

Why persist? Organisational perspectives on delivering an energy efficiency programme for the Leeds city region

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Abstract

Local governments are expected to act as catalysts to improve energy efficiency standards in buildings within their jurisdiction. In response, several UK local authorities have developed city-scale energy efficiency programmes to make effective use of government energy efficiency funding. Recent research documents the scale of involvement in city-scale energy projects, but reasons for actors' involvement are less well understood. Using empirical evidence, we address this limitation by exploring the motives of organisations involved in the delivery of a large-scale energy efficiency programme in the Leeds (UK) city region.

Local economic, social, and environmental priorities are important factors in the development of city initiatives, and collaborative working between the public and private sector can realise energy efficiency objectives while also contributing to local economic growth. With national energy policy subject to ongoing uncertainty, it is important to determine how local and organisational priorities can align to support successful delivery of city-scale energy efficiency schemes.

The focus of this paper is a case study of a joint programme, administered via a public-private framework arrangement to deliver energy efficiency measures across several cities and their surrounding regions. Evidence for the case study is drawn from semi-structured interviews with programme actors and from corporate and programme documentation. Using a theoretical framework with origins in business literature, we analyse the characteristics of the participating organisations and their rea-

sons for involvement in the programme. We discuss the impact of policy changes to the Green Deal and ECO in shaping the programme and its implementation. In the final section of the paper, we identify the key factors contributing to the continued delivery of the programme and lessons that can be drawn to inform future schemes.

Introduction

Energy efficiency improvements have been implemented by local authorities for many years, both in respect of their social housing stock and their corporate assets. Over time, upgrading domestic energy efficiency has been linked variously to efforts to improve public health, as a response to the 1973 energy crisis, and to reducing greenhouse gas emissions in the wake of the Kyoto Protocol (Bell and Lowe, 2000; Dowson et al., 2012). With climate change mitigation continuing to climb the global agenda, retrofit energy efficiency measures have become well established as a means by which local authorities can deliver reductions in carbon emissions while simultaneously addressing local issues such as fuel poverty. These and other benefits are reflected in a history of UK government policies and incentives designed to stimulate energy efficiency improvements, the most recent of which are the Energy Company Obligation (ECO) and the short-lived Green Deal finance mechanism (Mallaburn and Eyre, 2014; Rosenow and Eyre, 2016). Despite the sustained presence of energy efficiency within UK legislation, reductions in both ambition and financial support from central government led to a decline in retrofit installations from 2013 (House of Commons Energy and Climate Change Committee, 2016).

The role of local authorities in delivering local energy measures, often through local partnerships, is known (Betsill and Bulkeley, 2007; Kelly and Pollitt, 2011). Past research has identified the importance of collaboration between local residents, business and government (Khare et al., 2011), and the types and frequency of existing partnerships delivering climate change experiments in cities across the globe (Castán Broto and Bulkeley, 2013). To date however, little is known about the motivations and experiences of organisations involved in such partnerships. In this study, we take a case study approach to examine the motivations of the organisations involved in the Leeds city region based Better Homes Yorkshire scheme¹. We use a combination of the theoretical lenses of institutional and stakeholder approaches to organisational management and thematic analysis to consider the original reasons for participation in, and experiences of, delivering the programme. In doing so we consider whether lessons drawn from this case study can be used to inform the development of similar collaborations in the future. Furthermore, we believe that in the face of ongoing policy uncertainty and likely future reductions in UK energy subsidies, understanding the reasons for action is an important step towards the identification of self-sustaining opportunities to support such collaborations, by local, regional or national bodies.

The paper is structured as follows. We first set out the response of cities to climate change, before introducing the theory used to inform the framework for analysis of our empirical evidence. The background context is completed by considering the specific role UK local authorities have with regard to energy efficiency. We introduce our case study, methods of analysis and results, before the findings are discussed in the context of the insights they offer for future practice and research.

Background

CITY ACTIONS TO REDUCE CLIMATE CHANGE

It is now readily accepted that cities have the potential to significantly contribute both to climate change and its mitigation (Mills, 2007; Kennedy et al., 2012). Initiatives such as the European Covenant of Mayors for Climate and Energy² support local governments in developing and implementing measures to achieve voluntary targets for reductions in carbon emissions through the use of Sustainable Energy Action Plans. Cross-sector action is required to achieve the ambitious voluntary targets set out by many organisations, and local authorities across the globe are engaged in, and often likely to be leading, a wide range of activities to reduce carbon emissions (Castán Broto and Bulkeley, 2013). Many of the global experiments cited by Castán and Bulkeley were implemented independently by local governments, with private sector organisations forming the largest partner group.

