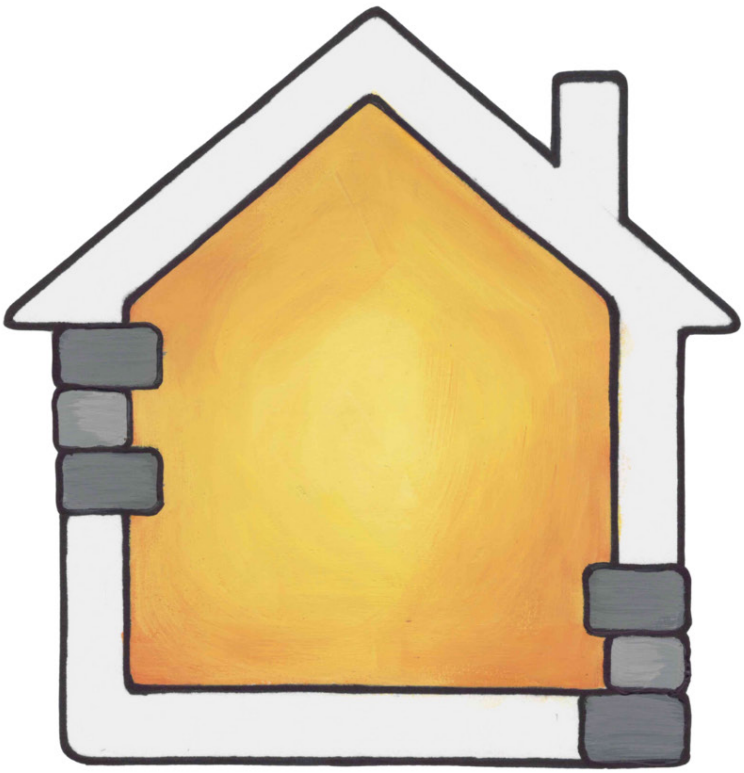


ZERO CARBON CALDERDALE

Calderdale's Retrofit Challenge

How can we make Calderdale homes warmer, healthier, and cheaper to heat? (and greener!)

Recommendations of the Citizens' Jury





UKRI Innovate UK

Calderdale Council

Carbon Co-op

Tod College learning centre and community hub

Introduction

How can we make Calderdale homes warmer, healthier, and cheaper to heat? (and greener!)



Background

Calderdale has over 75,000 properties with an EPC rating below band C. A key challenge on the path to achieving net zero by 2038 is upgrading these properties through retrofit—enhancing insulation and transitioning to low-carbon technologies like heat pumps and solar panels. In addition, a large number of properties are stone-built terraces that can be extra challenging to insulate and are often referred to as ‘complex to decarbonise’. This is a key focus of Calderdale’s Retrofit Challenge project.



The Jury

Since most homes in Calderdale are owned by the people living in them, the Jury focused on homeowners. Homeowners can make decisions on their properties and can benefit directly from the improvements. However, they still face many barriers to retrofitting, resulting in low uptake of these measures.

The Jury comprised 26 Calderdale homeowners, 12 men and 14 women from a varied age range. A number of jurors either have or live with someone with a life-limiting disability which is reflective of the number in Calderdale. 23 of the jurors live in homes with stone walls. 17 of the jurors are employed or actively seeking employment. Annual household incomes amongst the jury ranged from those who are below the income levels often used for grant funding to those on middle or higher incomes. All the jurors live throughout different parts of Calderdale including rural, semi-rural, and urban areas.

Knowledge of retrofit varied among the jurors from no previous knowledge or a basic understanding to a small number who had a comprehensive grasp of the subject. This created a diverse group of local homeowners and residents, all with different views and experiences that contributed to the research.



The Sessions

The Jury met over six sessions for a total of 23 hours. During these sessions, they heard from a wide range of experts who covered specialist areas related to retrofitting.

Session 1 - I**ntroduction and induction.**

Session 2 - **Introduction to Retrofit** with expert witnesses: Richard Armitage, Calderdale Council Healthy Homes and Aneaka Kellay, Carbon Co-op.

