capability to introduce the targets of the kind which had initially put the issue on local agendas.

In summary, the *MoU* represented DECC's effort to respond to the changes in subnational policy arising from DCLG's localism agenda. The demise of Government Offices left DECC without an established means of communicating with local authorities on policy matters, a function which the *MoU* placed with LG Group. With the revoking of NIs and broader move by DCLG against top-down targets for councils, DECC were left without any means of ensuring that local government ambition on carbon dioxide reduction matched the imperatives set by the Climate Change Act 2010 and related carbon budgets. In the absence of such instruments, the *MoU* marked a move into process-driven policy with a view to persuading councils to take (or maintain) action on the agenda.

7.3.4 Local authority officers

In contrast to the import placed on the *MoU* by DECC and the LGA, local authority managers expressed indifference to the document; not discussing it of their own accord and highlighting its marginality when questioned directly. The next section explains how this indifference took two distinct forms, depending on managers' local preferences: being perceived either as an opportunity missed to shore up their power within the organisation or as a welcome departure from excessive central government interference.

a) A missed opportunity

On being questioned directly, one local authority officer was forthright about the

MoU's irrelevance:

“You could drive a bus through it. It doesn’t mean anything. It’s just nice words, you can’t hold anybody to anything, it’s aspirational stuff. I think it’s time we had a bit more than that.... From a practitioner’s point of view, I have to make this work locally. There’s nothing in there that I can really use to help justify what I do. I’m looking for real hooks that actually mean something and do something, and there isn’t anything.” (City 2 Climate Change Manager, interview 2)

For the *MoU* to mean something to this officer, it had to be something which one could not “drive a bus through”, something with “real hooks” to “help justify what I do”, a role which was previously performed by the NIs. The officer desired a greater degree of control over local government from the centre, a course contrary to the localism agenda. The officer’s political context was key to their interpretation of the *MoU*. City 2 Climate Change Manager was speaking from a position of relative weakness compared to some in other local authorities, having suffered an above-average cut in funding and experiencing increasing ambivalence to the climate change agenda from a new management team. This helps to explain the wish for more concrete language than was present in the *MoU*, as the officer sought external sources of power to bolster the flagging status of climate policy within the council. That the *MoU* might be a catalyst for such action was not credible to the officer, an interpretation supported by a manager in another local authority who had experienced a similar level of cuts:

“I don’t think it [the *MoU*] has pulled any levers for us.... It works where you have that lead member or that strong corporate commitment to doing something about climate change.... But climate change isn’t

something that drives what we do so they're going to look at the MoU and say 'well, we're not interested'." (County 4 Climate Change Manager, interview 2)

This view backed up the concerns expressed by DECC Adviser 1 that local authorities outside the leading 20 per cent on climate policy were not being addressed under the new arrangements (see page 250). There was no chance of a local authority with no corporate interest in the issue being mobilised into action by the *MoU* or any other document focused on climate change as a subject of policy; their prior policy preferences were likely to prevail. While the LGA emphasised the high ambitions of some local authorities, there were also some who had little or no ambition to reduce carbon dioxide emissions.

b) A welcome departure

Not all local authority officers hankered for a firmer steer from central government. Some, at least, supported the LGA's aversion to prescriptive targets for carbon dioxide reduction in local areas. On being asked what the *MoU* meant to them, one officer offered a caveat to the general antipathy they shared with City 2 Climate Change Manager:

"Errrrm, not an awful lot really. Is that the wrong answer...? Well some bits ... the Nottingham Declaration, I think that's more important.... It's good to keep it going, continuity is important." (County 2 Climate Change Manager 1, interview 2)

The document in itself had no meaning for the officer although the prospect of a new *Nottingham Declaration* was valued, the development of which formed part of the *MoU*'s progress milestones. This was not due to any identifiable effect it may

have had on policy within the council, but by contributing to an overall sense of ‘continuity’ in policy, keeping the issue on the agenda. In contrast to City 2 Climate Change Manager 1, the careful wording of the *MoU* was advantageous for County 2 Climate Change Manager 1. There were two reasons for this. First, the continuity in policy context symbolised by the *MoU* was as important, if not more so, than its content. The ‘nice words’ bemoaned by City 2 Climate Change Manager 1 were a price worth paying for a document which legitimised local authority action on climate change mitigation. Second, County 2 Climate Change Manager 1’s dislike of top-down targets meant that they were against the *MoU* offering greater central control, and a more prescriptive approach would be a pointless endeavour:

“To put it politely, it [issuing top-down targets] is a made-up exercise.... We’d be deluding ourselves if we play that game, fiddling while Rome burns when they could actually be thinking about more national things they could do that could have a lot more effect than our policies locally. We’re deluding ourselves ... if you think local authorities have huge amounts of sway.” (County 2 Climate Change Manager 1, interview 2)

In this interpretation, central government should concentrate their resources on the potential carbon dioxide reductions from national policy and return to its previous position of contentment with local areas doing what they can within their own limited influence. Rather than the ambitious local authority being held back by national targets described by LGA Adviser 1, this council officer saw themselves as a realist, doing the best they could with limited resources and limited scope for influencing emissions within their area. The re-introduction of top-down targets would not increase their ability to reduce emissions, and even if more resources became available, there would be limited opportunities to bring about emissions

reductions. For officers such as County 2 Climate Change Manager 1, the centre was only useful in providing a light steering role, sending useful policy signals from time to time but without the need for anything specific directed at local authorities. In this case, the *MoU* was well suited to County 2 Climate Change Manager 1's desire for a signal which avoided climate change's existing status on the policy agenda being lost, without any expansion into a new mode of top-down governance.

In summary, the *MoU* was intended to set out the way in which progress would be made developing local authorities' role in climate policy (DECC and LG Group, 2011, p.3). Despite the document's ostensibly high relevance to local authorities, managers shared a deep ambivalence to the *MoU* and the process it was intended to bring about. There had been little central government involvement in local climate policy from DECC (or previously DEFRA) in previous years (see pages 238-244), and LG Group's limited resources restricted the depth of relationship they could build up with local authorities. Seen in this context, the *MoU*'s failure to make an impact with local authority climate change officers was a continuation of their weak relationships with DECC and LG Group. Within the East Midlands, the regional partnership had exercised greater influence than these national bodies in persuading local authorities to sign up and commit themselves to action, but their omission from the *MoU* and *Offer* risked their being squeezed out of the policy network.

7.3.5 Regional officers

Although the *MoU* excluded regional partnerships and organisations, it held greater meaning for some regional actors than for the local authorities it was intended to address. Unlike the local authority officers interviewed, Regional 4 Climate Change Manager 1 raised the *MoU* without prompting during a discussion about the changing factors driving local authority action in climate change mitigation, and the potentially detrimental effects on climate policy. While stressing how the constituent parts of climate policy could be reformulated to justify local action (see pages 209-231), there was an acknowledgement of the consequences of a changing national context:

“The removal of the performance framework, and the climate change National Indicators in particular, has taken away a really key and important driver. So in some senses it is more difficult to argue for why councils should pour ongoing revenue resources into people’s posts.... But something has just come out, a Memorandum of Understanding between DECC and LG Group.... Rather than centrally imposed top-down targets, which was the approach of the previous government, this is more about trying to mobilise local authorities to basically analyse and understand the potential for energy generation and carbon reduction within their local area.” (Regional 4 Climate Change Manager 1, interview 2)

The manager identified the *MoU* as a bottom-up successor to top-down targets, seeking to mobilise councils to acknowledge and act on the evidence supporting carbon emissions reduction. But as Regional 4 Climate Change Manager 1 also highlighted, the NIs were a significant influence on the way local authorities allocated their resources. Without them, the task of mobilisation rested on the ability to provide a business case based on costs, a course more likely to lead the council to concentrate on internal energy management (see pages 218-231). For Regional 4

Climate Change Manager 1, the *MoU* was an expression of the morphing national context for local action, an extension of DCLG's decentralisation agenda where climate policy was increasingly reliant on local persuasion rather than a wider imperative for local authorities to cut carbon emissions.

Along with the change in the political agenda, Regional 4 Climate Change Manager 1 also saw the document as a means of extending the role of LG Group within local climate policy:

“I think the idea of the new *MoU*, at least from the local government side, is that instead of councils reporting their progress to central government they report it to the LG Group. I think the idea is they want DECC to provide sufficient resources so that LG Group ... could perform that role.” (Regional 4 Climate Change Manager 1, interview 2)

Here, a new role was envisaged for the LG Group as the body collating and analysing local authority emissions data. While DECC had been responsible for publishing detailed inventories of local area carbon dioxide emissions, it was Government Office for the East Midlands that had provided additional interpretation of the data for local authorities in their region.⁴² With the latter's abolition, there appeared to be another opportunity for the LG Group to assume the role of bridge between central and local government. Another regional officer was more direct, drawing a contrast between this potential new role and the lack of clarity which had preceded it:

“I don't really know what LG Group do to be honest [in climate change] My feeling is they will go out with a splutter. As long as they continue

⁴² Eric Pickles adopted a rather different perspective on regional Government Offices, describing them as the “agents of Whitehall to intervene and interfere in localities” (Pickles, 2010d).

to fight a corner they are a problem ... because they confuse the issue. But if ... local authorities look to us to provide them with whatever then you could say the LG Group are an irrelevance.... It's difficult because they've been sort of appointed by central government to represent the local authority view." (Regional 2 Climate Change Manager, interview 2)

By signing up to the *MoU*, DECC was seen as formalising the LG Group's position as the representative of local government in climate policy. Although not detailed in the *MoU*, the *Offer* proposed that the LG Group "offers to take the lead in developing a single journey for all councils in tackling climate change" (LG Group, 2010 p.13). A number of national bodies were proposed as potential partners in this, along with council executive leaders, but without any mention of regional organisations (LG Group, 2010, p.14). The omission of regional organisations from the *Offer* should be placed in the context of the Cameron Government's localism and de-regionalisation agenda which constrained the policy options available (see page 241). The overall effect was for Regional 2 Climate Change Manager to see the *Offer* as a potential threat to the regional partnerships, although they believed that the greater proximity and familiarity with local authorities' own agendas would make them resilient to any attempt to squeeze them out of the network.

In summary, the bottom-up approach embodied by the *MoU* highlighted the shift away from a centrally controlled performance management framework to a reliance on local preferences to drive climate policy. A function of the broader government policy, the regional officers saw this as something that would make policy implementation more difficult in the future. The *MoU* and *Offer* also highlighted how the regional partnership continued to be overlooked by national policy. For regional

officials, this was not necessarily a problem, as they saw the links built up with local authorities during the Labour Government, when a regional structure was imposed from above, as strong enough to survive in the new era of bottom-up policy-making. Potentially more difficult for regional officers was LG Group's proposal of a new single journey for local authorities (2010, p.102), which implied a new top-down framework of support for councils which excluded regional partnerships.

7.3.6 Interpretive themes of the *Memorandum of Understanding*

a) Vagueness

The diverse meanings which the *MoU* held for actors was in part a product of the document's deliberately loose wording. Tensions between the priorities of DECC and LG Group were highlighted by the issue of mobilising councils outside the top 20 per cent of performers to greater action on climate change mitigation. Within the new localism context established by DCLG and in the absence of new resources from central government, LG Group was averse to any top-down imposition of activity and/or targets, limiting their commitment to encouraging all councils to "play their full and active part in reducing emissions" (DECC and LG Group, 2011, p.7). As a broad policy priority of the Cameron Government, DECC were supportive of the localism agenda but had to balance it with their overarching obligation to reduce carbon dioxide emissions, a policy objective driven by scientific evidence of climate change's global impacts. This friction between local and national priorities was resolved through the vagueness of much of the *MoU*, concluding with a statement of its legal status:

“This Memorandum is a statement of intent, and should not be interpreted as a binding agreement. It does not create legal obligations between the parties.” (DECC and LG Group, 2011, p.8)

Vagueness of language is a familiar concept in partnership documents, as a tactic to avoid the exclusion of organisations from a governance network. Sørensen and Torfing see this as a way of anchoring a network, particularly in its early stages, with discourse taking place “around relatively empty signifiers that are open for reformulation and reinterpretation” (2005, pp.212-213). In the example of the *MoU*, an insistence by either DECC or LG Group on more prescriptive language risked widening the gap between their agendas too much to reconcile. The difficulty of representing all local authorities within England and Wales also limited the concreteness of language which LG Group could commit to.

While the *MoU* could be seen as the first step towards the reformation of a new governance network, the reaction from other actors suggested a lack of enthusiasm for such a move. From local authorities, there were contrasting reactions. For City 2 Climate Change Manager 1, there was disappointment about the vagueness of the *MoU*, describing it as aspirational. Crucially, the manager then opined that “it’s time we had a bit more than that” (interview 2), implying agreement that the *MoU* represented a nascent policy process, and an overriding frustration that local climate policy should still be at such a relatively undeveloped stage. For County 2 Climate Change Manager 1 there was a greater acceptance of the new localist context with an acknowledgement that the *MoU* was important as a symbol of continuity in climate policy, particularly those clauses related to the new *Nottingham Declaration*.

Within this interpretation, there was an inevitability in the need to remake the governance network, and a symbol of continuity was a welcome alternative to a policy vacuum. However, it was seen, at best, as peripheral to local policy.

b) Dislocation between the national and local

These two local authority officers had different expectations and wants of the *MoU*, but were united in their low opinion of its relevance to their everyday work. Why was this the case? The partnership between DECC and the LG Group was born out of the two national organisations' own interests: DECC looked to maintain a role for local government in climate policy, the LG Group tried to strengthen their role as the voice of local government to which DECC listened. Both were responding to the shift from the centrally coordinated performance management of NIs to localism, consistent with the "emasculatation of traditional methods of 'command'" represented by a shift from hierarchical to network governance (Bevir and Richards, 2009b, p. 134). The network was envisaged as extending through the LG Group down to local authorities but it was hard to identify what the latter would gain from such a move. Most local authority officers already saw themselves as distant from the LG Group, an organisation where staff cuts meant support for councils was likely to dwindle still further. In addition, it was clear that new resources would not be forthcoming for local authorities to tackle climate change mitigation following the end of the East Midlands Improvement and Efficiency Partnership.

The weakness of any climate policy network between national and subnational actors was exposed by the new contexts of austerity and localism. As previously discussed, climate policy held a tenuous position within local government work, as it was understood to be excluded from the priority category of 'frontline services' (see pages 253-254). Climate change as a policy issue is less visible to the public than such services, and while climate policy continues to have significant implications for all areas of frontline work, it has been treated as a peripheral issue which service areas have often been reluctant to engage with. A greater focus on the local meanings of climate policy could help central government to further their understanding of the role of local government (Demeritt and Langdon, 2004, p.335). The omission of regional partnerships from the *MoU* highlighted national actors' misunderstanding of local authorities. The latter attaching greater meaning to the regional partnership than any links with DECC or the LG Group.

The work done by East Midlands Improvement and Efficiency Partnership had greater involvement from local authorities and made closer reference to specific areas of responsibility such as planning and schools. The elements of the programme that were seen as successful did benefit from the closeness of space and understanding gained from operating at a more local level. The climate change element of the East Midlands Improvement and Efficiency Partnership grew closer to the regional climate change partnership (CEM) over time. However, from a national perspective, the problem for these partnerships was that diversity between regions in their organisation and remit led to a level of inconsistency which made them easy

for the national bodies to overlook. They were often hosted by different organisations, not all included climate change mitigation in their remit and in some other regions, those Improvement and Efficiency Partnerships who had worked with the climate change partnerships had ended up having their funding diverted into other policy areas. Localism presented the opportunity for local authorities within the East Midlands to continue collaborating without the same number of regional organisations which existed under the Labour Government, although regional officers suggested the East Midlands was in a stronger position than many other regions where partnerships had been weakened by loss of resources and the closure of host organisations.

In the view of DECC and LG Group officials there was a network which, while underdeveloped, linked national policy to local authorities. Local officers had a different view. For them no meaningful network existed as officers felt dislocated from DECC and the LG Group. Although the regional partnership maintained links with local authority officers, holding regular meetings regarding the East Midlands Improvement and Efficiency Partnership climate change programme, they found themselves squeezed out of the new conceptualisation of the network within the *MoU*. While they had previously been able to co-exist with DECC and LG Group with separate sources of central government funding (DCLG and DEFRA), they now found themselves under pressure from the *MoU*.

c) Partnerships as power

It is unsurprising that DECC and LG Group should seek to forge a partnership that served their own interests. The ambivalence of local authorities to being included in such a network suggested that they identified little benefit from such an idea. Even if such a move were to be accompanied by extra resources for local government, these would have been contingent on greater control from the centre in the form of targets. Many officers would not have welcomed such a move, already seeing themselves at the limit of their influence to reduce carbon dioxide emissions in their area. This leads one to question the purpose of the network if it was likely to bring about little mutual benefit for its members.

For LG Group, the desire for greater links with central government can be seen as part of a wider drive to protect the interests of local government within Whitehall. While this is the organisation's core function, it came into sharper focus during a period of austerity in which DCLG took one of the largest cuts in funding within government and there was sustained comment from the Secretary of State and Ministers about the level of waste within local authorities and LG Group itself (Hope, 2010; Pickles 2010c, 2011). The LG Group's attempt both to strengthen organisational links and gain access to resources through the *MoU* can be seen within this context, suggesting a focus on the survival of the institution and the sector it represented rather than improving climate policy, an analysis supported by one local authority officer:

"I don't think the LGA [LG Group] is behaving in a way which is about being committed to the environmental outcomes. It's committed to

supporting and ensuring that local government continues to thrive and prosper. This is part of the problem of all this partnership working, that the commitment to the outcome gets lost in the commitment to the organisation's desire." (County I Climate Change Manager, interview 1)

Under budgetary and political pressure LG Group looked to redefine their external relationships with a view to moving closer to the source of power (DECC) in climate policy, characteristics identified within the bureau-shaping model of bureaucratic behaviour (Dunleavy, 1991, pp.203-204). The *MoU* listed future milestones for progress towards a more detailed framework for local government policy on climate change (DECC and LG Group, 2011, p.10) but the ambivalence displayed by local authority officers made it uncertain whether these developments would have any impact on outcomes. The *MoU* was more immediately focused on LG Group's ability to maintain its role and influence in a time of uncertainty for local government. DECC's motives in establishing the *MoU* could also be interpreted with reference to the bureau-shaping model, this time in relation to "load-shedding" (Dunleavy, 1991, pp.204-205). As a small department under budgetary pressures severe enough to threaten its entire existence (Stratton *et al.*, 2010), any assistance from outside agencies in delivering the national carbon budgets was attractive. Although LG Group's aversion to top-down targets for local government meant this could not be expressed formally, the *MoU* did specify the "pivotal role councils have in tackling climate change" (DECC and LG Group, 2011, p.3), which could be seen as preparing the ground for greater control in the future.

d) Summary

By explicitly setting out the terms of partnership working between DECC and LG Group within the new context of localism, the *MoU* allows us to see the very different perceptions of the network amongst its members, comparing their interpretations of the *MoU*'s development and its meaning for policy work in the future. There were clear differences between organisations operating at different spatial scales, as well as some more subtle differences between those operating within the same spatial scale. The analysis of partnership working has been made with reference to the power held and sought within the policy network. DECC were a powerful actor within this context, although their relative weakness within Whitehall led them to seek out partners to help them deliver their agenda. LG Group attempted to assume the role of a bridge between DECC and the local authorities, bringing them closer to the source of power within climate policy. Within a context of increasing government criticism of councils and LG Group, this can be seen as an attempt to boost the latter's standing as an actor within the policy process. While the fieldwork period only covered the very early stages of this process, it was questionable whether the LG Group could "reflect the insights and ambitions of their member councils" (DECC and LG Group, 2011, p.3) when such insights and ambitions within climate policy encompassed a wide range. It was also unclear how the organisation could reflect a diversity of members' views, including those who were disengaging from climate policy, while simultaneously seeking to "encourage all councils to play their full and active part in reducing emissions" (DECC and LG Group, 2011, p.7). The well established regional

partnership had the potential to be an intermediate between local and national government, but with a track record of dialogue and collaboration with local authorities. However, acknowledging the value of such partnerships within the *MoU* was precluded by the strong anti-regional stance taken by the Cameron Government, having already moved to abolish Regional Development Agencies, Government Offices and regional strategies. For local authorities there was a general ambivalence to the new developments in national-local relations, with managers seeing national policy as providing only a vague signal unlikely to change the direction of local policy. For all of these actors it was DCLG who, while not directly involved in the climate policy process, had exercised their power through the localism agenda and removal of NIs.

7.4 Local councillors' attitudes to central regulation: inconsistency, power and politics

7.4.1 A different comparative method: contrasting discussion and silence

The previous section employed an interpretive analysis of the *MoU* to highlight the weakness of network ties between local officers and national actors. The document marked a fresh turn in local climate policy, generating discussion from a range of actors each adopting a different view of the development. This section takes a different approach, focusing on the case of a local councillor (City 2 Councillor) who sought to strengthen these links as a result not of the *MoU*, but of the increased costs resulting from central government's changes to the CRC in 2010 (see pages 225-228). The sources of the councillor's desire for greater partnership working with

central government are analysed through an apparently contradictory account of the CRC regulation and the councillor's stated policy preferences. These contradictions are then used to explore the power and legitimacy of City 2 Councillor in the context of the indifference to CRC expressed by councillors in other local authorities.

The previous section was able to draw on a range of perspectives of a single issue, akin to the multiple angles depicted in the photograph taken from the set of *The Matrix* (Image 3.2). Such an approach is precluded here, as City 2 Councillor was the only councillor to discuss the CRC, doing so at length. In the previous section, where local authority managers did not discuss the *MoU* unprompted, it was unproblematic to directly ask them their views at a later point in the interview; the document was clearly within their remit as policy managers. My interview method was to minimise pre-determined direct questions in favour of a conversational approach, allowing more time to focus on the issues meaningful to participants (see pages 110-113). I only intervened to change the direction of conversation occasionally, in order to cover issues I considered fundamental to the research topic. The direct questioning of local authority managers on the *MoU* was an example of this. However, I did not judge such an approach appropriate for councillors and the CRC, despite the lengthy discussion entered into by City 2 Councillor. Councillors can be characterised as “gifted amateurs” representing the “lay persons view” (Gains, 2009, p.58), a position which one would not expect to provide significant insight on the CRC, a regulation often described as complex

(Committee on Climate Change, 2010, p.1; Barker, 2011). Councillors were typically less focused on details than managers, so asking a question about CRC would have both jarred the conversational flow and have been likely to prompt an “I don’t know” answer, jeopardising the rapport built up between myself and the councillor. As a result the comparison undertaken here is not between multiple interpretations, as with the *MoU*, but between the expected silences of most councillors on the CRC and the unexpected polemic against it of City 2 Councillor. Or in the terms of the *Matrix* image, why did City 2 Councillor turn a camera onto the CRC while others were looking away?

