



**To: Business Economy and Enterprise Scrutiny Board (3)**

**Date: 17<sup>th</sup> April 2024**

**Subject: Domestic Retrofit - Update**

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## **1 Purpose of the Note**

- 1.1 To update the Business Economy and Enterprise Scrutiny Board (3) on progress of the Council's domestic retrofit programmes.

## **2 Recommendations**

- 2.1 Business Economy and Enterprise Scrutiny Board (3) are recommended to:

- 1) Note the content of the briefing note.
- 2) Receive further updates regarding the overall progress of the domestic retrofit programmes across the city.

## **3 Domestic Retrofit overview**

- 3.1 Coventry's draft Climate Change Strategy, published last year, set out an ambitious vision for how the city intends to 'tackle the causes and consequences of climate change', which is a key priority of the One Coventry Plan.
- 3.2 To accompany the strategy, a Net Zero Routemap for Coventry was produced ([net-zero-carbon-route-map-for-coventry](#)), which identifies emissions from homes as the biggest contributor to the city's carbon footprint (totalling 30% of all emissions).
- 3.3 The Routemap also identified that a business-as-usual scenario will likely only reduce emissions by 0.2% by 2050, which is not an option if we are to meet the UK Government target of net zero by 2050. There are currently 143,000 properties in Coventry, of which an estimated 105,000 of these homes are still below an energy performance certificate (EPC) 'C' therefore living in more energy inefficient housing, and the city also has fuel poverty rates exceeding 20%, which has been exacerbated by the cost-of-living crisis. The Net Zero Routemap also identified that 6 of the top 10 most carbon-effective options of reducing carbon relate to domestic retrofit.
- 3.4 This highlights the need to increase the scale of domestic retrofit in the city, which will not only help reduce carbon emissions, but will also reduce household energy bills and help alleviate fuel poverty. Retrofitting is the process of installing and/or replacing parts of an existing building to make it more energy-efficient, which could include installing insulation, lower carbon forms of heating or even reducing draughts and improving heating control.
- 3.5 The UK has one of the oldest and leakiest housing stocks in western Europe. A lot of houses in Coventry, like elsewhere, are not to modern efficiency standards,

meaning that too many Coventry residents live in potentially damp and poorly insulated homes, paying too much to stay warm, or living in cold homes.

- 3.6 Despite being one of the biggest challenges we face, it can also make a huge difference by improving the quality of resident's lives, through creating warmer more efficient homes and helping to lower bills. Well-insulated properties also keep homes cooler in the summer, of great importance to make our homes more resilient to increasing temperatures and increasing likelihoods of extreme heat.
- 3.7 Research shows that housing quality has a significant and material impact on health and wellbeing. In addition, condensation and damp in homes can lead to mould growth. Inhaling mould spores can cause the development or worsening of a wide range of respiratory conditions. Living in a cold home can worsen respiratory illnesses and increase the risk of heart disease and cardiac events. It can also worsen musculoskeletal conditions such as arthritis. Cold or damp conditions can have a significant impact on mental health, with depression and anxiety more common among people living in these conditions. Each year, the NHS spends an estimated £1.4 billion annually on treating illnesses associated with living in cold or damp housing.
- 3.8 There is already considerable work in progress with to improve the energy efficiency of homes across Coventry, which is termed domestic retrofit. Retrofit measures can include improving the insulation of internal and external walls, floors and lofts and the upgrading of windows and doors, alongside more efficient heating, lighting and water systems. Over the last 2 years, the Council (working with partners) will have secured almost £30 million in grant funding to be delivered by March 25, with further investment in the city from the energy company obligation (ECO4), explained further below. This is a significant amount and will help to improve the energy efficiency of up to 2,500 homes (including social housing and private housing tenures).
- 3.9 The Council are committed to continuing to work with partners including the Strategic Energy Partnership, WMCA, Midlands Net Zero Hub, and through the Council's Climate Change Board to scale up retrofit across the city.
- 3.10 Retrofit presents a significant opportunity to address all three priorities in the One Coventry Plan, tackling climate change through lowering emissions and making homes more climate resilient, addressing inequality through targeted interventions to support our most vulnerable residents, tackling fuel poverty and improving public health outcomes, as well as presenting significant economic opportunities through creating new jobs and skills.

#### **4 Current activity**

- 4.1 The Council's Climate Change and Sustainability team is currently overseeing the delivery of several retrofit programmes across Coventry. A summary of these programmes is included in the below table, with more detailed information following.