The benefits of partnerships are highlighted in earlier work by Kelly and Pollitt (2011) which identifies that partnership with a wide range of organisations for both financial and non-

financial support is a common feature amongst 'successful' authorities. Indeed, the need for collaboration between local governments, businesses, and residents is described elsewhere as a necessary condition to successfully address climate change from a city perspective (Khare et al., 2011). While the nature and importance of partnerships for city action is clearly understood, there is less known about what might motivate organisations to enter into partnerships, particularly public-private partnerships designed to implement environmental benefits. Wassmer et al. (2014) have begun to address this, while Khare et al. (2011) discuss the need for a win-win, or mutually agreeable outcome for all stakeholders, but the nature of what constitutes a winning situation will vary between organisations. In the next section, we introduce the theories of organisational management that we will use to evaluate the motivations behind participation for the organisations in our case study.

ORGANISATIONAL MANAGEMENT THEORIES

Organisational management theories are used to explore the relationships between and influences on structure, operations and decision making within firms. Numerous theories exist, with each rooted in a specific field such as stakeholder theory in economics and institutional theory in sociology (Gao and Bansal, 2013). This study uses both institutional and stakeholder theories of management to inform its analysis framework. These have been chosen because while they are rooted in contrasting logics, they also exhibit similarities (Freeman et al., 2010) relevant to their application in evaluating the motivations of energy actors.

Institutional theory assumes that firms' organisational practices are determined in response to external influences (Schmidt, 2010; Starik and Kanashiro, 2013). External influences may be formal or informal, and include: the political, economic and legal frameworks which define the 'rules of the game' in which the firm is a participant; other organisations; and the informal customs and beliefs embedded in the society in which the organisation operates (Williamson, 2000). We will term this group of influences the 'institutional environment'.

Where institutionalism focuses on a firm's actions as a response to broad external influences, stakeholder theory considers the two-way relationships between a firm and the groups with which it interacts. Stakeholder theory assumes that planning within the firm is undertaken with the objective of balancing the (sometimes conflicting) interests of stakeholders (Freeman et al., 2010). There are numerous definitions of stakeholders, but for the purpose of this work we consider stakeholders in their broadest sense as "any group or individual who can affect or is affected by the achievement of the organisation's objectives" (Freeman, 1984 p. 46 in Mitchell et al., 1997).

Issues linking legitimacy and actions are common to both stakeholder management and institutional theory. Legitimacy in the institutional sense may be linked to the actions of the firm, which may be undertaken in response to the changing norms of the organisational environment in order to maintain credibility in the field (DiMaggio and Powell, 1991). In a stakeholder sense, legitimacy can refer to the stakeholders themselves, with actions by firms likely to be taken to satisfy the more important or legitimate stakeholders (Haigh and Griffiths, 2009).

1. Prior to launch the Better Homes Yorkshire scheme was known as the Leeds City Region Green Deal scheme, but for simplicity the project will be referred to as Better Homes Yorkshire throughout.

2. http://www.covenantofmayors.eu/index_en.html.

The ideas of response to external influence, balancing interests of stakeholders and the relative legitimacy of different influences are highly relevant when considering partnerships between local authorities and other organisations for city-scale energy efficiency projects. Local action for climate change mitigation is hampered by market and institutional constraints (Azevedo et al., 2013) and energy as an industry is highly regulated. The public and private sector partners are to differing degrees part of the institutional environment themselves, yet must also operate cooperatively within this environment to deliver value for their many and varied stakeholders including, for the private firms, their shareholders. Project outcomes are likely to be affected by the extent to which competing interests within and between partner organisations influence their (collaborative) decision making. It is this expectation which forms the basis for including the preceding theories in the analysis framework described in the methodology, rather than a solely data-driven analysis.

CASE STUDY LEGISLATIVE CONTEXT

Local authorities as part of the UK government institution have statutory obligations to fulfil on behalf of citizens in their area to provide decent homes as social landlords. Improving the thermal comfort of domestic properties contributes to this obligation (Dowson et al., 2012). Other than this specific obligation, local authorities at present only have a duty to report on the energy efficiency of housing in their area; they do not have to take action to improve it. The Home Energy Conservation Act 1995 (HECA) (DoE, 1995) required local authorities with housing responsibilities to develop and publish a strategy for improving the energy efficiency of the housing stock in their area by 30 % over a ten to fifteen year period (Fleming et al., 2004). The original HECA reporting requirements were replaced in 2012 by a requirement to prepare biannual reports documenting the measures “that the authority considers practicable, cost-effective and likely to result in significant improvement in the energy efficiency of residential accommodation in its area” (DECC, 2012 p. 6). ‘Significant improvement’ was explicitly linked to measures which used an “area based/street by street roll out involving local communities and partnerships” (DECC, 2012 p. 6) and took advantage of “financial assistance ... offered from central government initiatives” (ibid.) including the Green Deal (DECC, 2010) and ECO (HM Government, 2012)³.

