



Written evidence submitted by Care & Repair Cymru: August 2022

Introduction to Care & Repair

Care & Repair is Wales' older people's housing champion, helping our clients to live independently in warm, safe, accessible homes. In 2021-2022, we helped nearly 45,000 older people across Wales to live safely and independently in their own homes, through completing over 48,000 home improvements, and helping our clients increase their income through unclaimed benefits by a total of £8.6m in the last year. Our average client age is 73 years old and 32% of our clients live alone. The role that retrofitting and carbon reduction schemes can have on reducing our clients' fuel bills and improving home energy efficiency and quality of life is significant. Retrofitting offers a potential gateway to longer, healthier, happier lives.

Care & Repair focus on the whole house, and the whole person living in it. Our Rapid Response Adaptations Programme (RRAP), which services the homes of older people to make them safer and more energy efficient to live in, by fitting adaptations such as ramps, grab rails and energy saving lighting. Across our 13 different agencies in Wales, Care & Repair undertook 20,500 RRAPs last year for older people, to aid them in living safely and independently in their homes. As a part of our core services, Care & Repair agencies undertake casework for older people, including specialised casework for those living with sensory loss across Wales, including completing a thorough Healthy Homes Check across the property to assess falls and trip hazards, fire and gas safety, mould and damp issues, and security. As well as identifying potential issues, we sit down with clients in their own homes to find solutions, including completing repairs ourselves via our Technical Officers, and sourcing grants and funding for works. We provide income maximisation services and benefits entitlement checks, and when we cannot complete the works ourselves signpost and/or refer to additional support or resources, such as Nest.

As well as these core services, we run several specialist projects including:

- *Hospital to a Healthier Home (H2HH)*, a service that speeds up hospital discharge and improves patient flow by resolving housing issues that delay safe transfers of care.
- *Managing Better*, a service that works in partnership with RNIB, Action for Hearing Loss, Stroke Association and Alzheimer's Society, and works specifically for those aged over 50 living with sensory loss or dementia in Wales
- *70+ Cymru*, a service providing fuel poverty information, advice and direct practical works to improve home energy efficiency for vulnerable older people living across Wales.



The current approach to decarbonising housing in the private rented and owner-occupied sectors in Wales, including the effectiveness of existing programmes and support for retrofit;

Currently, the Optimised Retrofit Programme is running in three phases, with phase 2 running from 2021-2022, which does not include owner occupied housing. We would welcome clarification from Welsh Government on the plans for phase three. With our access to owner-occupied housing via our client group, we believe we are in an excellent position to offer access to owner-occupied and assist its rollout.

However, there is a concern that the Optimised Retrofit Programme as it stands will, despite presenting useful information and insight for the housing sector, not fully present an overarching view of the conditions and effectiveness of the programme in its entirety. This is because ORP is currently being tested on only a very small number of different property types. For the Programme to be fully applicable and to be able to further the understanding and knowledge of its effectiveness, we believe that it must be carried out on a wide range of existing homes of different ages, locations, construction types and energy efficiency ratings – this will enable the sector and Welsh Government to assess its suitability on the wide range of dwelling types that are here in Wales, and not simply retrofit and address those homes that are simpler to complete.

To counter this, we would welcome Welsh Government releasing an interim report of retrofit effectiveness, that includes a full data set and explanation as to the types of houses that have been targeted under Optimised Retrofit, the decarbonisation benefits such work has currently had, and how they expect to use this learning to widen the scope of the programme to dwelling types not currently included. With interim reporting, it will allow organisations such as ours to maintain a view over trends and themes into housing, and continue to target support and signposting to the measures that will make the biggest positive impact to our clients.

The role of sector specific retrofit targets to help drive change;

Care & Repair are of the firm belief that any expenditure and labour on retrofitting measures should be on a 'worst first' basis across Wales and target support at those households who are in the greatest need of retrofitting and immediate intervention. The impact of cold homes and poorly insulated properties on vulnerable people costs the Welsh NHS approximately £95 million every year, and with Ofgem's current projection of energy bills to hit their highest ever of over £4,000 a year in January 2023, we anticipate that these numbers will increase further, and the cost of poor housing to rise again.