Table 1 – Summary of the domestic retrofit programmes currently in delivery or completed this financial year. Completed / committed means homes that have had all retrofit measures installed or have been approved via batch application for HUG2. SHDF figures include estimate for March 24.

<b>Scheme</b>	<b>Homes Signed up</b>	<b>Homes completed / committed</b>	<b>Total Costs (Inc. co-funding spent to date)</b>	<b>Average / Property</b>
SHDF Wave 2	2028	539	£18,600,000	£34,508
HUG2	28	10	£100,000	£10,000
ECO4 Flex	92	n/a	n/a	n/a
SHDF Wave 1 (Closed down Jun 23)	95	95	£2,205,000	£23,210
LAD3 (Closed down Dec 23)	141	141	£1,709,401	£12,123
<b>Totals</b>	<b>2,384</b>	<b>785</b>	<b>£22,614,401</b>	<b>£15,968</b>

## 5 Social Housing Decarbonisation Fund (SHDF) 2

- 5.1 SHDF 2 built on the successful partnership with Citizen Housing in delivering the first wave of SHDF. The first wave improved the energy efficiency of 95 properties by June 2023.
- 5.2 The Council and Citizen are now working on the second phase, which has been significantly scaled up through the award of £23.8 million grant (co-funded £44 million by Citizen Housing) to improve the energy efficiency of over 2,000 Citizen properties by September 2025.
- 5.3 Measures include external wall insulation (EWI), cavity wall insulation (CWI), roof insulation top-ups, ventilation upgrades, and new doors and windows where appropriate.
- 5.4 Last month we [reported hitting the milestone](#) of having completed works to 500 properties, keeping on track for this ambitious delivery programme. During this year, over 700 homes were started, over 500 completed and over £9.3 million grant funding has been spent (co-funded by a further £9.3 million by Citizen).
- 5.5 Other benefits of this scheme include the employment opportunities it creates. The scheme creates many retrofit jobs in the delivery of works, but taking this further the principle contractor, Westdale have also set up a training academy, which has enabled previous unemployed residents to secure full-time employment. In developing this, the council have also built strong links with Coventry College who offer a 2-week retrofit bootcamp to give essential skills/knowledge before participants are interviewed for the training academy or by other employee partners, such as Dyson Energy Services. This approach is fully supported by the Council's job shop and skills team.

- 5.6 The Council and Citizen have been included in Department for Energy Security and Net Zero case studies and events indicating best practice in delivering SHDF. Our SHDF project is also the second biggest allocation to a single housing association in the country.
- 5.7 Despite the success of this scheme, it also highlights the scale to which it will cost to support retrofit across the city. This scheme addresses over 2,000 properties, but there approximately 143,000 in Coventry, of which over 105,000 are below EPC 'C' across the city, most of which may need support to help them retrofit.

## **6 Home Upgrade Grant 2**

- 6.1 The Council was awarded £2.8m in 2023 to retrofit around 150 properties which are off-gas. Off-gas homes account for about 5% of total properties across the city.
- 6.2 Nationally, the Home Upgrade Grant has presented difficulties in delivery, which has also been seen within Coventry. The challenges include difficulty in identifying and targeting off-gas properties through existing data, plus challenges around the funding eligibility of households which originally required an income threshold of £31k and capped limits of grant per household has meant that some interventions are not commercially viable.
- 6.3 Working with our Strategic Energy Partner E.ON (delivery partner) and Act on Energy (Customer journey support), we have received 77 applications, of which 28 have been qualified.
- 6.4 To date, 10 properties have been approved to have works completed, against an anticipated 40 homes in the first year of the programme, but it is expected most others will be able to be supported during the 24/25 financial year.
- 6.5 Marketing of the scheme has been via direct mail, door-knocking suitable streets, promotion on social media channels, on the intranet and in the Council's e-newsletter and via press release.
- 6.6 Measures to be installed include solar PV, cavity wall insulation, ventilation, and heating improvements.
- 6.7 Policy changes have been introduced by the Department for Energy Security and Net Zero (e.g. Income threshold increased to £36k from £31k, which may enable further properties to become eligible). We will contact all those currently unsuccessful to see if they can now be supported.
- 6.8 Working with partners, we intend to scale up marketing activity for the next financial year, starting with the creation of the 24/25 marketing and engagement plan shortly.
- 6.9 In total, the programme will aim to support approximately 150 residents by end March 25. If these residents cannot be engaged and properties completed, the funding will not be able to be claimed and government will return it to the treasury which we need to do everything in our power to avoid.