Session 3 - **Finance** with expert witnesses: Nandini Sharma, Lendology and Louise Marix-Evans, Quantum Strategy and Technology.

Session 4 - **Retrofit Delivery Models** with expert witnesses: Jonathan Atkinson and Professor Peter Roberts. Followed by Communications and Strategy with expert witness: Cara Holmes, National Retrofit Hub.

Session 5 - **Local Area Energy Plan, West Yorkshire Combined Authority One Stop Shop and Engagement** with expert witnesses: Laura Bramley, Calderdale Council, Jess McNeill, West Yorkshire Combined Authority, Gemma Voaden, Together Housing and Rebecca Notton, Groundwork.

Session 6 - **Conclusions and recommendations workshop**.

This booklet contains the recommendations the Jury arrived at. They are presented in order of popularity and importance to the Jury members.



Recommendation 1

One Stop Shop

Establish a viable, integrated and physical One Stop Shop area model for Calderdale.

A network of Retrofit advisors to provide trusted, impartial and well-thought-through information (including myth busting, material samples, example retrofits, statistics and comparisons).

The One Stop Shop should work with local trades to develop a network of trusted suppliers, supporting local trades to be able to deliver the work and provide quality assurance to minimise risk to their business.

It would provide a varied offer for different people (e.g. Retrofit assessments, through to full project management of the works).

Starting with mobile units for outreach and trusted local places like Libraries, GP surgeries, etc and leading to physical location(s) informed by the Local Area Energy Plan priority areas.

Additionally, the One Stop Shop would enable area-wide coordination, bringing together efforts from across the region and joining this up with health and care services. Learning from and connecting to existing services to help prevent winter deaths, improve air quality in homes, and promote social prescribing.

The One Stop Shop would offer training and specialist advice to trades and public services as well as apprenticeship schemes, inviting experts to provide training sessions, information and advice.

This recommendation is addressed to: West Yorkshire Combined Authority, Calderdale Council, Carbon Co-op and People Powered Retrofit, and local enterprises - a combined approach.

This recommendation is important because: It maximises the reach of support and provides health, environmental, and economic benefits. Not implementing it would be more costly for future generations. Additionally, it helps prevents scams, combat misinformation and remove barriers to accessing professional advice.

The immediate next steps are:

1 - Increased resources to make this viable, explore a utility company funding.

2 - Clarity on the framework and requirements needed for a physical presence (to be part of the West Yorkshire Combined Authority procurement).

3 - Develop a local leadership scheme - covering public health and local business.

4 - Look at integrating Calderdale's needs into the West Yorkshire Combined Authority One Stop Shop scheme.

5 – Facilitate a network of Community Champions as outreach in the community.

The timeframe is: Long term.

Recommendation 2

Finance

Retrofit products and materials to be VAT (value-added tax) exempt.

EPC (Energy Performance Certificate) assessments and retrofit assessments should be exempt from VAT. VAT should be exempt on all building products and materials used strictly to improve the energy efficiency of properties, excluding gas boilers.

This recommendation is addressed to: National Government.

This recommendation is important because: It will help to make retrofit more affordable to incentivise take-up.

The immediate next steps are:

1 – Influence National Government to remove VAT from specified products and materials used for improving energy efficiency and retrofitting.

2 – Develop a set of rules as to what counts as Retrofit or environmentally friendly products.

3 – HMRC to engage wider stakeholders in the development of new rules.

4 – Look at the possibility of incentivising homeowners with older gas boilers to move to heat pumps through VAT exemptions.

The timeframe is: Short term.





Recommendation 3

Supply Chain

Develop a local retrofit standard to guarantee the availability of a high-quality, equitable, circular, local supply chain.

Develop a tailored local retrofit standard for Calderdale's housing, overseen by Building Control or independent supervisors, which engages trained and approved local contractors.

This recommendation is addressed to: Calderdale Council and other stakeholders, including the private sector.

This recommendation is important because: The local approach is important because of the nature of Calderdale housing and to provide reassurance to homeowners about the benefits.

The immediate next steps are:

1 - Establish training (and retraining) schemes to embed skills and new standards with local contractors.