Whilst it may be preferable to first retrofit 'pathway homes', or properties that are least challenging in order to increase overall statistics of the number of homes retrofitted, we believe that the benefit of retrofitting homes on a 'worst first' basis - for low-income households and those with vulnerable or disabled occupants - is the best approach to driving real change and ensuring that the Programme's funding is truly tackling fuel poverty for those that need it most. By utilising retrofitting measures on a 'worst first' basis, this approach can be used in tandem with other measures Welsh Government and UK Government have put in place to support those living in, or at risk of, fuel poverty, which equates to

approximately 45%, or 614,000 households in Wales. Such measures include the £400 non-repayable energy grant to every household, the Winter Fuel Support Scheme and the Welsh Government Fuel Voucher Scheme, and by ensuring short term financial support and long-term retrofitting assistance is given this will go some way in tackling the fuel poverty that so many older and more vulnerable people are experiencing. Without utilising a ‘worst-first’ scenario, there is a risk that the chasm between the least and most affected by fuel poverty will widen further as we get deeper into this winter, leaving many even more vulnerable than before.

Welsh Government estimates that, of low-income households (some of which are Care & Repair’s direct clients) up to 98% are in fuel poverty (217,000 households) and 41% (91,700 households) are in severe fuel poverty. This will be catastrophic for many older households in Wales, as the current energy crisis we are facing will only compound these struggles further. We believe that retrofitting has a strong link to decreasing fuel poverty in low-income households, and that by creating opportunities for low-income and vulnerable households to benefit from retrofitting there is a two-fold benefit, to the household and to Welsh Government.

Vulnerable households are households where the occupants include one or more of the following:

- a person aged 60 and over,
- a dependent child or children under the age of 16,
- a single person aged under 25,
- a person living with a long-term illness or who is disabled.

Utilising the Welsh Government’s definition of vulnerable households, Care & Repair suggest that the worst-first approach is targeted at the four individual groups mentioned, with those households in each of these groups that are in severe fuel poverty targeted first as a priority. This support should be supplied equally, to avoid one vulnerable group being allocated less support.

Actions the Welsh Government should take to progress a programme of retrofit for these sectors in the short, medium and long term;

Welsh Government must take a ‘worst first’ approach to support older people who would benefit the most from retrofit actions, improve the quality of their home and allow them to save money on their energy bills as we approach winter and a third price cap rise in nine months. This will allow Welsh households in fuel poverty to be safe and warm in the short term, allow them to save on their bills in the medium and long term, and contribute towards Welsh Government’s aim to become net zero by 2050. We know that older people and people with long term illnesses or medical conditions that are exacerbated by cold environments such as dementia or COPD can be hugely affected by dropping temperatures – over 75% of excess winter deaths occur to those aged 75 and above, and 30% of excess deaths in winter in Wales are attributed directly to a cold home.¹

¹ [70+ Cymru: Tackling Fuel Poverty in Wales \(careandrepair.org.uk\)](https://www.careandrepair.org.uk/70+)

Alongside this, there is the option of expanding the current scope of the *Welsh Housing Quality Standards* survey. Currently, this survey is used only to explore the quality of social housing in Wales, but we are of the belief that the WHQS principles and research area could be applied to the private rented sector also, and we recommend this to be fully extended to encompass this. *The Welsh Quality Housing Standards* can also ensure that there is sufficient and up to date data on the experiences of both tenants and landlords in Wales, to inform future policy and recommendations to any changes to legislation surrounding the private rented sector.

However, to follow on from the above Care & Repair also believe wholeheartedly in the reinstatement of the *Welsh Housing Conditions Survey*, which was last conducted in 2017-2018. This survey was an invaluable source of data and guidance for Welsh Government, third sector, advice and advocacy charities and much more, and allowed maintenance and oversight of up-to-date knowledge of the developments. There is currently no equivalent survey available, and therefore do not have access to accurate or up to date data. For retrofitting initiatives to truly target those that need it most, there must be a data gathering exercise such as the *Welsh Housing Conditions Survey* to be undertaken at the earliest convenience.