7.4.2 Identifying inconsistency: being for and against reducing emissions

Two themes quickly dominated the interview conducted with City 2 Councillor. First, the budgetary pressure under which the local authority found itself; and second, the additional burden being placed on finances by the CRC:

Quote 1:⁴³

“The CRC thing is very ambitious for certain local authorities like ours, I can't see us being able to deliver on the [carbon dioxide emissions] savings in the time frame they've given us which means we'll have financial pressure.... I'm planning on lobbying a minister ... and relaying this to say 'look you're setting the bar so high, you're hitting us with two sticks here, we do want to do what you trying to tell us to do, but it's not the way to put a massive financial penalty in front of us year after year'. We need to work in partnership and that includes understanding we're under significant pressure.... If we'd have kept the [climate change] team the same size we'd still have had the same type of problem ... It is frustrating, we want to work with that agenda but we can do without significant penalties for it. I certainly wouldn't like to see more and more of that coming our way.” (City 2 Councillor, interview 2)

⁴³ For ease of cross-reference, quotes in this section from City 2 Councillor have been numbered 1 to 4.

At the end of the quote, the councillor reinforced their commitment to reducing emissions from the council's own estate, but saw the scale and speed of the reduction being asked for by central government as excessive. On the surface, this supported the notion that local government had an appetite to work on the agenda and that central government edicts were unnecessarily punitive, diverting resources away from tackling the problem itself. However, if we return to a quote from earlier in the same interview (first analysed on page 206), the councillor expressed a different view:

Quote 2:

“So I said to the team, if we need x per cent effort into CRC and other regulations - things we have to do whether we like it or not, and if we don't there will be a consequence - then I wanted a significant amount of resources ... pushed into that area. Then we worked out what was left.” (City 2 Councillor, interview 2)

Here is a clear account of a council responding to austere localism by retrenching to those areas of activity not covered by central government regulation. Backed by the threat of punitive action, such regulation was the primary consideration when deciding which areas resources would be allocated to. With the demise of the NIs measuring progress on carbon dioxide emissions, the council's climate change manager described the situation as a “policy vacuum” (City 2 Climate Change Manager 1, interview 2), the change in policy direction removing much of the incentive to direct resources towards climate change mitigation. As City 2 Councillor described in Quote 2, central government regulations were the key to understanding resource allocation within the council. With the withdrawal of NIs,

the only area of activity where central pressure for action remained was the local authority's corporate energy management (governed by CRC). As a result, the budget for energy management was maintained at a similar level to the previous year, whereas other areas of climate change work such as fuel poverty and energy efficiency work with small businesses had to be reduced significantly. This resulted in a cut of around half in the total budget for the unit - well in excess of those in other parts of the local authority (City 2 Climate Change Manager, interview 2).

This finding illuminates a contradiction between City 2 Councillor's criticism of CRC and their broad support for action on climate change mitigation (Quote 1). If the councillor were a supporter of action on climate change mitigation, one might assume they would be in favour of policies which provided reason for the local authority to act. This was the view of the council's climate change manager (City 2 Climate Change Manager 1), who was disappointed by the absence in the *MoU* of any new regulation or targets which might motivate the local authority to take greater action (see pages 255-256). But City 2 Councillor took a different view, strongly resisting central regulation in the form of the CRC as well as the prospect of anything additional being introduced in the future. This contradiction was expressed succinctly by the councillor later in the interview:

Quote 3:

"We want to work with the [climate change] agenda but ... certainly wouldn't like to see more and more of that [regulation with penalties] coming our way" (City 2 Councillor, interview 2).

The implication of the councillor's account of the budgetary process in Quote 2 is that only regulation such as the CRC prompted the council into allocating greater resources to climate change work. Without such measures from central government, climate change would have to compete with other discretionary areas of council work for funds from "what was left" after statutory and regulatory areas were addressed (see Quote 2). So while the councillor was ostensibly in favour of action, they were also resistant to central policies which made such action more likely. The next section will examine possible causes for this inconsistency, showing how it makes more sense to read the councillor's views with reference to the location of power within the policy network than as a literal commentary on the CRC.

7.4.3 Making sense of inconsistency: policy as contingent on power

As an account of how to reduce carbon dioxide emissions, the councillor's views do not make sense; there is an inconsistency between the councillor's general support for climate policy and their resistance to the regulation which stimulated such action. The councillor's plea that central and local government "need to work in partnership" (Quote 1) stemmed from a view that Whitehall did not understand how hard it would be to meet CRC targets "in the time frame" (Quote 1). What partnership amounts to for the councillor is a desire to weaken the CRC, despite the further downgrading climate change work would be likely to suffer as a result. Here, partnership did not mean the coming together of different organisations in pursuit of a common outcome, reduced carbon dioxide emissions. Rather, the

councillor's concept of partnership represented reclaiming power from the centre to set the parameters for energy management policy.

The councillor's disempowerment was further expressed through their account of climate policy as an agenda driven by global, not local, factors:

Quote 4:

"I think [for] governments around the world the train's left the station on this. We agreed years ago we're going to do this, this and that This is really ambitious [but] in the mean time we're nowhere near out of the wood on this financial crisis.... Something's got to give. To my mind it will be one of two things. They'll go 'OK we need more time on this and we recognise it's very tough, we may need to look at rejigging our priorities a little bit or making it easier on the local authorities or more support to deliver these things'. At end of day people at local level have to deliver these things pretty much." (City 2 Councillor, interview 2)

The councillor presented their self as constrained by the global priorities signed up to by central government, who would have to provide the council with either more time or more resources if CRC targets were to be reached. In the phrase "the train's already left on this" (Quote 4), the councillor evokes the image of the policy as a train, something that local authorities were powerless to stop even though they had a key role in policy delivery. By searching for partnership with central government, the councillor sought to alleviate their own sense of powerlessness in the face of the global policy agenda.

Two expressions of powerlessness by the councillor have been identified: first, as a way of making sense of the contradiction between support for climate policy and resistance to CRC's implementation; second, through the emphasis on climate policy

as a globally driven agenda, a 'train' that could not be stopped despite the issue being perceived as extra-local in nature (see pages 146-149). This interpretation of the councillor's position within the network should be seen within the context of central/local power relations. Local government in the UK has historically not been synonymous with self-government (Wilson and Game, 2006, pp.26-27), with local authorities often lacking the powers and resources to deliver on policy goals set by the centre (e.g. Demeritt and Langdon, 2004, p.334). While central government has attempted to address these concerns by granting local government the powers of wellbeing (Local Government Act 2000, s.2-5) and competence (Localism Act 2011, s.1-8),⁴⁴ the power to raise taxes has continued to reside at the centre leaving local government dependent on Whitehall for funding (Jones *et al.*, 2011, pp.18-21). As well as regulatory powers such as CRC, the centre holds financial power over local government, ensuring that central government's agenda sets the context for local policy decisions (Gains, 2009, p.59).

Under such conditions, City 2 Councillor's disempowerment may have been an expression of a wider malaise felt by local politicians who are elected to represent their area but feel unduly constrained by national politics. If so, then we would expect to find similar signals of disempowerment in the accounts given by councillors in other local authorities. This was not the case. Despite facing broadly similar financial liabilities from the CRC regulation, councillors from other local authorities did not share City 2 Councillor's prioritisation of the issue. This

⁴⁴ The Localism Act was passed subsequent to the completion of research fieldwork.

divergence was manifested through the amount of time devoted to the issue within interviews. City 2 Councillor began their interview with an unprompted monologue about CRC, returned to the subject throughout the subsequent discussion and even admitted towards the end of the interview that “I know I keep going on about it” (interview 2). In comparison, there was almost a complete absence of discussion about the topic from other councillors.

As explained above, most of these councillors were not questioned directly about the CRC due to their ‘amateur’ status. However, in one case it was established that a councillor did possess a more detailed grasp of their portfolio than those who had been interviewed from other local authorities. This provided confidence to make a general enquiry about their views on the CRC:

“I keep being copied in on the occasional email by Friends of the Earth to say we’re behind with the monitoring or whatever. My priority is working with things which affect people in their home finance, their job or whatever. All this other stuff comes on the back of it in my view.... They [officers] have the technical side of it. It’s what makes the difference to the people out there who we represent as well.... You go out door-knocking in my ward, the CRC is not the thing they raise with you.” (City 1 Councillor, interview 2)

City 1 Councillor saw the issue as one that they should not spend much time thinking about. There were two reasons for this view. First, it was the sort of technical issue best left to local authority officers who were typically specialists in a policy area, not generalists (Gains, 2009, p.54). Second, the councillor prioritised issues which impinged on the lives of local residents, something which CRC did not do. The quote above represents practically the entirety of City 1 Councillor’s

comments on the CRC, a marked contrast to the length of time City 2 Councillor spent talking about the issue. One might have expected the CRC, a tightly enforced central regulation on councils' carbon dioxide emissions, to be highlighted by a range of councillors. This would fit the wider narrative of local government weakness in the face of central government's regulatory and financial power. This was not the case: City 1 Councillor dismissed CRC as a concern when raised directly and the other councillors interviewed all remained silent on the issue. This suggests that despite CRC having far less scope for negotiation between central and local government than the similar NII85, the regulation was not regarded as a noteworthy manifestation of the centre's power by most councillors, and that other factors lay behind City 1 Councillor's views.

7.4.4 Political weakness as a condition for inconsistency

When considering City 2 Councillor's unique focus on CRC, one potential motivation would be the level of financial penalties City 2 would suffer as a result of its introduction. Central government regulations are often countered by lobbying from the regulated with the aim to alleviate any negative impacts; CRC proved to be no different in this regard (Leftly 2012; Murray, 2012) from previous attempts to regulate carbon dioxide emissions (e.g. Jachtenfuchs, 1996, p.181; Smith, 2004, p.87). However, there was no evidence that the City 2 local authority's financial liability under CRC was exceptional in comparison to other councils, and councillors from local authorities performing significantly worse than City 2 on CRC did not share City 2 Councillor's concerns, remaining largely silent on the issue (Environment

Agency, 2011; Noble, 2011). While the impact of the CRC on local authorities' already constrained budgets should be considered, City 2 Councillor's focus on CRC cannot be explained as an example of special pleading on behalf of a council who would be *particularly* badly hit by the regulation.

Instead, one can return to the notion of power to explain City 2 Councillor's very different view of CRC compared to their peers in other local authorities. Specific factors relating to the political control of the local authority cabinet meant that City 2 Councillor had a precarious hold on political power.⁴⁵ City 2 Councillor spoke of the need to regularly "sell myself and my policies to my party and electorate" in relation to attempts to reduce carbon dioxide emissions (Meeting 3, field notes), a situation consistent with local authorities with a weakened political leadership (Gains, 2009, p.61). It was unclear whether there were additional local factors which contributed to this weakness. What can be said is that drawing on concepts of political power and weakness provide a more convincing account of City 2 Councillor's search for partnership working than a narrow focus on the impact of CRC. City 2 Councillor's talk of lobbying ministers and forging closer ties with government represented an attempt to regain political power within an area of policy where the councillor felt they were controlled by national regulation and a globally set agenda.

⁴⁵ Detailing these factors would run contrary to the ethical basis for this research, which stipulated a minimisation of the risk of research participants being identifiable (see pages 133-135).

7.4.5 Summary

This section has sought to unpack the meaning of a local authority councillor's desire to dilute the CRC, which implied a further reduction in the resources allocated to climate policy locally. Clearly City 2 Councillor felt that local policy was being unduly controlled by the national CRC scheme, which was in turn a product of the global climate policy agenda. The early signs are that CRC will provide some motivation to local authorities to reduce their carbon dioxide emissions, a policy aim ostensibly supported by City 2 Councillor. The contradictions in City 2 Councillor's account highlighted that this aim had become secondary to the councillor's desire to further their own power. Potential sources of this weakness included the perception that climate policy was driven by a global agenda poorly linked to local issues and the historic weakness of English local government in comparison to the centre. Added to this was the minimal scope for negotiation between the central and local government regarding submission to the CRC. The regulation was seen as something that was being 'done to' local authorities, in particular the changes to CRC announced in 2010 which caused a huge increase in the financial penalties attached to carbon dioxide emissions while removing any scope for recycling the scheme's proceeds back to the best performing organisations (see pages 225-228). While these are all potentially strong sources of local authority weakness, the preponderance of silence on CRC amongst councillors suggested that other factors must have been at play to explain City 2 Councillor's fixation on the issue. One explanation for this was the political instability within which City 2 Councillor operated, a local factor which reduced the councillor's

legitimacy to exercise their powers and resulted in their perception that they had to 'sell' climate policies to other actors (Gordon *et al.*, 2009, pp.16-17). City 2 Councillor sought a new source of legitimacy through a partnership with central government to discuss the CRC. This provides a credible account, particularly when considering that councillors from ruling majority parties in other local authorities made no mention of such partnerships with central government, suggesting no such need to seek out new sources of political legitimacy.

This discussion illuminates two wider points about partnerships and policy networks. First, that actors' notions of partnership are contingent on their perceptions of what is important within an area of policy. Second, that these perceptions cannot be 'read off' from actors' stated policy aims. Consistency may not be entirely "[c]ontrary to nature, contrary to life" (Huxley, 1928, p.125) but neither is it the norm. This section has shown that where inconsistency was uncovered it was possible to discover the conditions under which actors' preferences were constructed (Hay, 2010, pp.79-81). The case of City 2 Councillor, when placed against the accounts and silences of councillors from other local authorities, highlights that stated policy preferences are subservient to a politician's rudimentary need for power and legitimacy.

7.5 Conclusion

This chapter has traced the political struggles for meaning by actors in a climate policy network encompassing subnational government within the East Midlands,

central government and the LG Group. It has shown that weak links persisted between central and subnational government in the realm of climate policy while the regional partnership became institutionalised, as actors pursued funding and lines of communication with Whitehall departments. Under the Cameron Government, network actors were analysed with reference to the *MoU*, showing a diverse range of interpretations while demonstrating how the new localism agenda of a government department ostensibly outside of the climate change network, DCLG, had a significant impact on all actors.

This chapter has also responded to Bevir and Richards's call for an improved analysis of power within a decentred analysis of policy networks (2009b, pp. 139-140). A flow of power away from network actors towards DCLG was identified, whose new localism agenda and language constrained policy options. In particular, the abolition of many regional organisations set the context for the omission of regional climate change partnerships from the *MoU* and the emergence of the LGA as a bridging organisation between local and central government. This represented an attempt by the LGA to forge a new role for itself within an environment of falling budgets and hostile rhetoric from the media and DCLG, both towards itself and the local authorities it spoke for. For DECC, localism represented a loss of influence over local authorities' ambitions in cutting carbon emissions, further weakening a department seen as peripheral and with a comparatively small budget to others in Whitehall. Local authorities did regain the power to set their own emissions targets, without the negotiation process which preceded the adoption of NIs. While

this empowered local authorities as *organisations*, it led in some cases to the disempowerment of climate change *managers* in those local authorities where NIs had been the predominant driver for policy (see pages 200-205). Where the local political arguments for climate policy were made more effectively, local authorities were less negatively affected by the localism agenda, the *MoU* being seen as a means of policy continuity which was vague enough not to interfere with locally determined plans. However, overarching this was the reduction in grant funding from DCLG to local government, draining the power of those local authorities who remained ambitious to implement their plans.

As well as the movement of power, this chapter has also showed how policy preferences and responses to change were contingent on the need to possess power within the network. The publication and subsequent interpretations of the *MoU* demonstrated the importance of power in cognitive activity, and the case of the councillors' diverse responses to CRC illustrated how inconsistencies in an individual's account of policy can reveal hidden meanings of their stated preferences. With both the *MoU* and the CRC, actors' perceptions of what constituted partnership working within a network was contingent on their own interpretations of the world around them, and in particular how they saw their position of power.

Finally, the analysis in this chapter can be linked to earlier discussions of policy ritual and myth (see Chapter 5). This chapter has demonstrated how the regime of rational policy-making and target setting established by DECC had to accommodate

a new localism agenda which was broadly hostile to such targets. The *MoU* was a way of DECC and LGA coping with this change in the policy landscape brought about by DCLG, and served the three functions of rituals identified by Kertzer (1988, p.9):

- channelling emotion: the vagueness of language provided a means of smoothing over tensions between DECC and the LGA over funding, top-down targets and interaction between officials;
- guiding cognition: this was key to explaining the *MoU*. County 2 Climate Change Manager 1 was ambivalent to the document, regarding it as of little relevance to their local work. However, the manager still welcomed its promise of policy continuity within the new contexts of austerity and localism. This linking of past, present and future helps reinforce the confidence of actors in the face of new policy problems (Kertzer, 1988, p. 10); and
- organising social groups: the *MoU* fulfilled the function of categorising who was 'in' and 'out' of subnational climate change policy. The LGA became more explicitly involved with central government policy than in the past, while the omission of regional organisations, despite their stronger links with local authorities, signified their loss of status within the new localism and de-regionalisation agenda.

As discussed in Chapter 5, for a policy act to be a ritual it must have an expressive, symbolic function. Here, the ritual of agreeing and publishing the *MoU* symbolised the beginning of a new policy myth: **that widespread local authority action on climate change mitigation would continue, even as central government pressure to do so decreased.** Climate policy was justified by globally framed arguments (see pages 28-33) yet the *MoU* implied that local authorities would continue to set their own targets for reducing emissions, potentially becoming even more ambitious once freed from central government interference. Any laggard local authorities who did not set targets would be

mobilised by the LGA to sign up to the new *Nottingham Declaration*, even though they were powerless to insist on any such action

This myth, embodied by the *MoU*, provided continuity from the greater certainty that the NIs afforded local climate policy. This reaching back into history was explicit within the *MoU*'s call for a new *Nottingham Declaration*; a document which had been seen as successful in gaining consensus on climate action, although this consensus was shown to be thin during implementation (see pages 187-188). It could be argued that the myth of local authorities implementing stretching climate policy may prove useful if it anchors the network under conditions of change, and provides the space for further agreement at a later date. However, the likely appearance of such agreement must be questionable, particularly since the publication of the new *Nottingham Declaration* (now called *Climate Local*), has little substantive difference from its first incarnation (LGA, 2012c).

8. Decentring climate policy

The conclusion to this thesis draws together the empirical findings of Chapters 5, 6 and 7 with the historical and theoretical contexts presented in Chapters 2,3 and 4. The conclusion is split into six sections. First, there is a statement of the original contributions of this research to theoretical development, methodology and empirical findings. Second, the three research questions posed in Chapter 1 are addressed. Third, Bevir and Rhodes's decentred approach is assessed using the empirical data, focusing on the categories of tradition and dilemma. Fourth, this approach is then critiqued, using Yanow's (1992) concept of policy myths to go beyond tradition and dilemma in explaining change and continuity. Fifth, the implications of the research for the future of implementation studies are assessed. Sixth, and finally, the future of climate policy is discussed.

8.1 What is new in this research?

8.1.1 Theoretical development

This research has partly filled the lacuna of implementation studies within the decentred approach (Bevir and Richards, 2009b, p.134). In doing so it has exposed the tension between implementation studies with their roots in a top-down approach to policy-making and a decentred approach focused on the contingent nature of the policy meanings created by individuals. It has demonstrated how the notions of tradition and dilemma can explain policy change. However, the concepts of policy rituals and myths have been fused with the decentred approach to provide

a better critical account of how policy can continue in the context of two incommensurable traditions (Yanow, 1996). Overall, a decentred approach is found to have some weaknesses in dealing with rhetoric - an important part of climate policy meaning - and in explaining how and why particular changes take place. These criticisms are used to develop an alternative, post-structuralist account of change in local climate policy, based upon the work of Glynos and Howarth (2007). Finally, it is argued that a focus on meaning provides a challenge to the theoretical basis of implementation studies. These theoretical developments are expanded upon below.

8.1.2 New research methods

Both the style and number of interviews with participants have been innovative within a decentred approach. A particular style of conversational interview was used for this research, which gave participants licence to focus on the issues of interest to them within policy work, with minimal guidance from the interviewer. This adds a new emphasis to the accounts of interview methods found in the existing decentred literature (e.g. Poulsen, 2009, p.123; Durose, 2009, pp.39-40). The conversational approach opened up a new methodological avenue, allowing notable rhetoric to emerge (e.g. 'policy embedding') from the talk of managers with minimal guidance from the interviewer. Repeat interviews were employed with many participants, enabling an improved consideration of change over the fieldwork period, as well as providing the opportunity to check and cross-reference concepts raised by other participants in earlier encounters.

8.1.3 New empirical knowledge

This research is the first to focus on climate policy implementation in the English East Midlands. It is also novel in providing an insight into the repercussions for local climate policy of the 2010 general election. While the findings echo research in another English region regarding the flaws of National Indicator (NI)186 (Pearce and Cooper, 2011, p.215), a focus on the indicator's *meaning* has enabled an explanation of the context for seven out of nine local authorities which included it in their Local Area Agreements (LAAs). This research has also punctured the assumption that consensus exists on local climate policy, showing how the patchy appetite for action was revealed by the Cameron Government's twin agendas of austerity and localism.

This research is the first academic study of the *Memorandum of Understanding* (*MoU*), a key document of the new local climate policy landscape. This analysis agrees that the *MoU* was a signal of continuity in local climate policy (Green Alliance, 2011, p.12), but breaks new ground in highlighting how the document's vague language enabled agreement between the Department of Energy and Climate Change (DECC) and the Local Government Association (LGA) and yet ensured its peripherality to local authority managers. This research also provides new findings on the potential role for regional partnerships in the new framework. The regional climate change partnership has been changed by the Cameron Government's de-regionalisation strategy, but remains intact as a potential bridge between central and local government, contrary to reports in some 'grey' literature that such partnerships have been abolished (Travers, 2011, p.6).

The next section provides more detail on research findings by answering the three key research questions posed in Chapter 1.

8.2 Question 1: What factors do actors find important in the implementation of climate change mitigation policy?

1. Separateness;
2. Passivity;
3. Data;
4. Kindred policies;
5. Power.

8.2.1 Separateness

Local managers were aware that climate change was widely regarded as *apart from*, rather than *a part of*, mainstream local policy concerns. Within this context, managers characterised their practices as ‘policy embedding’ rather than ‘policy implementation’, connoting both their acknowledgement of climate change’s peripherality and that their work would be subject to some resistance from other sections of local authorities. Managers’ disinclination to use the term ‘implementation’ also challenges the wording of the research question itself. The implications of the research findings for implementation studies are discussed further below (see pages 316-318).

8.2.2 Passivity

Specialist board meetings held regularly in two local authorities were characterised by passivity amongst the individuals responsible for climate policy outside of the core team. Improved access to data was seen by climate change managers as key to countering this tendency, enabling organisational targets to be disaggregated to service areas and giving the latter greater ownership of the policy. However, it was questionable whether this rational-scientific approach of creating new targets would be effective as service heads may regard emissions reduction measures as beyond their control, as well as being unwilling to instigate changes that threaten the priority of service delivery. The experience of NII86 supported these suspicions, where managers felt the emissions being measured were beyond their control, providing the context for their distancing themselves from the indicator.

8.2.3 Data

The introduction of the NII86 dataset was seen by managers as fundamental in moving climate change from the periphery to the mainstream of local policy. The symbolism of such a development was important enough for NII86 to be included in seven out of the nine LAAs within the East Midlands, eclipsing the three significant flaws which managers were already aware of when deciding on which NIs to adopt. Besides measuring emissions beyond their control, managers felt the data was published too slowly to be useful for policy-making and that its centralised methodology overlooked the importance of local knowledge in calculating emissions. The abolition of NIs by the Cameron Government left local government

climate policy vulnerable to the sharp cuts in central government grants, revealing an absence of the presumed political consensus on reducing carbon emissions. The focus on performance management had failed to provide the continued legitimisation of policy through political argument, necessary for effective and ongoing implementation.

