

STAKEHOLDER ENGAGEMENT IN RESEARCH: THE CASE OF RETROFIT 2050 RESEARCH PROJECT

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Stakeholder engagement has recently been increasingly identified as key to research projects success. Stakeholder engagement is often seen as communication of the completed research project findings; however engagement with stakeholders that focuses on communicating with and involving them in the knowledge production process is increasingly accepted as the best practice. The study aimed at exploring how the Retrofit 2050 research team engaged fully with relevant stakeholders. The study examines how key stakeholders were recruited, engagement approaches and how the whole process was managed. It illustrates the application of the approaches for stakeholder analysis, engagement and knowledge exchange strategies. This research presents a literature review that considered the power of stakeholder engagement to sustainable urban retrofit research and identified the main process of stakeholder engagement and management. The authors provide participatory and participant observational research perspective of how key stakeholders were engaged throughout the research process. The findings indicate that, engaging with key stakeholders in research can legitimise the result and improves the quality of research output. The study highlights that, personal or one-to-one method of stakeholder engagement is the most commonly used approach to promote stakeholder-researcher relationships. It provides a research case study that can serve as a reference for the systematic consideration of other research teams about the practical approaches for stakeholder engagement in interdisciplinary sustainable urban environment research projects.

Keywords: participatory research, stakeholder engagement, stakeholder analysis, retrofit

INTRODUCTION

Academic researchers are currently responding to the call to generate useful, useable and used research by adopting effective strategies for engaging non-academic stakeholders in academic research (Boaz and Hayden, 2002). Incorporating stakeholder perspectives is increasingly becoming important in research with environmental and societal relevance as a growing number of successful research projects are judged by the bigger impact on knowledge, society, the economy and the people (Allen *et al.*, 2013). The contribution of stakeholders is more pertinent in complex socio-technical research project such as sustainable urban retrofit. Stakeholder engagement is an important piece throughout an entire research process in terms of data collection and the dissemination of research outputs (Carney *et al.*, 2009); however, O'Haire *et al.* (2011) argue that engaging relevant stakeholders early

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in the research process and maintaining good relationships are important to building trust and credibility. The importance of stakeholder engagement in academic research cannot be underestimated, as it helps researchers gain a better understanding of how to enhance mutual learning and knowledge exchange between researchers and their identified stakeholder community (Carney *et al.*, 2009). Stakeholders are more likely to participate in a research when the research could impact on policies that directly affect their lives and interests (Mallery *et al.*, 2012). Moreover, researchers engage with stakeholders for various reasons including: the need to add legitimacy to the research output, compliance with the conditions of research funding agencies, and as part of the dissemination process (Carney *et al.*, 2009). This research presents the general overview of the Stakeholder Engagement within the Retrofit 2050 research project. It explores the practice and process of involving key stakeholders throughout the research process. Second part provides an overview of the Retrofit 2050 research project. Relevant and current literature on stakeholder engagement strategies are examined in the third section. The final part highlights practical approaches adopted in engaging with stakeholders in the Retrofit 2050 research project and presents conclusions and recommendations for researchers with the desire to engage stakeholders in research.

THE RETROFIT 2050 RESEARCH PROJECT

The Retrofit 2050 project (Re-engineering the city 2020-2050: urban foresight and transition management) is an EPSRC funded programme of research to investigate transitions to sustainability in the built environment of Britain's city-regions between 2020 and 2050. It brings together an inter-disciplinary research team from Cardiff University, Salford University, University of Cambridge, Reading University, Oxford Brookes University and Durham University, as well as commercial partners from across the private and public sector including Royal Institution of Chartered Surveyors (RICS), Building Research Establishment (BRE), TATA; ARUP; Core Cities group; Department for Environment, Food and Rural Affairs (DEFRA); Welsh Government; Manchester City Council; Cardiff Council; Carillion; Environment Agency Wales, and Neath Port Talbot Council (Retrofit2050, 2014).

The essence of the Retrofit 2050 project is to bridge the gap between what is needed for urban scale retrofit and how this might be achieved. The work looks through a socio-technical lens for transition through retrofit in the built environment in an urban context. The Retrofit 2050 project comprises four interlocking technical work packages: Urban Transitions Analysis; Urban Foresight Laboratory (2020-2050); Urban Transitions Management; and Synthesis, Comparison and Knowledge Exchange as illustrated in Figure 1. The Retrofit 2050 project adopts Participatory Action Research approach which involves researchers and stakeholders engaging actively in the knowledge production collectively focused on effecting social change. A participatory research approach incorporates stakeholder knowledge into the whole research process (Allen *et al.*, 2013).

