

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /
Climate Change, Environment and Infrastructure Committee
Datgarboneiddio'r sector tai preifat / Decarbonising the private housing sector
DH2P_26
Ymateb gan Cyngor Adeiladu Gwyrdd y DU / Evidence from UK Green Building Council

UKGBC response to Welsh Government Call for Evidence

22 August 2022

Introduction

UK Green Building Council (UKGBC) is an industry network with a mission to radically improve the sustainability of the built environment, by transforming the way it is planned, designed, constructed, maintained and operated. As a charity with close to 700 member organisations spanning the entire sector, we represent the voice of the industry's current and future leaders who are striving for transformational change. We also work closely with local authorities across the country to support their efforts to decarbonise their built environment and in particular their housing stocks.

We welcome the opportunity to give evidence to the Climate Change, Environment and Infrastructure Committee.

- ***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;***

We welcome efforts by the Welsh Government to decarbonise homes, particularly the 'Optimised Retrofit' programme which seeks to support RSLs and LAs to decarbonise their own housing stock. We believe this represents a good model for England to follow. We also understand that there are plans to evolve the Optimised Retrofit programme to enable it to support the owner occupied sector and private rented sectors. We believe this approach is vital as currently we are unaware of any government led activities in place for those sectors. This means that even those homeowners/landlords that are motivated to act, and have means or access to finance, frequently fail to improve their homes' energy performance - a fundamental problem but also an opportunity (see below).

We recognise that the Welsh Government is dependent on Westminster for much policy in this space (such as Minimum Energy Efficiency Standards (MEES) legislation. However we believe there are actions that the Welsh Government can undertake to drive forward action on retrofit, as well as lobbying Westminster to provide a the necessary policy framework at the national level.

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

UKGBC sees a vital role for sector specific retrofit targets to help drive change in this sector. The built environment is responsible for 1 in 5 tonnes of carbon emissions in the UK and the Committee on Climate Change estimates that nearly 2 homes every minute will need to be retrofitted between now and 2050 across the UK.

Spiralling energy bills and the cost of living crisis have brought into sharp focus the need to retrofit existing homes, in order to insulate householders from further price rises, as well as meet our net zero targets.

Furthermore the recent heatwaves have highlighted the need to ensure our homes are fit for habitation in a rapidly changing climate with a greater frequency of extreme weather events.

We are calling on Westminster to introduce the following regulatory measures:

- A clear trajectory for improving the MEES for the domestic private rented sector to EPC Band C (or equivalent) by 2030;
- A mandatory minimum EPC (or equivalent) rating of C for owner-occupied homes at the point of sale.

We also believe that work is needed to identify the optimum percentage reduction in space heating demand by archetype alongside the optimum ways of providing powering and heating homes through renewable energy.

Without this underlying analysis of our housing stock and a comprehensive 'National Retrofit Strategy', each local authority, housing association, landlord and individual householder is left to work out for themselves how far they should be going on retrofit to achieve 'best carbon/energy saving bang for buck'.

The Welsh Government could undertake this analysis in advance of the UK Government and develop a Welsh Retrofit Strategy. This would ensure that all policy making and target setting is underpinned by technical analysis, and a clear understanding of the role of home retrofit in meeting Wales's Net Zero target, as well as other relevant targets around fuel poverty, job creation etc.

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

The Welsh Government should take steps to ensure there will be long term householder demand for retrofit, and build the necessary skills to deliver retrofit in tandem with rising demand. This is especially important as the retrofit industry has been badly damaged by stop-start programmes and funding streams and needs to be rebuilt.

In 2019 UKGBC and partners launched '[Accelerator Cities](#)', a programme designed to support local and combined authorities to take a lead on home retrofit, by providing a range of resources and opportunities for collaboration. We see local authorities as being critical to the delivery of retrofit. The complexity and technical nature of delivery, the need for a 'trusted' partner to give householders reassurance and the need for high levels of co-ordination across multiple actors means that local/combined authority leadership will be essential to deliver action on home retrofit.