Following the publication of this guidance, ECO legislation came into force in December 2012. The Green Deal finance mechanism was launched in January 2013, but its performance was underwhelming from the outset. In June 2014, the Green Deal Home Improvement Fund⁴ was launched to try and stimulate interest in the offer. Three funding rounds saw three corresponding spikes in activity but failed to create a lasting impact, and all public-sector funding for the Green Deal ceased in July 2015 (Rosenow and Eyre, 2016). Meanwhile the ambition of the ECO was also scaled back with targets reduced in December 2013 and April 2015 on the announcement of changes

to the original ECO and the start of ECO2 respectively (Ofgem, 2015). It was against this background of policy flux that the energy efficiency scheme used as our case study was created.

Methods and analysis

This study seeks to understand why a group of organisations chose to work together to develop and deliver a particular project. In doing so it satisfies one of the key measures of relevance for the use of a case study approach, namely the degree to which it seeks to explain a particular circumstance (Yin, 2009). For the purposes of this research we focus on the case study of Better Homes Yorkshire. This case is an example of a local government acting as a catalyst to improve energy efficiency standards within its jurisdiction through the use of a public-private framework partnership. It was therefore considered an appropriate case for investigating our research questions. Furthermore, in focusing our study on Better Homes Yorkshire, an ongoing real-world project over which we have no control, we strengthen the argument for a case study approach (ibid). The following section describes the Better Homes Yorkshire project and case study design.

LEEDS CITY REGION AND BETTER HOMES YORKSHIRE

The Leeds city region is an area of the UK that includes urban and rural areas within North, West and South Yorkshire (Figure 1). Keepmoat and Willmott Dixon⁵ deliver energy efficiency and renewable energy services within the region via a framework contract with the West Yorkshire Combined Authority (WYCA) and individual call-off contracts with the ten local authorities. The Better Homes Yorkshire brand describes the overall scheme, with sub-brands for each authority, e.g. Better Homes York.

The contracts provide Keepmoat and Willmott Dixon with exclusive endorsement by the local authorities for provision of services “including Green Deal and ECO services to private households”, with additional non-exclusive opportunities to service corporate estate, social housing and businesses in the region (Rutherford, 2014). The contract is not a purchase contract; rather it provides market advantage to the private sector partners when delivering their services, including Green Deal and ECO services. Better Homes Yorkshire launched in March 2015 with a target to deliver undefined energy efficiency improvements to over 12,000 homes in the first three years, funded through Green Deal grants and finance, ECO subsidies and customer contributions. At the end of the first year the overall and accompanying interim targets were reconsidered⁶ in light of the suspension of public sector funding for the Green Deal and changes to ECO described previously (Norreys, 2016).

DATA COLLECTION

Data for the case study were obtained from publicly available literature and a series of eight semi-structured interviews with individuals from organisations involved in the scheme. The initial series of online searches was undertaken using the term

3. ECO is the most recent incarnation of the UK's energy supplier obligation.

4. A cash-back grant for households installing certain energy-efficiency measures (Rosenow and Eyre, 2016).

5. A third private sector partner retains an option to become active but is excluded from this analysis.

6. Year 1: 1,733 achieved of 2,136. Year 2 target of 4,133 reduced to 815. Year 3 targets placed under review.

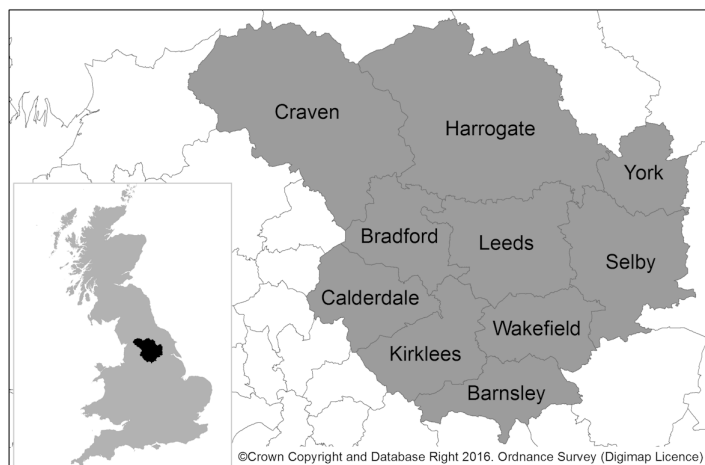


Figure 1. The Leeds city region (Ordnance Survey (GB), 2015).