8.2.4 Kindred policies

Separateness, passivity and the problems of data all contributed to a weakening of climate policy, leading to a greater focus on two kindred policies to climate change. First, City 1's elected councillor regarded tackling fuel poverty as a stronger justification for policy than reducing carbon emissions *per se*. While increasing energy bills have spread beyond deprived households to become a concern across society, householders may favour the comfort of warmer homes over a reduction in energy bills and carbon emissions. Second, the Carbon Reduction Commitment (CRC) accentuated local authorities' interest in cutting emissions from their own estates. However, such measures are difficult to introduce where they threaten long-established working practices and professional identities.

8.2.5 Power

Policy implementation has been shown to be contingent on the seeking of power by individuals. Cuts to local government grant funding have exacerbated the progressive disempowerment of local authorities under the Conservative and Labour governments of the last three decades. While being inherently problematic for local

managers, the case of City 2 Councillor's particular weaknesses showed how practices can be primarily dictated by a search for greater power, displacing other activities. The strong anti-bureaucratic agenda led within the Cameron Government by the Secretary of State at the Department for Communities and Local Government (DCLG), Eric Pickles, also marked a flow of power away from the regional climate change partnership. Despite the Government's abolition of regional agencies, the partnership remained active within the region, bringing in new partners and maintaining links between local authorities. However, the exclusion of regional organisations from the Pickles agenda left the partnership excluded from post-NII86 climate policy, despite remaining well placed to step into the bridging role between central and local government vacated by Government Office for the East Midlands.

8.3 Question 2: How do actors' perceptions of change affect implementation?

1. Policy meaning;
2. Localism;
3. Rational-scientific policy-making;
4. Issue awareness raising through data collection;
5. Central-local relationship.

8.3.1 Policy meaning

The case of County 1's environmental management system illustrates how diverse interpretations of change can affect implementation. The system was seen by the climate change team as largely a repackaging of existing policies, while one service

within the local authority (Service I) perceived it as an attempt to impose a significant new programme of action which had the potential to affect service delivery. It was the diversity of these meanings, as much as the meanings themselves, which stultified implementation. The divergence in meanings was rooted in different interpretations of the idea of policy; the climate change team had expected existing policies to be followed while Service I saw these policies as secondary to the pragmatic concerns of service delivery.

8.3.2 Localism

The Cameron Government's localism agenda brought about swift changes in 2010, with the abolition of NIs and the dismantling of much of the regional tier of government. The change in policy was instigated by the DCLG, and was interpreted in different ways by others. For both DECC and the LGA, the localism agenda meant a reduction in power. For DECC, this came from the loss of their link with local authorities through regional Government Offices and the removal of any influence over local government targets for carbon emissions. For the LGA, while the localism agenda promised devolved power to localities, strong rhetoric from the government and sections of the media on local authority waste and 'non-jobs' also brought a meaning of threat to the organisation and the local authorities it represented. Establishing closer ties with DECC would move LGA closer to the key source of power in national climate policy, improving the position of the organisation itself and potentially strengthening the weak links between national and local government in climate change mitigation. So although the localism agenda was interpreted in

different ways by DECC and LGA, these perceptions drove them towards closer partnership working.

8.3.3 Rational-scientific policy-making

By focusing on performance management as the basis for action, managers hoped that adopting rational-scientific targets for NII86 would bring about new policies to reduce local area emissions. However, such organisational targets did not equate to shared priorities. A local authority focusing heavily on writing policy carried a presumption that the priorities and values within such documents could be easily transferred to those outside the core of policy-makers. Such a top-down approach meant that policy became seen as something being 'done to' those affected by any move to cut carbon emissions, heightening resistance and impeding implementation. The approach also overlooked the need for implementation to be supported by the ongoing legitimisation of policy through political argument. Where the need for argument as well as data was recognised, greater progress on implementation was made through the inclusion of kindred policies.

8.3.4 Issue awareness raising through data collection

Local authorities' collection of data on their own energy usage proved much lengthier than anticipated, the poor state of record keeping emphasising the low priority afforded to energy usage. It was the act of data collection, rather than any change in the level of consumption, that had altered the perception of energy usage amongst local authority managers and raised its priority amongst finance managers.

This 'awareness effect' was reinforced by the introduction of the CRC, with the latter impacting upon perceptions of energy usage beyond its modest impact on corporate energy costs (in its pre-2010 form). While corporate awareness of energy usage has increased, this may provide only a limited window in which to act before energy costs and CRC penalties become seen as a fixed cost. In addition, while awareness may be raised, demand for energy may prove to be inelastic, due to the inherence of fossil fuel usage within local authority activities.

8.3.5 National-local relationship

Local managers saw national government's role in emissions reduction as far greater than their own. The methodology used to devise NII86 contributed to this feeling of disempowerment, as the majority of the emissions being monitored within local areas were out of the control of local authority managers. Focusing on the carbon dioxide emissions measured by NII86 risked neglecting other sources of greenhouse gases over which local authorities exerted greater influence, for example methane released from landfill waste sites. The post-NII86 framework for local climate policy, the *MoU*, illuminated the difficulties of prompting change within the new localism agenda. As the document lacked new targets for emissions reduction, local managers perceived the new framework as largely irrelevant to their needs. The *MoU* was welcomed by some local authority managers as providing a signal of continuity, although where programmes were threatened or already cut, the *MoU* provided no incentive or persuasion for local authorities to renew their

carbon-cutting efforts. In all cases, the *MoU* did not bring about new actions within local authorities.

8.4 Question 3: To what extent is subnational policy implementation driven by the centre?

1. Issue definition;
2. Austerity and localism.

8.4.1 Issue definition

Following the emergence of climate change onto international and national policy agendas in the late 1980s, some local authorities took up the issue as an opportunity for policy activism within a context of dwindling local powers. However, it was not until 2008 that the issue was clearly defined as a priority issue with which local authorities should concern themselves, with the inclusion of area-wide carbon emissions within the NI performance management regime. This move was key in legitimising action for those local authorities who included NI186 in their LAAs. However, national government positing climate change as a matter for local policy did not overcome the disjoint with the issue's global and scientific origins, being associated with international negotiations and atmospheric pollution that did not respect national borders. Despite the efforts to spread climate change as a priority issue from national to local actors, the issue's lack of meaning within local communities left the agenda being seen as aspirational and vulnerable to budget cuts.

This attempt to transfer policy priorities from the centre to localities reflected a top-down approach to policy-making and implementation. This approach was supplemented by a focus on rational-scientific goal setting through performance management which required comparability between local areas. As a result, the methodology for NII86 was produced centrally which removed the burden of data collection from local authorities but also contributed to the methodology becoming seen by local climate change managers as a 'black box' closed to local knowledge. Whether this view was justified, it contributed to a distrust in the quality of the data and ultimately a disengagement by managers from NII86. As previously discussed, NII86 data was slow to be published. This stemmed from the prioritisation of international policy commitments, with local statistics prepared after data submissions to the United Nations were completed. This reflected the dominant global framing of climate change as a policy issue, while seriously impeding the ability of local managers to utilise data as evidence in a timely way.

With the demise of NIs, issue definition became less defined under the Cameron Government. The *MoU* and the planned new *Nottingham Declaration* (subsequently published as *Climate Local*) sought to provide continuity in defining climate change as an issue. The *MoU* had to employ vague language to satisfy the demands of DECC, who wanted climate change to remain within the purview of local authorities and DCLG, whose localism agenda required a hands-off approach from national government which did not impose targets on local authorities. While such vagueness could be seen as the foundations for future redefining of local climate policy, the

strength of DCLG's rhetoric against bureaucracy and targets, in conjunction with the disempowerment of local authorities through reduced budgets, seem likely to constrain any return to targets or other obligations for local authorities to act.

8.4.2 Austerity and localism

While climate change was newly defined as an issue for local authority policy under New Labour, the Cameron Government's twin policies of localism and austerity provided very different circumstances for climate policy and network relations between actors. Localism encompassed a policy of 'de-regionalisation' by the government, abolishing Government Offices, Regional Development Agencies and Improvement and Efficiency Partnerships. While the East Midlands climate change partnership, Climate East Midlands, was able to survive the loss of these member organisations, central government policy clearly affected the actors involved at the regional level.

The abolition of NIs, in conjunction with the weak local meaning of climate change outlined in the previous section, set the context for action waning in some local areas. With the cuts in local government grants arising from the austerity programme, local climate change work came under budgetary pressure where effective local arguments had not been made for policy to be maintained. While neither austerity nor localism were directly related to climate change work or originated from DECC, they have provided strong constraints on local action since 2010. That DECC's attempt to recast local climate policy through the *MoU* was

received with such ambivalence by local authorities underscores how DECC's policy agenda was subordinate to those of DCLG and the Treasury. The introduction of the *MoU* also marked a return to weaker links between national and local government in climate policy.

8.5 A decentred approach to climate policy

8.5.1 Returning to traditions and dilemmas

The search for the policy meanings created and acted upon by individuals has underpinned this research, and helped to reveal aspects of local climate policy which would likely have remained obscured by a more instrumental approach to studying implementation. A focus on meaning is consistent with a broad interpretive approach to the social sciences. However, the decentred approach introduces two further analytical categories: traditions and dilemmas. Traditions provide a means of locating micro-level case studies within wider debates, without resorting to generalised categories and models intended to fit a wide range of circumstances. Traditions capture "a set of understandings someone receives during socialization", providing the first, but not the only, influence on a person's actions (Bevir and Richards, 2009a, p.10). A tradition is a set of beliefs and practices which displays a degree of consistency and has been passed between generations, intentionally or not (Bevir and Rhodes, 2006a, pp.8-9). Traditions are not static, ideal-type categories, but families of beliefs which change over time (Bevir *et al.*, 2003, p.8). The decentred approach sees such change as arising through dilemmas. These dilemmas come about

when a new idea stands contrary to an existing tradition, requiring a pushing and pulling to bring the two together (Bevir *et al.*, 2003, p.8; p.10). As a result, one may expect the tradition to change and develop over time, although actors drawing on stronger traditions may find themselves better placed to defy the potential for change arising from new ideas (Bevir and Richards, 2009b, p.137).

8.5.2 Dilemmas of managerialism

a) Local authority managers

Chapter 6 focused on NII86 as the preeminent example of rational-scientific goal setting within local climate policy. The setting of targets and top-down performance management belong to a managerial tradition which developed from the Thatcher Government's adoption of new public management to New Labour's focus on delivery and "self-sustaining, self-improving systems" (Rhodes, 2011b, pp.27-28). The climax of New Labour's managerial approach came with the introduction of Public Service Agreements which set targets across central government and formed the basis for the local government performance management framework of which NII86 was a part. The proliferation of targets, monitoring and audits under New Labour can be described as an audit culture resting on a belief that "identifiable targets will improve policy outcomes in the long run" (Geyer, 2012, p.22).

In the case of NII86, it was not clear that the adoption of targets led to improved outcomes. Rather than focusing policies on meeting their NII86 targets, local authority managers sought to distance themselves from the indicator, highlighting

their lack of control over the emissions measured, the delay in publishing the data and the centralised nature of the methodology (see pages 188-197). This did *not* mean that the organisation as a whole dismissed the targets; however, the targets had little influence on policy beyond the symbolic effect of putting climate change ‘on the map’ of local authorities through its inclusion in their performance management regimes. An individual operating from within the managerial tradition may not see this example as particularly problematic for their worldview. While NII86 may have been deeply flawed, this was a problem of indicator design rather than of the broad target-based approach. Climate change managers noted that despite these flaws, directors would still judge performance on NII86, the data from which suggested that local authorities were actually performing well against their targets. A focus on policy meaning enables an analysis beyond these surface appearances, showing that local managers did not tailor their policies towards such targets as they saw emissions as largely beyond their control.

The irrelevance of NII86 to local managers was not sufficient to derail the managerial tradition within the higher echelons of local government. However, it also did little to quench local managers’ own thirst for data, which was seen as a solution to passivity within board meetings. That the managerial tradition remained largely intact after the NII86 experience is unsurprising from a decentred perspective. The dilemmas which lead to the evolution of traditions are more likely to arise from changes in intellectual agendas than relatively micro-level events such as NII86 (Bevir and Rhodes, 2006a, pp.37-38).

Such a dilemma did arise after the Cameron Government entered office in 2010, in particular with the arrival of Eric Pickles as Secretary of State for DCLG. Pickles has been identified as from a strongly Thatcherite strand of the Conservative Party, in favour of a limited state (Heppell, 2002, p.313) and willing to embrace radical change (Leach and Wilson, 2002, p.677). This Thatcherite tradition informed Pickles's approach in government (see pages 252-254), rolling back the excessive 'command-and-control' performance management regime, replacing central auditing functions with individuals acting as 'citizen auditors' (Lowndes and Pratchett, 2011, pp.33-34). The rapid dismantling of the performance management regime presented a dilemma to local managers. Having focused on putting climate policy on the map through the introduction of NII86, the map itself had been swept away by the new Thatcherite broom in DCLG. The managerial approach under New Labour, which had expressed policy priorities through the NI framework, found itself in conflict with the resurgent appetite for a smaller state. This dilemma exposed the weakness of managerialism, that excessive focus on measurement *per se* displaces the political arguments needed to legitimise the decisions taken over what is measured. Without such political foundations, target attainment provides the only motivation for policy. This provides a possible explanation for why local managers found it relatively easy to back away from NII86 after they adopted it. Managers working in policy areas where political arguments were more robust may find such a course of action less viable. That local climate change managers were able to do so supports the idea that

the issue was regarded as meaningful for global, rather than local, policy with local politicians and residents (see pages 141-148).

Local authorities' response to the dilemma was twofold: a search for new ways of justifying climate policy and for new ways of measuring. Kindred policies which were more locally meaningful, such as action to reduce fuel poverty or management of local authorities' emissions from their own estate, signalled a mutation of policy as new justifications for action were called upon in the wake of N1186's abolition. Such a change is similar to the process of the "origins, mutations and recombinations" described by Kingdon as occurring within a "policy primeval soup", from which the right combination may emerge to enable a policy's survival (1984, pp.130-131). Such a combination takes into account problems, policies and politics (Kingdon, 1984, p. 211). The nature of the policy mutation dictates any move to new ways of measuring, the second response to the policy dilemma. While national government's performance management framework was abolished, the managerial tradition continued within local government, whose own key performance indicators and strategies remained. The mutation of policy also raised the prospect of a mutation of indicators, and a move to other indicators such as the number of domestic properties insulated (see pages 211-216). This approach was supported by the Committee on Climate Change (CCC)'s report on local authority climate policy (published after the period of research fieldwork), which proposes concentrating on monitoring those areas of policy where local authorities can exert most influence, rather than measuring aggregate emissions (2012a, pp.61-65). For the CCC, these

indicators are proxies for the ultimate aim of reducing carbon emissions. However, this continuation of the managerial approach implies a persistence with policies which are insufficiently attentive to political argument. In particular, the expectation that local authorities can greatly increase the number of renewable energy sites entering planning and construction seems implausible given increasing public protests and political opposition, particularly to onshore wind (CCC, 2012a, p.65; BBC, 2012; Montgomerie, 2012; Jowit, 2012; Nichols, 2012). A less managerial approach would emphasise such local political factors over a rational-scientific approach to imposing targets. As well as a change in the means of measuring outcomes, this would lead to a change in the overall aims of policy. Rather than using proxies to measure progress on the existing policy aim of reducing carbon emissions, a more locally political approach may see a change in policy aim from the extra-local issue of cutting carbon to intra-local issues such as cutting fuel poverty. In other words, in moving beyond a managerial approach to climate change, the response to the NII86 dilemma changes from *proxy indicators* to *kindred policies*.

Using the analytical categories of traditions and dilemma, it has been possible to shed light on the changes in climate policy which took place with the arrival of the Cameron Government. The collision of the New Labour managerial tradition with the resurgent Thatcherite tradition of Pickles left local managers with a dilemma on where to go next with local climate policy. Possible responses to this dilemma - proxy indicators and kindred policies - have been highlighted. However, managers' ability to respond was restricted by another aspect of the Pickles agenda: the

austerity programme which disproportionately affected local government in terms of the value of budget cuts. The reasoning behind central government's decision to impose a package of large, front-loaded cuts on local government funding remains arguable. Pickles justified the approach by saying that local government needed to transform rapidly to be ready for a long period of funding restraint (Phillips, 2011). This formed part of a wider discourse identifying local government as wasteful of public money and ripe for efficiency savings in 'back office' activities (Pickles, 2010c). A more critical view would identify the move as part of a Thatcherite tradition of attacking intermediary institutions such as local government, not as an attempt to reduce the size of government, but as a means of further strengthening central power (Bevir and Rhodes, 1998, pp. 112-113). Whichever was the aim, local climate change managers found themselves enfeebled by a process in which local authority budgets were cut and the managerial justification for climate policy had been removed. With the rapid reassessment of priorities required in response to the cuts,⁴⁶ there was little time to build political support for climate policy and widespread cuts in programmes followed. In local authorities where the political played a greater role in policy-making, such as City 1 (see pages 206-208), the overall budget cuts were not necessarily transferred to climate policy as local arguments were already in place.

⁴⁶ There was a period of four months between the publication of the new financial settlement for local government and the start of the next financial year (Hayman, 2010).

b) Department of Energy and Climate Change (DECC)

As with local authority managers, officials within DECC faced the dilemma of how to respond to the Pickles agenda. It is worth reiterating that although the New Labour managerialism of NIs contained many elements of top-down governance (e.g. nationally determined policy priorities and centralised methodologies for indicators), it did not enable government departments to exact *direct* control over local authorities. Rather, NIs represented a response to a dilemma faced under New Labour of reconciling the Westminster tradition of “hierarchy and leaders who know best” with the proliferation of network governance (Rhodes, 2011b, p.241). This response can be characterised as *metagovernance*, the state attempting to exert control within the framework of network governance - with its maxim of steering not rowing (Osborne and Gaebler, 1993, p.25) - through the vertical joining up of central and local government. While network governance allowed actors to roam the policy ‘landscape’, metagovernance sought to manage the landscape rather than the actors themselves (Rhodes, 2011b, pp.239-241). There was evidence of central government attempting such management in the NI negotiation process, applying pressure on subnational actors to include at least one climate change indicator, preferably NII86, within their LAAs (see page 47). However, most local authorities were keen to adopt NII86 of their own volition, so it is difficult to ascertain the strength of central government’s influence.

The Pickles agenda sought to loosen any grip the centre did hold over local government through metagovernance. The abolition of NIs and the regional

Government Offices left DECC with no conduits through which they could persuade local authorities to continue with climate policy in their challenging budgetary position. As at the local level, the dilemma revealed the extent to which actors had relied on the managerial approach to paper over the cracks of historically weak central-local relations (see pages 238-244). The removal of the managerial architecture of NIs exposed the inherent weakness of this approach and renewed the dilemma of how to exert influence within a network governance tradition. DECC's response was to publish the *MoU* in partnership with the Local Government Group (2011). The document attempted to establish a loose framework within which local government could set their ambitions for reducing carbon emissions. The intention was for local authorities to help the government achieve its emissions targets, but without the centre being able to set local targets apposite to the task. The various interpretations and motivations related to the *MoU* are detailed in section 7.3 (see pages 244-270). Overall, this renewed attempt at metagovernance provided no significant steering to local authorities beyond a signal of continuity. Events subsequent to the fieldwork period suggest a more decisive response by DECC to the dilemma. As managerial control over local authorities was weakened, the department disbanded its public sector team entirely to focus on the Green Deal - a policy strongly rooted in a managerial tradition - promising delivery of energy efficiency improvements through the private sector. This suggests that DECC was more comfortable operating within a managerial tradition than as part of a network.

8.6 Beyond tradition and dilemma: the role of policy myths

8.6.1 Returning to policy myths

While Bevir and Rhodes's broad focus on policy meaning has provided a useful framework for making sense of subnational climate policy, concerns about their decentred approach have been expressed within the interpretive literature (see pages 82-96). This section returns to those concerns, drawing on the data presented in this thesis to build an interpretive critique of the decentred approach. In particular, it develops the analysis of policy myths to go beyond Bevir and Rhodes's view of "state and political institutions ... in perpetual motion" (2006a, p.10), and instead open up explanations of continuity as well as change. Two policy myths of prioritisation and consensus are identified, both linked to the central policy myth of rational-scientific policy making identified in Chapter 5. Policy documents suggested that climate policy was made rationally based upon scientific evidence, and that climate policy is a priority issue enjoying consensus support. However, the data presented in this thesis has shown that such policy encountered significant challenges in implementation with two attendant myths to the rational policy making myth emerging: myths of prioritisation and consensus.

8.6.2 The myth of prioritisation

The decentred approach's attentiveness to actors' cognitive activity brings with it a recognition that describing particular events as 'exogenous' to a group of actors is a cognitive construction rather than a real world category (Parsons, 1995, p.201). It is

the sense which actors make of such events, rather than the events themselves, which is key to understanding behaviour. An actor's agency is situated within a wider web of beliefs, emphasising that while actors are not subject to structural constraints, neither are they entirely autonomous but influenced by particular traditions of thought into which they are socialised (Bevir and Rhodes, 2006a, pp. 2-8). In this thesis, this view of agency has been tested by the effects on climate policy actors of localism (the abolition of NIs) and austerity (the cuts in local authority grants from central government). Both of these were instigated by government departments beyond the main network of climate policy actors (DCLG and HM Treasury, respectively), and constituted significant changes in their circumstances. Actors interpreted these changes in a variety of ways, against a background of traditions, as shown earlier in this chapter (see pages 301-308). However, in contrast to the decentred approach's notion of situated agency actors were also subject to constraints *beyond* the influence of traditions. The changes in circumstances were so broadly detrimental to the climate change agenda that policy actors were obliged to focus their responses largely on maintaining continuity in a period of uncertainty. This evidence provides an important check against reification of agency within interpretive approaches; actors are influenced by traditions of thought but can also be constrained by changes in circumstances. These changes can still be interpreted in different ways, but these interpretations are also subject to actors' power (see pages 270-286).

This leads onto an argument for explanations to move beyond self-interpretation and the intentionality of actors' responses to include *non-intentional* responses (Glynos and Howarth, 2007, p.83). This non-intentionality is encapsulated in the concept of *policy myths*, constructed as a means of proceeding past seemingly insurmountable obstacles to progress in a policy issue. As discussed in Chapter 5 (see pages 181-182), these myths are neither falsehoods nor intentionally authored by actors, instead emerging as stories which actors tell themselves and each other in an attempt to reconcile incommensurable goals (Yanow, 1996, pp.191-192). Austerity and localism challenged the dissipated build-up of climate policy consensus around the *Nottingham Declaration* and NIs, as shown in Chapter 6, leaving a policy vacuum. A 'myth of prioritisation' emerged to fill this vacuum: that local authorities would continue to prioritise climate policy despite funding cuts and the removal of top-down guidance from central government. The myth smoothed over the tension between two apparently incommensurable goals: the need to cut local authority spending and maintaining budgets in the non-frontline area of climate change policy.