## **7 Energy Company Obligation (ECO) 4**

- 7.1 ECO4 is a government energy efficiency scheme designed to tackle fuel poverty and help reduce carbon emissions.
- 7.2 Large and medium energy suppliers are required by the government to install energy efficiency measures such as insulation and heating upgrades to support vulnerable, fuel poor and low-income households to heat their homes.

- 7.3 The Council is working with E.ON and Agility Eco (managing agent) to maximise ECO across the city, by enabling the Council to sign ECO Flex declarations.
- 7.4 ECO Flex enables the Council to allow additional residents to be supported above the original criteria by signing off flexible eligibility declarations, such as through NHS referral or income thresholds (below £31k income) rather than just those on benefits. It also allows us to work with these organisations to ensure a level of quality control over contractors working across the city. This should help to raise standards and public confidence in the schemes.
- 7.5 Since we started participating last year, the Council have signed 92 declarations (a combination of NHS referrals and referrals from contractors where the household's combined income is below £31k).
- 7.6 The Council will continue to explore opportunities to maximise these routes, with conversations ongoing with E.ON, Agility Eco, contractors, and NHS organisations. Momentum on this scheme is growing with ever increasing numbers of ECO Flex declarations sent onto the Council.

## **8 Local Authority Delivery 3**

- 8.1 The Local Authority Delivery (LAD3) programme was a government-funded grant programme which aimed to support the retrofit of energy efficiency measures for low income and low Energy Performance Certificate (EPC) rated residential households within the city (for properties which were on-gas).
- 8.2 The LAD3 programme was closed by December 2023.
- 8.3 By close-down it supported 141 residents across the city, with range of energy efficiency measures predominantly with insulation (external wall insulation, roof insulation, cavity wall insulation), solar PV and improvement to heating.

## **9 Challenges**

- 9.1 The challenges presented by domestic retrofit are both complex and wide ranging and require a concerted effort from project partners, including the Council, delivery partners, managing agents, training providers, funders and installers to effectively manage them. A summary of some of the key challenges has been included below:

## **10 Customer take-up (engagement)**

- 10.1 The ability for any contractor to be able to carry out installation works for ECO4 (utilising energy supplier funding) has created scenarios where residents are experiencing door-knocking by multiple contractors throughout the year. This has led to a lack of trust and confidence in organisations delivering retrofit in addition to mixed and sometimes confusing messaging to residents.
- 10.2 The response rate to mail outs on domestic retrofit averages out between 1-5%, despite council branding on the letters, and even those that do respond may not be eligible.
- 10.3 A household may have applied for funding from one scheme but due to deadlines associated with the funding or specific funding criteria they may not be able to be completed. There are examples where these properties are forwarded to another related fund which follows with a different set of criteria resulting in them not being eligible under the changed criteria. This affects public satisfaction and confidence in the delivery of the funds and makes it more difficult to recruit households in applying.

- 10.4 Although the schemes can support private rented properties (often with limits imposed relating to number of properties per landlord), there is often low uptake within this tenure. There is coupled with concerns tenants won't benefit from the cheaper energy bills, and instead they may have to pay higher rent to pay for the measures.
- 10.5 The Council have worked with E.ON to promote ECO4 to specific neighbourhoods, in Radford and Longford. There was success in Radford with over 50 applications received, engaged through mail outs, Councillor engagement and drop-in sessions held by E.ON and the Council. However, this was still only a small proportion of those attempted to engage. The Council and E.ON also tried a more targeted street-based approach in Pearson Avenue, Longford but engagement rates in this area were very low, with few people following up on the retrofit opportunities.
- 10.6 As part of current and future retrofit programmes we need to inspire behaviour change, aiming to make retrofit more of a norm with residents wanting to make full use of these schemes.

## **11 Grant Funding and Finance**

- 11.1 There is insufficient grant funding within the cost caps stipulated for retrofit schemes to enable certain measures to be completed. For example, in ECO4, it is not viable to complete external wall insulation (EWI) in many properties (especially those that are EPC D-rated, without also installing new gas central heating etc.). This is an issue in Coventry due to the age of the properties in the City a large proportion of which are solid walled properties which can only be effectively made more energy efficient by the use of costly EWI.
- 11.2 There is insufficient grant funding to enable certain property archetypes to be completed. For example, HUG2 has a cost cap of £15k for solid wall in mid-terrace (which is often very difficult to achieve). This is problematic particularly in Coventry where there are so many properties of this archetype.
- 11.3 The majority of households across the city don't qualify for any grant funding for retrofit measures. However, most of these households also do not have sufficient cash to enable them to pay for retrofit measures themselves. This means that retrofit and investing in energy efficiency measures is not an affordable option for the majority of households.