“Better Homes (Yorkshire) <org>”, where *Yorkshire* was used in one set and not the other, and <org> was replaced in turn by each of the individual areas or organisations participating, e.g. “Better Homes Bradford”, or “Better Homes Yorkshire Keepmoat”. Relevant results from the first three pages of results were captured and stored according to their source organisation. Relevant results included project and organisation webpages, press releases, news articles and minutes of meetings that referred to the project. Additionally, the websites of each participating organisation were searched to identify content relating to their organisational make up and purpose.

In addition to the online literature search, eight semi-structured interviews were conducted with individuals from six different organisations involved in the scheme. Participants were chosen based on recommendations for their knowledge of and involvement in the scheme, with some individuals representing more than one organisation, and some public sector organisations providing more than one interviewee. This ensured that both the procurement history and current operation of the scheme could be explored during the interviews.

Table 1 summarises the timing and makeup of the interviews undertaken, with the number of public sector interviews reflecting the larger proportion of public sector organisations represented in the framework. Repetition in public sector responses was observed quite rapidly, a phenomenon known as theoretical saturation (Eisenhardt, 1989). Therefore, additional interviews with the remaining public partners were not sought at the time, as it was decided that a sufficiently diverse set of responses had been gathered.

Interviews took place face to face where possible or by telephone where not, and lasted between 30 and 60 minutes. Due to the small number of organisations involved in the Better Homes Yorkshire scheme and to protect the anonymity of participants, information provided by interviewees will be identified only as originating from the public or private sector, rather than the specific organisation of the speaker.

Interviews undertaken for this study form part of an ongoing data collection process for a larger piece of work, and questions were focused on three areas of interest: the characteristics of the organisation, the energy related activities of the organisation, and the partnerships between organisations on energy related projects. Where interviewees were involved in specific projects

of interest, questions in the areas of energy related activity and partnerships were focused more closely on the project in question. For each of the interviews undertaken for this case study, this meant that as a minimum part of the interview was exclusively focused on the Better Homes Yorkshire scheme. The interview questions were primarily focused on the positive reasons for participation; however, specific challenges to projects were often raised and discussed by the interviewees. The use of a semi-structured interview process afforded flexibility to explore these and other related topics while retaining an overall structure to the conversations.

ANALYSIS OF THE CASE STUDY DATA

The case study data were analysed using QSR NVivo Version 10 for Windows⁷. All sources were uploaded to a single project file within the software and categorised according to their origin and subject matter, then analysed using a combination of theoretically derived and data-driven themes.

Table 2 summarises the theme structure developed using ideas from organisational theory and used to analyse interview transcripts and corporate literature, i.e. the ‘public face’ of the organisations, to identify the relative extent to which stakeholder and institutional logics guide the decisions made by the organisations. In addition to the theoretical analysis which was aimed at understanding broad organisational influences, data driven themes were used to capture ideas relating to decisions surrounding the specific case of Better Homes Yorkshire. Data-driven categories were developed through analysis of the whole dataset, with broad initial themes such as *reasons* and *challenges* being developed into more nuanced ideas including *motivations*, *objectives*, *outcomes* and *change*. These were combined with a series of categories such as *comfort*, *health*, *funding* etc. to provide greater descriptive detail. In this way, the various factors affecting decisions by the organisations during their participation in the development and operation of the Better Homes Yorkshire scheme could be identified.

Results

The aim of the case study was to establish the characteristics and influences on the participant organisations in the Better Homes Yorkshire scheme, their reasons for participation in the scheme and how the organisations are working together to deliver the scheme. The following sections present the results for each of these questions in turn.

ORGANISATIONAL CHARACTERISTICS AND INFLUENCES

There are fourteen organisations signed up to the Better Homes Yorkshire framework agreement, of which three are private and the remainder public. The active organisations exhibit archetypal organisational structure with the exception of the West Yorkshire Combined Authority which was formed in 2014 via an amalgamation of the public-private Local Enterprise Partnership and the public West Yorkshire Passenger Transport Executive. At the time of the study it was undergoing a process of merging the previous organisational structures together into a series of directorates with common goals across the organisation.

7. <http://www.qsrinternational.com/nvivo-support/downloads/nvivo10-for-windows>.

Table 1. Summary of interviews undertaken.

Sector	No of interviews	Dates conducted	Sector coverage
Public	6	September to November 2016	Six of nine authorities, plus WYCA*
Private	2	October and November 2016	Both active organisations

* The tenth local authority joined the scheme after the interviews were conducted.