2 - Set up a collective buying and re-use scheme - passing on bulk buying savings.

3 - Adopt a recognised quality assurance standard which includes independent supervision of work and a warranty scheme.

4 - Establish an approved contractor scheme. Promote the use of natural, locally supplied and reclaimed materials where possible and appropriate.

5 - Lobby for VAT exemption and Government insurance support. Add into local plans.

The timeframe is: Medium term.



Recommendation 4

Planning, archetypes and surveying

Develop an archetypes guidebook for retrofit of different types of houses.

Create publicly available archetypes based on the PAS 2035 framework for different types of housing in Calderdale, such as terraces, back-to-back terraces, pre-1920s solid stone walls, under- and over-dwellings.

The guide should include what measures and materials are appropriate for the type of house. It should also provide a list of measures involved in light, medium and deep retrofit. Ventilation needs to be considered in parallel with insulation.

This recommendation is addressed to: Calderdale Council as the local planning authority. Royal Institution of Chartered Surveyors (RICS) and the Chartered Institution of Building Services Engineers (CIBSE) to support the development of a guide.

This recommendation is important because: It provides a process to follow until planning authorities can provide a starting point and a demonstration house, which can be used to promote the retrofit scheme to the public of Calderdale.

The immediate next steps are:

1 - Create a body of organisations and experts who can develop the guide. This should consist of architects, surveyors, and builders. However, it needs to be specific to Calderdale's housing challenges and needs.

2 - Life expectancy of materials to be included in the guide.

3 – The guide needs to be complementary to the local retrofit standard in recommendation 4 and address the needs and regulations of listed buildings.

4 – Ensure the guide includes light, medium and deep retrofit measures.

5 – Ensure that the importance of ventilation is highlighted in the guide.

The timeframe is: Medium term.

Recommendation 5

Finance

0% interest retrofit loans with match funding loans to be made available.

To fund the loans, the National Government would tax energy providers. Loans for retrofit measures would help to make homes more energy efficient. There should be 0% interest on payment for retrofit products, such as solar panels.

This recommendation is addressed to: National Government and financial institutions that can provide loans (such as Lendology and banks). National Government should provide the match funding for loans.

This recommendation is important because: It is important to provide diverse and accessible finance options. Providing 0% interest can help reduce the risk of negative equity. The immediate next steps are:

1 – Lobby National Government to support the development of 0% interest financing options.

2 – Investigate developing Government-managed lenders who are accountable.

3 – Make use of the Sovereign Wealth Fund to support the scheme financially and explore how a carbon tax could support the rollout of 0% interest loans whilst ensuring a fair and just transition.

4 - Develop a working partnership with Great British Energy.

5 - Financial underspend in the scheme is to be kept by the local authority.

The timeframe is: Medium term.



Recommendation 6

Area Based Schemes

Coordinate the development of both One Stop Shops and Area Based Schemes in localised areas to achieve momentum, scale, speed and equity.

The One Stop Shop will promote the area-based scheme to regions with more interested homeowners. It will show cost benefits and offer incentives that increase with more participating houses.

It is really important for this to be community-led and there is understanding of homeowners' needs, preferences, and circumstances. Sharing positive examples of where collaboration has worked and sharing lessons learnt. Clear leadership and coordination will be needed.



This recommendation is addressed to: Calderdale Council and or One Stop Shop (backed by Local Authority).

This recommendation is important because: It's important to have community buy-in and clear leadership with examples of community-level organising for national impact and to support scale-up.

The immediate next steps are:

1 - Funding for community engagement to enable buy-in from homeowners.

2 - Using the Local Area Energy Plan to support the development at scale by identifying priority areas.

3 - Develop archetypes and pre-approved planning to be shared out to facilitate momentum of take-up in the local area and build in underwriting/guarantees to manage the risk of works.

4 - Identify people who might be interested already in a pilot.

5 - Look at short to medium term opportunities in the area – e.g. pots of money, trainees from Todmorden College and jury members

The timeframe is: Medium to long term.

Additional comments: Follow on from the One Stop shop, but this is a key mechanism for scaling-up.