There is also an opportunity to streamline the assistance and support that is provided. Whilst it is the opinion of Care & Repair that a whole-house approach to retrofitting is preferable in the vast majority of cases, it is knowledge that by retrofitting a home on either a fabric first or whole house basis, the dwelling becomes more energy efficient and has a benefit to both the occupier's energy bills and their health and wellbeing as they live in an environment that keeps them warm and safe. The Welsh Governments' *Warm Homes Programme* could be utilised as a no-wrong-door system to additional support measures and be used as a single point of access for any queries or issues that relate to fuel poverty or retrofitting, but without diverting funds intended to tackle fuel poverty being diverted away from that cause. By doing this, the triage system can ensure that people are referred to the right area and the right organisation for support depending on their query and can have one case handler or caseworker from beginning to end. This will be particularly reassuring for older people who often do not have the confidence or energy to chase queries and may give up accessing what they qualify for.

In the short term, we must ensure that the *Warm Homes Programme* has flexibility to deliver appropriate measures per property, based on the 'whole house' approach. This could form part of a longer-term (formal) retrofitting plan. We need the *Warm Homes Programme* to be able to connect to a wider variety of renewable / low carbon options that are the best fit for the whole house, and not just the simplest options.

Finally, there is a necessity for ensuring that contractors with specialist knowledge are brought into the programme, to share their training and experience in this area. The inclusion of retrofit professionals and contractors is done right from the beginning of the project, and their expertise continuing to be used until after the project is completed. This will also allow for learning and skills to be developed and shared, increasing the expertise of retrofitters across Wales, and increasing the number of reliable contractors to complete work in a reasonable time frame.

the key challenges of delivering a programme of retrofit within these sectors, including financial, practical and behavioural, and action required from the Welsh Government (and its partners) to overcome them;

Financial challenges

One of Care & Repair's roles is to support and advocate on behalf of older people across Wales who are (including, but not limited to) low income, have a disability, or are living in the private rented sector. These experiences inform our work, projects and organisational direction, and because of the excellent work of our on-the-ground agencies and officers, we have a very clear picture as to the challenges that face our clients.

One of the challenges that we see is the cost of retrofitting a home to an adequate standard. We recognise that retrofitting can have an expensive initial outlay, which can often discourage homeowners and owner occupiers from agreeing to retrofitting. We believe that non-repayable grant funding must be made available for households that choose to retrofit. Longevity of this proposed grant funding will be protected through flexibility to adapt to challenges that arise. For this reason, we believe a 3-year funding cycle should be put in place to ensure that the Programme is able to sustain the level of retrofit operations that is able to both make an impact and adapt with learning and need. Grant funding will also allow the Programme to undertake retrofitting and decarbonisation methods in a wide range of homes, allowing the data to be more representative of the Welsh housing stock by encouraging more homeowners to participate. The promise of a non-repayable grant, in tandem with our recommendation of a worst-first approach, could lead to a much higher number of lower-income households, including older people, to opt into the retrofit programme.

There is little point in using a 'one-size-fits-all' approach, as we know that location, rurality, age of the property and other factors will have a significant effect on the cost of such work and assigning a maximum amount of money per property may not be the most effective method Nest already publishes information on the average Local Authority spend per household on energy efficiency improvements, which shows that costs vary. This data shows that spend is higher in LAs with a higher number of properties no on mains gas.² In addition, homes in rural locations may have additional transport costs to access the property, or properties off grid and using LPG may need additional pipework which drives up costs, which should not be by the occupier. For this reason, a possible solution to this problem could be a cost cap per county based on known data on costs and property type, or target to get the most used areas of homes up to EPC C initially.

There must also be a consideration for older people and savings/pensions. From our experience with the current Welsh Government *Warm Homes Programme*, currently it only matters if you have savings if you are aged over 75. That means someone aged 74 can get help through the programme even if they have savings, but someone born just months before them are ineligible for support. This is discriminatory – it should not be the case that the older you get the less help you qualify for. If this grant is to be made

² Nest Annual Report 2020-2021. Pg 16. Available at: <https://nest.gov.wales/wp-content/uploads/2022/05/Nest-Annual-Report-20-21-English-FINAL-2.pdf>

available, then it must be available to all vulnerable households, irrespective of savings – for older people, these savings are often set aside for specialised care, mobility expenses, end-of-life support and funeral costs, of which will usually exceed the £16,000 savings limit.