Table 2. Theoretically derived themes used in data analysis.

Institutional	Stakeholder	Cross-cutting	Descriptive
Political	Stakeholders	Legitimacy	External
Regulatory	Balancing interests	Ethical perspectives	Internal
Cultural	Value creation		

Analysis of corporate literature and interview evidence suggests that outcomes for, and the influence of, stakeholder groups inform decisions about actions across all partner organisations, but the number and makeup of stakeholders considered varies according to organisation type. Public sector sources were more likely to refer to balancing a range of stakeholder needs, such as opportunities for local businesses and economic growth of the region alongside improving the quality of life for citizens and communities. Conversely, the need to return a profit for shareholders remains the underlying driver for the private sector operations, though the responses of both private sector interviewees suggested that the client groups and work they seek to undertake is recognised for, and chosen in part because of, its social as well as economic value. This social value was alluded to when discussing the personal importance of organisations' objectives for employees from both sectors.

People [...] tend to join councils because they have some kind of social conscience and want to improve the lives of people who are living in an area. (Public)

... there's quite a strong moral ethos [that] the works we do are there to improve the lives of people [...] that's the sort of underlying sort of get out of bed reason. (Private)

Despite energy being a highly institutionalised sector nationally, references to institutional factors directly influencing the organisations were largely confined to the effect of government policy on resource allocation. For the public sector, this manifested as a steadily decreasing resource with which to deliver services under government austerity, and the organisational response to the reductions.

Staff have been slimmed down dramatically, and will continue to be slimmed down dramatically, so you are looking at better processes to do more with less. (Public)

Conversely, private sector commentary included references to investment in additional resources to prepare for expected market growth stimulated by government policy. One such example was the expectation surrounding the launch of the Green Deal, and the waste associated with its lack of delivery and eventual failure.

Setting up subsidiary businesses and other bits and pieces, which haven't been used, so there has been quite a lot of wasted effort I guess on the basis that we expected markets

to arrive on the basis of government promises that haven't materialised. (Private)

Legitimacy, in the institutional sense of validity of an organisation within its field, was not cited as a driver for the general activities of any of the organisations in the context considered. In a stakeholder sense, legitimacy can mean that certain stakeholders are held to be more important than others. The fundamental need for the private organisations to satisfy their shareholders could arguably be characterised as an example of variation in stakeholder importance, however this was not explicitly stated as such by the respondents.

REASONS FOR PARTICIPATION

One of the questions asked of the case study was "what are the reasons for organisations' involvement in the Better Homes Yorkshire scheme"? The evidence collected suggests that 'reasons' can be divided into objectives and motivations. We define objectives as the desired material outcomes of the project determined at the procurement stage, and these are therefore associated solely with the public sector as the procuring parties. Motivations on the other hand capture both the intrinsic drivers and the tangible benefits that an organisation expected to gain by being part of the project, and are therefore considered in the context of both public and private sector organisations.

Objectives of the Better Homes Yorkshire project

The Better Homes Yorkshire procurement followed on from earlier successful domestic energy efficiency framework contracts in the region (Rutherford, 2014), but with the new framework designed around the Green Deal and ECO which had replaced earlier funding mechanisms to become the primary means to fund retrofit energy efficiency improvements.

It was set up to respond to the Green Deal, and then ECO. It was going to bring millions of pounds worth of ECO funding in and do loads of stuff to people's homes. (Public)

I think that the ability to draw down significant amounts of external funding that, that was really one of the key drivers. (Public)

While leveraging funding was the key driver, there were multiple additional objectives stated for the scheme. Table 3 summarises these objectives as identified in the scheme procurement literature and interview responses. These are split into the

Table 3. Objectives for the Better Homes Yorkshire framework over and above funding leverage.

Delivery outcomes	Framework objectives
Improved living standards for residents*	Access to economies of scale
Contributions to voluntary emissions reduction targets	Cost levelling across the region
Reduction in energy bills (domestic and corporate)	Reduced bureaucracy for large scale project delivery
Creation and safeguarding of jobs within the energy efficiency supply chain	
Creation of apprenticeship opportunities	
Opportunities for local SMEs	

* Encompasses multiple interrelated objectives including reducing fuel poverty, improving housing stock and creating warmer and healthier homes.

overall outcomes hoped for from the work delivered through the framework, and the expected benefits of using a framework as the chosen delivery structure.

The delivery outcomes in Table 3 broadly reflect the wider, long-term strategic aspirations of the local authorities involved with Better Homes Yorkshire. However, the aspiration to access Green Deal and ECO finance using a long-term framework arrangement with endorsed partners was expected to deliver the specific framework objectives shown in Table 3; a logic apparent in documentary evidence and supported by interview responses.