Recommendation 7

Planning, archetypes and surveying

Detailed surveys carried out by independent assessors.

The Retrofit Assessment should use a traffic light system and be written in plain English to make it easy to understand. The surveys need to be affordable and independent. Surveys should be subsidised by National Government, West Yorkshire Combined Authority and Calderdale Council as part of their net zero commitments.



This recommendation is addressed to: Organisations that can provide surveys, e.g. Carbon Coop, which could be a feature of the One Stop Shop.

This recommendation is important because: The surveys inform homeowners of how important it is to improve the efficiency of their property and provide the information necessary to take the next steps to improve that efficiency. The cost of professional surveys is currently a barrier to homeowner knowledge of retrofit options. The data gathered is important to make informed decisions about the sequencing of retrofit measures. Surveys that are carried out by professional unbiased assessors prevent 'cowboy' surveyors from taking advantage.

The immediate next steps are:

1 - Check the existing surveying standards and guidance that is already available.

2 - Publish a survey standard (in collaboration with the Royal Institute of Chartered Surveyors).

3 - Develop a simplified survey format that's easy to understand and follow using plain and simple language.

4 - Investigate possible funding streams to subsidise the cost of the surveys for homeowners in Calderdale.

5 - Lobby National government, West Yorkshire Combined Authority and Calderdale Council to provide funding to subsidise the costs.

The timeframe is: Short term.

Recommendation 8

Planning, archetypes and surveying

Pre-approved planning permission for retrofit measures and listed property guidance.



The pre-approved document must include the permitted development of solar panels and air-source heat pumps. The pre-approved guidance sets out which measures are suitable without requiring planning permission. Due to Calderdale having a high proportion of conservation areas and listed buildings, specialised guidance is required.

There should be free planning advice about energy improvements for those with listed properties or those in a conservation area. Permitted development should include solar panels and air source heat pumps, pre-approved planning guidance, what you can do without applying for permission, and listed property and conservation area guidance, including free planning advice for energy improvements.

This recommendation is addressed to: Local planning authority (Calderdale Council), which consists of a planning service and a committee. National government via the National Planning Policy Framework (NPPF) and English Heritage.

This recommendation is important because: Planning is a blocker to retrofit, and Calderdale has 21 conservation areas as well as listed buildings.

The immediate next steps are:

1 - Include information on what is permitted without planning permission at the One Stop Shop.

2 - Updating created links to archetypes and planning in simple, accessible English and other languages.

3 - The Planning Service at the Council will require greater capacity. Planning Service should have training on retrofit measures that should include information from the NPPF and Historic England.

4 - Links to the marketing information and governance recommendations.

5 - Need to ask the National Government to update NPPF on retrofit (implementation).

The timeframe is: Short term.

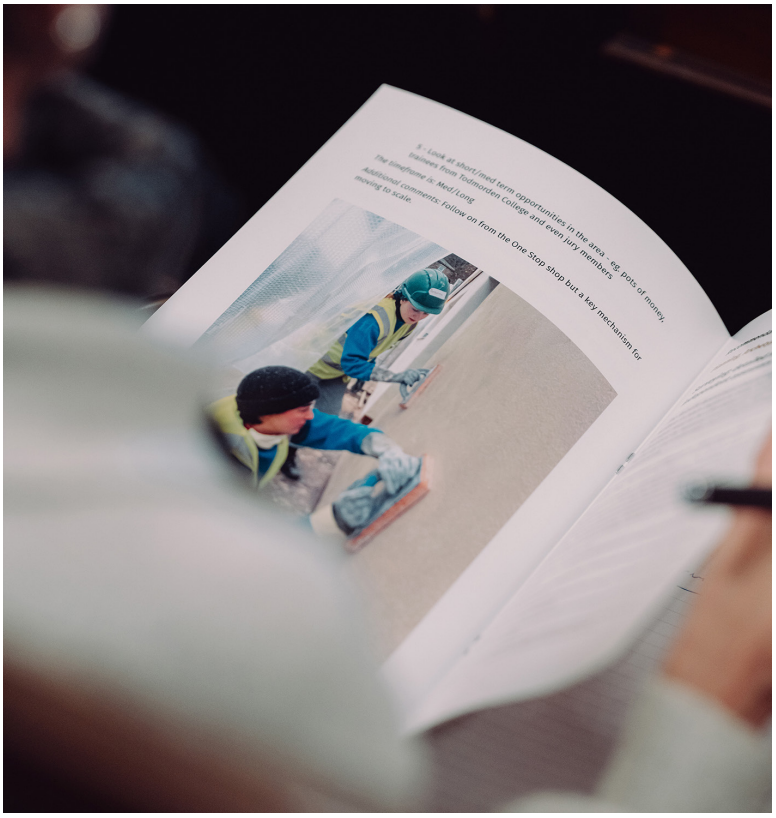
Additional comments: Use local Government power to promote wellbeing to support retrofit.