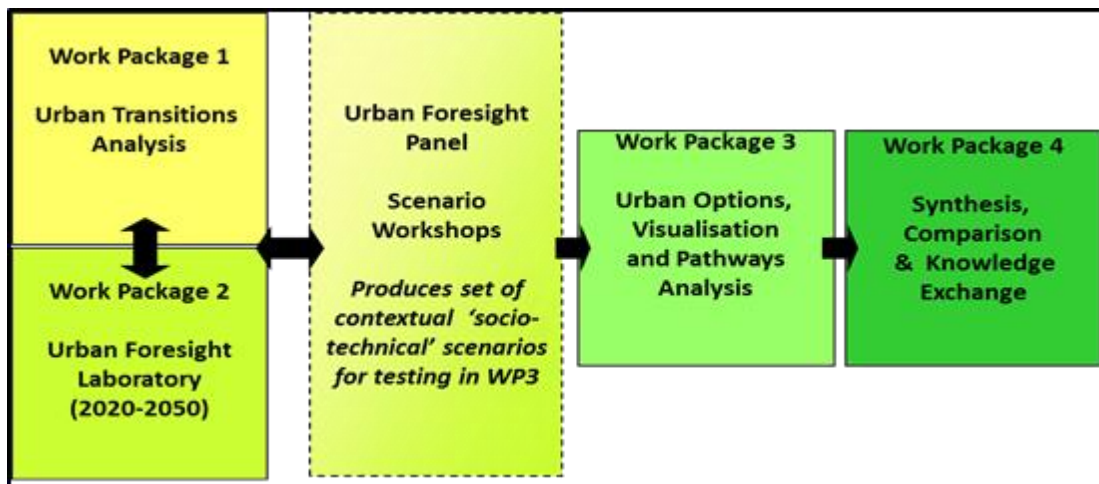


Figure 1: The Project Structure (Source: Eames, 2011)

LITERATURE REVIEW

Understanding and Defining Stakeholders

Stakeholders could be any individual or group who has a vested interest in the result of a body of work. Durham *et al.*, (2012) however add that the stakeholder is any person or group who influences or is influenced by the research. For the purposes of this study, stakeholders are individuals, groups or organizations who have a personal or professional interest in the topic of sustainable urban retrofitting and/or is been affected and influenced by the results of the Retrofit 2050 project. The level of stakeholder influence on the project varied and those with significant influence on the research or significantly impacted by the work is described as the key stakeholder (Opoku *et al.*, 2012). For a research project to be successful, the interests and influence of the key stakeholders must be recognised. A stakeholder's interest in a project can stem from the potential to influence the decision, and/or from the potential to be influenced by the results of the research. They can act as individuals or groups who have interest in an issue or a policy (Gardner *et al.*, 2009; Allen *et al.*, 2013). Researchers normally engage with different types of stakeholder depending on the relevance of the research or the interest/power that these individuals, groups of people or organizations have on the project; for example, public, industry/practitioners, policy makers (Farell *et al.*, 2001; Carney *et al.*, 2009).

It is important that the appropriate people are identified and engaged throughout the research process, to play the important role of informing the design of the study as well as making good use of the results once the study is completed. Gardner *et al.* (2009) describe the term stakeholder engagement as any process that involves stakeholders in some form of collaborative effort directed towards a decision. It is sometimes used to describe the broad range of interactions between the researchers and stakeholders through information delivery, consultation, involvement or collaboration in the decision-making throughout the research process.

Identifying and recruiting stakeholders

Academic researchers use various approaches when identifying potential stakeholders, but one common approach is the use of individuals who were known to the principal investigators through professional relationships. Identifying the relevant stakeholders of a given research project is as difficult and important as the research process itself; the choice of which stakeholders to engage is influenced by the interest and the power

of the stakeholder on the outcome of the research (Baldwin, 2000). O'Haire *et al.* (2011) state that stakeholder selection should be based primarily on availability and convenience, knowledge, and personal contacts. The identification process is called stakeholder analysis; which refers to a process of developing a list of stakeholders, identifying their interests and analysing their influence (Mitchell *et al.*, 1997). Stakeholder analysis is therefore a process of identifying stakeholders, analysing their influence, and thereby concentrating on preferential stakeholders (Reed *et al.*, 2009). Other methods of identifying and recruiting stakeholders include: direct methods; in-person interactions and personalized letters, emails, and phone calls and indirect methods; postings on web sites, blogs, and newsletters requests to stakeholder interest organizations and referrals through existing stakeholders (Mallery *et al.*, 2012). Also "snowball sampling", which involves identifying stakeholders through referrals from others, is a commonly used in identifying stakeholders (O'Haire *et al.*, 2011).