Understanding the emergence of this myth explains the importance of the *MoU* as a means of maintaining a sense of continuity and stability for policy actors. The *MoU* was the ritualised embodiment of this myth (see pages 282-286), filling the vacuum left by NIs and providing a coping mechanism by which subnational climate governance could continue (Rhodes, 2011b, pp.285-287), albeit constrained by the rhetoric of Pickles and DCLG. While this rhetoric can be understood as part of a Thatcherite tradition, the *logic* of the response of climate policy actors cannot be

explained merely through an appeal to a rival managerialist tradition (see pages 301-308). Rather, it was a search for continuity in uncertain times which drove actors' responses to events beyond their control. It was still actors who made sense of these events, but *how* they made sense of them was constrained by issues of politics and power, leading to the emergence of a *myth of prioritisation*.

8.6.3 The myth of consensus

The above observation supports the constructivist ontology adopted by the decentred approach: while particular events occur in the real world, they *only* make sense through actors' interpretations. As described in Chapter 3, such constructions are akin to a process of joining the dots, foregrounding some acts and objects over others and making links between them to come to a particular view of the policy landscape at any one time (see pages 86-88). This metaphor helps to unpack the processes of interpretation and construction, and illustrate the importance of politics and power (Glynos and Howarth, 2007, p. 114). Rhetoric has been shown to be an important part of these processes; for example, the pressure on actors deriving from the anti-bureaucratic language of Eric Pickles and various media outlets (see pages 253-258). The ongoing attack on 'non-jobs' within local government, often contrasted with the notion of 'frontline services', were constitutive of a political logic calling for the narrowing or termination of local authority climate change work. Pickles's related comments on regional bureaucracy also contributed to a regime in which regional partnerships could not be considered as part of the new policy framework put forward in the *MoU*, despite such

partnerships providing greater access to local policy knowledge than using the LGA as a single bridge from central government to all local authorities.

This rhetoric is important as the function it performed, that of reducing options for local authority climate change work, could not be made explicit by Eric Pickles and DCLG as climate change remained a priority issue for the Cameron Government (HM Government, 2010, p.16). That is not to say that Pickles was necessarily hostile to the climate change agenda *per se*, only that his rhetoric affected the options available to policy actors. Pickles joined the dots between austerity, non-jobs and frontline services to a particular political end of providing political cover for spending cuts while still toeing the government line on climate change.

Similar issues of unspoken and subdued resistance towards climate policy were uncovered in Chapter 5 with the resistance to climate policy by some actors within local authorities. This manifested itself as passivity in meetings and in the language used to express beliefs about climate change, contrasting 'theoretical' environmental concerns with the 'practical' nature of service delivery (see pages 155-158).

However, carbon reduction remained a top priority in many local authorities' corporate strategies, so overt resistance to climate policy was *verboden* (Yanow, 1996, p.197), a situation exacerbated by the prevailing partnership ethos which dampened debate in meetings (see pages 175-177). These tensions led to the emergence of a *myth of consensus* in local and central government that there was widespread support for the implementation of climate policy, smoothing over the

disjoint between the symbolism of climate policy and the practicalities of service delivery.

8.6.4 Accounting for change

The comparison of actors' responses to changes in circumstances in Chapter 7 shows the importance of their hold on power in mediating those responses. Bevir and Rhodes argue that referring to power "fails to provide any critical or explanatory leverage" and that tradition performs a similar function in conveying the "influence society exerts on individuals" (2006a, pp.24-25).⁴⁷ However, the data presented in this thesis does not support such a focus on traditions as a means of explaining change. Rather, austerity and localism were "decisive pressures" which explained the changing policy landscape (Finlayson *et al.*, 2004, p.151). While addressing climate change was a policy aim for organisations 'on paper', the myths of consensus and prioritisation masked a continuation of the peripheral nature of the climate agenda highlighted in Chapter 5. This left climate policy actors, in the main, poorly equipped to resist the pressures of austerity and localism.

Those actors who were better placed to resist, such as managers working in City 1, were able to do so because of the *political* arguments that had been made locally for climate change and its kindred policies. The appeal to kindred policies enabled councillors to tie locally resonant policies, such as reducing fuel poverty, to the globally framed issue of climate change (see pages 28-33). While bringing in

⁴⁷ Although Bevir and Rhodes appear to contradict this stance when discussing the importance of change, adopting the term despite recognising that it occurs "everywhere" (2006a, p10).

additional justifications for policy introduced potentially conflicting policy aims, it also helped build a “logic of equivalence” for energy efficiency policies (Glynos and Howarth, 2007, pp.143-145). City 1 was the exception rather than the rule. As shown in Chapter 7, many climate policy actors were unable to resist the pressures applied to the subnational climate change agenda by DCLG.

Previously, the pressures on DECC were explained in terms of a dilemma between traditions of managerialism and Thatcherism, highlighting Pickles’s decisive political pressure behind the latter (see pages 307-314). This helps to explain how DECC were unable to resist DCLG’s policy changes, but is less satisfactory in explaining why DECC and LG Group published a high-profile document which illuminated their inability to affect change within subnational policy. As discussed above, the *MoU* was a ritualised response to austerity and localism which embodied the emergent myth of prioritisation, a means of mediating this contradiction (Yanow, 1996, p.189). It may be that “a set of evolving traditions” are couched in such myths (Rhodes *et al.*, 2009, p.29). However, the data presented in this thesis suggests that it is the myths themselves, and the circumstances leading to their emergence, which provide greater explanatory power than a reliance on tradition and dilemma.

A focus on myths helps to redress the balance between dynamism and stability which was discussed in Chapter 3 (see pages 88-91): that a focus on change prompted by dilemmas risked falling short of explaining why some practices endure (Glynos and Howarth, 2007, p.108). Bringing myths back into an interpretive

explanation offers a rejoinder to the view that change is ubiquitous. There will always be some degree of flux within a policy issue and the actors involved, myths refocus attention on the extent to which this flux is absorbed into existing practices. Put simply, while small things change, the big picture can remain the same.

8.7 The future of implementation studies

Through its focus on meaning, this research has reopened the question of the legitimacy of ‘policy implementation’ as a subject for study. Implementation studies have typically focused on the gap between policy intent and outcome, a problematisation that points policy analysis towards attempts to close that gap:

“The influence that ontological logic has had on implementation studies has left them largely powerless to deal with meaning making and interpretation in social behavior [sic]. Rather than being a manifestation of error, the gap may be the expression of the lack of consensus in support of policy values An interpretive approach suggests [that] ... organizational [sic] events are seen to be influenced by beliefs and values prevalent during the policymaking phase, *including those inherited from prior debates.*” (Yanow, 1990, p.226; emphasis added).

The importance of prior meanings and practices, bundled together in the decentred approach as traditions, stems from an ontological shift from the top-down, rational policy approach of early implementation studies. None of the cognitive factors - what Young (1977, p.12) called the “assumptive world” - can justifiably be studied within temporal spaces demarcated by particular policy events pre-determined by the researcher. Such a shift is not only justified by an appeal to the interpretive, hermeneutic tradition discussed in Chapter 3, but also by the empirical findings in subsequent chapters. The interpretation of policy by the County I service in

Chapter 5 highlights the weakness of delineating research in terms of policy stages. For Service I, 'policy' was not a highly meaningful category of action; the pragmatic concerns of service delivery took priority over policy and, in some cases, legislation. Why problematise policy research based on the chronology of a policy's introduction, if key actors do not interpret the policy as something to act upon?

A typical response to this query in the literature is that although the stagist model of policy (Figure 3, page 69) is discredited as an accurate representation of policy practice, it continues to provide a useful heuristic upon which to base policy studies (Parsons, 1995, pp.80-81). In Chapter 3 it was argued that while heuristics can be helpful to explanation, they also have the potential to obfuscate rather than explain if they present an oversimplified view of the policy process (see pages 69-70). The evidence of this research is that this may now be the case for the stagist model and, by implication, the study of policy implementation as a discrete practice. The implication of studying an implementation stage is that one can identify the making of a decision which overshadows any others being made within a policy area. As discussed in Chapter 1, the Climate Change Act 2008 appeared to be an exemplar of this. However, the research findings have demonstrated how the ways in which this, and any other, policy developments and decisions are interpreted are the product of ongoing political argument situated within traditions of practice and thought which have emerged over time. Crucially, this means that "[i]n order to bring along the organizations [sic] and individuals who will carry out decisions, *there is a continuing*

need for legitimation” (Weiss, 1991, p.42; emphasis added). Political support, through argument, is needed for a policy throughout its existence.

This argument has implications for implementation studies. Many policy practitioners recognise that the stagist model is rarely comparable to their own interpretations of reality (Hallsworth *et al.*, 2011, pp.38-39). A focus on policy meaning provides greater promise in explaining the practices of public policy, and helps to move away from the temporal framing of policy and decision events implicit in the study of implementation and other policy cycle stages. This marks a return to Barrett and Fudge’s (1981a, p.25) recursive process of action and reaction, the ongoing task of maintaining support and legitimacy for a policy. As this research has shown, assessing and responding to the meanings that actors attach to policies is fundamental to such an endeavour.

This is not to dismiss the long history of implementation studies. This should hopefully be clear through the above reference to Barrett and Fudge, firmly located within the ‘bottom-up’ school of implementation studies. Much useful work has taken place which has been labelled as ‘implementation studies’. The argument is that such a framing places limits on research which could do more to obfuscate than clarify when seeking the reasons for policy-makers’ actions.

8.8 The future of climate policy

This research has found that between 2010 and 2011, significant *change* took place in the workings of subnational climate policy. In concluding, attention has also been given to the *future* of climate policy. This final section considers the factor which underpins the concepts of both change and future: *time*.

8.8.1 Time and targets

As set out in Chapter 1, this research originated from a curiosity about the UK's carbon targets. The introduction of statutory targets was no small victory for environmental campaigners, and the CCC ensured there was no shortage of advice on how such targets could be achieved, but in the world beyond academic spreadsheets how *plausible* was such a radical, rapid reversal of recent trends in energy usage? Four years after the passing of the Climate Change Act, the CCC's progress report to Parliament betrayed a sense of frustration at the time taken to bring about change:

“[T]he conclusion we have reached in previous reports - that there is a need for a step change in the pace at which measures are implemented - continues to apply. When we first highlighted this need, we recognised there would be a lead time of several years. However, the lead time has now elapsed. The step change in pace of implementation is therefore needed urgently if we are to remain on track to meeting future carbon budgets.” (CCC, 2012b, pp.20-21)

This comparatively languid rate of change identified by the CCC makes sense when examining some of the meanings of time for individuals acting locally:

- local authorities' data collection for their own energy usage (NI185) took much longer than anticipated;

- area-wide emissions data (NII86) was supplied too slowly to be useful for managers;
- the time constraints on climate change managers trying to reach a compromise on policy with another department;
- the time constraints on non-climate change managers attempting to fit carbon reduction alongside their core priorities; and
- the councillor who felt the timescales for emissions reduction under the CRC were unrealistic.

Time emerges as a key factor in answering the question of plausibility. In the case of the East Midlands, it is argued that the amount of time spent on climate policy on the ground fell far short of the CCC's expectations. That is not to say that there were not individuals within the region's organisations who were highly committed to climate policies. However, as the founding text of implementation studies reminds us, time is symbolic of the tussle between the multiple perspectives on policy priorities:

“Time is a scarce resource for men and organizations [sic]. If you want to know what a man loves, observe how he spends his time. If you want to know what matters most to an organization [sic], chart the activities on which its members spend their precious allotment of hours.... It is easy to ignore the fact that the sense of urgency manifested by the observer may differ widely in the time and hence importance that they allocate to the program [sic] in question.” (Pressman and Wildavsky, 1984, p.121).

Here is a recognition that different ways of seeing an issue's urgency exist, and that these are likely to have material consequences for actors' commitment to a particular course of action. In Chapter 3 it was argued, following Berger (1972b), that such a diversity of interpretations is inherent to the social world (see pages 67-69). The research findings have supported this claim and, crucially, revealed that a key source of diversity has been the rational-scientific model upon which climate

policy is based. Targets have cascaded from the scientific evidence into international agreements and national legislation, which in turn have set the context for subnational policy. These targets remain unchanged. Indeed, it is written into the Climate Change Act that such targets *cannot* be changed unless there are “significant developments” in the scientific evidence (2008, s.2).

The argument here is not that scientific evidence should be sidelined when making policy. Rather, if policy is based *solely* on such evidence, then it becomes more difficult to implement as scientifically-derived targets elide multiple political arguments across a range of issues and geographies. The case of subnational climate policy provides an exemplar of this friction between the rational-scientific world of policy-making and the social world of policy implementation. In other words, policy implementation can be re-defined as *the making sense of rational-scientific knowledge in the social world*.

One may argue that this is as it should be; one can make a rational plan in many walks of life and be prepared to change it as circumstances dictate.⁴⁸ However, in this case the circumstances governing the legislation are restricted to scientific knowledge, rather than social world. This makes climate policy *scientifically robust, but politically brittle*, particularly as short term pressures rise under persistent conditions

⁴⁸ On a very small scale, precisely this strategy was followed for the planning and operationalising of the fieldwork and deskwork of this research. Many plans were made and revised.

of low or negative economic growth⁴⁹. It still appears unlikely that the Climate Change Act will be repealed in the near future.⁵⁰ However, in the absence of any formal repeal, government may still come to slowly distance itself from its carbon targets, as was seen in the local sphere with NII86. Some emission cuts may still be achieved, but significant slippage would raise further questions of the wider democratic effects of government legislating “well beyond our current political capacity to deliver” (Challen, quoted in Harrabin, 2009).⁵¹

8.8.2 The future

These observations on climate policy hold particular relevance for the local sphere. It may be tempting to surmise that climate change will continue to be seen as a global, not local, problem and that efforts at reducing carbon dioxide emissions should be concentrated at the national and international scales. There is some truth in this reading but different, potentially more fruitful, avenues open up by focusing on the importance of moving beyond *scientific data* as evidence and acknowledging that *political argument* as evidence is essential for maintaining the political legitimacy of public policy. As the branch of government operating at closest proximity to the public, local authorities carry a message to central government and international

⁴⁹ Describing policy as scientifically robust is not a comment on the robustness of climate science, merely on the close relationship between climate science and climate policy. Climate science is evolving, in particular with regard to the sensitivity of the Earth’s climate to increasing carbon emissions (for contrasting reviews, see *The Economist*, 2013; Nuccitelli and Mann, 2013).

⁵⁰ A recent petition arguing for such a move garnered 1,530 signatures compared to the 100,000 required for the matter to be considered for Parliamentary debate (Longstaff, n.d.). Some on the right of British politics continue to argue for the Act’s repeal (Keswick *et al.*, 2012).

⁵¹ When making these remarks, Colin Challen MP was the chair of the All Party Parliamentary Climate Change Group.

institutions: at a time when public faith in politics is waning (Hay, 2007), policy-makers can ill afford to neglect the need for legitimacy in public policy. This legitimacy comes through the appropriate use of evidence which can, in turn, lead to a morphing of policy issues and agendas from their initial problematisation. Following scientific evidence, climate change has been problematised as an issue of carbon dioxide emissions. However, the indications from this research are that focusing on carbon dioxide emissions alone cannot yet draw sufficient political support for action when set against economic and social factors, findings which are supported by developments in national and international policy (Prins *et al.*, 2010). There is, of course, a vital place for scientific data as evidence for policy, but focusing on data to the exclusion of political argument risks hindering, not improving, policy-making and implementation.

Such a conclusion does not sit comfortably with the current policy landscape, and represents a significant shift in my own thinking since beginning this research in 2008. Bringing greater political arguments to bear on action to support reducing carbon emissions means focusing on the logics of equivalence between interests within society, and building broader, stronger coalitions which can argue for action. The emergence of kindred policies shows how this is already taking place in some places, but such a pragmatic, politically driven approach needs to become widespread if climate policy is to become meaningful to local residents. However, with such pragmatism comes dilution of the original aim of reducing carbon dioxide emissions. The findings of this research show that such a dilution is essential to

restore the primacy of politics and policy flexibility and ensure that policy is adequately contextualised within the routines, local knowledge and traditions prevalent in society (van Gunsteren, 1976, pp.150-53). But with this dilution comes a tacit acceptance that carbon targets will not be met on time, with all of the uncertainties that brings for the future shape of society.

Appendix. Participant consent form

International Centre for Public and Social Policy, School of Sociology and Social Policy, University of Nottingham

Participant Factsheet:

“Delivering climate change mitigation policy in the East Midlands”

Who is carrying out the research? Warren Pearce, as part of a PhD being undertaken at University of Nottingham in conjunction with East Midlands Councils.

What is the study about? Regional and local implementation of climate change mitigation policy in the East Midlands

What will the participant have to do? Participants may be interviewed face-to-face, take part in a focus group discussion or be observed attending regularly scheduled meetings. Interviews and group discussions are estimated to last approximately one hour each. The attached consent form covers each of these aspects for the entirety of the project. Interviews will be arranged at mutually agreeable times. Notice of meeting observations will be given to attendees in advance.

What are the benefits of participating in the study? By participating you are helping to broaden the project's sources of data and increase the chances of research outputs being relevant to practitioners. The study is a collaborative project with East Midlands Councils, a key member of Climate East Midlands.

Are there any foreseeable risks to the individual if they participate in the research? Participants should be aware that while every effort will be made to maximise anonymity, it cannot be guaranteed that all participants will remain unidentifiable in the final report. At the regional level, some participants occupy unique roles which may not be appropriate to anonymise when they are the subject of discussion.

Are there any costs or inducements to taking part in the research? No.

Participation is voluntary, what should you do if you do not want to participate? Inform myself in advance or if you have any particular queries or concerns or require any clarification, please let me know as soon as possible (contact details below). Consent can be withdrawn at any time, including during an interview, focus group or meeting observation.

What happens to the collected information? The audio recording and anonymised transcript of the meeting will be archived and then destroyed in accordance with University policy. Anonymous quotes may be used in research outputs.

What are the research outputs? The project seeks to provide an in-depth study of the implementation of climate policy within the East Midlands and contribute to the ongoing improvement of practice at local and regional level. Research findings will be disseminated to policy practitioners throughout the course of the project with a full length thesis due to be completed in September 2012.

The project website <http://realiseclimate.org/> is updated regularly and is the primary source of information on research progress, findings and dissemination.

What sorts of people are being asked to take part? Local and regional stakeholders make up the majority of the participants, along with some relevant central government figures.

Contact details

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Complaint procedure

If you wish to complain about the way in which the research is being conducted or have any concerns about the research then in the first instance please contact Warren Pearce or Dr. Cope.

If this does not resolve the matter to your satisfaction then please contact the School's Research Ethics Officer, currently Dr Tony Fitzpatrick Tony.Fitzpatrick@nottingham.ac.uk. (0115 951 5230)

Participant Consent Form:

In signing this consent form I confirm that:

I have read the Participant Information Sheet and the nature and purpose of the research project has been explained to me.	Yes		No	
I have had the opportunity to ask questions.	Yes		No	
I understand the purpose of the research project and my involvement in it.	Yes		No	
I understand that my participation is voluntary and I may withdraw from the project at any stage without having to give any reason and withdrawing will not penalise or disadvantage me in any way.	Yes		No	
I understand that while information gained during the study may be published, any information I provide is confidential (with one exception, see below). Every effort will be made to maximise the anonymity of participants although no guarantee can be given that they will be entirely unidentifiable, particularly to colleagues within the network.	Yes		No	
I understand that the researcher may be required to report to the authorities any significant harm to a child/young person (up to the age of 18 years) that he/she becomes aware of during the research. I agree that such harm may violate the principle of confidentiality.	Yes		No	
I agree that extracts from the interview may be anonymously quoted in any report or publication arising from the research.	Yes		No	
I understand that interviews, focus group discussions and observed meetings will be recorded using digital voice recorders.	Yes		No	
I understand that data will be securely stored.	Yes		No	
I understand that the information provided can be used in other research projects which have ethics approval, but that my name and contact information will be removed before it is made available to other researchers.	Yes		No	
I understand that I may contact the researcher or research supervisor if I require further information about the research, and that I may contact the Research Ethics Officer of the School of Sociology and Social Policy, University of Nottingham, if I wish to make a complaint relating to my involvement in the research.	Yes		No	
I agree to take part in the following aspects of the above research project:				
•Focus group	Yes		No	
•Meeting observations	Yes		No	
•Interview	Yes		No	

Participant's name (BLOCK CAPITAL)	Participant's signature	Date	

WARREN PEARCE			
Researcher's name (BLOCK CAPITAL)	Researcher's signature	Date	

Bibliography

Web pages are referenced with original web address and archive link where possible.
Archived web pages also available from author on request.

Adler, P.A. & Adler, P. (1998). Observational techniques. Taken from N.K. Denzin & Y.S. Lincoln (Eds.), *Collecting and Interpreting Qualitative Materials* (pp.79-109). Thousand Oaks: Sage Publications.

AEA Technology. (2008). *Analysis to Support Climate Change Indicators for Local Authorities*. London: Department for Environment, Food and Rural Affairs.

AEA. (2011). *CO2 Emissions Within the Scope of Influence of Local Authorities (previously Called National Indicator 186: Per Capita CO2 Emissions in the LA Area)*. London: DECC. Retrieved from <http://www.decc.gov.uk/assets/decc/11/stats/climate-change/2767-emissions-within-the-scope-of-influence-of-local-a.xls>

Allison, G. T., & Zelikow, P. (1999). *Essence of Decision: Explaining the Cuban Missile Crisis* (2nd edition). New York: Longman.

American Veterinary Medical Association. (2012). *AVMA Press Room - About the Profession*. Retrieved May 1, 2012, from <http://www.avma.org/press/profession/specialties.asp> (Archived at <http://www.webcitation.org/67KcF6Ai8>)

Andrews, R., Boyne, G.A., Law, J., & Walker, R. M. (2005). External constraints on local service standards: the case of Comprehensive Performance Assessment in English local government. *Public Administration*, 83(3), 639-656. doi:10.1111/j.0033-3298.2005.00466.x

Apel, K. O. (1972). Communication and the foundations of the humanities. *Acta Sociologica*, 15(1), 7-26.

Archer, M.S. (1998). Social theory and the analysis of society. From T. May & M. Williams (Eds.), *Knowing the Social World* (pp.69-85).

Ares, E. (2008). *Climate Change Bill [HL]* (Research Paper No. 08/53). London: House of Commons Library.

Armour, K. C., & Roe, G. H. (2011). Climate commitment in an uncertain world. *Geophysical Research Letters*, 38, L01707. doi:201110.1029/2010GL045850

Arnold-Foster, J. (2007, January 29). A matter of security. *New Statesman*, 15.