Recommendation 9

Information and knowledge

A campaign to raise awareness, encourage, and assist all audiences to start their retrofit journey.

A campaign that is relevant and inclusive for all Calderdale residents, from all walks of life, including those who are disabled, have different languages, etc. A campaign that creates positive stories around retrofit, showing what is possible and what the benefits are, both for comfort, health and environmental gains.



This recommendation is addressed to: : Schools, colleges, Calderdale Council, churches, mosques, libraries, doctors' surgeries, and community groups.

This recommendation is important because: There is a gap in understanding of what retrofit is and why it is important. We need to get back to the beginning and explain the context, as well as making the information simple and accessible to all audiences.

The immediate next steps are:

1 - Build an understanding of what has worked in other parts of the country (e.g. social housing) and develop the campaign brief, ensuring it includes an accessible, non-jargon approach to introduce retrofit.

2 - Bring together a team of energy buddies to raise community awareness and monitor their successes and learning.

3 - Start with easy wins to build confidence and show examples of real-life case studies to encourage participation.

4 - To establish how this agenda meets social impact measures, wider benefits and the Council and Combined Authorities' strategic objectives, to encourage involvement of these wider groups to support this priority.

5 - Seek funding to develop this campaign using a range of mediums, including digital tools, to maximise reach.

The timeframe is: Short term.

Additional comments: The time frame for this is short-term to begin with as it underpins the other recommendations by building awareness. However, it will also need to continue in the long term to drive lasting behaviour change.

Recommendation 10

Other

Calderdale has the potential to renewably generate significant amounts of its own power.

To devise and implement pilot projects to scope and test small-scale, renewable, local power generation and district heating schemes such as hydro, solar, wind, ground/water source, battery storage etc. across the Borough.

This recommendation is addressed to: Calderdale Council and community groups.

This recommendation is important because: Energy self-sufficiency enhances community resilience.

The immediate next steps are:

1 - Map what is happening already, both locally and elsewhere.

2 - Review the Local Area Energy Plan and use the data to plan projects and raise awareness.

3 - Communicate options to and invite local communities and council facilities to be part of the pilots.

4 - Devise equitable strategies to deal with 'hold-outs'.

5 - Monitor, review and develop a scale up plan.

6 - Consider implementation through community enterprise schemes e.g. RIPPLE Energy (Rippleenergy.com).

The timeframe is: Medium term.





Recommendation 11

Finance

Retrofit funding through grants and subsidies using tax thresholds as caps.

Accessible grants targeted at average salary earners and pensioners, ensuring equity by prioritising areas of high deprivation and individuals living with disabilities. Trusted advice on grant eligibility to be readily available, for example, through a One Stop Shop. Explore alternative threshold options, e.g. square footage of homes or council tax bands. It should still be possible for high earners/large homes to access some support. EPC assessments and retrofit assessments (funded by Central Government).

This recommendation is addressed to: West Yorkshire Combined Authority/ National Government/National Lottery.

This recommendation is important because: Average earners and some pensioners are left out; this brings scale and equity to retrofit.

The immediate next steps are:

1 - Change eligibility thresholds.

2 - Engage with eligible residents.

3 - Seek additional Government funding to provide free retrofit assessments. Updated EPC ratings are to be logged for ongoing monitoring.

4 - Advertise information on the One Stop Shop website.