Practical challenges

One of the main practical challenges is the significant labour shortage that Wales is currently experiencing, and the concern about the ability for the retrofitting to be undertaken and maintained. In October 2021 there were 176,000 labourer vacancies, and due to Wales having an ageing population the electric grids need 40,000 new staff over the next 5 years to replace those retiring, and with the average age of a plumber and gas fitter being 55, there is a likelihood that plumbing will end up in a similar situation. This skills gap is already affecting the work that Care & Repair agencies are able to undertake thanks to reduced contractor availability. We are concerned that this skills gap means that the ability to reach the number of homes needed to meet the targets set will not be possible.

Pre-1919 housing in all forms makes up the largest percentage of Welsh housing at 23%. These older homes were often built to a different specification, with outdated materials and harder to replicate building methods, and are often of a lower median energy efficiency rating than more modern homes. This also means that the options to fix, retrofit and bring up to standard can often be time consuming and costly for the homeowner, so often these small actions are not undertaken. The percentage of pre-1919 homes that are classed as ‘poor housing’ is significantly higher than any other dwelling age, at 34.4%.³ When we look at energy efficiency of dwellings across Wales, the older the building, the lower the median efficiency rating. This is particularly evident in pre-1900 homes, which equates to approximately 23% of all Welsh housing stock⁴. Overall, Wales has the lowest median energy efficiency score of any region in England and Wales at a median of 64, equivalent to band D.

We are concerned about the impossibility of retrofitting some of the homes that require an increase to the EPC rating due to historic safety concerns, such as asbestos or MMF (manufactured mineral fibres). Current asbestos guidance is to leave the area where it is present dormant and undisturbed for as long as possible, but with Wales laying claim to the oldest housing stock in the UK and with 83% of older people in Wales owning their own home, This will inevitably mean a higher proportion of older people living in older homes unable to be retrofitted to the standard necessary, so as to not put labourers or occupiers at risk. These homes should be retrofitted as far as is reasonably practical, but guidelines and formal definitions must be created to ensure those in older homes, often the homes of older people, are not forgotten or ‘written off’ as unable to be retrofitted and so left behind or penalised for not opting in. There must also be additional grants or financial support to acknowledge the increase in fuel costs in the homes that cannot be retrofitted but not through the fault of the owner.

There are also the limitations that using EPC ratings as a standalone measure of energy efficiency can bring. In line with the *Decarbonisation of Homes in Wales* Advisory Group, we agree that EPCs should not be a standalone baseline tool and should instead take a ‘whole house approach’. At Care & Repair

³ [The-Cost-of-Poor-Housing_Report_BRE-Trust_English.pdf \(bregroup.com\)](#)

⁴ [Decarbonising Welsh homes: stage 2 report \(gov.wales\)](#)

we take a whole person, whole house approach, considering a host of factors that can influence a home's energy efficiency including the home's age, construction and systems installed, as well as the way the person lives and uses their home which varies across the life course.

For this reason, we support a multi-measured Whole House approach to retrofitting. We may otherwise see a large number of older people who are unable to maintain their home and may be forced to move due to financial limitations.

Behaviour challenges

Older people over 65 are classed as vulnerable and are often more susceptible to injuries from falls and trips and effects of poor air quality, hazards and fatigue. If we are to successfully encourage older people to take up retrofitting and contribute to the decarbonisation effort in Wales, this must not come at a juxtaposition to their health, and the domestic upheaval for an undetermined amount of time may be a significant barrier to older people. There is little information to inform people as to the length of time that retrofitting will take, and so there may be a reluctance to undertake such measures if there is little information as to the disruption until after the enquiry process has begun.