Association for the Conservation of Energy (2005). *The Home Energy Conservation Act 1995 - Fact Sheet*. Retrieved on January 26, 2012 from http://www.ukace.org/index2.php?option=com_content&do_pdf=1&id=156

Association for the Conservation of Energy. (2007, August). *Consultation on Local Government Performance Framework: Climate Change Mitigation and Fuel Poverty Indicators*. Association for the Conservation of Energy. Retrieved on July 31, 2012 from [http://www.ukace.org/publications/ACE%20Response%20\(2007-08\)%20-%20Defra%20Consultation%20on%20local%20government%20performance%20framework.pdf](http://www.ukace.org/publications/ACE%20Response%20(2007-08)%20-%20Defra%20Consultation%20on%20local%20government%20performance%20framework.pdf)

Atkinson, R. (1998). *The Life Story Interview*. Thousand Oaks: Sage Publications.

Audit Commission. (2009). *Lofty Ambitions: The Role of Councils Reducing Domestic CO2 Emissions*. London: Audit Commission.

Audit Commission. (2011). NI 186 Per capita reduction in CO2 emissions in the LA area. *Audit Commission*. Retrieved May 29, 2012, from <http://www.audit-commission.gov.uk/performance-information/performance-data-collections-and-guidance/nis/Pages/NI186percapitareductioninCO2emissionsintheLAarea.aspx> (Archived at <http://www.webcitation.org/6A3tY93O5>)

Baede, A. P. M., van der Linden, P., & Verbruggen, A. (Eds.). (2007). Annex II: glossary. In Core Writing Team, R.K. Pachauri & P. van der Linden (Eds.) *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 76-89). Geneva: IPCC.

Bain, J. S. (1943). The normative problem in industrial regulation. *The American Economic Review*, 33(1), 54-70.

Ball, C., & Wright, G. (1991). Greening the environment: national and local economic issues. *Local Economy*, 6(1), 81-87. doi:10.1080/02690949108726085

Barker, G. (2012, January 18). 2012: An exciting year for the Green Deal. *Department of Energy and Climate Change Blog*. Retrieved September 3, 2012, from <http://blog.decc.gov.uk/2012/01/18/2012-an-exciting-year-for-the-green-deal/> (Archived at <http://www.webcitation.org/6AOpk4CvL>)

Barrett, S., & Fudge, C. (1981a). Examining the policy-action relationship. In S. Barrett & C. Fudge (Eds.), *Policy and Action: Essays on the Implementation of Public Policy* (pp. 3-32). London: Methuen.

Barrett, S., & Fudge, C. (1981b). Reconstructing the field of analysis. In S. Barrett & C. Fudge (Eds.), *Policy and Action: Essays on the Implementation of Public Policy* (pp. 249-278). London: Methuen.

Barrow, B., & Reynolds, E. (2012, February 17). The end of rip-off fuel bills? Energy watchdog threatens to force big firms to cap prices. *Mail Online*. Retrieved July 31, 2012, from <http://www.dailymail.co.uk/news/article-2102458/Ofgem-tells-Big-Six-energy-firms-reduces-prices-face-cap-fuel-bills.html> (Archived at <http://www.webcitation.org/69ZhYR9Hw>)

Barton, K. (2006). Revolution in *The Matrix*: a cue call for reflexive sociology. In M. Díaz-Diocaretz & S. Herbrechter (Eds.), *The Matrix in Theory* (pp. 53-72). Amsterdam: Rodopi.

Bates, S. R., & Jenkins, L. (2007). Teaching and learning ontology and epistemology in political science. *Politics*, 27(1), 55–63.

BBC. (2012, June 4). “Work harder over windfarm planning.” BBC. Retrieved August 30, 2012, from http://news.bbc.co.uk/today/hi/today/newsid_9725000/9725989.stm (Archived at <http://www.webcitation.org/6AlwkgUhR>)

Beattie, J. H. M. (1970). On understanding ritual. In B. R. Wilson (Ed.), *Rationality* (pp. 240-268). Oxford: Basil Blackwell.

Beddington, J. (2009). Professor Sir John Beddington’s Speech at SDUK 09. *GovNet Communications*. Retrieved September 25, 2012, from <http://www.govnet.co.uk/news/govnet/professor-sir-john-beddingtons-speech-at-sduk-09> (Archived at <http://www.webcitation.org/6AwHDB7tO>)

Bellamy, R., & Hulme, M. (2011). Beyond the tipping point: understanding perceptions of abrupt climate change and their implications. *Weather, Climate, and Society*, 3(1), 48-60. doi:10.1175/2011WCAS1081.1

Benschop, Y., & Verloo, M. (2006). Sisyphus’ sisters: can gender mainstreaming escape the genderedness of organizations? *Journal of Gender Studies*, 15(1), 19-33. doi: 10.1080/09589230500486884

Benton, T., & Craib, I. (2001). *Philosophy of Social Science: The Philosophical Foundations of Social Thought*. Basingstoke: Palgrave.

Berger, J. (1972a). The moment of cubism. In N. Stangos (Ed.), *Selected Essays and Articles: The Look of Things* (pp. 133-164). Harmondsworth: Penguin.

Berger, J. (1972b). *Ways of Seeing*. London: Penguin.

Berger, P. L., & Luckmann, T. (1967). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin.

Bevir, M., & Rhodes, R. A. W. (1998). Narratives of “Thatcherism.” *West European Politics*, 21(1), 97-119. doi:10.1080/01402389808425234

- Bevir, M., & Rhodes, R.A.W. (1999). Studying British government: reconstructing the research agenda. *The British Journal of Politics & International Relations*, 1(2), 215–239. doi: 10.1111/1467-856X.00012
- Bevir, M. & Rhodes, R.A.W. (2003). *Interpreting British Governance*. London: Routledge.
- Bevir, M., & Rhodes, R.A.W. (2005). Interpretation and its others. *Australian Journal of Political Science*, 40(2), 169–187. doi: 10.1080/10361140500129974
- Bevir, M. & Rhodes, R.A.W. (2006a). *Governance Stories*. Abingdon: Routledge.
- Bevir, M., & Rhodes, R.A.W. (2006b). Interpretive approaches to British government and politics. *British Politics*, 1(1), 84–112. doi:10.1057/palgrave.bp.4200001
- Bevir, M. & Rhodes, R.A.W. (2008). The differentiated polity as narrative. *British Journal of Politics & International Relations*, 10(4), 729–734. doi: 10.1111/j.1467-856X.2008.00325.x
- Bevir, M., & Rhodes, R.A.W. (2010). *The State as Cultural Practice*. Oxford: Oxford University Press.
- Bevir, M., Rhodes, R.A.W., & Weller, P. (2003). Traditions of governance: interpreting the changing role of the public sector. *Public Administration*, 81(1), 1–17. doi: 10.1111/1467-9299.00334
- Bevir, M., & Richards, D. (2009a). Decentring policy networks: a theoretical agenda. *Public Administration*, 87(1), 3–14. doi:10.1111/j.1467-9299.2008.01736.x
- Bevir, M. & Richards, D. (2009b). Decentring policy networks: lessons and prospects. *Public Administration*, 87(1), 132–141. doi:10.1111/j.1467-9299.2008.01739.x
- Bhaskar, R. (1998). General introduction. In M. Archer, R. Bhaskar, A. Collier, T. Lawson, & A. Norrie (Eds.), *Critical Realism: Essential Readings* (p. ix–xxiv). London: Routledge.
- Big Ask. *UK Climate Change and Energy Bills get royal assent*. (2008, November 26). Retrieved September 7, 2012, from <http://www.thebigask.eu/news/climate-change-and-energy-bills-get-royal-assent.html> (Archived at <http://www.webcitation.org/6AV8CEAQy>)
- Blair, T. (2004). PM speech at the launch of the Climate Group. Retrieved on December 12, 2011, from <http://tna.europarchive.org/20070205134610/http://www.pm.gov.uk/output/page5716.asp>

Blanco, I., Lowndes, V., & Pratchett, L. (2011). Policy networks and governance networks: towards greater conceptual clarity. *Political Studies Review*, 9(3), 297-308. doi:10.1111/j.1478-9302.2011.00239.x

Blau, P. M. (1963). *The Dynamics of Bureaucracy: Study of Interpersonal Relations in Two Government Agencies*. University of Chicago Press: Chicago.

Boardman, B. (2010). *Fixing Fuel Poverty: Challenges and Solutions*. London: Earthscan.

Bodansky, D. (2010). The Copenhagen Climate Change Conference: A Postmortem. *American Journal of International Law*, 104(2), 230–240.

Bond, A. J., Mortimer, K. J., & Cherry, J. (1998). Policy and practice: the focus of Local Agenda 21 in the United Kingdom. *Journal of Environmental Planning and Management*, 41(6), 767-776. doi:10.1080/09640569811416

Boseley, S. (2009, May 13). Climate change biggest threat to health, doctors say. *the Guardian*. Retrieved September 25, 2012, from <http://www.guardian.co.uk/environment/2009/may/13/climate-change-health-impact> (Archived at <http://www.webcitation.org/6AwHa8J8S>)

Bows, A., Calverley, D., Broderick, J., & Anderson, K. (2009). *Making a Climate Commitment: Analysis of the First Report (2008) of the UK Committee on Climate Change*. Manchester: Tyndall Centre for Climate Change Research.

Boykoff, M. T. (2011). *Who Speaks for the Climate? Making Sense of Media Reporting on Climate Change*. Cambridge: Cambridge University Press.

Bradbeer, J. (2001). UK environmental policy under Blair. In S.P. Savage & R. Atkinson (Eds.), *Public Policy Under Blair* (pp.86-101). Basingstoke: Palgrave.

Brady, H. E., & Collier, D. (Eds.). (2010). *Rethinking Social Inquiry: Diverse Tools, Shared Standards* (2nd edition). Plymouth: Rowman & Littlefield.

Breakwell, G. M. (1993). Social representations and social identity. *Papers on Social Representations*, 2(3), 198–217.

Bretherton, C. & Vogler, J. (2006). The European Union as a protagonist to the United States on climate change. *International Studies Perspective*, 7(1), 1-22.

Brimblecombe, P. (2006). The Clean Air Act after 50 years. *Weather*, 61(11), 311–314. Buckingham: Open University Press.

Brown, G. (2008, January 18). Gordon Brown goes green. *The Sun*. Retrieved September 25, 2012, from <http://www.thesun.co.uk/sol/homepage/news/Green/700956/Green-week-Gordon-Brown-goes-green-The-Great-British-Light-Switch.html>

Bruyninckx, H., Happaerts, S., & Brande, K. van den (Eds.). (2012). *Sustainable Development and Subnational Governments: Policy-Making and Multi-Level Interactions*. Basingstoke: Palgrave Macmillan.

Bühns, T. (2008). Climate change policy and New Zealand's "national interest": the need for embedding climate change policy into a sustainable development agenda. *Political Science*, 60(1), 61-72. doi:10.1177/003231870806000106

Bulkeley, H., & Kern, K. (2006). Local government and the governing of climate change in Germany and the UK. *Urban Studies*, 43(12), 2237-2259. doi: 10.1080/00420980600936491

Burrell, G., & Morgan, G. (1979). *Sociological Paradigms and Organisational Analysis*. London: Heinemann.

Butterworth, N., Southernwood, J., & Dunham, C. (2011). *Kirklees Warm Zone Economic Impact Assessment*. London: Carbon Descent.

Cabinet Office. (1999). *Professional Policy-Making for the Twenty-First Century*. London: Cabinet Office.

Cameron, D. (2010a, May 14). PM's speech at DECC. *Number 10*. Retrieved August 6, 2012, from <http://www.number10.gov.uk/news/pms-speech-at-decc/> (Archived at <http://www.webcitation.org/69isWLO43>)

Cameron, D. (2010b, November 28). Use the profit motive to fight climate change. *the Guardian*. Retrieved September 25, 2012, from <http://www.guardian.co.uk/commentisfree/2010/nov/28/david-cameron-climate-change-cancun> (Archived at <http://www.webcitation.org/6AwGNFjhH>)

Carbon Action Network. (2008). *Introduction to CAN and Annual Report 2007/08*. Carbon Action Network. Retrieved on July 31st, 2012 from http://www.can.uk.net/downloads/root/regions/uk/documents/can_annual_report.pdf

Carr, D. (1970). Husserl's problematic concept of the life-world. *American Philosophical Quarterly*, 7(4), 331-339.

Carty, T., & Hislop, H. (2007). *Changing Places: Advancing Local Government Action on Climate Change*. London: Green Alliance.

Cass, L. R. (2007). Measuring the domestic salience of international environmental norms: climate change norms in American, German and British climate policy debates. In M. E. Pettenger (Ed.), *The Social Construction of Climate Change* (pp. 24-50). London: Ashgate Ltd..

Caterino, B., & Schram, S. (2006). Introduction: reframing the debate. In S. Schram & B. Caterino (Eds.), *Making Political Science Matter: Debating Knowledge Research, and Method* (pp. 1-16). New York: New York University Press.

Caufield, C. (1997). Swampy fever sweeps England. Retrieved November 7, 2011, from http://www.salon.com/1997/06/05/media_71/singleton/ Salon. (Archived at <http://www.webcitation.org/69Ebd7BP2>)

Centre for Sustainable Energy. (2005). *Locating Local Authority Agencies and Influence in Energy Governance in the UK*. Bristol: Centre for Sustainable Energy.

Chadwick, H. (2012, March 15). A Brief History of Climate Change in the East Midlands. *Helen Chadwick Consulting*. Retrieved March 20, 2012, from <http://helenchadwickconsulting.wordpress.com/2012/03/15/a-brief-history-of-climate-change-in-the-east-midlands/> (Archived at <http://www.webcitation.org/69j9uQrHM>)

Chapman, J. (2011, February 18). Revealed: Labour's crazy town hall "non-jobs", including the walking co-ordinator on £32,000-a-year and the roller disco coach. *Mail Online*. Retrieved August 6, 2012, from <http://www.dailymail.co.uk/news/article-1358144/Labours-3m-town-hall-jobs-bonanza-employed-deliver-frontline-services.html> (Archived at <http://www.webcitation.org/69is4rVBn>)

Chapman, J. (2012, September 5). Cameron's right hook for LibDems: Grayling and Paterson on the up as "Leftie" Clarke is demoted. *Mail Online*. Retrieved September 7, 2012, from <http://www.dailymail.co.uk/news/article-2198409/Camerons-right-hook-LibDems-Grayling-Paterson-Leftie-Clarke-demoted.html?ito=feeds-newsxml> (Archived at <http://www.webcitation.org/6AVCDfiwa>)

Charney, J. G., Arakawa, A., Baker, D. J., Bolin, B., Dickinson, R. E., Goody, R. M., Leith, C. E., Stommel, H.M. & Wunsch, C.I. (1979). *Carbon Dioxide and Climate: A Scientific Assessment*. Washington D.C.: National Academy of Sciences.

Church, C., & Young, S. (2001). The United Kingdom: mainstreaming, mutating or expiring? In W. M. Laffertey (Ed.), *Sustainable Communities in Europe* (pp. 107-129). London: Earthscan Publications.

Clegg, S. (2006). The bounds of rationality. In S. Schram & B. Caterino (Eds.), *Making Political Science Matter: Debating Knowledge Research, and Method* (pp. 171-187). New York: New York University Press.

Climate Change Act 2008. (ch. 27). London: The Stationery Office.

Climate East Midlands (2009). *The Wrapper*, 1, p.1.

Climate East Midlands. (2011, March). *Climate East Midlands Skills Programme*. Retrieved June 2, 2012 from <http://www.climate-em.org.uk/images/uploads/Skills%20Fund%20flyer.pdf>

Climate Sock. (2010a). Dancing to the wrong tune. *Climate Sock*. Retrieved December 13, 2011, from <http://www.climatesock.com/2010/02/dancing-to-the-wrong-tune/#more-142> (Archived at <http://www.webcitation.org/69kEPclUn>)

Climate Sock. (2010b). Before we get carried away.... *Climate Sock*. Retrieved December 13, 2011, from <http://www.climatesock.com/2010/05/before-we-get-carried-away/#more-254> (Archived at <http://www.webcitation.org/69kETIVJq>)

Cohen, M., March, J. And Olsen, J. (1972). A garbage can model of organisational choice. *Administrative Science Quarterly*, 17, 1-25.

Cohen, S., Demeritt, D., Robinson, J., & Rothman, D. (1998). Climate change and sustainable development: towards dialogue. *Global Environmental Change*, 8(4), 341-371. doi: 10.1016/S0959-3780(98)00017-x

Colebatch, H. (2002). *Policy* (2nd edition). Buckingham: Open University Press.

Collier, U., & Löfstedt, R. E. (1997). Think globally, act locally? Local climate change and energy policies in Sweden and the UK. *Global environmental change*, 7(1), 25–40.

Collingwood, R. G. (1946). *The Idea of History*. Oxford: Clarendon Press.

Committee on Climate Change. (2008). *Building a Low-Carbon Economy – the UK's Contribution to Tackling Climate Change*. Norwich: The Stationery Office.

Committee on Climate Change. (2010). *The CRC Energy Efficiency Scheme - Advice to Government on the Second Phase*. London: Committee on Climate Change.

Committee on Climate Change. (2011a). *The Fourth Carbon Budget. Reducing emissions through the 2020s*. London: Committee on Climate Change.

Committee on Climate Change. (2011b). *Adapting to Climate Change in the UK: Measuring Progress*. London: Committee on Climate Change.

Committee on Climate Change. (2011c). *Household Energy Bills - Impacts of Meeting Carbon Budgets*. London: Committee on Climate Change.

Committee on Climate Change. (2012a). *How Local Authorities Can Reduce Emissions and Manage Climate Risk*. London: Committee on Climate Change.

Committee on Climate Change. (2012b). *Meeting Carbon Budgets - 2012 Progress Report to Parliament*. London: Committee on Climate Change.

Committee on Climate Change. (n.d.). *Climate Change Act*. Retrieved March 22, 2012, from <http://www.theccc.org.uk/about-the-ccc/climate-change-act> (Archived at <http://www.webcitation.org/69k1z5TXr>)

Comte, A. (1853). *The Positive Philosophy of Auguste Comte* (Vols. 1-2, Vol. 1). London: John Chapman.

Confederation of British Industry. (2007). *Climate Change: Everyone's Business*. London: CBI.

Confederation of British Industry. (2008, October 16). *CBI reaction to 80% carbon emissions target*. Retrieved from http://web.archive.org/web/20090130144929/http://climatechange.cbi.org.uk/press_release/00065/

Connelly, J., & Smith, G. (2003). *Politics and the Environment: From Theory to Practice* (2nd edition). London: Routledge.

Conservative Party. (2010). *Invitation to Join the Government of Britain. The Conservative Manifesto 2010*. London: Conservative Party.

Cooper, D. (1971). *The Cubist Epoch*. New York: Phaidon Press.

Cope, S. (1999). Globalisation, Europeanisation and management of the British state. In S. Horton & D. Farnham (Eds.), *Public Management in Britain* (pp.46-58). Basingstoke: Palgrave.

Cope, S. (2008). CASE (1+3) 2008 application "Delivering Climate Change Policy in the English Regions: Reducing Greenhouse Gas Emissions in the East Midlands." (Ref: NOTT_Cope_CASE2008)

Copping, J. (2011, April 10). "Non jobs" gravy train rolls on for councils. *The Telegraph*. Retrieved August 6, 2012, from <http://www.telegraph.co.uk/news/politics/8440079/Non-jobs-gravy-train-rolls-on-for-councils.html> (Archived at <http://www.webcitation.org/69inTgfee>)

Corbyn, Z. (2009, May 21). ESRC puts doctoral training in few hands. *Times Higher Education*. Retrieved June 15, 2012, from <http://www.timeshighereducation.co.uk/story.asp?storyCode=406615§ioncode=26> (Archived at <http://www.webcitation.org/68ZRUR2i>)

Corfee-Morlot, J., Cochran, I., Hallegatte, S., & Teasdale, P.-J. (2011). Multilevel risk governance and urban adaptation policy. *Climatic Change*, 104(1), 169-197. doi: 10.1007/s10584-010-9980-9

Cotton, B. (2011, November 24). New Audiences for Experimental Film. *visioneca*. Retrieved April 24, 2012, from <http://www.visioneca.com/2011/11/new-audiences-for-experimental-film.html> (Archived at <http://www.webcitation.org/679sjDNj7>)

Crozier, M. (1964). *The Bureaucratic Phenomenon. An Examination of Bureaucracy in Modern Organizations and its Cultural Setting in France*. Chicago: University of Chicago Press.

Daventry District Council Home Energy Conservation Scheme. (2011, October 3). *The Chill-Out Home Insulation Scheme*. Letter to residents.

Davies, J.S. (2009). The limits of joined-up government: towards a political analysis. *Public Administration*, 87(1), 80-96.

Davies, L. (2012, May 3). Energy conference protesters accuse police of heavy-handed tactics. *the Guardian*. Retrieved July 31, 2012, from <http://www.guardian.co.uk/uk/2012/may/03/energy-conference-protesters-accuse-police> (Archived at <http://www.webcitation.org/69ZhxXjc3>)

de Castella, T. (2011, February 23). Just what is a “non-job”? *BBC*. Retrieved August 6, 2012, from <http://www.bbc.co.uk/news/magazine-12549785> (Archived at <http://www.webcitation.org/69iqDQczl>)

Dearlove, J. (1973). *The Politics of Policy in Local Government: The Making and Maintenance of Public Policy in the Royal Borough of Kensington and Chelsea*. Cambridge: Cambridge University Press.

Deben, Lord, Kennedy, D., King, J., Fankhauser, S., Hoskins, B., Krebs, Lord, May, Lord and Skea, J. (2012, September 13). *The need for a carbon intensity target in the power sector*. Letter to Rt Hon Edward Davey MP.

Demeritt, D. (2001). The construction of global warming and the politics of science. *Annals of the Association of American Geographers*, 91(2), 307-337. doi: 10.1111/0004-5608.00245

Demeritt, D. (2006). Science studies, climate change and the prospects for constructivist critique. *Economy and Society*, 35(3), 453-479. doi: 10.1080/03085140600845024

Demeritt, D., & Langdon, D. (2004). The UK Climate Change Programme and communication with local authorities. *Global Environmental Change*, 14(4), 325-336. doi: 10.1016/j.gloenvcha.2004.06.003

Department for Business Innovation and Skills. (2012). *Regional Development Agency closure*. Retrieved June 12, 2012, from <http://webarchive.nationalarchives.gov.uk/20120302091214/http://www.bis.gov.uk/policies/economic-development/englands-regional-development-agencies> (Archived at <http://www.webcitation.org/68MxA0gN>)

Department for Communities and Local Government. (2007). *Negotiating New Local Area Agreements*. Wetherby: DCLG.

Department for Communities and Local Government. (2008). *National Indicators for Local Authorities and Local Authority Partnerships: Handbook of Definitions*. London: DCLG.

Department for Communities and Local Government. (2011a). *Local Government Financial Statistics England No.21*. London: DCLG

Department for Communities and Local Government. (2011b). *List of statutory duties - DCLG owned (revised 30 June 2011)*. Retrieved August 10, 2012 from <http://www.communities.gov.uk/documents/localgovernment/xls/18927821.xls> (Archived at <http://bit.ly/DCLGstatdutiesDCLG>)

Department for Communities and Local Government. (2011c). *List of statutory duties - other government departments (revised 30 June 2011)*. Retrieved August 20, 2012 from <http://www.communities.gov.uk/documents/localgovernment/xls/18927851.xls> (Archived at <http://bit.ly/DCLGstatdutiesOTHERGOV>)

Department for Communities and Local Government & Local Government Association. (2008). *National Improvement and Efficiency Partnership*. Wetherby: DCLG.