Stakeholder Engagement Strategies

There are numerous reasons why researchers engage stakeholders in research projects such as improving the policy relevance of the research (Durham *et al.*, 2012). To achieve the full benefits of stakeholder engagement in research projects, a strategic approach should be adopted with clear objectives, milestones and an evaluation plan. O'Haire *et al.* (2011) suggest that researchers bringing together diverse stakeholders may require paying much attention to group dynamics in addition to the presentation of the research topics. Carney *et al.* (2009) believe that researchers should plan the stakeholder engagement element of their research in a strategic and transparent manner to ensure that, how stakeholders have been engaged in the formation, execution and dissemination of research can be communicated more accurately. Researchers engage stakeholders using a variety of methods, including one-to-one meetings, advisory committees, public fora, focus groups, telephone interviews, e-mail, conference calls or Webinars, citizens' juries, workshops, conferences, and online questionnaire (O'Haire *et al.*, 2011). The person one-to-one method of stakeholder engagement is one of the most commonly used as it ensures a time of focused stakeholder attention to the issue under research. It also promotes stakeholder-researcher relationships ensuring a better understanding of each other's needs and priorities. In-person methods are helpful for brainstorming, clarifying and stimulating a deeper understanding of issues (O'Haire *et al.*, 2011). However, regardless of the method used to engage stakeholders, it essential to influence the contacts, establishing long-term partnerships, and building trust and credibility. It has been stated that stakeholder engagement can improve the quality of research output resulting in rich and diverse knowledge through the involvement of people with diverse social value (Pahl-Wostl, 2007 cited in Carney *et al.*, 2009). The legitimacy of findings from any research project can be enhanced through the engagement of the key stakeholders. Allen *et al.* (2013) commented that the roles of stakeholders in research are varied and can include anything from identifying research questions, sharing values and preferences, providing quantitative data or local expertise, commenting on research concepts and results and more importantly, learning from the research process. When stakeholder engagement in a research project is for the purpose of co-production of knowledge both the stakeholder and the researcher gain mutual learning. Such stakeholder engagement helps ensure the relevance of the research to policy and also give credibility to the research outside academia (Carney *et al.*, 2009). Stakeholder engagement should not be conceptualized as communication of research results after the project is complete (Green *et al.*, 2009; Allen *et al.*, 2013), but should rather focus

on communicating with and involve stakeholders inclusively throughout the whole research process. Stakeholders should not be passive recipient of the research findings as Carney *et al.* (2009) believe that good research requires the active input of all relevant stakeholders.

METHODOLOGY

The study adopted a qualitative research approaches through participatory methodology, with Participant Observation as the data collection technique. Bergold (2012) describe participatory research as a research paradigm which involves the stakeholders in the process and outcomes of the research. It is about conducting research with and for the research subjects; research with the people rather than on the people. Participatory research methodology aims to reflect, explore and disseminate the views, concerns, feelings and experiences of research participants from their own perspectives (Swain and French, 2004) and support the involvement of research stakeholders in the knowledge-production process (Bergold, 2007). Qualitative data collection for this study was done through observation, and document analysis. Participant observation has been used in a variety of disciplines as a tool for collecting data about people, processes, and cultures in qualitative research (Kawulich, 2005), through participation, observation, and interrogation (DeWalt and DeWalt, 2002). Kawulich (2005) describes participant observation technique as the most natural qualitative data collection method that connects the researcher to the most basic of human experiences. However, one major weakness levelled at participant observation methods is the potential lack of objectivity, as the researcher is not an independent observer, (Iacono *et al.*, and 2009). In participant observation method, the researcher serves as the primary instrument for observing and collecting data (Creswell, 2003) and this help develop a holistic understanding of the context and the phenomena under study. Finally data is analysed through a detailed sequential process of reviewing all documents associated with the whole Retrofit 2050 research project.

