

The hidden reality of fuel poverty in rural Wales: Retrofit schemes

This briefing summarises some of the main findings from a new Citizens Advice Cymru [report](#) which examines fuel poverty in Wales through a rural lens. Here we examine awareness, usage and attitudes to retrofit schemes. A second briefing is also available which focuses on the impact of fuel poverty and financial support.

Approximately 340,000 households in Wales are in fuel poverty (25%)¹. This means that a quarter of the Welsh population risks needing to make impossible choices between heating and powering their homes and paying for other essentials.

Our research confirms that rural households in Wales are disproportionately affected by energy affordability issues compared to households in urban areas. This is due to older housing stock, a higher cost of living, and less awareness and engagement with support services. Rural households are also less likely to be connected to the mains gas grid, making them vulnerable to price fluctuations in the alternative fuel market - as illustrated by the recent increase in domestic heating oil prices due to the latest Middle East crisis.

Retrofit Schemes

A number of retrofit schemes have been in place in recent years to help people improve the energy efficiency of their homes or provide support to switch to low carbon heat options. Improving the energy efficiency of homes helps to reduce bills and therefore protect people from future price hikes. There have been two core programmes offering energy efficient home improvements to people in Wales:

- The Welsh Government's Warm Homes Programme delivered through the **Nest scheme**: a fuel-poverty and home energy efficiency scheme providing universal free advice and home improvements for households who meet certain eligibility criteria; and
- **ECO4** (Energy Company Obligation): a GB-wide scheme funded by energy suppliers to improve the least energy-efficient homes.

¹ The Welsh Government defines fuel poverty as the need to spend over 10% of the household's income to afford maintaining a "satisfactory heating regime". For severe fuel poverty, this rises to 20%. Data tables are available [here](#) and relate to October 2024.

The ECO scheme officially came to an end this year - leaving Nest as the only current route to accessing free retrofit in Wales.

People living rurally are more likely to be in need of retrofit measures due to older, poorly insulated houses and more reliance on carbon-intensive, unregulated sources of heat. Our research also found around a third of rural households report mould growth and damp patches on the walls or ceilings of their homes.

Despite these issues, the latest Nest annual report suggests that remote areas were under-represented in the latest tranche of installations. According to the 2024 to 2025 report², only 10% of homes receiving improvements were in rural areas, which is significantly lower than the proportion of people living rurally in Wales (estimated at approximately a third of the population). Households who are not connected to the gas grid constituted only 8% of the scheme's beneficiaries.



Some of these houses, although they look quaint, they're really old and not energy efficient at all. - Research Participant



Amongst our survey respondents, people living in urban areas are more likely to have heard of, and used, retrofit schemes - although usage is relatively low amongst both groups, with just 10% saying they'd used the Nest scheme and 9% saying they'd used ECO.

- 52% of people living in urban areas have heard of Nest, compared to just 40% in rural areas.
- Only 20% of people living in rural areas had heard of ECO compared to 34% in urban areas.

Experiences of Retrofit

Most survey respondents who had received energy-efficiency improvements or low carbon heat options through retrofit schemes reported positive experiences (over 80%) and welcomed warmer homes, lower energy use and improved heating systems.



We had to buy coal and wood .. and travel it back up, back and forth. And it was such an effort. So in a way, that [air source heat pump] really changed our life - Research Participant



However, poor-quality installations (predominantly associated with ECO) and misconceptions or insufficient guidance on how to use new technologies, such as heat pumps, were regularly mentioned. Those who described their experiences with retrofit

² Welsh Government, [Warm Homes Nest scheme: annual report 2024 to 2025](#), 26 March 2026

less favourably were primarily disappointed that they had noticed little financial benefit since the improvements were made.

Many households who would benefit from retrofit support were unable or unwilling to access it because of confusion over eligibility criteria, low awareness, or concerns about disruption or the legitimacy of the schemes. These barriers were particularly pronounced in rural areas, in spite of the need for retrofit being generally higher.

Interest in Retrofit

Two-thirds (67%) of survey respondents expressed interest in retrofit schemes, particularly fully funded options (41%), though rural households showed slightly lower interest (62%) than urban households (71%).

Key motivators for interested participants include saving money on bills, increasing home comfort, and helping the environment, with solar panels being the most popular type of improvement across all respondents.

Urban residents leant slightly more toward demand-led schemes, whereas rural residents exhibit higher uncertainty over which approach they prefer. For those initially uninterested, clear evidence of energy savings (26%), quick issue resolution guarantees (20%), and minimal disruption assurances (19%) were cited as the top factors that would increase their willingness to participate in such schemes.

Interestingly, autonomy over what type of improvements will be installed is especially important for those in rural areas (20% compared to just 9% of urban respondents). This is likely linked to the specific nature of many rural properties. Rural participants also want assurance that improvements are proven, effective, and will deliver the claimed benefits over the long term (i.e., reduced energy usage, increased efficiency and savings).

Elly's Story

Elly* lives with her two teenage children in rural Wales. She uses Universal Credit to top up her wages. Her house is old and takes over a day to warm up, which makes it difficult to manually adjust the temperature when needed. She uses a prepayment meter to avoid unexpected bills and finds it increasingly difficult to top it up. She's increased her working hours to manage this and has had to cut back spending on her children. Elly has always stayed on top of her bills, but the constant increases in her energy bills make her worry about the future. Elly recalls people knocking on her door to offer solar panels and receiving e-mails from retrofit schemes but she always assumed they were not genuine opportunities. She thinks extra insulation would be

hugely helpful, but would only trust a council or government backed programme. She would also feel better about it if her neighbours went through changes at the same time.

*All names have been changed

While the level of interest in retrofit is encouraging, our research concludes that an evident reliance on sorting things out for themselves, instead of turning to the range of support that's available, creates challenges for how best to identify, engage and help rural households who are struggling to afford energy bills. We have set out the following recommendations in order to tackle some of these issues and boost the use of retrofit schemes, particularly in the more rural parts of Wales. Our full set of recommendations can be found in the main [report](#).

Recommendations:

1. The Welsh Government should commit the significant investment necessary to make Welsh homes warmer, healthier, and more energy efficient to meet the growing and urgent need. This should include:
 - a. maintaining a demand-led Nest scheme to provide trusted advice and fully funded energy efficiency and low carbon heat upgrades for low-income households, and
 - b. introducing an area-based approach to installing retrofit measures, ensuring any initial pilot projects include rural areas.
2. In designing future retrofit schemes the Welsh Government should:
 - a. actively assess the needs of rural households and communities by 'rural proofing' schemes in line with Government ambitions
 - b. ensure information about available support schemes is comprehensive but clear, and promoted using the most appropriate channels to reach rural communities
 - c. regularly review income thresholds linked to eligibility to ensure they are routinely increased in line with inflation
 - d. ensure a full explanation is given to households on how to operate and care for any new installation(s). This should include help beyond the immediate aftermath of the works.

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