Motivations for participation

The motivations for participation for the public sector are distinct from the project objectives in that they are concerned both with intrinsic drivers guiding the decisions to participate and the anticipated benefits of participation to the organisation itself. For the private sector, motivations include their reasons for bidding for the framework and the decision to bid as a consortium.

Considering local authorities initially, strength in numbers and the associated market benefits were cited by respondents as a motivating factor for being part of the framework rather than delivering the works as an individual authority, with the scale of the project a common factor linking them together. These were described to be beneficial both from the internal perspective of the authorities, and the external perspective of the partners they were trying to attract, though for some authorities this had to be balanced against constraining factors such as a reduction in perceived control.

So, there's strength in numbers and certainly in terms of working our way through the procurement process it helped combining forces with the other authorities in the Leeds City Region. I think also it meant that we could bring a more attractive offer to the market if you like. I know we felt that we could get a better show of interest from would-be bidders, so that was another reason. (Public)

... they believed it was a better option to go with the scale of Better Homes, rather than the comfort and local control ... I think really the motivator was the economic scale that by doing that, we could benefit from the reduced costs. (Public)

The decision by the private sector organisations to bid for the scheme, and specifically to bid for the scheme as a consortium, was linked by respondents to expectations surrounding the impact of the Green Deal and ECO, with both private respondents speaking of the likelihood that an individual organisation may

have struggled to allocate sufficient resources to manage and deliver the forecasted volume of works.

... physically if you think about it you have to meet each council once a month, so that's ten meetings a month and now if one contractor goes for it it's quite time consuming and you end up with a lot of resource allocation to it and ... your supply team might not be able to cope with it. So, the power of three came together and we thought it would be a much stronger bid. (Private)

When that framework came out we looked at who we could partner with to bid because ... we thought, the volume of work that would come from those ten authorities would be too big for one company [...] because we felt that ECO and Green Deal would work and the volume of work would be fairly significant. (Private)

In addition to the direct market motivations both public and private sector respondents identified examples of increased standing as a result of the partnership. Private sector partners were able to capitalise on the standing of local authority partners to implement the project aims, while local authority partners gained legitimacy with central government due to the improved efficiencies associated with the existence of a framework contract.

... you've got the council logo and brand behind it to support what we do. (Private)

... with government, having to not go through procurement and being ready to roll actually makes it more likely we will get funding ... So, it makes us a little bit more efficient and effective, when we are bidding. It doesn't seem like it sometimes, but practically, it streamlines what we have got. (Public)

The examples above describe some of the motivations discussed in detail by the respondents. Table 4 summarises the wider range of motivations cited by interview respondents, split by sector. Taken in conjunction with the objectives in Table 3 we see that while stakeholder benefits are important to the objectives of the scheme, market drivers remain the most common motivations for choosing to be part of the framework itself.

COLLABORATION

The Better Homes Yorkshire framework contract was signed in 2014 at the end of an eighteen-month procurement process. During this time, the Green Deal and ECO, on which much of

the anticipated work programme was predicated, were significantly altered (Rosenow and Eyre, 2016) leading to one of the three private sector organisations modifying their role from active to silent partner in the scheme in advance of the final contract award. Furthermore, eight months after the framework contract was awarded the Green Deal Finance company ceased to be funded by government. The originally anticipated sources of funding for the Better Homes Yorkshire scheme are therefore leaner than at the time the organisations were making the decision to develop and bid for the framework contract. This has had a direct impact on the resource allocation and scope of delivery for the project by the private sector.

It's meant that we've reduced our service offering, we've reduced our promotions and we've reduced our call centre numbers ... (Private)

The roles of project partners within the framework have also changed. Local authorities are taking a much more active role in the identification and vetting of suitable candidate areas and homes. In the original iteration of the scheme, this would have been a risk shouldered by the contractors.

... we're asking [the authorities] to put in a lot more time effort in the marketing and trying to source and allocate funding to make it work. (Private)

The decrease in funding has had a number of effects over and above the structural organisation of the project. In contractual terms, a major consequence of the funding reduction is an associated reduction in delivery targets. By March 2016, only 1,733 homes had been treated compared with a target of 2,136 for the year and an overall target of 12,000 in the first three years. In response to these results, and in light of the suspension of the Green Deal finance offer and significant reduction in funding represented by the transition from ECO to ECO2 in the same period, the Better Homes Yorkshire Programme Board (which includes members from all participating organisations) reduced the performance targets for year two by 80 % and reduced the contract management fee payable to WYCA (Norreys, 2016).