There is also likely to be an element of pride, and the reluctance to accept that their home needs to be updated or tackled due to its state of disrepair. For many older owner-occupiers who have lived in their home for years or perhaps even decades, the acceptance that they have been unable to maintain their home to a safe standard, or that they need additional support in maintaining a safe home may be a challenge, and so the promotion and advertising of retrofitting initiatives needs to be sensitive to this.

There may also be a lack of confidence in the decarbonisation initiative and agenda. With limited information that is accessible, easy to understand and applicable to homes in Wales in media that is offline, there are additional challenges in older people understanding what retrofitting involves, and the commitment that is to be made by undergoing retrofitting. If we are to make this a success, there needs to be a focus on creating resources for homeowners and landlords that are easy to understand and applicable to their living situation, so as to make a fully informed decision before entering a contract to retrofit.

Care & Repair believe that Welsh Government have a responsibility to check in on and support those who have undergone retrofit measures, to ensure that there is understanding of the new measures. This will not only provide confidence in the occupier of the work and its development, but it also allows for the beneficiary to communicate if they have any concerns about its impact, and the equipment can be checked that it is working as expected. The below is just one of many case studies dealt with and resolved by one of our Care & Repair agencies;

'Mr L is 72 years old, lives alone with no family in rural mid-Wales. He has recently been in hospital having suffered a stroke. Client wanted to return home despite medical advice to stay in hospital.'

His home is a detached stone house situated at the end of a bridle way. It was built pre-1900, it is isolated and is in a very poor condition. There is one habitable room in the property.'

We were asked to look at his heating by another organisation that was helping him with a very large electricity bill (approx. £5000). We visited the property and via a Home Energy Assessment established that Mr L had Storage Heaters installed three years ago under a grant scheme. The scheme was either part of ECO3 or NEST, the client wasn't sure.

There was one storage heater in the lounge where our client was living, and three installed in the bedrooms upstairs. The lounge storage heater was set at 14 degrees Celsius; the three upstairs heaters were set at 20 degrees Celsius.

Our client was using two electric radiators to supplement the heat in his lounge, as well as the storage heater.

Mr L has very poor mobility and hasn't been upstairs for several years. The first floor of the property is in disrepair with parts of the roof open to the elements and windows in poor condition. Therefore, the heating had been running for 3 years at 20 degrees Celsius every day, in a part of the property that was not insulated, had draughty windows and open roof space. This explained the high electricity bill.

Our HEO turned the upstairs heaters down to 'frost-proof' mode and tried to adjust the lounge heater to 18 degrees Celsius. However, Mr L had lost confidence in the storage heaters and given his huge energy debt was unwilling to increase the temperature of his lounge heater. Mr L wanted to continue to rely on his electric radiators, though our HEO did advise and explain the high cost and inefficient heat output from them.

When our HEO visited the property, he found it difficult to access the front door as there is small ditch with an unstable crossing leading up to it. Our HEO liaised with their Care & Repair RRAP (Rapid Response Adaptations Programme) caseworker and arranged to install a safer access bridge with solar lighting. Mr L needs daily visits from carers who bring him meals and heat them up for him. Mr L's microwave was in his kitchen where the floor had collapsed. Our HEO moved the microwave into Mr L's lounge and the carers can now access the house and heat Mr L's meals.

If the installers had taken account of Mr L's needs and way of living, they could have better set the storage heaters to help him stay warm. Mr L would have more confidence in and ability to use the system, he would have used less electricity and be in less debt.

We believe our partners have worked with the supplier to reduce the debt by 50%.'

Actions

Ringfenced funding - One of the main actions that would ensure a strong delivery of this programme would be to ensure continued, ringfenced funding for the activity, and secured beyond annual renewed funding. This will ensure that owner occupiers have confidence that work will be carried out to completion, and that personal finances will not be a barrier to access. By Welsh Government also ringfencing funding and allocating beyond a one-year cycle, this shows that retrofitting and decarbonisation as a true priority and focus for the betterment of the population and the planet. Schemes such as NEST have been funded for a longer length of time beyond a one-year annual funding cycle and

so we know that this is within the gift of Welsh Government to grant and prioritise beyond annual project funding.