## **12 Accuracy of Data to Target Properties**

- 12.1 Most government funded retrofit programmes have been developed with a focus on the EPC ratings of properties (both in terms of eligibility criteria and targeted properties). Where many owner occupiers have remained in their properties for so long, they would not have up-to-date EPC ratings (these could be higher or lower than anticipated) or may not have an EPC rating at all which makes it difficult to identify eligible properties.

## **13 Complex and Inflexible Eligibility Criteria**

- 13.1 Programmes such as HUG2 exclude most homes in Coventry due to the funding only being available to properties not heated by a gas boiler. These are particularly hard to find especially within cities.
- 13.2 The complexity of the eligibility criteria can dissuade residents from applying for funding, either because they are unsure if they or their property fit into the required criteria or because they are unsure about providing sensitive eligibility evidence to

delivery partners such as health or income details. This could be even more true for vulnerable residents who we would want to prioritise support for. Strict eligibility criteria also means that often projects have to be pepper potted across streets and the City rather than being able to support a group of properties together.

## **14 Supply Chain and Skills Shortages**

14.1 The supply chain has to date not been able to successfully grow to be able to effectively retrofit properties across multiple energy efficiency schemes. This is partly due to the lack of certainty with regards to the levels of future investment going beyond at best a two-year period, leading to a reluctance to invest in the future and the need for growing the workforce, alongside training and skills development. The supply chain and skills gap has led to price increases of retrofit works nationally over the past few years.

## **15 Housing Stock and Planning**

15.1 The majority of the housing archetype in the city is made up of old Victorian terraced houses of solid wall construction, many of which have decorative brickwork just below the roof level, and where downpipes are shared between three to four houses which can present a challenge to retrofitting individual properties that may qualify for grant funding and are likely to take the costs of work over the grant cap allowance.

15.2 There are difficulties in the technical delivery of measures which may affect the character and appearance of a property, especially with respect to external wall insulation e.g. where brick slips are required to be completed as per the request of planning departments or where decorative brickwork detailing is required to be matched. This can increase difficulty and increase costs of retrofit, but the climate change team and Planning team are currently collaborating in the creation of an EWI Guidance document to help set out acceptable solutions, which is currently in late draft stage.

## **16 Opportunities**

16.1 Whilst there are many challenges facing the successful roll out of domestic retrofit across the city, there are opportunities to address this and help scale up delivery:

## **17 Customer Engagement**

17.1 We need to help local people better understand the benefits of retrofit and what the process involves, being clear that whilst works can be disruptive, the benefits are well worth it. This means a big communications push, with feedback from local residents who have benefitted from retrofit, development of 'show home' properties for people to look around and better understand the look and feel of retrofit measures and building a toolkit so we can better signpost residents to information, trusted contractors and grant funding opportunities.

## **18 Funding**

18.1 The Council are constantly exploring funding opportunities to drive forward domestic retrofit. This includes applying for research funding to look at more effective ways of engaging with residents in the city, including looking at messaging specific to different market segmentations to encourage uptake (in collaboration with University of Warwick). This has to be very focused and targeted work because the barriers to uptake are different for different groups/market segments and that

we need targeted messaging and creative approaches to get people on board. The Council are also exploring a project with University of Birmingham and Citizen Housing to measure the impact of retrofit measures using indoor air quality sensors.

- 18.2 The Council are also working with colleagues at WMCA to ensure an effective set up of the devolution deal single settlement. It is hoped this will enable more flexible use of funding that can be used more effectively to reach a larger number of homes, giving the Council more control in terms of managing the grant criteria and using our local knowledge to target areas.
- 18.3 The Council will continue to seek programmes that could support the so called 'able to pay' group. This groups accounts for households that would not hit the eligibility criteria for the aforementioned programmes but are still likely need support to help retrofit their properties, which is the majority of households in the city.
- 18.4 The Council are working with WMCA to assess opportunities of leveraging private green finance which could be used to provide loans to residents to deliver energy saving measures in a more cost-effective way. WMCA are part of the Government's Local Net Zero Accelerator Programme, which focuses on developing innovative models to support measures such as retrofit. However, even if green finance / mortgages become more common, issues will persist with the high payback periods for certain measures such as EWI, which would often be extremely high.