The effects described above are two examples of material alterations to the scheme linked to the suspension of the Green Deal, but interview evidence from both sectors suggests that the approach to collaboration by all partners is subtly different to that which would have emerged without the challenges created by policy change. Respondents describe a general pulling together and deepening of collaborative efforts between all parties to ensure success of the framework despite the difficult environment in which it now operates.

... it works because we are all doing whatever we can within the constraints of the contracts [...] if we stuck to just what

the contract says, we would doing nothing because it is all about Green Deal. So, everybody has kind of opened up a bit. (Public)

... we're both quite dependent on each other to put in the effort now much more so than we would have been. And I think that probably has driven us to work together in a more collaborative environment. (Private)

Furthermore, the drive for increased collaboration extends beyond the Better Homes Yorkshire partners with several respondents linking the work of the framework to public health outcomes. There is a recognition that the benefits of improving energy efficiency in homes creates associated benefits of reduced numbers of visits to public health services as a result of the improved health and wellbeing of residents. This has led some of the partners to seek closer integration between the project and a wider group of organisations in the health and social care sector, who have the potential to support the project by providing an additional avenue for the vetting and signposting potential applicants to the scheme. These links help to strengthen the business case for works within the scheme, while the health and wellbeing benefits are used to help persuade householders to sign up to works, with one respondent noting warmth, comfort and reductions in fuel poverty chime more closely with those in greatest need than carbon reduction objectives, despite the clear links between carbon and energy efficiency as one of the original drivers for the scheme.

But ... public sector energy efficiency – domestic stuff – historically has been focused on carbon [...] I think actually it is a better message now ... talking to a cold family about carbon emissions, we are not going to go anywhere. [...] we have always done the fuel poverty stuff, but yes it is now really the thrust is all about that. (Public)

Discussion

ORGANISATIONAL CHARACTERISTICS

Data collected suggest that the Better Homes Yorkshire partners are largely structured and operated as typical public and private sector organisations. Despite this, there are similarities in the influences on decision making from both stakeholder and institutional perspectives. The needs of stakeholders were often cited by respondents of all organisations in the context of being a positive influence on decisions about organisational activity, often linked to ideas of social responsibility and improving lives. However, in the private sector, these aspirations appear to be balanced against the need to ensure positive outcomes for the shareholders, chiming with ideas about stake-

Table 4. Motivations for participation in Better Homes Yorkshire by sector.

Public sector	Private sector
Avoidance of competition for the same funding	Estimated value of works available
Taking advantage of cost levelling opportunities	Avoidance of competition for the same works
More attractive to investors – bureaucracy	Benefits of collaboration for delivery
More attractive to investors – scale	Positioning with public sector
Using resources wisely	Association with trusted organisations

holder legitimacy as described by Haigh and Griffiths (2009). In addition to the external influences on decision making, the internal values of all the partner organisations are concerned with making a positive difference to stakeholders, with interview evidence suggesting that this is a genuinely held position by employees. Whether this is a common characteristic exhibited by organisations involved in other projects with similar objectives to Better Homes Yorkshire is worthy of further research.

The nature of the influence of institutional factors, in particular the political and legislative environment, was varied. There is evidence that funding announcements had in some cases prompted investment activity, but respondents generally spoke of the constraints on activity through policy upheaval and funding reductions. This viewpoint is likely to be shaped by the fact that the case study under discussion was so closely tied to the unsuccessful Green Deal initiatives. Nevertheless, the responsive logic demonstrated by the private sector organisations in this case study shares similarities with public sector organisations implementing projects in response to funding opportunities (Fleming et al., 2004), with the distinguishing features being the objectives behind the actions. For the public sector, these are linked to trying to avoid reductions in services as policy changes challenge the availability of resources, whereas the private sector objectives seem to be more concerned with seeking growth arising from policy change.

OBJECTIVES AND MOTIVATIONS

The multiple social and environmental delivery objectives for the Better Homes Yorkshire framework are shown in Table 3. Many of these align with the more general strategic objectives of the local authorities in the region. The fact that a long-term framework arrangement was developed for delivery of these objectives may be partially as a result of the regulatory context at the time of procurement. Guidance issued for local authorities referred to 'significant improvements' as arising from measures that took advantage of the Green Deal and ECO, were area-based, and utilised partnerships (DECC, 2012 p. 6). This guidance, coupled with the cessation of alternative funding mechanisms for energy efficiency (Mallaburn and Eyre, 2014) is likely to have provided a strong steer on the development of the Better Homes Yorkshire framework arrangements and demonstrates that government policy may simultaneously drive and constrain activity.