Communication with owner-occupiers - There must also be an assurance that the impact on individuals is fully communicated and driving the project – whilst it can be interpreted that a lower number of retrofit actions undertaken shows less activity overall, the impact of the work done for an individual will be hugely positive, and the impact and personal stories must not be forgotten in favour of higher statistics. We believe that whilst data is key, the positive impact and personal experiences that arise from retrofitting should be a primary consideration, and equal in value to data and statistics.

Whole stock approach - some dwellings in Wales will be unable to be fully retrofitted up to the required EPC rating of C. There must be particular considerations for the owners and occupiers of these properties, to ensure that they do not miss out financially, and are not penalised for their property not being up to the C rating standard by the required time frame. With this however, there will have to be guidelines in place to ensure that as many properties as possible are retrofitted to the standard, and the exceptions are on an individual basis at the owner's request. We recommend Welsh Government take an approach similar to that proposed in the Welsh Housing Quality Standard to decarbonise social housing stock, allowing for carbon offsetting where a home has had all that can be done to decarbonise it but still falls short of the minimum standards.

How the right balance can be struck between influencing/incentivising homeowners and private sector landlords to retrofit their properties and regulating to increase standards to drive progress;

For Care & Repair, there are several recommendations in how to ensure that incentivisation and regulation can both be monitored. There must be a recognition that tenants, homeowners, owner-occupiers and landlords of properties will have different needs and priorities, and these need to be catered for accordingly.

The option of convening a focus group/s or workshops for targeted groups to investigate some of the incentives that would appeal the different groups may be of benefit. These groups will allow Welsh Government, agencies and third sector to formulate incentives and influencing measures that appeal to their individual target audiences and engage directly with those that will be affected by any changes or incentives brought in to boost the take up of retrofit actions.

The safety and longevity of the work being carried out will also be a concern for homeowners and landlords. With retrofitting often being a large, invasive project (particularly if the 'whole house' option is chosen in favour of 'fabric first') then there will need to be confidence from the homeowner that the contractors used are reliable, and the work is done to a high standard to not cause additional problems and increased costs in the future. Currently, MCS is a standards organisation that exists to certify low-carbon products, their installers and installations. MCS is a UK-recognised mark of quality and trust in renewable energy methods, contractors and projects. The creation and introduction of a 'Trust Mark'/standards organisation that exists in Wales solely to regulate retrofitting projects and provide

assurances to customers would be welcomed by Care & Repair, as it will ensure that there is oversight to the work undertaken and guarantee that work undertaken in this area has been done so by contractors that are regulated and signed up to the standards. Care & Repair are concerned to see a significant rise in scams targeting older and more vulnerable households that may be looking for ways to insulate their home and reduce their fuel bills to address their rise in the cost of living. With spray-on foam insulation being the primary offering of potential scammers, by having a database of approved contractors, this can provide protection to homeowners that the work is safe and regulated.

Some deterrents for landlords on making energy efficient changes range from 'high upfront costs' to 'no personal benefits to making improvements'⁵, which in turn can create a difficult or hostile environment for the tenant if they are wanting their landlord to undertake such measures to save on their energy bills. This could cause worry and anxiety particularly for older people, as with high costs often comes an increase in rent in order to make the tenant contribute financially to the work being undertaken, but with so many other areas of expenditure increasing rapidly, there may not be the possibility for the tenant to be able to afford a rent increase, particularly if they are on a fixed income such as state pension, or have additional outgoings such as increased and constant energy use for essential medical equipment. One recommendation from Care & Repair to address the above would be for Welsh Government to fund an initial formal retrofit assessment for private sector housing landlords and owner-occupiers, in line with the PAS2035 guidance. This assessment will then provide landlords with a full report of their property, outline retrofit measures that can be undertaken and allow the landlord or owner-occupier to move at a pace that suits their budget and any future plans with the property. These assessments will also provide critical insight into the most common retrofit suggestions and give a wider awareness as to the state and needs of the Welsh private housing stock.