STAKEHOLDER ENGAGEMENT: THE CASE OF RETROFIT2050

Stakeholder engagement in the Retrofit 2050 projects took place at different stages throughout the research process. Forms of stakeholder engagement included availability of projects working papers and brochures, newsletter updates, involvement in workshops and symposia and project advisory group (PAG) meetings. To ensure the effective engagement of the stakeholders in the research process, a working paper on knowledge exchange strategy was developed to guide the research team (Opoku *et al.*, 2012). The recruitment and selection of stakeholders for the Retrofit 2050 project began with a stakeholder analysis; compiling a target list of key regional stakeholders from industry, local/regional government, third sector and community organisations. Stakeholders were selected on the basis of their local knowledge and organisational affiliation. The identified key stakeholders on the Retrofit 2050 projects have been grouped into the following as illustrated in Figure 2; practitioner community, policy community, academic community and general.

Practitioner Community

The practitioner stakeholder community includes all built environment professionals, construction organizations, suppliers/installers, energy/green deal companies, clients, developers, and owners. Professional institutions, think tanks, and trade associations are all relevant players in this project. The project's findings will reach out to the built environment practitioner community, and will provide a clear understanding of how

urban designers, engineers, planners, technology experts, infrastructure providers and regulators can effectively plan for urban transition.

Policy Community

The policy community were local and central government agencies involved with energy, climate change and urban sustainability policies. Key routes into the policy community include the Government’s Chief Scientific Adviser (CSA) and the key departments. The research enable policy-makers at national, regional and local level to gain a better understanding of how future change will require new and innovative forms of governance and the way in which technology roadmaps can help shape future thinking in cities.

Academic Community

The academic stakeholder community included university institutions and research centres working on retrofit related projects (EPSRC Sustainable Urban Environment-SUE community). The research draws together new and existing futures-based thinking and academic research focused on energy, waste and water set within a socio-technical framework. This enables the further development of urban knowledge which represents an integrated approach to knowledge generation for cities in the UK and internationally.

Public Citizens

The general public stakeholders included think tanks, NGOs and community organizations. The project team worked closely with key third sector stakeholder groups in the two case study areas of Manchester and Cardiff.

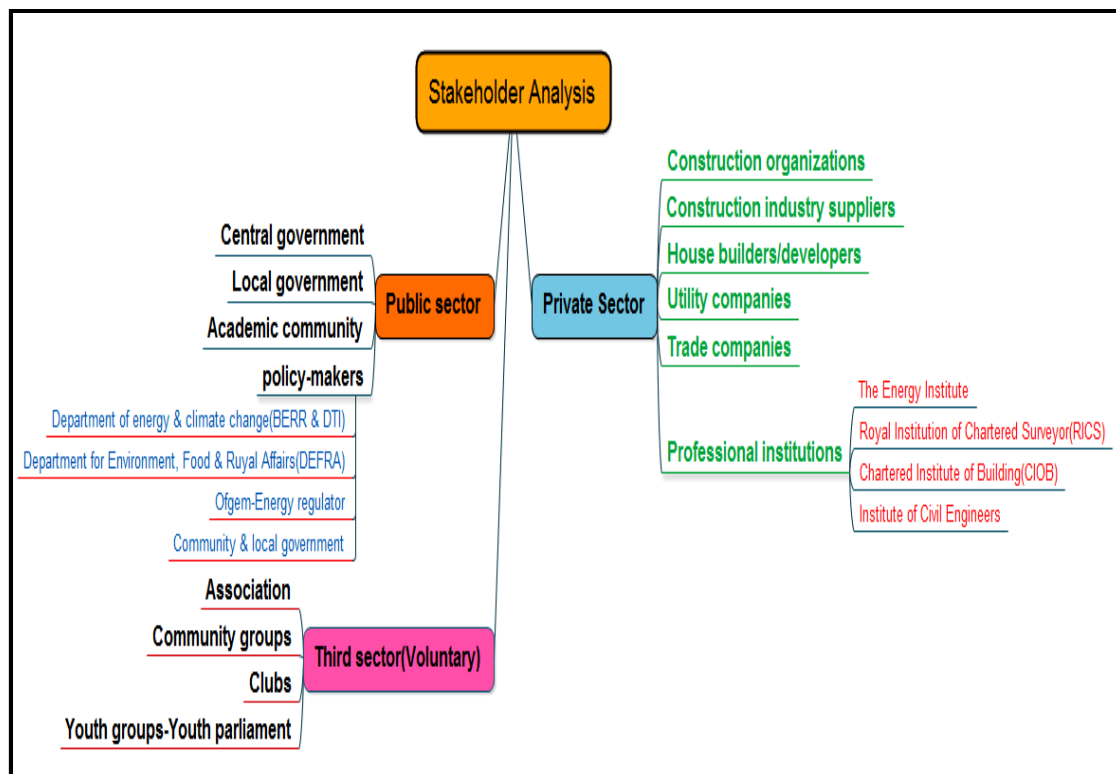


Figure 2: Retrofit 2050 Stakeholder Analysis

Stakeholder Engagement Approaches

Various approaches were adopted by the Retrofit 2050 research team to suit each stakeholder to be engaged in the research process. The key stakeholders were engaged throughout the research process; contributing to the process as well as receiving the research project findings. The stakeholder engagement approaches used in the Retrofit 2050 project are discussed below:

