

**Low Carbon Communities
- Progress Summary
Tewkesbury Borough
Council
May 2024**

Project Introduction

Low Carbon Communities aims to increase private investment in home retrofit and to provide people with the tools and knowledge necessary to discuss and engage with retrofit within their local communities. The UK Shared Prosperities fund (UKSPF) funded project will provide 50 Bespoke Energy Efficiency Reports (BEERS) to constituents of Tewkesbury Borough. These reports will advise homeowners and direct private investment to the most appropriate and cost-effective retrofit opportunities. The surveys and follow up support will be conducted by Severn Wye Energy Agency who have been contracted to supply the technical support package for the project.

The Low Carbon Communities project is an action research project with an emphasis on direct community support and engagement plus practical action and evaluation. The aim of the evaluation is to help us learn about the essentials that future services will need for retrofit to be attractive to self-funding homeowners.

It is hoped that the project will foster a community of individuals who can directly receive support from Severn Wye. They can then share their experiences with those in their community looking to retrofit their properties and grow the collective knowledge.





Progress Summary

Applications and research questionnaires

The marketing of the project has been successful and the 50 spaces for householders to participate in the scheme have been filled. Each householder completed an application questionnaire detailing their retrofit journey to date and their motivations to participate.

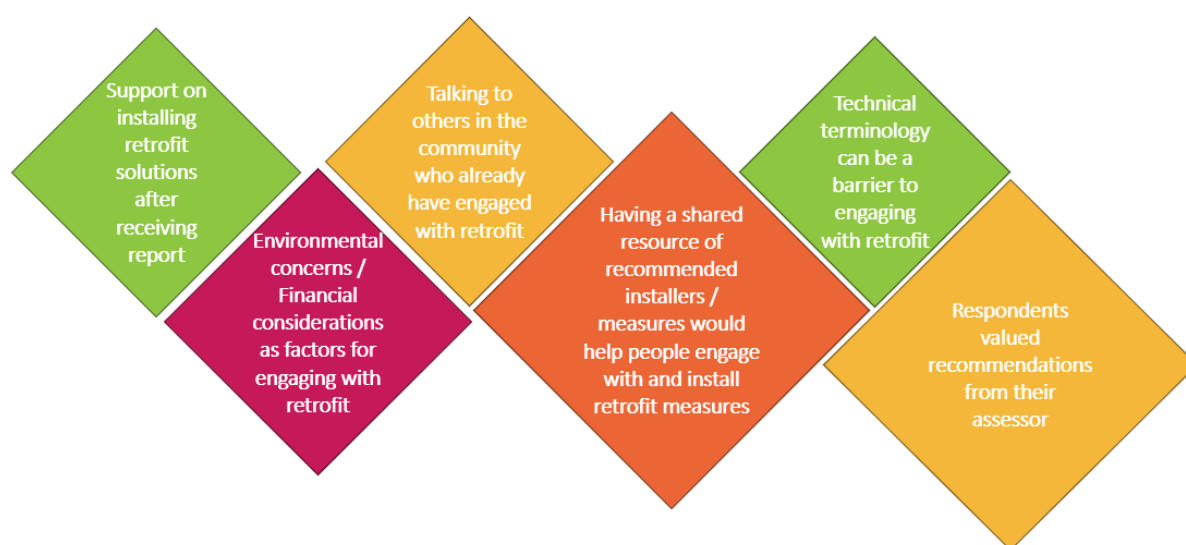
Initial findings from these questionnaires indicated that the vast majority of participants want to engage with retrofit and have a strong baseline knowledge but would benefit from more detailed insight and advice on costings to then implement these measures more effectively. The questionnaires also showed that clients indicated a clear preference for 'familiar technologies' such as solar or loft insulation over emerging technologies such as heat pumps.

Bespoke Energy Efficiency Reports

As of the end May 2024, Severn Wye Energy Agency had completed 39 of the site visits and 34 of Bespoke Energy Efficiency Reports had been send to the homeowners. From these reports a total of 361 recommendation have been made, an average of 10.6 per property. So far, over 30 different measures have been recommended to improve the energy efficiency of the properties. The estimated monetary savings that could be achieved by the 34 households by installing the measures recommend in their report totals £52,430 per annum, an average of £1542 per property per year. The estimated CO₂e savings that could be achieved by the households installing all the measures identified their report totals 137 tonnes CO₂e. On average, these 34 homes have the potential to improve their EPC SAP rating by 17.

Focus Groups

The first round of focus groups took place in May 2024. Further respondent-led research methods will be used to develop insight and explore our research questions. give participants sufficient time to implement the measures identified in their reports. From thematic analysis of the May focus groups, several themes were identified as being significant to participants.



Anecdotes from Severn Wye surveyors -

“Every property I have visited wanted to do their part in moving towards net zero.”

“Most of the properties I have visited have been in the conservation area that covers the Borough, with people thinking they cannot make renewable changes or benefit from renewables. By suggesting they can still benefit from solar PV by using co-operative schemes such as Ripple has opened up a different way of thinking should a physical system be unable to be installed.”

“A lot of people have realised a heat pump system might be right for them and I feel we have eased the fears when it comes to installing the technology, more people are talking about ground source heat pumps as a possible install.”



“A smaller measure that has been commonplace is the lack of draughtproofing around loft hatches and insulation on top of the hatch, using my airtightness knowledge I could let clients know how much of a difference this can make to keeping comfortable and reducing heat loss.”

On all properties I’ll explain about boiler flow rate temperatures and any property that has TRVs set to max I’ll explain about the settings too (number 3 or III is around 20-21 degree room temp). I’ve had a couple where the homeowner or I have straight up turned the boiler flow temp down on site because they just didn’t know what the numbers represented (so making immediate carbon and cost savings).”

Anecdotes from participant householders -

“Yes, the report has been helpful. I have insulated the loft hatches and plan to insulate the older section of the loft this year. Also going to investigate the combi saver with our regular boiler service”

“It is most informative and we have actioned two of your recommendations already - additional insulation around the hot water cylinder and thermal curtains on the front door and adjacent window. We are also in the process of having solar panels and a battery installed which will, of course, make a major difference to our energy consumption. Thank you very much for your advice.”

“Thank you for the report. Reading it is extremely thought provoking.”

“We purchased some Amazon AQM’s (Air Quality Monitor) and have one on each floor at the moment. That showed us that the top floor humidity was quite high, probably because we had chosen to keep the heating up there to a minimum. We’re keeping an eye on it for now, but in the meantime we got a quote for a positive pressure ventilation system, but early indications are we might not need it. We changed the base temperature to the whole house this winter, which although has cost us more than previously, the comfort in the house is better and the humidity is better. We have got some quotes for a home battery solution as

the calculations for our savings, including the electric car look to be the biggest saver for us. Looking to get this done in the next month or two once we have a smart meter fitted first.”

“What a great read. Very in-depth review of the current state of my property but also the future possibilities on offer for my property. I really appreciate your hard work and dedication to pulling this document together for me. I will consider several elements from the report in my future projects on my home.”