Department for Environment, Food and Rural Affairs. (2006a). *The United Kingdom's Initial Report under the Kyoto Protocol*. London: DCLG.

Department for Environment, Food and Rural Affairs. (2006b). *Climate Change: the UK Programme. United Kingdom's Second Report Under the Framework Convention on Climate Change*. London: DEFRA.

Department for Environment, Food and Rural Affairs. (2008a, March 11). *£4 million to help local authorities fight climate change (ref 77/08)*. Retrieved March 23, 2012, from <http://webarchive.nationalarchives.gov.uk/20080520175914/http://defra.gov.uk/news/2008/080311b.htm>

Department for Environment, Food and Rural Affairs. (2008b). *Local Authority CO2 Emissions Estimates 2006: Methodology Summary*. London: DEFRA.

Department for Environment, Food and Rural Affairs. (2009). *Sustainable Development Indicators in Your Pocket 2009*. London: DEFRA.

Department for Trade and Industry. (2003). *Energy White Paper: Our Energy Future - Creating a Low Carbon Economy* (No. Cm 5761). Norwich: The Stationery Office.

Department for Trade and Industry. (2007). *Meeting the Energy Challenge: a White Paper on Energy*. Norwich: The Stationery Office.

Department of Energy and Climate Change (2009). *The UK's Fifth National Communication under the United Nations Framework Convention on Climate Change*. London: DECC.

Department of Energy and Climate Change. (2010a). CRC Energy Efficiency Scheme - What is the CRC Energy Efficiency Scheme? Retrieved March 23, 2012, from http://webarchive.nationalarchives.gov.uk/20100404191632/http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/crc/crc.aspx

Department of Energy and Climate Change (2010b). *Estimated Impacts of Energy and Climate Change Policies on Energy Prices and Bills*. London: DECC.

Department of Energy and Climate Change (2011a). *2009 National Statistics on Carbon Dioxide Emissions at Local Authority and Regional Level. Frequently Asked Questions*. London: DECC.

Department of Energy and Climate Change (2011b). *Annual Report on Fuel Poverty Statistics 2011*. London: DECC.

Department of Energy and Climate Change (2011c). *Sub-regional Fuel Poverty Levels, England 2009*. Retrieved January 27, 2011 from http://www.decc.gov.uk/en/content/cms/statistics/fuelpov_stats/regional/regional.aspx (Archived at <http://bit.ly/DECCfuelpoverty2011>)

Department of Energy and Climate Change (2011d). *Extra Help Where it is Needed: a New Energy Company Obligation*. London: DECC.

Department of Energy and Climate Change (2012a). *The Green Deal and Energy Company Obligation: Government Response to the November 2011 Consultation*. London: DECC.

Department of Energy and Climate Change (2012b). *Guidance to English Energy Conservation Authorities Issued Pursuant to the Home Energy Conservation Act 1995*. London: DECC.

Department of Energy and Climate Change. (n.d.). *Climate Change Act 2008*. Retrieved March 21, 2012, from http://www.decc.gov.uk/en/content/cms/legislation/en/content/cms/legislation/cc_act_08/cc_act_08.aspx (Archived at <http://bit.ly/DECCclimatechangeact2008>)

Department of Energy and Climate Change & Local Government Group (2011). *Memorandum of Understanding Between the LG Group and the Department of Energy and Climate Change*. London: DECC.

Department of the Environment. (1990). *This Common Inheritance: Britain's Environmental Strategy*. London: HM Stationery Office.

Department of the Environment. (1994). *Climate change: the UK Programme. United Kingdom's Report Under the Framework Convention on Climate Change*. London: HM Stationery Office.

Department of the Environment. (1997). *Climate Change: the UK Programme. United Kingdom's Second Report Under the Framework Convention on Climate Change*. London: HM Stationery Office.

Derby City Council. (2010, March 10). *Derby's City Partnership Agreement: 2008 - 2011*.

Derbyshire County Council. (2010, March). *Working Together For A Better Derbyshire: Derbyshire Local Area Agreement 2008-2011*.

Devine-Wright, P., Fleming, P. D., & Chadwick, H. (2001). Role of social capital in advancing regional sustainable development. *Impact Assessment and Project Appraisal*, 19(2), 161-167. doi:10.3152/147154601781767096

Dewey, J. (1927). *The Public and its Problems*. New York: Holt.

Dowding, K. (2001). There must be an end to confusion: policy networks, intellectual fatigue, and the need for political science methods courses in British universities. *Political Studies*, 49(1), 89-105

Dowding, K. & James, O (2004). Analysing bureau-shaping models: comments on Marsh, Smith and Richards. *British Journal of Political Science*, 34 (1), 183-189.

Downs, A. (1972). Up and down with ecology - the "issue-attention cycle." *Public Interest*, 28, 38-50.

Druckman, A., Chitnis, M., Sorrell, S., & Jackson, T. (2011). Missing carbon reductions? Exploring rebound and backfire effects in UK households. *Energy Policy*, 39(6), 3572-3581. doi:10.1016/j.enpol.2011.03.058

Dryzek, J. S. (1993). Policy analysis and planning: from science to argument. In F. Fischer & J. Forester (Eds.), *The Argumentative Turn in Policy Analysis and Planning* (pp. 213-232). Durham: Duke University Press.

Dunleavy, P. (1991). *Democracy, Bureaucracy and Public Choice*. Hemel Hempstead: Harvester Wheatsheaf.

Durose, C. (2007). Beyond “street level bureaucrats”: re-interpreting the role of front line public sector workers. *Critical Policy Studies*, 1(2), 217-234. doi: 10.1080/19460171.2007.9518520

Durose, C. (2009). Front-line workers and ‘local knowledge’: neighbourhood stories in contemporary local governance. *Public Administration*, 87(1), 35-49. doi: 10.1111/j.1467-9299.2008.01737.x

Eadson, W. (2008). Climate change mitigation in Local Area Agreements: an enforced lack of ambition? *People, Place & Policy Online*, 2(3), 140-150. doi:10.3351/ppp.0002.0003.0004

East Midlands Development Agency. (2006). *A Flourishing Region: Regional Economic Strategy for the East Midlands 2006-2020*. Nottingham: EMDA.

East Midlands Improvement and Efficiency Partnership. (2009). *East Midlands Improvement and Efficiency Partnership Annual Report 2008-09*. Nottingham: EMIEP.

East Midlands Improvement and Efficiency Partnership. (2010, May 10). EMIEP - Key Achievements. Retrieved March 23, 2012, from <http://www.eastmidlandsiep.gov.uk/latest-news/1/468/em-iep-key-achievements/> (Archived at <http://bit.ly/EMIEP2010>)

East Midlands Regional Assembly. (2002). *Regional Environment Strategy. Part One: Objectives and Policies for the East Midlands Environment*. Melton Mowbray: EMRA.

East Midlands Regional Assembly. (2003a). *Regional Environment Strategy. Part Two: Actions for the East Midlands Environment*. Melton Mowbray: EMRA.

East Midlands Regional Assembly. (2003b, September 26). *Meeting of the Promoting Sustainable Development Group: Climate Change Steering Group*

East Midlands Regional Assembly. (2004). *The Regional Energy Strategy (Part 1)*. Melton Mowbray: EMRA.

East Midlands Regional Assembly. (2006, June 23). *Meeting of the Promoting Sustainable Development Group: Climate Change Steering Group*

East Midlands Regional Assembly. (2007). *Towards a Programme of Action on Climate Change in the East Midlands*. Melton Mowbray: EMRA.

East Midlands Regional Climate Change Partnership (2009). *Tackling Climate Change in the East Midlands. Regional Programme of Action, 2009-2011*. Government Office for the East Midlands, Environment Agency, East Midlands Development Agency, East Midlands Regional Assembly.

East Midlands Sustainable Development Roundtable. (2000). *The Potential Impacts of Climate Change in the East Midlands*. Solihull: Environment Agency.

Eastin, J., Grundmann, R., & Prakash, A. (2011). The two limits debates: "Limits to Growth" and climate change. *Futures*, 43(1), 16-26. doi:10.1016/j.futures.2010.03.001

Economist, The. (2013, March 30). A sensitive matter. *The Economist*. Retrieved March 28, 2013, from <http://www.economist.com/news/science-and-technology/21574461-climate-may-be-heating-up-less-response-greenhouse-gas-emissions> (Archived at <http://www.webcitation.org/6FxlX2z3f>)

Edelman, M. J. (1964). *The Symbolic Uses of Politics*. Urbana: University of Illinois Press.

Ekins, P., & Etheridge, B. (2006). The environmental and economic impacts of the UK climate change agreements. *Energy Policy*, 34(15), 2071–2086. doi: 10.1016/j.enpol.2005.01.008

Ekins, P. & Lockwood, M. (2011). *Tackling Fuel Poverty During the Transition to a Low-Carbon Economy*. York: Joseph Rowntree Foundation.

ENDS Report. (2010, September 22). *Britain risks exceeding carbon budget by 2015*. Retrieved April 11, 2012, from <http://www.endsreport.com/index.cfm?go=24959> (Archived at <http://bit.ly/ENDSreport2010>)

Environment Agency. (2010). *The CRC Energy Efficiency Scheme User Guide*. London: Environment Agency.

Environment Agency. (2011). *2010/2011 CRC Performance League Table*. Retrieved March 12, 2012, from <http://crc.environment-agency.gov.uk/pplt/web/plt/public/2010-11/CRCPerformanceLeagueTable20102011>

Evans-Pritchard, A. (2012, August 26). Peak cheap oil is an incontrovertible fact. *Telegraph.co.uk*. Retrieved September 10, 2012, from http://www.telegraph.co.uk/finance/comment/ambroseevans_pritchard/9500667/Peak-cheap-oil-is-an-incontrovertible-fact.html (Archived at <http://www.webcitation.org/6AZW8bMyY>)

Exworthy, M., & Powell, M. (2004). Big windows and little windows: implementation in the "congested state." *Public Administration*, 82(2), 263-281. doi:10.1111/j.0033-3298.2004.00394.x

Fenger, J. (2009). Air pollution in the last 50 years. From local to global. *Atmospheric Environment*, 43(1), 13–22.

Finlayson, A., Bevir, M., Rhodes, R.A.W., Dowding, K., & Hay, C. (2004). The interpretive approach in political science: a symposium. *The British Journal of Politics & International Relations*, 6(2), 129–164. doi: 10.1111/j.1467-856X.2004.t01-6-00131.x

Fischer, F., & Forester, J. (Eds.). (1993). *The Argumentative Turn in Public Policy and Planning*. Durham: Duke University Press.

Flyvbjerg, B. (2006a). A perestroika straw man answers back: David Laitin and phronetic political science. In S. Schram & B. Caterino (Eds.), *Making Political Science Matter: Debating Knowledge Research, and Method* (pp. 56-85). New York: New York University Press.

Flyvbjerg, B. (2006b). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245. doi:10.1177/1077800405284363

Flyvbjerg, B., Landman, T., & Schram, S. (2012). Introduction: new dimensions in social science. In B. Flyvbjerg, T. Landman, & S. Schram (Eds.), *Real Social Science: Applied Phronesis* (pp. 1-14). Cambridge: Cambridge University Press.

Fontana, A. & Frey, J.H. (2005). The interview: from neutral stance to political involvement. From N.K. Denzin & Y.S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (pp.695-727). Thousand Oaks, California: Sage.

Footitt, A., Wood, R., & Turnpenny, J. (2007). *Review of Local Government Action on Climate Change*. Norwich: Tyndall Centre for Climate Change Research.

Fox, C. J., & Miller, H.T. (1996). *Postmodern Public Administration: Toward Discourse*. Thousand Oaks, Calif: Sage Publications.

Friends of The Earth. (1989). *Environmental Charter for Local Government*. London: Friends of the Earth.

Friends of the Earth. (2008). *Climate Change Act passed*. Retrieved May 23, 2012, from http://foe.org.uk/news/climate_change_act_16069.html (Archived at <http://www.webcitation.org/67sJN6u67>)

Friends of the Earth (2010). *Briefing: Local Carbon Budgets*. London: Friends of the Earth

Gains, F. (2009). Narratives and dilemmas of local bureaucratic elites: Whitehall at the coal face? *Public Administration*, 87(1), 50-64. doi:10.1111/j.1467-9299.2008.01741.x

Gains, F., & Clarke, K. (2007). Constructing delivery: implementation as an interpretive process. *Critical Policy Analysis*, 1(2), 133-138.

Gearty, M. (2007). *The Nottingham Declaration: Symbols, Strategy and Confidence*. Retrieved August 7th, 2012 from http://people.bath.ac.uk/mnspwr/doc_theses_links/pdf/dt_mg_APPDXGNott_case_issue_vws_A5.pdf

Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.

Gerth, H. H., & Wright Mills, C. (1948). Introduction: the man and his work. In H. H. Gerth & C. Wright Mills (Eds.), *From Max Weber: Essays in Sociology* (pp. 3-76). London: Routledge & Kegan Paul.

Geyer, R. (2012). Can complexity move UK policy beyond “evidence-based policy making” and the “audit culture”? Applying a “complexity cascade” to education and health policy. *Political Studies*, 60(1), 20-43. doi:10.1111/j.1467-9248.2011.00903.x

Gibbs, D. (2000). Ecological modernisation, regional economic development and regional development agencies. *Geoforum*, 31(1), 9-19. doi:10.1016/S0016-7185(99)00040-8

Gibbs, D., & Jonas, A. E. G. (2001). Rescaling and regional governance: the English Regional Development Agencies and the environment. *Environment and Planning C*, 19(2), 269-288.

Glachant, M. & de Muizon, G. (2006). *Climate Change Agreement: a successful policy experience?* Retrieved August 16, 2007 from <http://www.cerna.ensmp.fr/Documents/MG-GM-ClimateChangeAgreements.pdf>

Gladwin, T. N., Kennelly, J. J., & Krause, T. S. (1995). Shifting paradigms for sustainable development: implications for management theory and research. *Academy of Management Review*, 874-907.

Glynos, J., & Howarth, D. (2007). *Logics of Critical Explanation in Social and Political Theory*. Abingdon: Routledge.

Goodwin, J., King, K., Passant, N., Sturman, J., & Li, Y. (2005). Local and Regional CO2 Emissions Estimates for 2003 (Report to DEFRA. No.AEAT/ENV/R/2036). London: DEFRA.

Gordon, R., Kornberger, M., & Clegg, S. R. (2009). Power, rationality and legitimacy in public organizations. *Public Administration*, 87(1), 15-34. doi:10.1111/j.1467-9299.2008.01743.x

Gough, I. & Marden, S. (2011). *Fiscal Costs of Climate Mitigation Programmes in the UK: a Challenge for Social Policy?* CASE Papers, CASE/145. London: Centre for Analysis of Social Exclusion.

Green Alliance (2011). *Is Localism Delivering for Climate Change?* London: Green Alliance.

Green, D. (1999, June 6). Better than SFX. *the Guardian*. Retrieved April 24, 2012 from <http://www.guardian.co.uk/film/1999/jun/05/features2> (Archived at <http://www.webcitation.org/679yR25qZ>)

Greener, J. (2011). *The Bottom Line: An Ethnography of For-Profit Elderly Residential Care* (Doctor of Philosophy). University of Nottingham, Nottingham.

Griggs, S., & Howarth, D. (2012). Phronesis and critical policy analysis: Heathrow's "third runway" and the politics of sustainable aviation in the United Kingdom. In B. Flyvbjerg, T. Landman, & S. Schram (Eds.), *Real Social Science: Applied Phronesis* (pp. 167-203). Cambridge: Cambridge University Press.

Gris, J. (1914). *Breakfast* [gouache, oil, and crayon on cut-and-pasted printed paper on canvas with oil and crayon]. Retrieved May 23, 2012 from http://www.moma.org/collection_images/resized/655/w500h420/CRI_221655.jpg

Grundmann, R. (2012). "Climategate" and the scientific ethos. *Science, Technology & Human Values*, published online April 23, 2012. doi:10.1177/0162243911432318

Guba, E. G. (Ed.). (1990). *The Paradigm Dialog*. Newbury Park: Sage Publications.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth Generation Evaluation*. Newbury Park: Sage Publications.

Hajer, M. (1993). Discourse coalitions and the institutionalization of practice: the case of acid rain in Great Britain. In (Eds.) F. Fisher & J. Forester, *The Argumentative Turn in Policy Analysis and Planning*, pp.43-76. Durham: Duke University Press.

Hajer, M. (1995). *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Clarendon Press, Oxford.

Hallsworth, M., Parker, S., & Rutter, J. (2011). *Policy Making in the Real World: Evidence and Analysis*. London: Institute for Government.

Hammersley, M. (1992). *What's Wrong With Ethnography?: Methodological Explorations*. London: Routledge

Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in Practice* (3rd edition.) Abingdon: Taylor & Francis.

Hansard HC Deb 02 vol 152 col 15 (2 May 1989). Electronic version retrieved March 28, 2012 from <http://hansard.millbanksystems.com/commons/1989/may/02/engagements> (Archived at <http://www.webcitation.org/6FxQ0leoz>)

Hansen, J., Johnson, D., Lacis, A., Lebedeff, S., Lee, P., Rind, D., & Russell, G. (1981). Climate impact of increasing atmospheric carbon dioxide. *Science*, 213(4511), 957–966.

Hardman, I. (2012, September 5). The exciting new sub-committee on the block. *Spectator Coffee House*. Retrieved September 7, 2012, from <http://blogs.spectator.co.uk/coffeehouse/2012/09/the-exciting-new-sub-committee-on-the-block/> (Archived at <http://www.webcitation.org/6AVBwWMYb>)

Harrabin, R. (2009, February 11). UK's CO2 plan "certain to fail." *BBC*. Retrieved June 18, 2012, from <http://news.bbc.co.uk/1/hi/sci/tech/7881868.stm> (Archived at <http://www.webcitation.org/68VkGGxs3>)

Hatch, M. J., & Yanow, D. (2008). Methodology by metaphor: ways of seeing in painting and research. *Organization Studies*, 29(1), 23–44. doi:10.1177/0170840607086635

Haverland, M., & Yanow, D. (2012). A hitchhiker's guide to the public administration research universe: surviving conversations on methodologies and methods. *Public Administration Review*, 72(3), 401–408. doi:10.1111/j.1540-6210.2012.02524.x

Hawkesworth, M. (2006a). Contending conceptions of science and politics. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (pp. 27–49). Armonk: M.E. Sharpe.

Hawkesworth, M. (2006b). Contesting the terrain: Flyvbjerg on facts, values, knowledge, and power. In S. Schram & B. Caterino (Eds.), *Making Political Science Matter: Debating Knowledge Research, and Method* (pp. 152–170). New York: New York University Press.

Hay, C. (2007). *Why We Hate Politics*. Cambridge: Polity Press.

Hay, C. (2010). Ideas and the construction of interest. In D. Béland & R. H. Cox (Eds.), *Ideas and Politics in Social Science Research* (pp. 65–82). Oxford: Oxford University Press.

Hay, C. (2011). Interpreting interpretivism interpreting interpretations: the new hermeneutics of public administration. *Public Administration*, 89(1), 167–182. doi:10.1111/j.1467-9299.2011.01907.x

Hayman, A. (2010, December 16). The end of the beginning. *Local Government Chronicle: Fit For Purpose*. Retrieved January 20, 2012, from <http://www.lgcplus.com/>

the-end-of-the-beginning/5023333.blog# (Archived at <http://www.webcitation.org/6A3gSNuif>)

Held, D., McGrew, A., Goldblatt, D. & Perraton, J. (1999). *Global Transformations: Politics, Economics and Culture*. Oxford: Blackwell.

Helm, D., Hepburn, C., & Mash, R. (2003). Credible carbon policy. *Oxford Review of Economic Policy*, 19(3), 438-450. doi:10.1093/oxrep/19.3.438

Heppell, T. (2002). The ideological composition of the parliamentary Conservative party 1992–97. *The British Journal of Politics & International Relations*, 4(2), 299–324. doi:10.1111/1467-856X.t01-1-00006

Heyman, B., Harrington, B., Heyman, A., & The National Energy Action Research. (2011). A randomised controlled trial of an energy efficiency intervention for families living in fuel poverty. *Housing Studies*, 26(1), 117-132. doi: 10.1080/02673037.2010.512787

Hill, H. C. (2003). Understanding implementation: street-level bureaucrats' resources for reform. *Journal of Public Administration Research and Theory*, 13(3), 265-282. doi: 10.1093/jopart/mug024

Hill, M. (1997). Implementation theory: yesterday's issue? *Policy & Politics*, 25(4), 375-385. doi:10.1332/030557397782453165

Hill, M. & Hupe, P. (2003). The multi-layer problem in implementation research. *Public Management Review*, 5(4), 471-90. doi: 10.1080/1471903032000178545

Hill, M. & Hupe, P. (2009). *Implementing Public Policy*, (2nd edition). London: Sage.

HM Government (2006). *Climate Change. The UK Programme 2006* (CM6764). Norwich: The Stationery Office.

HM Government. (2009). *The UK Low carbon transition plan: national strategy for climate and energy*. London: The Stationery Office.

HM Government. (2010). *The Coalition: Our Programme for Government*. London: Cabinet Office.

HM Government. (2011). *The Carbon Plan: Delivering Our Low Carbon Future*. London: DECC.

HM Treasury. (2007a). *Review of Sub-National Economic Development and Regeneration*. Norwich: HM Stationery Office.

HM Treasury. (2007b). *Public Service Agreements*. Retrieved March 14, 2012, from http://webarchive.nationalarchives.gov.uk/+http://www.hm-treasury.gov.uk/pbr_csr07_psaindex.htm

HM Treasury. (2007c). *PSA Delivery Agreement 27: Lead the Global Effort to Avoid Dangerous Climate Change*. Norwich: HM Stationery Office.

HM Treasury. (2007d). *PSA Delivery Agreement 28: Secure a Healthy Natural Environment for Today and the Future*. Norwich: HM Stationery Office.

HM Treasury (2010). *Spending Review 2010 (Cm7942)*. London: The Stationery Office.

Hoggett, P. (1996). New modes of control in the public service. *Public Administration*, 74(1), 9-32. doi: 10.1111/j.1467-9299.1996.tb00855.x

Home Energy Conservation Act 1995. (ch. 10). London: HM Stationery Office.

Hood, C. (1976). *The Limits to Administration*. London: John Wiley

Hood, C. (2006). Gaming in targetworld: the targets approach to managing British public services. *Public Administration Review*, 66(4), 515–521. doi: 10.1111/j.1540-6210.2006.00612.x

Hope, C. (2010). Ministers tell chief executive of Local Government Association to cut his £302,000 total pay package. *The Telegraph*. Retrieved February 21, 2012, from <http://www.telegraph.co.uk/news/8140777/Ministers-tell-chief-executive-of-Local-Government-Association-to-cut-his-302000-total-pay-package.html> (Archived at <http://www.webcitation.org/69j9qEzp2>)

House of Commons Environmental Audit Committee (2007a). *The EU Emissions Trading Scheme: Lessons for the Future*. London: The Stationery Office.