Accelerator Cities is built on an extensive consultation in 2019 which identified the barriers and opportunities in region or city-wide retrofit strategies. We know from work done to date that a retrofit programme should include the following component parts:

- 1 - Setting out a comprehensive strategy for retrofit including undertaking a baseline assessment of local building stock and setting targets for retrofit
- 2 - Undertaking a skills map and needs assessment in the local area and supporting the development of training
- 3 - Developing/supporting 'one-stop-shops' for householders, to provide accredited advice and access to contractors, and guide and support them through the retrofit process
- 4 - Coordination of blended public and private funding sources, thereby bringing all households into the 'able to fund' sector regardless of tenure or individual circumstances

5 - Engaging with householders and landlords with messages that resonate with them as individuals to encourage them act

6 - Engaging with the supply chain for quality assured interventions, and working with the industry to build capacity and the supply chain in tandem with householder demand for retrofit.

In 2020, UKGBC and partners developed a [Retrofit Playbook](#) which is guidance for local authorities on how to develop retrofit programmes. The Playbook was well received, but many local authorities fed back that while they wanted to do more on retrofit, they felt unable to due to constrained capacity and resources.

Therefore UKGBC ran a series of workshops in March 2022 to better understand why most local authorities were struggling to act on retrofit. The workshops revealed that:

- There is a significant lack of capacity within most local authorities to work on home retrofit. Most local authorities do not even have one full time (equivalent) officer with responsibility for developing and supporting retrofit initiatives.
- The boom-bust nature of past grant funding programmes has resulted in little supply chain delivery capacity and limited retrofit knowledge / experience within local authorities.
- Many local authorities do not have programmes which can take advantage of the retrofit funding available from central government (in England).
- In most areas of the country there are not the businesses (supply chain) locally to undertake low energy retrofit, beyond basic measures, even where the homeowners are motivated to act.
- Should national government decide to provide, or stimulate, investment in low energy retrofit, many areas simply do not have the local authority experience and capacity nor supply chain to deliver.
- Existing builder, contractor and installer companies can be trained and supported to provide the needed retrofit services.
- Where local authorities have leadership buy-in and allocated resource, effective retrofit programmes have been delivered to low income and fuel poor households.
- Examples where local authorities have successful facilitated/supported owner occupier retrofit delivery do exist.
- Local authorities are ideally placed to engage with local groups that facilitate the development of the retrofit supply chain.
- Local authorities are keen to work together.

In order to try and overcome the barriers above for owner occupiers the UKGBC is developing two complementary approaches. The first is creating the essential capacity building blocks via Local Authority Facilitated Mass Scale Retrofit initiative. The second is advocating for an Energy Saving Land Transaction Tax Incentive to provide a long-term demand driver, a structural nudge.

1) Local Authority Facilitated Mass Scale Retrofit

UKGBC and partners have developed proposals to 'break the deadlock' on retrofit, and take the first step towards delivering mass scale retrofit programmes. We aim to:

- 1) Help 20 or 30 keen, but capacity limited, local authorities to encourage low energy retrofit service provision initially focused on the two most readily delivered approaches:
 - Identified small local area, multi tenure retrofit delivery (street by street) - utilising existing grant funding.

- A wider area scheme focused on homeowners, and landlords, that are motivated and have means or access to finance – without being reliant on government grant funding programmes

Once these are firmly established, widen and deepen the target markets and scale.

- 2) Provide easy to adopt materials and ‘in person’ support to help local authorities recruit and train retrofit officers, develop the strategic business cases and, as appropriate, support the procurement and mobilisation of a retrofit facilitation service provider.
- 3) Raise ‘surge funding’ to support the retrofit facilitation service during its early years and, potentially provide funding to cover some local authority retrofit officer salary costs in the first year.
- 4) Facilitate a straight-forward application process for local authorities by making the successful completion of the programme milestones the ‘gateways’ for securing the surge funding, and maintaining continued project manager support.

For more information about our proposed way forward see our appended document ‘Local Authority Facilitated Mass Scale Retrofit Brief’

2) Energy Saving Land Transaction Tax (LTT) Incentive

Structural-incentives provide flexible solutions and allow innovation. Introduction of long-term ‘structural-incentives’, such as Stamp Duty/Land Transaction Tax, would create the market conditions to create a thriving energy efficiency market giving householders and home buyers choice and becomes part of the existing home improvement culture.

Whereas the short-term nature of past grant schemes, operating in isolation, has resulted in a ‘boom-bust’ market and failed to leverage significant private finance, a structural driver would overcome this. Further, as a structural driver need not be a burden on the Treasury it can reasonably be expected to remain in place as, and when, administrations change providing the long-term demand so essential for success and lowest costs.