## **19 Innovation**

- 19.1 Working with the WMCA, we are also exploring the potential to implement innovative approaches and economies of scale such as the Net Zero Neighbourhood project. This could address energy needs (e.g. retrofit, renewables) at a more local scale attracting finance to install energy efficiency measures, but also enable residents to use collective purchasing power to buy renewables (e.g. solar PV) at a cheaper price.
- 19.2 As part of the Strategic Energy Partnership, the Council are working with E.ON to develop a pipeline of projects that will include domestic retrofit. The Partnership is currently developing an Energy Masterplan for the city that will help inform future opportunities for innovation and support a more place-based approach for the development of initiatives such as community district heating schemes.
- 19.3 The Council are working with local modular construction company ModPods to explore opportunities for using modular solutions for retrofit measures, this could include products such as 'clip on' external wall insulation, cutting down the time and disruption of works and potentially creating more accurate replication of brickwork detail.

## **20 Policy**

- 20.1 The Council need to ensure the current Local Plan Review includes policy to support retrofit and ensures new homes of the future are sustainable and don't require retrofit in the future ('net zero ready').
- 20.2 The Council's housing team are also reviewing their HMO licencing conditions and looking at whether the required energy ratings can be increased.

## **21 Skills**

- 21.1 There is already some fantastic work going on in the city through City College's Retrofit Boot Camps and contractors such as Westdale who have established a



retrofit training academy; however, we need to go much further to create a skilled workforce with the capacity to scale up to meet increasing demand.

- 21.2 As part of the Council's Skills Strategy a Green Skills Sub-Group has been established which is working to analyse the green skills gap in the city and the future workforce requirements. Key stakeholders from the private and public sector are part of this sub-group, providing valuable expertise to help shape our response to tackling this challenge citywide.
- 21.3 One of the key strategic aims of the Strategic Energy Partnership is to create new skills and local jobs, which will include retrofit. This will involve helping to develop the local supply chain and skills, create apprenticeships and help support more jobs in this sector.

## **22 Next Steps**

- 22.1 Despite the challenges identified, the work already being carried out across the city shows Coventry has a strong record of delivery in retrofit and will help the city to continue to attract further funding for retrofit and continue the momentum currently achieved.
- 22.2 For 2024/25 the key areas of focus for domestic retrofit will be:
- i. Continue to work in partnership with Citizen Housing in the successful delivery of the SHDF 2 scheme.
  - ii. Maximise uptake of the HUG2 scheme to support as many off-gas grid residents as possible.
  - iii. Maximise uptake of ECO4 within the city and continue to work with partners to ensure effective delivery of this scheme across the city.
  - iv. Develop a 'Toolkit' which will enable residents to better understand which current (and future) schemes they may be eligible for and how to apply for these. We will work with front-line staff and Councillors to encourage residents to access the toolkit, and hopefully increase participation in schemes.
  - v. Increase communications and awareness of retrofit through more media articles, social media, use of Citivision, local radio etc and explore establishing the first 'retrofit show home'.
  - vi. Continue to analyse the challenges identified within retrofit programmes and work with partners to tackle these challenges where possible.
  - vii. Continue to explore other opportunities for funding that could either support more residents or enable projects to work more effectively, including participating in the Local Net Zero Accelerator Programme and development of plans for the city's first Net Zero Neighbourhood, alongside research bids to support engagement and uptake.
  - viii. Continue to work closely with WMCA colleagues to help shape the net zero devolution funding from April 25, to ensure it will be able to be delivered as effectively as possible.
  - ix. We will continue to drive skills related to domestic retrofit, working with the Green Skills Sub Group and partners such as our Strategic Energy Partner to better understand the green skills gap and how we can collectively address this, alongside promoting existing activity such as boot camps and the SHDF training facility.

- x. Work with partners to develop innovative solutions to retrofit, including our Strategic Energy Partner and other key partners across the city including ModPods and organisations on our Climate Change Board.
- xi. Continue to work with the Planning team to ensure local plan considers potential retrofit and need to ensure homes are at least 'net zero ready'.

## **23 Health Inequalities Impact**

23.1 Fuel Poverty disproportionately affects householders who are vulnerable and on low incomes, and particularly those with ill-health or disabilities. Increasing the capacity of funding available to support these residents is of vital importance.

23.2 Most of these programmes specifically support those residents suffering from fuel poverty or those on low incomes. The improvement of energy efficiency to their homes can help to reduce energy bills, help residents to keep their homes warmer, reduce potential for mould and damp growth, and ultimately help residents to stay healthier.

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