ECEHH Project Insight:

EXPO-ENGAGE: Air quality citizen science

A bite size project update, Sep 2023

Explore our project in Cornwall and South Wales Valleys, building networks and breaking barriers for equitable air quality monitoring

Who is this relevant to?

Local communities, public health professionals, environmental activists, scientists and researchers, policy makers and educators

Background

Reducing the use of fossil fuels to achieve net zero emissions targets in the UK will require major changes to how we live: citizen support will be therefore be essential.

Citizen science is one way to engage communities with energy transitions by raising awareness of emissions, sources of pollution and empowering communities with data. However, those living in deprived areas or on low household incomes tend to be less likely to participate in citizen science initiatives. They are also more likely to be living in areas of environmental pollution or of low environmental quality. Further, cities receive attention in terms of air quality, but the personal exposure of people living in smaller communities – which may still have localised areas of low air quality – is less known.
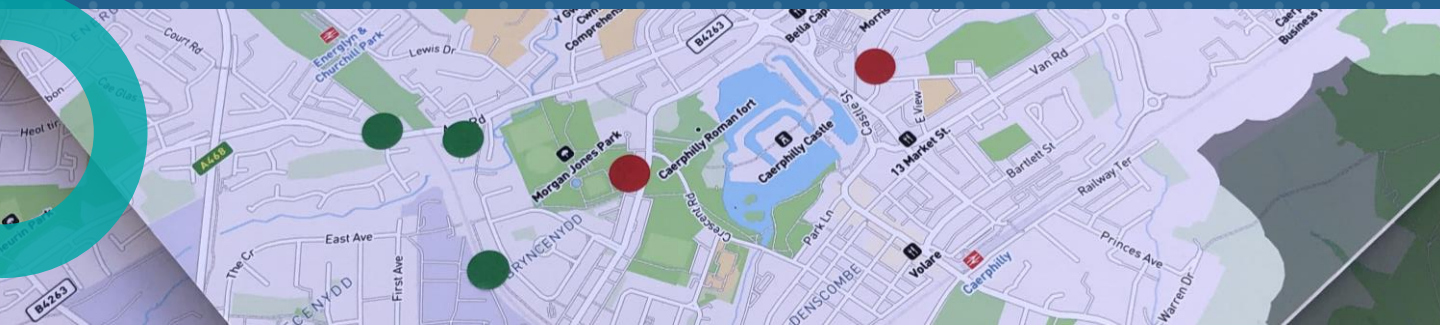
Study areas

- Camborne, Pool and Redruth in Cornwall
- Caerphilly county, South Wales

Objectives

1. Develop a network of stakeholders and community members interested in air quality in the two areas.

2. Identify barriers to taking part in citizen science for people living in these areas.

3. Co-produce a research plan with stakeholders for air quality citizen science in the two areas

Who's involved?

The project is a collaboration between University of Exeter and Cardiff University and is funded by the UK Energy Research Centre

Pilot project

This project builds upon a pilot initiative funded by the GW4 Crucible. It involved residents from Bristol and Falmouth who participated in our study. Half of the participants received personal air quality monitors, while the other half used an air quality forecasting app. We organised discussion groups to understand their experiences and engagement with air quality and climate change issues. The results of this work have been submitted for publication.

Progress so far

Contributing towards objective 1, we have carried out a stakeholder mapping exercise and contacted potential stakeholders.

Contributing towards objective 2, the team visited Camborne, Redruth and Caerphilly in August 2023. The team surveyed residents to find out their perceptions of air quality and potential ways that might prevent or help them take part in measuring air quality.

In October, we plan to hold co-production workshops to develop a research plan and meet objective 3.

You can find out more about the project at: https://www.expo-engage.co.uk/
Or contact:
Expo-engage@exeter.ac.uk

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