How effective the Welsh Government is influencing decisions on reserved matters to support decarbonisation of these sectors;

With Wales leading the way on greener measures and futureproofing through the global first *Wellbeing of Future Generations Act*, areas of the reserved agenda for UK Government are not moving at a pace that matches Welsh Government targets. We are concerned that movement towards such initiatives as UK-wide carbon reduction in housing could be less effective when using a four-nations approach.

There is also the additional challenge of the energy sector across the UK, and its play in devolution. Whilst fuel poverty within itself is something that Welsh Government can and does act on, the energy sector is still reserved to the UK Government, and so the possibility of making changes on a Wales level with the energy sector that benefits Welsh consumers is disappointingly limited. This means that the increase in energy caps that have been implemented are out of scope for the Welsh Government to mitigate, outside of introducing measures such as additional non-repayable grants to low-income households, which could ultimately be an unsustainable solution. Welsh Government should continue try

⁵ [Attitudes and behaviours of private sector landlords towards the energy efficiency of tenanted homes - ScienceDirect](#)

to engage the UK government in dialogue to work towards more sustainable solutions. In the long term, bringing renewable energy production closer to Wales would influence the social responsibility and income generation opportunities stemming from these organisations working collaboratively with the Welsh Government.

With UK Government aiming to reduce carbon emissions by 78% by 2035, more direct and wide-reaching decarbonisation measures need to be taken on a four-nations level, and we believe that action in Wales can lead the way in influencing this across the UK. Through making the roll out of decarbonisation methods an example of good practise for leaders of other nation governments to follow, Welsh Government and Welsh MPs have a case for the increased focus on retrofitting in the UK Government's work stream. The UK Government's own Department for Business, Energy and Industrial Strategy (BEIS) sponsored the *PAS 2035:2019 Retrofitting Dwellings for Improved Energy Efficiency* document, that is applicable on a UK- wide basis and is the key to understanding the standards of retrofitting on both a fabric first and whole house approach. This document shows that there is understanding within the UK Government on the need to prioritise retrofitting in order to meet their published carbon reduction goals, but with approximately 28 million homes needing to be retrofitted across the UK, Welsh Government should use all avenues and contacts possible to put decarbonisation firmly on the UK Government's agenda and consider it a priority work area.

Summary of recommendations

- Clarification from Welsh Government on the plans for phase three of the Optimise Retrofit Programme
- For the Optimise Retrofit Programme to be carried out on a wide range of existing homes of different ages, locations, construction types and energy efficiency ratings, to assess its suitability on the wide range of dwelling types
- For Welsh Government to release an interim report of retrofit effectiveness, that includes a full data set and explanation as to the types of houses that have been targeted under the Programme
- For the 'worst-first' approach to be targeted at the four individual groups described as 'vulnerable' by Welsh Government, with those households in each of these groups that are in severe fuel poverty targeted first as a priority
- Apply the Welsh Housing Quality Standards principles and research area the private rented sector also
- Reinstate the *Welsh Housing Conditions Survey*
- Implement a 3-year funding cycle to ensure that the Programme is able to sustain the level of retrofit operations that is able to both make an impact and adapt with learning and need

- Introduce a 'cost cap per county' based on known data on costs and property type, or target to get the most used areas of homes up to EPC C initially.
- For a retrofit grant to be made available, and available to all vulnerable households, irrespective of savings
- For Welsh Government to create guidelines and formal definitions surrounding the practicality and possibility of retrofitting, and utilising 'as far as is reasonably practical' on a case-by-case basis
- Implement a multi-measured Whole House approach to retrofitting
- Create resources for homeowners and landlords that are easy to understand and applicable to their living situation, so parties are able to make a fully informed decision before entering a contract to retrofit.
- Create and introduce a 'TrustMark'/standards organisation that exists in Wales solely to regulate retrofitting projects and provide assurances to clients
- Welsh Government to fund an initial formal retrofit assessment for private sector housing landlords and owner-occupiers, in line with the PAS2035 guidance
- Engage the UK government in dialogue to work towards more sustainable solutions.
- Bringing renewable energy production closer to Wales would influence the social responsibility and income generation opportunities stemming from these organisations working collaboratively with the Welsh Government.
- Making the Welsh roll out of decarbonisation methods an example of good practise for leaders of other nation governments to follow