



Harnessing DIY retrofits for household emissions reduction at scale: a case study of the Nottingham Green Meadows project

Project Aims

In June 2019, the UK Government committed to achieving a 100% reduction of greenhouse gas emissions by 2050 (the Net Zero target). One of the biggest challenges to reaching this goal is the current state of residential and commercial buildings in the UK, which are responsible for approximately 40% of the UK's emissions. The UK has the oldest and coldest housing stock in Europe with 28 million homes and 6 million commercial properties requiring some form of intervention to reduce emissions; a process known as retrofitting.

Other challenges to achieving the Net Zero target are skills gaps in the design and construction professions, a cost-of-living crisis, and inconsistent government policy that is being rolled out too slowly and is often met with resistance from homeowners. This project looks to explore what can be done to tackle these challenges in Nottinghamshire and consider the potential effectiveness of a grassroots, citizen-based approach.

Nottingham Green Meadows is a community project aimed at providing practical knowledge, skills, and support to enable residents of the Meadows area to take actions related to climate change. One key aspect of the project is a series of practical courses which teach Meadows' residents how to retrofit their own homes to reduce emissions. The climate crisis is fundamentally a social justice issue, as its impacts are unequally distributed across society, therefore this project aims to contribute to lowering domestic carbon emissions in the Meadows area, ensuring that financial and wellbeing benefits are felt across the community.

This PhD project will employ participatory approaches embedded within the Green Meadows project, engaging with the local community who have varying involvement with the project. This research will also identify the factors which enable, and prevent, people from diverse backgrounds from engaging with these potential solutions.

This project has been co-created and is supported by researchers from Nottingham Trent University, the University of Nottingham, and partners at Nottingham Green Meadows. The successful candidate will be enrolled at the University of Nottingham.



Project Aims

1. Understand the role of simple and affordable energy efficient DIY retrofit solutions in local to national aspirations in meeting Net Zero targets.
2. Identify the cultural, psychological, and structural facilitators and barriers to the uptake of energy-efficient home improvements among different groups of people engaged with the Nottingham Green Meadows project.
3. Understand how to promote uptake of DIY energy efficient retrofit solutions among diverse groups, including those that are marginalised or face greater degrees of socio-economic challenges, to pursue a socially just transition to Net Zero.

Supervisory Team

1. Lead Academic Supervisor: [Dr Charles Ogunbode, UoN](#)
2. Academic Co-Supervisor: [Professor Richard Bull, NTU](#)
3. Community Supervisor: [Heather Ince, Green Meadows Project](#)

Key Details

Host University:	The University of Nottingham
School / department:	School of Psychology
Start date:	03 April 2024
Financial offer:	Tuition fees covered in full (worth approx. £15k across full PhD programme). Monthly stipend based on £18,622 per annum, pro rata, tax free.
Working hours	Full-time (minimum 37.5 hrs per week), or part-time (minimum 20hrs per week).
Working Style:	Primarily in-person at host university. Flexible working supported. Working pattern to be agreed between successful candidate and lead supervisor.



Competencies

Co(I)laboratory Core Competencies

Category	Competency	Assessed: Application (A), Interview (I)
Comprehension and evaluation	Strong understanding of the project and its subject matter.	A / I
	Analytical, researcher mindset with keen attention to detail.	A / I
	Communicate complex concepts with clarity and precision.	A / I
	Able to identify connections, patterns, gaps, and irregularities in information/data.	I
	Able to interpret data/information confidently with logic and empathy to derive meaning.	I
Social and emotional	Demonstrable experience of responding effectively changing contexts, information and demands.	A
	Ability to persevere in the face of challenges/failures and to remain constructive in developing solutions.	A
	Demonstrable passion for learning with clear drive and curiosity to undertake this specific research project.	A / I
	Willingness to immerse oneself in the research subject matter and make a contribute to new knowledge through a PhD.	A / I
	Strong desire to make a positive community impact through the research.	A / I
	Willingness to think deeply about complex concepts and engage with academic ideas and theory.	A / I
Preparedness and potential for success	Experience of working, collaborating and communicating effectively with different stakeholders.	A
	High level of self-motivation and ability to work with minimal guidance.	A / I
	Strong organisational and time-management skills with the ability to balance and prioritise multiple tasks.	A / I
	Ability to identify potential challenges and complexities and thoughtfully consider possible solutions.	A / I
	Able to identify the technical, personal, or professional skills required for a task and take action to develop these.	A / I
Community Context	Genuine desire to undertake community-engaged research over more traditional approaches to research.	A
	Understand the impact of and need for the inclusion of diverse experiences and points of view in research.	A / I
	Appreciation/understanding of the importance of community insight and experience in the generation of new knowledge.	A / I
	Awareness/understanding of the broader societal context related to the subject matter of the project.	A / I



Project Specific Competencies			
Essential	Assessed: Application (A), Interview (I)	Desirable	Assessed: Application (A), Interview (I)
An appreciation of the value of rigorous and high-quality applied research for informing policy interventions to promote sustainable behaviours.	A / I	Prior research experience including some degree of familiarity with basic qualitative and quantitative methods.	A / I
Cultural fluency – appreciation of diversity of worldviews, values, cultures and the value of different knowledges and ways of knowing.	A / I	Prior experience of working with community groups, especially those including people from diverse socioeconomic and cultural backgrounds.	A / I
Commitment to the advancement of sustainability and social justice.	A / I	Some knowledge of systematic literature reviewing techniques, as well as data collection through observation and interviews.	A / I
Flexibility and willingness to work with people from various backgrounds as equal partners in pursuit of a common objective.	A / I	Familiarity with the building and construction industry and/or energy and climate change policy.	A / I
Experience in any relevant professional or community setting.	A / I	Background in the social sciences.	A / I

References for Further Reading

- Bull, R. & Eadson, W. (2023) Who has the power? Reflections on citizen engagement in district heating schemes in the UK and Sweden. *Energy Policy*, 2023, 177, 113505
- Bull, R., Petts, J., & Evans, J. (2008). "Social Learning from Public Engagement: Dreaming the impossible?" *Journal of Environmental Management and Planning* 51(5): 703-718.
- Demski, C., Butler, C., Parkhill, K. A., Spence, A., & Pidgeon, N. F. (2015). Public values for energy system change. *Global Environmental Change*, 34, 59-69.
- Manzo, L. C., & Perkins, D. D. (2006). Finding common ground: The importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20(4), 335-350.
- Ogden, J. (2016). Celebrating variability and a call to limit systematisation: The example of the behaviour change technique taxonomy and the behaviour change wheel. *Health Psychology Review*, 10(3), 245-250.
- Parkins, J. R., Rollins, C., Anders, S., & Comeau, L. (2018). Predicting intention to adopt solar technology in Canada: The role of knowledge, public engagement, and visibility. *Energy Policy*, 114, 114-122.
- Scott, F. L., Jones, C. R., & Webb, T. L. (2014). What do people living in deprived communities in the UK think about household energy efficiency interventions? *Energy Policy*, 66, 335-349.
- Talò, C., Mannarini, T., & Rochira, A. (2014). Sense of community and community participation: A meta-analytic review. *Social Indicators Research*, 117, 1-28