Expert Reviews

As part of the work of the Retrofit 2050 Urban Foresight Panel, more than twenty reviews were commissioned from leading national and international experts from academia, industry, government and civil society organizations on aspects of retrofitting including urban design, governance, transport, energy, water and waste. The workshop addressed one of the key objectives for the project; developing and evaluating city-regional visions and pathways for urban-scale retrofitting. This was the first workshop of the Retrofit 2050 project and focused on exploring the meaning of urban retrofitting and drivers for sustainability, it considered the historic reshaping of the urban fabric and the way that current niche and mainstream activities might seed future transitions. The output of this workshop was a report that drew together the diverse range of ideas and insights forming the basis of further workshops.

Conferences and Exhibitions

The research team took part in a number of relevant exhibitions and conferences dedicated to sustainable urban retrofit including the RetroExpo exhibition and conference, the Greenbuild and Ecobuild exhibitions in 2012. An academic conference was held to share knowledge and findings from the Retrofit 2050 project and engage in a process of comparative and mutual learning with leading national and international academic peers, together with a small number of key stakeholders from policy and practice. Also, policy/practitioner conference was held with the aim of making the findings of the research project accessible, useful, and useable for policy makers, government, local governments, property owners, practitioners, and third sector organisations with an interest in the future of retrofit

Workshops/Symposia

As part of the research process of linking the contextual scenarios with the regional case study context, regional scenarios workshops brought together a panel of experts from the public, private and voluntary sectors to explore visions of retrofitting to the year 2050. Whilst the activities of the Retrofit 2050 project are primarily UK focussed, a workshop was held to provide a window into understanding the dynamics of retrofitting activities on the global stage. It explored the politics and processes of retrofit as they unfold in different countries and contexts across the world.

Engagement with Policy and practitioners

Policy makers and practitioners were actively involved in both the knowledge production process as well as the dissemination process. Among them was a presentation on EPSRC Retrofit 2050 project at HM Treasury in London. Also dissemination Seminars were organised for practitioners that included the Chartered Institute of Building (CIOB) sustainability group; Women in Sustainable Construction and Property (WSCP), Deloitte Real Estates, the Institute of Environmental Management and Assessment (IEMA) and the Cardiff County Council.

CONCLUSIONS AND RECOMMENDATION

In conclusion, this study presents participant observational perspective on how the Retrofit 2050 research team engaged with the relevant stakeholders throughout the research project. The discussions show that it is essential to understand the process and the benefits of stakeholder engagement in research. Engaging with relevant stakeholders in research can improve the quality of research output, legitimise the result, and more importantly enhance the policy relevance of the research. The stakeholders engaged in the Retrofit 2050 research project impacted greatly on the overall success of the project. Stakeholders were part of the research process taking part in knowledge production, data collection and research dissemination workshops, seminars and conferences. The active engagement of non-academics (policy makers, practitioners and the general public) in the research process provided the relevant and diverse perspective/opinions needed to tackle the research problem. Key findings from Retrofit 2050 research project have been presented to both academic and policy/practitioner audiences at a number of seminars, workshops and conferences.

The study highlights how to engage with stakeholders and the choice of appropriate stakeholder engagement approaches in academic research. More should be done in terms of further empirical studies to showcase the enormous benefits of engaging stakeholders in academic research. It was noted that the process of identifying, recruiting, contacting, and engaging stakeholders in research takes longer than anticipated and would be helpful to have a realistic assessment of the timelines. Also there is no perfect approach for stakeholder identification and prioritization and combining several approaches when necessary is the best way to manage stakeholders. The following recommendations have been identified through the study to enhance stakeholder engagement in research:

- Stakeholders should be engaged early and throughout the research process;
- Researchers should employ multiple methods of engagement that suits individual stakeholder needs and requirements;
- When using in-person stakeholder approach, it is prudent to undertake icebreaker sessions when stakeholders are not accustomed to each other or come from diverse backgrounds;
- Finally stakeholders should be provided with easy-to-understand and concise informational materials at the beginning of each engagement.

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