5 - List all retrofit grants available to homeowners on the local authority website, with searchable criteria and quick views on terms.

The timeframe is: Medium term.



Recommendation 12

Finance

Wider use of green mortgages for retrofit funding at preferential rates.

EPC and retrofit assessments must be undertaken before and after significant energy efficiency improvement measures. The rate of mortgage payments to decrease as the property becomes more energy efficient. This is monitored by EPC and retrofit assessments on the property.

This recommendation is addressed to: Mortgage advisors and National Government.

This recommendation is important because: Green mortgages are important because they will incentivise homeowners to improve the energy efficiency of their property. Homeowners can save on a reduction in energy bills and mortgage repayments. It reduces the financial risk of energy improvements to the individual and can provide long-term stability for lenders and borrowers.

The immediate next steps are:

1 – Consult and engage with the National Government, banks and building societies on the proposals and how this works with the current green mortgage offers.

2 – Consult and engage with National Government on target interest rates and regulations.

3 – Develop a process of measuring energy efficiency works implemented using EPC and retrofit assessments as tools for before and after benchmarking.

4 - Increase awareness of the offers once they are developed.

The timeframe is: Medium term.

Recommendation 13

Communications and engagement

Produce a communication strategy to assist Calderdale residents in joining the retrofit journey, with a toolkit to guide communications and to share regionally for greater impact.



1. Research community types and community groups.
2. Consider the needs of different community groups (e.g. multilingual, sign language and braille).
3. Create warmer homes "Champions for the community" - make them multi-generational and bilingual to handhold and encourage.
4. Visit schools, colleges and communities to gather insight and recruit volunteer champions.
5. Produce a communications toolkit for each community.
6. Collaborate with universities and the National Retrofit Hub to learn about behaviour change and best practices in communications.
7. Examine National Energy Action resources to enhance knowledge.
8. Monitor, revise and improve with key performance indicators (KPIs).
9. Consider direct communication via the One Stop Shop.

This recommendation is addressed to: Community partnerships with Council and utility companies.

This recommendation is important because: Underpins all other priority projects and recommendations.

The immediate next steps are:

1 - Seek funding for starting point from utilities (Energy Redress Scheme) as they have budget to do this, and it needs flagging when they are developing their business plans.

2 - Set up an advisory group.

3 - Scope and undertake research.

4 - Write a communications strategy and marketing campaign.

5 - Set success factors, e.g. relevant, co-designed, varied, flexible and responsive.

The timeframe is: Long term.

Recommendation 14

Information and knowledge

There needs to be clear communication of the Council's vision of net zero in 2038, and the role of the retrofit strategy within it.

Come and join the journey - the Council's role is to communicate their net zero aspirations and what progress is being made on a regular basis, including what retrofit measures have been implemented across all housing in the borough. This should include what's worked well, whether the work is on track and what lessons need to be learnt. Communicating the strategy and scale of the work will help homeowners feel part of something larger and more motivated to join the efforts.



This recommendation is addressed to: Council's senior leadership team and communications department.

This recommendation is important because: It helps the Calderdale public and communities to better understand the ongoing transition and find their role within it. The immediate next steps are:

1 - Recognise all the different audiences and adapt the message and mode of communication to best effect. Build on existing communication and fill the gaps.

2 - Consider the pros and cons of focussing on environmental and other retrofit benefits with different groups.

3 - The Council needs to clarify what they want to achieve. When they target 'net zero' is it net zero or emissions? And how does it align with the regional net zero objectives?

4 - Consider how the Council could most benefit from ongoing public scrutiny and ongoing communication of which actions work best over time and new developments.

5 - All levels of Government should lobby to ensure that all new buildings are energy efficient. As otherwise this is undermining the retrofit strategy.

The timeframe is: Short/Medium term

Additional comments: Discussion about this point - some felt that pushing this message too strongly could lead to suspicion or negative reactions towards the green agenda, potentially overshadowing other important messages about health and well-being.



For more information, visit: **new.calderdale.gov.uk/housing/healthy-homes-service/citizens-jury** or scan the QR code.

ZERO CARBON CALDERDALE