House of Commons Environmental Audit Committee. (2007b). *Beyond Stern: From the Climate Change Programme Review to the Draft Climate Change Bill (No. HC460)*. London: The Stationery Office.

House of Commons Environmental Audit Committee. (2008a). *Climate Change and Local, Regional and Devolved Government (No. HC225)*. London: The Stationery Office.

House of Commons Environmental Audit Committee. (2008b). *Reducing Carbon Emissions from UK Business: The role of the Climate Change Levy and Agreements (No. HC 354)*. London: The Stationery Office.

House of Commons East Midlands Regional Committee. (2009). *East Midlands Development Agency and the Regional Economic Strategy* (No. HC 406). London: The Stationery Office.

House of Commons Environmental Audit Committee. (2011). *Carbon Budgets: Government Response to the Committee's Seventh Report of Session 2010–2012* (No. HC 1720). London: The Stationery Office.

Howarth, D., & Griggs, S. (2006). Metaphor, catachresis and equivalence: the rhetoric of freedom to fly in the struggle over aviation policy in the United Kingdom. *Policy and Society*, 25(2), 23–46.

Huhne, C. (2010). Speech at the LGA Annual Conference in Bournemouth, 7 July 2010. Retrieved February 23, 2012, from <http://www.decc.gov.uk/en/content/cms/news/lgaspeech/lgaspeech.aspx> (Archived at <http://www.webcitation.org/69j9f8eGl>)

Hulme, M. (2008). The conquering of climate: discourses of fear and their dissolution. *The Geographical Journal*, 174(1), 5–16.

Hulme, M. (2009). *Why We Disagree About Climate Change. Understanding Controversy, Inaction and Opportunity*. Cambridge: Cambridge University Press.

Hulme, M., & Turnpenny, J. (2004). Understanding and managing climate change: the UK experience. *The Geographical Journal*, 170(2), 105–115. doi: 10.1111/j.0016-7398.2004.00112.x

Husserl, E. (1913/1931). *Ideas. General Introduction to Pure Phenomenology*. (W. R. Boyce Gibson, Trans.). London: George Allen & Unwin.

Husserl, E. (1970). *Crisis of European Sciences and Transcendental Phenomenology*. (D. Carr, Trans.) Evanston, Illinois: Northwestern University Press.

Huxley, A. (1929). Wordsworth in the Tropics. *Do What You Will: Essays* (pp. 113–129). London: Chatto & Windus.

International Energy Agency. (2011). *World Energy Outlook. Executive Summary*. Paris: International Energy Agency.

International Union for Conservation of Nature and Natural Resources. (1980). *World Conservation Strategy: Living Resource Conservation for Sustainable Development*. Gland, Switzerland: International Union for Conservation of Nature and Natural Resources.

Jachtenfuchs, M. (1996). *International Policy-Making as a Learning Process?* Aldershot: Avebury.

Jackson, P. (1988). The management of performance in the public sector. *Public Money & Management*, 8(4), 11-16.

Jackson, T. (2009). *Prosperity Without Growth? The Transition to a Sustainable Economy*. London: Sustainable Development Commission.

Jaspal, R., & Nerlich, B. (2012). When climate science became climate politics: British media representations of climate change in 1988. *Public Understanding of Science*. Published online April 11, 2012. doi:10.1177/0963662512440219

Jay, X. (1991). A charter for the environment. *Science of The Total Environment*, 106(1-2), 175-181. doi:10.1016/0048-9697(91)90031-9

Jenkins, D., Middlemiss, L., & Pharoah, R. (2011). A study of fuel poverty and low-carbon synergies in social housing. Retrieved August 2, 2012 from [http://www.sbe.hw.ac.uk/documents/FuelPovertyReport220711\(1\).pdf](http://www.sbe.hw.ac.uk/documents/FuelPovertyReport220711(1).pdf)

Johnston, A. (2011, August 25). Andy Johnston's response to the Nottingham Declaration consultation. *Local Energy*. Retrieved August 2, 2012, from <http://www.localenergy.org.uk/2011/08/andy-johnstons-personal-response-to-the-nottingham-declaration-consultation/> (Archived at <http://www.webcitation.org/69j9f8eGI>)

Joint Public Issues Team. (2008). *The Climate Change Bill comes to the House of Commons*. Methodist Church House.

Jones, A. (2008). Climate change, regional policy and the Sub-National Review – time to count the cost. *Local Economy*, 23(1), 1-5. doi:10.1080/02690940801906700

Jones, G., Stewart, J., & Travers, T. (2011). Genuine localism - the way out of the impasse. In M. O. Oyarce (Ed.), *Redefining Local Government* (pp. 7-21). London: CIPFA.

Jordan, A. (2002). Decarbonising the UK: a 'radical agenda' from the Cabinet Office. *The Political Quarterly*, 73(3), 344-352. doi 10.1111/1467-923X.00475

Jordan, A., & Rayner, T. (2010). Can the climate change consensus hold up? *Political Insight*, (September), 70-71.

Jordan, A., Wurzel, R. K. W., Zito, R., & Brückner, L. (2003). Policy innovation or "muddling through"? "New" environmental policy instruments in the United Kingdom. *Environmental Politics*, 12(1), 179-200. doi:10.1080/09644010412331308344a

Jowit, J. (2012, February 28). David Cameron meets Tory MPs opposed to windfarm plans. *the Guardian*. Retrieved February 28, 2012, from <http://www.guardian.co.uk/environment/2012/feb/28/cameron-meets-tory-mps-windfarm> (Archived at <http://www.webcitation.org/6ANriwe57>)

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 47(2), 263–291. doi: 10.2307/1914185

Keeling, R. (2011, April 6). Counting the non-jobs. *Local Government Chronicle*. Retrieved August 6, 2012, from <http://www.lgcplus.com/briefings/people/hr/counting-the-non-jobs/5028299.blog> (Archived at <http://www.webcitation.org/69iqcEfNm>)

Kellogg, W. (1987). Mankind's impact on climate: the evolution of an awareness. *Climatic Change*, 10(2), 113–136. doi:10.1007/BF00140251

Kertzer, D. I. (1988). *Ritual, Politics, and Power*. New Haven: Yale University Press.

Keskitalo, E. C. H. (2010). Climate change adaptation in the United Kingdom: England and South-East England. In E. C. H. Keskitalo (Ed.), *Developing Adaptation Policy and Practice in Europe: Multi-level Governance of Climate Change* (pp. 97–148). Springer.

Keswick, T., Lord Leach of Fairford, Knox, T., Littlewood, M., Montgomerie, T., & Sinclair, M. (2012, July 9). *Policies for growth*. Letter to Daily Telegraph. Retrieved from <http://www.telegraph.co.uk/comment/letters/9385113/Primary-school-grammar-wars-metalinguistics-vs-the-naming-of-parts.html> (Archived at <http://www.webcitation.org/6FxPjcQIK>)

King, D.A. (2004). Climate change science: adapt, mitigate, or ignore? *Science*, 303 (5655), 176–177. doi:10.1126/science.1094329

King, K., Goodwin, J., Passant, N., Brophy, N., & Tsagatakis, I. (2008). *Local and Regional CO2 Emissions Estimates for 2005-2006 for the UK* (Report to DEFRA. No.AEAT/ENV/R/2661). London: DEFRA.

King, K., Passant, N., Li, Y., Goodwin, J., & Jackson, J. (2006). *Local and Regional CO2 Emissions Estimates for 2004 for the UK* (Report to DEFRA. No.AEAT/ENV/R/2297). London: DEFRA.

Kingdon, J.W. (1984). *Agendas, Alternatives and Public Policies*. s.n.: Harper Collins.

Klijn, E. H. (2008). Policy and implementation networks: managing complex interactions. In S. Cropper, M. Ebers, C. Huxham, & P. Smith Ring (Eds.), *The Oxford Handbook of Inter-Organizational Relations* (pp. 118–146). Oxford: Oxford University Press.

Klijn, E. H., & Koppenjan, J. F. M. (2000). Public management and policy networks. *Public Management: An International Journal of Research and Theory*, 2(2), 135–158. doi: 10.1080/14719030000000007

Koger, S. M., & Winter, D. D. N. (2010). *The Psychology of Environmental Problems: Psychology for Sustainability* (3rd edition). New York: Psychology Press.

Kok, M. T. J., & de Coninck, H. C. (2007). Widening the scope of policies to address climate change: directions for mainstreaming. *Environmental Science & Policy*, 10(7-8), 587–599. doi: 10.1016/j.envsci.2007.07.003

Koteyko, N. (2011). Managing carbon emissions: a discursive presentation of “market-driven sustainability” in the British media. *Language & Communication*. doi:10.1016/j.langcom.2011.11.001

Koteyko, N., Thelwall, M., & Nerlich, B. (2010). From carbon markets to carbon morality: creative compounds as framing devices in online discourses on climate change mitigation. *Science Communication*, 32(1), 25-54. doi: 10.1177/1075547009340421

Krizsán, A., & Zentai, V. (2006). Gender equality policy or gender mainstreaming? *Policy Studies*, 27(2), 135-151. doi:10.1080/01442870600722912

Kuhn, T. (1970). *The Structure of Scientific Revolutions* (2nd edition). Chicago: The University of Chicago Press.

Laffertey, W. M. (2001). Introduction. In W. M. Laffertey (Ed.), *Sustainable Communities in Europe* (pp. 1-14). London: Earthscan Publications.

Laitin, D. D. (2006). The Perestroika challenge to social science. In S. Schram & B. Caterino (Eds.), *Making Political Science Matter: Debating Knowledge Research, and Method* (pp. 33-55). New York: New York University Press.

Laudan, L. (1971). Towards a reassessment of Comte’s “Méthode Positive.” *Philosophy of Science*, 38(1), 35-53. doi: 10.2307/186760

Leach, S., & Wilson, D. (2002). Rethinking local political leadership. *Public Administration*, 80(4), 665–689.

Leftly, M. (2012, March 8). Cable says green tax must be cut to save companies. *The Independent*. Retrieved from <http://www.independent.co.uk/news/business/news/cable-says-green-tax-must-be-cut-to-save-companies-7544698.html> (Archived at <http://www.webcitation.org/6FxPdF8sE>)

Leicester City Council. (n.d.). *Insulation*. Retrieved August 2, 2012, from <http://www.leicester.gov.uk/your-council-services/ep/energy-efficiency/energy/insulation/> (Archived at <http://www.webcitation.org/69cQWSLEy>)

Leicestershire Together. (2010, March). *Local Area Agreement 2008-2011*.

- Leiserowitz, A., Maibach, E. W., Roser-Renouf, C., Smith, N., & Dawson, E. (2010). Climategate, public opinion, and the loss of trust. Working paper, Yale Project on Climate Change Communication. Retrieved August 2nd, 2012 from http://environment.yale.edu/climate/files/Climategate_Opinion_and_Loss_of_Trust_1.pdf
- Lele, S. M. (1991). Sustainable development: a critical review. *World Development*, 19 (6), 607–621.
- Lenzer, G. (1998). Introduction: Augustus Comte and Modern Positivism. In G. Lenzer (Ed.), *Auguste Comte and Positivism: The Essential Writings* (p. xxxi-lxxxii). New Brunswick: Transaction.
- Levett, R. (1998). Sustainability indicators - integrating quality of life and environmental protection. *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, 161(3), 291-302. doi: 10.1111/1467-985X.00109
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park: Sage Publications.
- Lincolnshire County Council. (2010, March). *Big County Big Skies Big Future. Lincolnshire's Local Area Agreement 2008-2011*.
- Lindblom, C. E. (1959). The science of “muddling through.” *Public Administration Review*, 79–88.
- Lipsky, M. (1980). *Street-Level Bureaucracy: Dilemmas of the Individual in Public Service*. New York: Russell Sage Foundation.
- Liverman, D. M. (2009). Conventions of climate change: constructions of danger and the dispossession of the atmosphere. *Journal of Historical Geography*, 35(2), 279–296.
- Local Democracy, Economic Development, and Construction Act 2009 (c.20). London: The Stationery Office.
- Local Government Act 2000*. (ch. 22). London: The Stationery Office
- Local Government Association (2007). *A Climate of Change*. London: Local Government Association.
- Local Government Association. (2012a). *Business Plan 2012-13: Supporting, Promoting and Improving Local Government*. London: Local Government Association.
- Local Government Association (2012b). *Environment and Housing Board*. Retrieved February 24, 2012, from <http://www.local.gov.uk/environment-and-housing-board> (Archived at <http://bit.ly/LGAenvironmenthousingboard>)

Local Government Association. (2012c). *Climate Local. Information Pack for Councils*. Local Government Association.

Local Government Chronicle (2010). *Give Councils Carbon Budgets - FoE*. Retrieved February 23, 2012, from <http://www.lgcplus.com/briefings/corporate-core/environment/give-councils-carbon-budgets-foe/5017691.article> (Archived at <http://bit.ly/LGCgivecouncilscarbonbudgets>)

Local Government Group (2010). *Local Government's Offer on Climate Change: Full Proposal*. London: Local Government Group.

Localism Act 2011. (ch.20). Norwich: The Stationery Office.

Lockwood, M. (2011). Up and down with climate change. *Political Climate*. Retrieved April 8, 2012 from <http://politicalclimate.net/2011/05/02/up-and-down-with-climate-change/> (Archived at <http://www.webcitation.org/6FxOV3RZp>)

Longstaff, R. (n.d.). Repeal the Climate Change Act - e-petition. *HM Government e-petitions*. Retrieved September 18, 2012, from <http://epetitions.direct.gov.uk/petitions/2035> (Archived at <http://www.webcitation.org/6AmRf0q6a>)

Lorenzoni, I., O'Riordan, T. & Pidgeon, N. (2008). Hot air and cold feet: the UK response to climate change. From H. Compston & I. Bailey (Eds.), *Turning Down the Heat*, pp.104-124. Basingstoke: Palgrave Macmillan.

Lowndes, V. & Pratchett, L. (2012). Local governance under the Coalition Government: austerity, localism and the 'Big Society'. *Local Government Studies*, 38(1) doi: 10.1080/03003930.2011.642949

Lowndes, V., & Skelcher, C. (1998). The dynamics of multi-organizational partnerships: an analysis of changing modes of governance. *Public Administration*, 76(2), 313-333.

MacCarthy, J., & Watterson, J. (2010). *Summary of differences between geographical coverages of reported GHG emissions* (Report to DECC No. ED45322). Didcot: AEA.

Macmillan, T. (2009). *Tim Macmillan Early Work 1980 - 1994*. Time-Slice Films. Retrieved April 23, 2012 from <http://vimeo.com/6165108> (Archived at <http://www.webcitation.org/679yl8gTE>)

Macnaghten, P., & Urry, J. (1998). *Contested Natures*. London: Sage Publications.

Majone, G. (1989). *Evidence, Argument, and Persuasion in the Policy Process*. New Haven: Yale University Press.

Manning, P. K. (1992). *Organizational Communication*. New York: Aldine de Gruyter.

- Marsh, D. (2008a). Understanding British government: analysing competing models. *British Journal of Politics & International Relations*, 10(2), 251-268. doi: 10.1111/j.1467-856X.2007.00297.x
- Marsh, D. (2008b). What is at stake? A response to Bevir and Rhodes. *British Journal of Politics & International Relations*, 10(4), 735-739. doi:10.1111/j.1467-856X.2008.00341.x
- Marsh, D. & Smith, M. (2000). Understanding policy networks: towards a dialectical approach. *Political Studies*, 48(1), 4-21. doi: 10.1111/1467-9248.00247
- Marsh, D. & Smith, M (2001). There is more than one way to do political science: on different ways to study policy networks. *Political Studies*, 49(3), 528-541 doi: 10.1111/1467-9248.00325
- Matland, R. E. (1995). Synthesizing the implementation literature: the ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory*. 5(2), 145–174.
- Maynard-Moody, S. & Musheno, M. (2006). Stories for research. From D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method. Empirical Research Methods and the Interpretive Turn* (pp.316-330). Armonk, New York: M.E. Sharpe.
- McGauran, A. M. (2009). Gender mainstreaming and the public policy implementation process: round pegs in square holes? *Policy & Politics*, 37(2), 215–233.
- McGregor, P., Swales, K., & Winning, M. (2010). *The Committee on Climate Change: A Policy Analysis* (Working Paper No. 1031). University of Strathclyde Business School, Department of Economics. Retrieved from <http://ideas.repec.org/p/str/wpaper/1031.html>
- McGregor, P., Swales, K., & Winning, M.. (2012). A review of the role and remit of the committee on climate change. *Energy Policy*, 41(0), 466-473. doi:10.1016/j.enpol.2011.11.007
- Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W.W. (1974). *The Limits to Growth: a Report for the Club of Rome's Project on the Predicament of Mankind*. New York: Universe Books.
- Measham, T., Preston, B., Smith, T., Brooke, C., Gorddard, R., Withycombe, G., & Morrison, C. (2011). Adapting to climate change through local municipal planning: barriers and challenges. *Mitigation and Adaptation Strategies for Global Change*, 16(8), 889-909. doi:10.1007/s11027-011-9301-2
- Metcalf, S. (2009). *An inquiry into transforming consumption: brinks, boundaries, borders and "betweens"*. (Unpublished MSc dissertation). Ashridge Business School, Bath.

Metz, B., Davidson, O. R., Bosch, P. R., Dave, R., & Meyer, L. A. (Eds.). (2007). *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.

Montford, A. W. (2010). *The Hockey Stick Illusion: Climategate and the Corruption of Science*. London: Stacey International.

Montgomerie, T. (2012, February 16). Building a Conservative majority (3)... Ending windfarm subsidies. *Conservative Home*. Retrieved February 16, 2012, from http://conservativehome.blogs.com/majority_conservatism/2012/02/building-a-conservative-majority-3-ending-windfarm-subsidies-conservativemajority.html (Archived at <http://www.webcitation.org/6ANreioRi>)

Murphy, D. J., & Hall, C. A. S. (2011). Energy return on investment, peak oil, and the end of economic growth. *Annals of the New York Academy of Sciences*, 1219(1), 52–72. doi:10.1111/j.1749-6632.2010.05940.x

Murray, J. (2010, October 20). Carbon tax bombshell takes business by surprise. *Business Green*. Retrieved July 31, 2012, from <http://www.businessgreen.com/bg/news/1870050/carbon-tax-bombshell-takes-business-surprise> (Archived at <http://www.webcitation.org/69ZRb7eVP>)

Murray, J. (2012, March 1). Exclusive: CBI steps up calls for carbon tax shake-up. *Business Green*. Retrieved March 12, 2012, from <http://www.businessgreen.com/bg/news/2156417/exclusive-cbi-steps-calls-carbon-tax-shake> (Archived at <http://bit.ly/Murray2012CBI>)

Museum of Modern Art (2010). Cubism. Retrieved April 24, 2012, from http://www.moma.org/collection/details.php?theme_id=10068§ion_id=T020544#skipToContent (Archived at <http://www.webcitation.org/679u1qZYh>)

National Audit Office. (2007). *Central Government Support for Local Authorities on Climate Change*. London: National Audit Office.

National Audit Office. (2010). *Sustainable Development: Briefing for the House of Commons Environmental Audit Committee*. London: National Audit Office.

Needham, C. (2009). Policing with a smile: narratives of consumerism in new labour's criminal justice policy. *Public Administration*, 87(1), 97–116. doi:10.1111/j.1467-9299.2008.01744.x

Nerlich, B. (2010). "Climategate": paradoxical metaphors and political paralysis. *Environmental Values*, 19(4), 419–442. doi: 10.3197/096327110X531543

Nerlich, B., Koteyko, N., & Brown, B. (2010). Theory and language of climate change communication. *Wiley Interdisciplinary Reviews: Climate Change*, 1(1), 97–110. doi: 10.1002/wcc.002

New, M., Liverman, D., Schroder, H., & Anderson, K. (2011). Four degrees and beyond: the potential for a global temperature increase of four degrees and its implications. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 369(1934), 6–19. doi:10.1098/rsta.2010.0303

New Economics Foundation. (2010). *The Great Transition*. London: New Economics Foundation.

Newton Dunn, T. (2010). Plane hypocrisy. *The Sun*. Retrieved August 20, 2012, from <http://www.thesun.co.uk/sol/homepage/news/2792820/Governments-green-quango-took-120-short-haul-flights-last-year.html> (Archived at <http://www.webcitation.org/6A3ouMZgz>)

Nichols, W. (2012, June 7). Industry shrugs off council's attempted wind farm ban. *Business Green*. Retrieved August 30, 2012, from <http://www.businessgreen.com/bg/news/2182499/industry-shrugs-councils-attempted-wind-farm-ban> (Archived at <http://www.webcitation.org/6AlwgHStA>)

Noble, M. (2011, November 8). CRC Performance League Table – All Local Authorities. *Local Energy*. Retrieved March 12, 2012, from <http://www.localenergy.org.uk/2011/11/crc-performance-league-table-all-local-authorities/>

Nordhagen, S., Calverley, D., Foulds, C., Thom, L. L., & Wang, X. (2012). Credibility in climate change research: a reflexive view. *Tyndall Centre for Climate Change Research, Working Paper 152*.

Northamptonshire County Council (2010, February). *Northamptonshire Local Area Agreement 2008-2011*.

Nottingham City Council. (2010). *Nottingham Local Area Agreement 2008-2011*.

Nottingham Declaration on Climate Change. (2005). s.n.

Nottingham Warm Zone. (n.d.). *How much will I save?* Retrieved August 2, 2012, from <http://nottinghamwarmzone.com/insulation/howmuch> (Archived at <http://www.webcitation.org/69cQdmmPG>)

Nottinghamshire Partnership. (2010). *Local Area Agreement 2010 Refresh*

Nuccitelli, D., & Mann, M. E. (2012, April 13). How The Economist got it wrong. *ABC Environment (Australian Broadcasting Corporation)*. Retrieved April 17, 2013, from <http://www.abc.net.au/environment/articles/2013/04/12/3735095.htm> (Archived at <http://www.webcitation.org/6FxlC7QFv>)

OED Online. (2012a). *embed* | *imbed*, v. Retrieved July 19, 2012, from <http://www.oed.com/view/Entry/60835?redirectedFrom=embed&> (Archived at <http://www.webcitation.org/69HdWEnOP>)

OED Online. (2012b). *myth*, n. Retrieved July 19, 2012, from <http://www.oed.com/view/Entry/124670?rskey=HBBLCr&result=1&isAdvanced=false#eid> (Archived at <http://www.webcitation.org/69HdgeNrQ>)

Office for National Statistics. (2011, August 30). *The Relationship Between Gross Value Added (GVA) and Gross Domestic Product (GDP)*. Office for National Statistics. Retrieved April 12, 2012, from <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/gva/gross-value-added-and-gross-domestic-product.html> (Archived at <http://bit.ly/ONSrelationshipGVAGDP>)

Office for National Statistics. (2012). *2011 Census: Key Statistics for Local Authorities in England and Wales*. Titchfield: Office for National Statistics.

Office of the Gas and Electricity Markets (2008). *Carbon Emissions Reduction Target 2008-11 Market Transformation Action*. London: OFGEM.

Office of the Gas and Electricity Markets (2011). *Electricity and Gas Supply Market Report* (No. 176/11). London: OFGEM.