Motivations for participation in the framework were largely centred on economic benefits to the organisations, whether direct, such as the access to new markets for the private sector, or indirect, such as the increase in standing of local authorities seeking to attract investment. These anticipated returns have to some extent been eroded by the reduction in scale to the project discussed previously. However, some of the fringe benefits of the framework arrangement itself have been less affected by the decrease in scale, such as the reduction in bureaucracy for the public-sector partners after the initial procurement process, enabling large volumes of work to be undertaken in urban regions at short notice to exploit short-term funding availability. Additionally, rural authorities have been able to benefit from planned cost levelling effects arising from the scale of works undertaken by the urban authorities in the partnership. The final section of this discussion considers whether these returns

alone are providing the win-win for all partners that Khare et al. (2011) suggest is required for a successful collaboration, or whether there are other reasons that the partnership has survived in the face of non-trivial challenges to the scheme since its inception.

Previous research has identified the value of economic co-benefits in strengthening the case for local energy investment (Kelly and Pollitt, 2011). In this example, the situation is arguably reversed with the environmental and social objectives shoring up the weakened economics of the scheme in light of changes to Green Deal and ECO funding. While there has clearly been a reduction in scale to the scheme as a result of funding reductions, local authority respondents spoke of looking to add value to the business cases for projects delivered by the framework by highlighting when works were improving fuel poverty and health issues. References to links with health reflects a historical connection between energy efficiency policy and health (Dowson et al., 2012), and also returns to the idea of the value of co-benefits raised by Dulal and Akbar (2013) when discussing how the case for local climate change mitigation activities can be strengthened using local priorities.

WHY PERSIST?

In response to changes to the Green Deal and ECO partners have to some extent put aside competing organisational interests in order to ensure the ongoing viability of the Better Homes Yorkshire scheme. The choice by the programme board to reduce targets and contractual payments in response to the challenges faced, rather than enforce contractually legitimate penalties, is one example of this approach. Additionally, some public-sector partners within the framework have played a greater role in identifying potential clients for Better Homes Yorkshire than was originally envisaged. The changes to funding have also resulted in partners seeking to strengthen the business case for works undertaken through the framework with informal collaborations with bodies beyond the partnership. What has driven this collaborative response to the challenges? A number of possible explanations emerged during discussions, primarily linked to motivations for participation in the first place and a shared financial burden from procurement and bidding costs. These are now discussed.

In addition to the economic motivations for the scheme, there was also a social and environmental ethos evident in interview responses and documentary evidence from both sectors, and a stated desire to make a positive impact on both. The need for common values for successful partnerships is identified by Wassmer et al. (2014) and supported here by a sense that despite differences in the makeup of, and obligations to, their stakeholders, the underlying values of the participating organisations overlap and this overlap strengthens the shared commitment to success of the scheme. Anecdotally, those authorities that have engaged more closely with the private partners have achieved greater volumes of household improvements than those that have not.

Alongside shared values, there is a shared financial burden for all parties from the procurement and bidding process, and a mutual dependence on the success of the scheme to recoup not insubstantial sunk costs. All of the organisations involved have a vested interest to provide a return on their investment for their stakeholders, whoever they might be. The outcome

of the scheme on the future standing of organisations was also raised in responses, with private sector responses reflecting on the long-term benefits of collaboration in terms of the position afforded to them through the scheme, and the potential for future growth despite the current challenging climate. Conversely one individual from the public sector inferred it was politically important for the scheme to succeed, to avoid calling into question the decision to discontinue previous arrangements for provision of similar services; a situation exemplified by the rise and fall of the Green Deal (Rosenow and Eyre, 2016). These ideas are all worthy of additional exploration, and suggest that while the immediate financial drivers are an important factor in the choice to persist, they are not the sole criteria for the decision.

Conclusions and future research

In this study, we have examined the reasons for participation and characteristics of the organisations involved in the Better Homes Yorkshire energy efficiency scheme. We have identified similarities in their values concerning outcomes for stakeholders, and provided examples of links between the institutional environment and decision making at both organisational and project levels. Partner organisations have responded to challenges of UK energy efficiency policy changes by strengthening their collaborative efforts to ensure continuation of the scheme. We suggest that while their shared financial burden undoubtedly plays its part in this collaborative response, the ongoing success of the scheme can be partially attributed to the shared values of the partners and the wider effects on the standing of the organisations involved.

There is value in pursuing further research to establish if the organisational characteristics, motivations and collaborative methods identified in this study are common to other energy efficiency collaborations, and indeed to other types of energy-related projects. In doing so, we seek to evaluate whether some of the tentative lessons drawn from this case study can be reasonably developed into firm conclusions to inform future policy and collaborations.

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