One Leicester. (2010, March). *Leicester's Local Area Agreement 2008-11*.

Oreck, J. (1999). Making "The Matrix." USA: Home Box Office.

Oreskes, N. (2004). The scientific consensus on climate change. *Science*, 306(5702), 1686-1686. doi:10.1126/science.1103618

Oreszczyn, T., Hong, S. H., Ridley, I., & Wilkinson, P. (2006). Determinants of winter indoor temperatures in low income households in England. *Energy and Buildings*, 38 (3), 245–252. doi: 10.1016/j.enbuild.2005.06.006

Osborne, D., & Gaebler, T. (1993). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. New York: Plume.

Oxford Dictionaries Online (2010, April). "embed". Retrieved June 29, 2012 from <http://oxforddictionaries.com/definition/embed?region=uk> (Archived at <http://www.webcitation.org/69HdwRgST>)

O’Riordan, T., & Rowbotham, E. J. (1996). Struggling for credibility: the United Kingdom’s response. In T. O’Riordan & J. Jäger (Eds.), *Politics of Climate Change in Europe: A European Perspective* (pp. 228-267). London: Routledge.

O’Toole, L. J. (1986). Policy recommendations for multi-actor implementation: an assessment of the field. *Journal of Public Policy*, 6(02), 181–210. doi: 10.1017/S0143814X00006486

O’Toole, L. J. (2000). Research on policy implementation: assessment and prospects. *Journal of Public Administration Research and Theory*, 10(2), 263-288.

Pader, E. (2006). Seeing with an ethnographic sensibility: explorations beneath the surface of public policies. In P. Schwartz-Shea & D. Yanow (Eds.), *Interpretation and Method. Empirical Research Methods and the Interpretive Turn* (pp. 161-175). Armonk: M.E. Sharpe.

Palmer, J., & Cooper, I. (2011). *Great Britain’s Housing Energy Fact File 2011* (No. URN: 11D/866). London: DECC.

Park, C. (2005). New variant PhD: the changing nature of the doctorate in the UK. *Journal of Higher Education Policy and Management*, 27(2), 189-207. doi: 10.1080/13600800500120068

Parry, M. L., Canziani, O. F., Palutikof, J. P., van der Linden, P. J., & Hanson, C. E. (Eds.). (2007). *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.

Parsons, W. (1995). *Public Policy: Introduction to the Theory and Practice of Policy Analysis*. Cheltenham: Edward Elgar.

Parsons, W. (2001). Modernising policy-making for the twenty first century: the professional model. *Public Policy and Administration*, 16(3), 93–110.

Pearce, G., & Ayres, S. (2009). Governance in the English regions: the role of the Regional Development Agencies. *Urban Studies*, 46(3), 537-557. doi: 10.1177/0042098008100994

Pearce, G., & Cooper, S. (2011). Sub-national responses to climate change in England: evidence from Local Area Agreements. *Local Government Studies*, 37(2), 199-217. doi: 10.1080/03003930.2011.554825

Pelling, M. (2010). *Adaptation to Climate Change: From Resilience to Transformation*. Abingdon: Routledge.

- Penna, S. (2003). Policy contexts of social work in Britain: the wider implications of “New” Labour policy and the “new legal regime.” *Social Work and Society*, 1(1). Retrieved August 20, 2012 from <https://www.socwork.net/sws/article/view/252/427> (Archived at <http://www.webcitation.org/6FxP2SvGJ>)
- Phillips, L. (2011, July 7). Pickles did not warn PM about Housing Benefit cap, he tells PF. *Public Finance*. Retrieved September 13, 2012, from <http://www.publicfinance.co.uk/news/2011/07/pickles-did-not-warn-pm-about-housing-benefit-cap-he-tells-pf/> (Archived at <http://www.webcitation.org/6AeGFwuXB>)
- Pickles, E. (2010a). *Abolition of Regional Strategies*. Letter to Leaders of all Councils (May 27, 2010).
- Pickles, E. (2010b). *Changes to Local Authority Performance Arrangements*. Letter to Leaders of all Councils cc. Chief Executives of all Councils (October 10, 2010).
- Pickles, E. (2010c). Townhall waste and duplication. Ministerial Speech Reference. Retrieved February 21, 2012, from <http://www.communities.gov.uk/speeches/newsroom/townhallwaste> (Archived at <http://www.webcitation.org/69jB5IKYQ>)
- Pickles, E. (2010d). *Regional government. Ministerial Statement (July 22, 2010)*. Retrieved June 12, 2012, from <http://www.communities.gov.uk/statements/newsroom/regionalgovernment> (Archived at <http://www.webcitation.org/68MwnS6Mv>)
- Pickles, E. (2011). Efficient management by local authorities before cutting services. Ministerial Article Reference. Retrieved February 21, 2012, from <http://www.communities.gov.uk/articles/newsroom/1845524> (Archived at <http://www.webcitation.org/69jBG7rYT>)
- Pielke Jr., R.A. (2005). Consensus about climate change? *Science*, 308(5724), 952-954. doi:10.1126/science.308.5724.952
- Pielke Jr., R.A. (2009). The British Climate Change Act: a critical evaluation and proposed alternative approach. *Environmental Research Letters*, 4, 024010 (7pp). doi:10.1088/1748-9326/4/2/024010
- Pielke Jr., R.A. (2010). *The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming*. New York: Basic Books.
- Pielke Jr., R.A, Prins, G., Rayner, S., & Sarewitz, D. (2007). Lifting the taboo on adaptation. *Nature*, 445(8), 597-598.
- Poncelet, E. C. (2001). “A kiss here and a kiss there”: conflict and collaboration in environmental partnerships. *Environmental Management*, 27(1), 13-25. doi:10.1007/s002670010130

Poulsen, B. (2009). Competing traditions of governance and dilemmas of administrative accountability: the case of Denmark. *Public Administration*, 87(1), 117-131. doi:10.1111/j.1467-9299.2008.00727.x

Pressman, J. L., & Wildavsky, A. B. (1984). *Implementation: How Great Expectations in Washington are Dashed in Oakland: Or, Why It's Amazing that Federal Programs Work at All, this Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers who Seek to Build Morals on a Foundation of Ruined Hopes* (3rd edition). Berkeley: University of California Press.

Prins, G., Galiana, I., Green, C., Grundmann, R., Hulme, M., Korhola, A., Laird, F., Nordhaus, T., Pielke Jnr, R., Rayner, S., Sarewitz, D., Shellenberger, M., Stehr, N., and Tezuka, H. (2010). *The Hartwell Paper: a new direction for climate policy after the crash of 2009*. Institute for Science, Innovation & Society, University of Oxford; LSE Mackinder Programme, London School of Economics and Political Science, London, UK

Ragin, C. C. (1992a). Introduction: Cases of "What is a case?" In C. C. Ragin & H. S. Becker (Eds.), *What is a Case? Exploring the Foundations of Social Inquiry* (pp. 1-18). Cambridge: Cambridge University Press.

Ragin, C. C. (1992b). "Casing" and the process of social inquiry. In C. C. Ragin & H. S. Becker (Eds.), *What is a Case? Exploring the Foundations of Social Inquiry* (pp. 217-226). Cambridge: Cambridge University Press.

Regional Development Agencies Act 1998 (c.45). London: The Stationery Office.

Rein, M. (1976). *Social Science & Public Policy*. Harmondsworth: Penguin.

Rhodes, R.A.W. (2011a). One-way, two-way, or dead-end street: British influence on the study of public administration in America since 1945. *Public Administration Review*, 71(4), 559-571. doi:10.1111/j.1540-6210.2011.02388.x

Rhodes, R.A.W. (2011b). *Everyday Life in British Government*. Oxford: Oxford University Press.

Rhodes, R.A.W., Wanna, J., & Weller, P. (2009). *Comparing Westminster*. Oxford: Oxford University Press.

Rittel, H.W.J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy sciences*, 4(2), 155-169. doi: 10.1007/BF01405730

Roberts, D. (2010, August 10). "Environmentalism" can never address climate change. *Grist*. Retrieved July 17, 2012, from <http://grist.org/article/2010-08-09-environmentalism-can-never-address-climate-change/> (Archived at <http://www.webcitation.org/69DpJSGA9>)

Roe, E.M. (1994). *Narrative Policy Analysis: Theory and Practice*. Durham, NC : Duke University Press

Rogelj, J., Nabel, J., Chen, C., Hare, W., Markmann, K., Meinshausen, M., Schaeffer, M., Macey, K. & Hohne, N. (2010). Copenhagen Accord pledges are paltry. *Nature*, 464 (7292), 1126-1128. doi:10.1038/4641126a

Rubin, H.J. & Rubin, I.S. (2005). *Qualitative Interviewing. The Art of Hearing Data*. Thousand Oaks, California: Sage.

Rutland County Council. (2010, March). *Delivering a Plan for Rutland – Our Local Area Agreement*.

Rutland, T., & Aylett, A. (2008). The work of policy: actor networks, governmentality, and local action on climate change in Portland, Oregon. *Environment and Planning D: Society and Space*, 26(4), 627 – 646. doi:10.1068/d6907

Sachverständigenrat für Umweltfragen. (2012). *Environmental Report 2012: Responsibility in a Finite World*. Berlin: German Advisory Council on the Environment.

Sapolsky, H. M. (1972). *The Polaris System Development: Bureaucratic and Programmatic Success in Government*. Cambridge, Mass.: Harvard University Press.

Sawyer, J. S. (1972). Man-made carbon dioxide and the “Greenhouse” Effect. *Nature*, 239, 23-26. doi:10.1038/239023a0

Schmidt, M. R. (1993). Grout: alternative kinds of knowledge and why they are ignored. *Public Administration Review*, 53(6), 525.

Schroeder, H.W. (2007). Place experience, gestalt, and the human–nature relationship. *Journal of Environmental Psychology*, 27(4), 293-309. doi:10.1016/j.jenvp.2007.07.001

Schroeder, H., & Bulkeley, H. (2009). Global cities and the governance of climate change: what is the role of law in cities? *Fordham Urban Law Journal*, 36(2), 313-359.

Schwartz-Shea, P. (2006). Judging quality: evaluative criteria and epistemic communities. In D. Yanow & P. Schwartz-Shea & (Eds.), *Interpretation and Method. Empirical Research Methods and the Interpretive Turn* (pp. 89-113). Armonk: M.E. Sharpe.

Schwartz-Shea, P., & Yanow, D. (2012). *Interpretive Research Design: Concepts and Processes*. Abingdon: Routledge.

- Scott, F. (2011, October). Is localism delivering for climate change? *Green Alliance*. Retrieved August 6, 2012, from <http://www.green-alliance.org.uk/greall.aspx?id=6108> (Archived at <http://www.webcitation.org/69inrz54j>)
- Seale, C. (1999). Quality in qualitative research. *Qualitative Inquiry*, 5(4), 465–478. doi: 10.1177/107780049900500402
- Shehata, S. (2006). Ethnography, identity, and the production of knowledge. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (pp. 244-263). Armonk: M.E. Sharpe.
- Shore, C., & Wright, S. (Eds.). (1997). *Anthropology of Policy: Critical Perspectives on Governance and Power*. London: Routledge.
- Simon, H.A. (1997). *Administrative Behavior* (4th edition). New York: The Free Press.
- Simmons, I. G. (2008). *Global Environmental History: 10,000 BC to 2000 AD*. Edinburgh: Edinburgh University Press.
- Smil, V. (2012, July). A skeptic looks at alternative energy. *IEEE Spectrum*. Retrieved July 16, 2012, from <http://spectrum.ieee.org/energy/renewables/a-skeptic-looks-at-alternative-energy/0> (Archived at <http://www.webcitation.org/69Cbj1VLv>)
- Smith, A. (2004). Policy transfer in the development of UK climate policy. *Policy & Politics*, 32(1), 79-93. doi:10.1332/030557304772860067
- Smith, N., & Hay, C. (2008). Mapping the political discourse of globalisation and European integration in the United Kingdom and Ireland empirically. *European Journal of Political Research*, 47(3), 359-382. doi:10.1111/j.1475-6765.2007.00728.x
- Social Research Association (2003). *Ethical Guidelines*. Retrieved August 22, 2009 from <http://www.the-sra.org.uk/documents/pdfs/ethics03.pdf>
- Stein, S. J. (2004). *The Culture of Education Policy*. New York: Teachers College Press.
- Stephens, N. (2007). Collecting data from elites and ultra elites: telephone and face-to-face interviews with macroeconomists. *Qualitative Research*, 7(2), 203-216. doi: 10.1177/1468794107076020
- Stern, N. (2007). *The Economics of Climate Change*. Cambridge: Cambridge University Press.
- Stratton, A., Fowler, J., & Curtis, P. (2010). Chris Huhne fights Treasury to save his climate department. *The Guardian*. Retrieved February 21, 2012, from <http://www.guardian.co.uk/politics/2010/sep/21/chris-huhne-fights-treasury-attacks> (Archived at <http://www.webcitation.org/69jBAugHH>)

Study of Critical Environmental Problems. (1970). *Man's Impact on the Global Environment: Assessment and Recommendations for Action*. Cambridge, Mass.: MIT Press.

Study of Man's Impact on Climate. (1971). *Inadvertent Climate Modification: Report of the Man's Impact on Climate*. Cambridge, Mass.: MIT Press.

Sustainable Development Commission. (2005). *The Next Steps: an Independent Review of Sustainable Development in the English Regions*. London: Sustainable Development Commission.

Sørensen, E., & Torfing, J. (2005). The democratic anchorage of governance networks. *Scandinavian Political Studies*, 28(3), 195-218. doi:10.1111/j.1467-9477.2005.00129.x

Taxpayers' Alliance. (2010). *Council Savings: Unnecessary Jobs* (Research Note 77). London: Taxpayers' Alliance.

Taylor, C. (1971). Interpretation and the sciences of man. *The Review of Metaphysics*, 25(1), 3-51.

Teichmueller, H. (1895). Economic freedom. *American Law Review*, 29(3), 373-384.

Thatcher, M. (1988, October 14). Speech to Conservative Party Conference. Retrieved March 28, 2012, from <http://www.margaretthatcher.org/document/107352> (Archived at <http://www.webcitation.org/69kCryCSc>)

Thatcher, M. (1990, November 6). Speech at 2nd World Climate Conference. Retrieved March 28, 2012, from <http://www.margaretthatcher.org/document/108237> (Archived at <http://www.webcitation.org/69kCzVmxA>)

Tsokounoglou, M., Ayerides, G., & Tritopoulou, E. (2008). The end of cheap oil: current status and prospects. *Energy Policy*, 36(10), 3797-3806.

Torgerson, D. (1986). Interpretive policy inquiry: a response to its limitations. *Policy Sciences*, 19(4), 397-405. doi: 10.1007/BF00139523

Trades Union Congress. (2007, March 13). *TUC comment on climate change bill*. Retrieved May 23, 2012, from <http://www.tuc.org.uk/social/tuc-13068-f0.cfm> (Archived at <http://www.webcitation.org/67sjFTdbx>)

Travers, T. (2011). *Local Action on Climate Change: An Analysis of Government Policies*. London: Friends of the Earth.

Turner, A. (2008, October 7). *Interim advice by the Committee on Climate Change*. Letter to Ed Miliband, Secretary of State, Department for Energy and Climate Change.

- Tuxworth, B. (1996). From environment to sustainability: surveys and analysis of local agenda 21 process development in UK - local authorities. *Local Environment: The International Journal of Justice and Sustainability*, 1(3), 277-297. doi: 10.1080/13549839608725501
- Tverberg, G. E. (2012). Oil supply limits and the continuing financial crisis. *Energy*, 37(1), 27-34. doi:10.1016/j.energy.2011.05.049
- Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. *Journal of Risk and Uncertainty*, 5(4), 297-323. doi: 10.1007/BF00122574
- UK Statistics Authority. (2009). *Code of Practice for Official Statistics* (Edition 1.0). London: UK Statistics Authority.
- United Nations Framework Convention on Climate Change. (2009, December 18). *Copenhagen Accord*. Agreed at the Conference of the Parties, Fifteenth Session, Copenhagen, 7-18 December, 2009.
- van Gunsteren, H. R. (1976). *The Quest for Control: A Critique of the Rational-Central-Rule Approach in Public Affairs*. London: John Wiley & Sons.
- Verloo, M. (2005). Mainstreaming gender equality in Europe. A critical frame analysis approach. *The Greek Review of Social Research*, 117, 11-34.
- Vickers, G. (1995). *The Art of Judgement*, Centenary Edition. Thousand Oaks, California: Sage Publications.
- Vining, J., Merrick, M. S., & Price, E. A. (2008). The distinction between humans and nature: human perceptions of connectedness to nature and elements of the natural and unnatural. *Human Ecology Review*, 15(1), 1-11.
- von Storch, H. (2012, May 27). Interview Reiner Grundmann. *Die Klimazwiebel*. Retrieved September 7, 2012, from <http://klimazwiebel.blogspot.co.uk/2012/05/interview-reiner-grundmann.html?spref=tw&m=1> (Archived at <http://www.webcitation.org/6AVlbk3K5>)
- Wachowski, A. (Director), & Wachowski, L. (Director) (1999). *The Matrix*. United States, Warner Bros. Pictures.
- Walker, G. (2008). What are the barriers and incentives for community-owned means of energy production and use? *Energy Policy*, 36(12), 4401-4405. doi:10.1016/j.enpol.2008.09.032

- Weber, M. (1922/1978). The Nature of Social Action. In W. G. Runciman (Ed.), *Weber: Selections in Translation* (pp. 7-32). Cambridge: Cambridge University Press.
- Weber, M. (1948). Bureaucracy. In H. H. Gerth & C. Wright Mills (Eds.), *From Max Weber: Essays in Sociology* (pp. 196-244). London: Routledge & Kegan Paul.
- Weiss, C. H. (1991). Policy research as advocacy: pro and con. *Knowledge, Technology & Policy*, 4(1), 37-55.
- White, M., & Radford, T. (1988, June 25). Pollution threatens to scorch the Earth. *The Guardian*, p. 1.
- Whitmarsh, L. (2009). Behavioural responses to climate change: Asymmetry of intentions and impacts. *Journal of Environmental Psychology*, 29(1), 13-23. doi:10.1016/j.jenvp.2008.05.003
- Whitmarsh, L., Seyfang, G., & O'Neill, S. (2011). Public engagement with carbon and climate change: To what extent is the public "carbon capable"? *Global Environmental Change*, 21, 56-65. doi:10.1016/j.gloenvcha.2010.07.011
- Whole Life Costing Forum. (n.d.). *About WLC*. Retrieved November 28, 2011, from <http://www.wlcf.org.uk/aboutwlc.html> (Archived at <http://www.webcitation.org/69HX85t71>)
- Wiedmann, T., & Minx, J. (2008). A definition of "carbon footprint." From C.C. Pertsova (Ed.), *Ecological Economics Research Trends* (pp. 1-11). Hauppauge NY, USA: Nova Science Publishers.
- Wigley, T. M. L. (2005). The climate change commitment. *Science*, 307(5716), 1766-1769. doi:10.1126/science.1103934
- Wild, A., & Marshall, R. (1999). Participatory practice in the context of Local Agenda 21: a case study evaluation of experience in three English local authorities. *Sustainable Development*, 7(3), 151-162. doi:10.1002/(SICI)1099-1719(199908)7:3<151::AID-SD111>3.0.CO;2-0
- Williams, D. (2010, October 25). LGA slams carbon tax plan. Retrieved March 23, 2012, from <http://www.publicfinance.co.uk/news/2010/10/lga-slams-carbon-tax-plan/> (Archived at <http://www.webcitation.org/6FxPJRTWF>)
- Williams, K., Joynt, J. L., & Hopkins, D. (2010). Adapting to climate change in the compact city: the suburban challenge. *Built Environment*, 36(1), 105-115. doi:10.2148/benv.36.1.105

Wilson, D. (2003). Unravelling control freakery: redefining central-local government relations. *The British Journal of Politics & International Relations*, 5(3), 317–346. doi: 10.1111/1467-856X.00109

Wilson, D., & Game, C. (2006). *Local Government in the United Kingdom* (4th edition). Basingstoke: Palgrave Macmillan.

Winter, D. D. N., & Koger, S. M. (2010). *The Psychology of Environmental Problems: Psychology for Sustainability* (3rd edition). New York: Psychology Press.

Wintour, P. (2012, April 20). Ed Miliband plans to switch voters on with cheap electricity. *the Guardian*. Retrieved July 31, 2012, from <http://www.guardian.co.uk/politics/2012/apr/20/ed-miliband-voters-cheap-electricity> (Archived at <http://www.webcitation.org/69ZhZsCuj>)

Wittgenstein, L. (1958). *Philosophical Investigations* (3rd edition). Oxford: Basil Blackwell.

World Commission on Environment and Development (1987). *Our Common Future*. Oxford: Oxford University Press.

Wynne, B. (1992). Misunderstood misunderstanding: social identities and public uptake of science. *Public Understanding of Science*, 1(3), 281–304. doi: 10.1088/0963-6625/1/3/004

Yanow, D. (1990). Tackling the implementation problem: epistemological issues in implementation research. In D. J. Palumbo & D. J. Calista (Eds.), *Implementation and the Policy Process: Opening Up the Black Box* (pp. 213–227). New York: Greenwood Press.

Yanow, D. (1992). Silences in public policy discourse: organizational and policy myths. *Journal of Public Administration Research and Theory*, 2(4), 399–423.

Yanow, D. (1993). The communication of policy meanings: implementation as interpretation and text. *Policy Sciences*, 26(1), 41–61. doi: 10.1007/BF01006496

Yanow, D. (1996). *How Does a Policy Mean?: Interpreting Policy and Organizational Actions*. Washington D.C.: Georgetown University Press.

Yanow, D. (1997). Passionate humility in interpretive policy and administrative analysis. *Administrative Theory & Praxis*, 19, 171–177.

Yanow, D. (2000). *Conducting Interpretive Policy Analysis*. Thousand Oaks: Sage Publications.

Yanow, D. (2005). Cognition meets action: metaphors as models of and models for. Prepared for the ECPR workshop on metaphors in political science, Granada, Spain, April 11-19, 2005

Yanow, D. (2006a). Thinking interpretively: philosophical presuppositions and the human sciences. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (pp. 5-26). Armonk: M.E. Sharpe.

Yanow, D. (2006b). Neither rigorous or objective? Interrogating criteria for knowledge claims in interpretive science. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method: Empirical Research Methods and the Interpretive Turn* (pp. 67-88). Armonk: M.E. Sharpe.

Yanow, D. (2009). Ways of knowing: passionate humility and reflective practice in research and management. *The American Review of Public Administration*, 39(6), 579-601. doi:10.1177/0275074009340049

Yin, R.K. (2003). *Case Study Research: Design and Methods* (3rd edition). Thousand Oaks, Sage Publications

Yin, R.K. (2009). *Case Study Research: Design and Methods* (4th edition). Thousand Oaks: Sage Publications.

Young, K. (1977). "Values" in the policy process. *Policy & Politics*, 5(3), 1-22.

Young, K., Ashby, D., Boaz, A., & Grayson, L. (2002). Social science and the evidence-based policy movement. *Social Policy and Society*, 1(03). doi:10.1017/S1474746402003068

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