Structural-incentives and subsidy working together:

An Energy Saving LTT Incentive, combined with grants for lower value homes, would be a workable and effective structural solution, working seamlessly with existing green finance arrangements and policies as well as driving innovative new approaches to delivering home upgrades.

How would the Energy Saving LTT Incentive work?

- First, the energy demand of the home is calculated from the independently produced Energy Performance Certificate (already a requirement of a house sale).
- The LTT to be paid is then adjusted up or down based on the home’s calculated energy demand - the better the energy performance, the lower the tax paid.
- If the purchaser undertakes low energy improvements within 2 years, and obtains an updated EPC, a rebate would be paid as if the improvement had been made before purchase;
- The government could increase the value of the rebate paid to lower value homes to help subsidise the costs of the installed energy performance measures.
- Any recognised improvement in a home’s energy efficiency would reduce the LTT paid.

Key benefits of the Energy Saving LTT Incentive:

- Provides confidence that a home’s energy performance will be reflected in its selling price;
- Encourages homebuyers to seek advice, determine the potential energy improvements to a home, understand the costs and develop a plan at the time of purchase – alongside other renovation plans;

- Embeds necessary improvements to a home's energy performance in the wider discussion about financing the purchase together with any other improvements the homebuyer may be considering;
- Recognises most homeowners undertake significant improvement works shortly after they move in – combining these with energy improvements reduces the faff, time and disruption;
- Rewards homebuyers that improve the energy performance of their homes;
- It 'nudges' homebuyers to take action on energy efficiency in a way that is proportionate to the home's value, and doesn't impede housing sales, affordability or social mobility;
- Is not a subsidy. The Stamp Duty Incentive itself would be revenue neutral for government – i.e. stamp duty rises are off-set by stamp duty reductions. However, it is capable of being blended with grant funding for those that are struggling;
- Helps establish a stable home retrofit market creating a sustainable supply chain, jobs, and skills;

For more information see the Energy Saving Land Transaction Tax Incentive brief attached. An illustrative ESLTT Incentive calculator is available from the UKGBC.

UKGBC would be delighted to discuss these proposals in more detail with the Welsh Government. We believe adopting such an approach would achieve the crucial balance of building the market for retrofit, alongside the supply chain and capacity of the industry to deliver.

- **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;**

Please see barriers listed above in the previous section.

In addition, a number of market failures currently curtail private investment flows to decarbonise homes and make them climate resilient. Barriers to unlocking private investment have been set out by the [Green Finance Initiative](#) in their table below. Key cross-cutting themes are the upfront costs of retrofit, lack of available financial support, unclear government signals, as well as certain supply chain constraints.

- **Unclear government signals:** This can be done through confirming regulatory timelines for minimum energy efficiency standards for all housing tenures (including tightening standards in the private rented sector and gradually introducing measures for owner occupiers) and the phase-out of fossil heating systems. Measures like requiring mortgage lenders to disclose the average energy efficiency of their lending portfolio could spur innovation and interest in financial products like green mortgages.
- **High upfront costs:** Research shows that retrofitting on average costs £25k per home (with a wide distribution around the average).

Government subsidies for low-to mid income households will be essential for supporting poorer families with the upfront costs of retrofit, and can help 'pump prime' the market for heat pumps, helping lower the costs for all households. As well as grants, the government can consider partial subsidies and blended finance through loans offered through the UK Infrastructure Bank. Financial products and services like property-linked finance and salary sacrifice schemes could help spread the upfront costs of retrofit over time. Business models like heat-as-a-service can also help overcome the challenge of high upfront costs.

- **Lack of available financial support:** More can be done to support innovation of new financial products and services to ensure that across the different housing tenures, and the cross-section of households within each.

Table 1: Key financial and non-financial barriers to action and investment in greener homes

	Upfront costs	Lack of financial support	Unclear Government signals	Supply chain	Other
Owner Occupied (first-time buyers, mortgaged homeowners, outright homeowners)	Higher up-front costs of low-carbon heating systems vs traditional gas boilers; costs of whole house retrofit	Lack of financial products and incentives; first-time buyers seek to minimise outgoings, highly leveraged, have limited options for further borrowing	Long-term uncertainty on schemes, nothing on efficiency for 'able to pay'. Regulatory clarity for heat, but lack of clarity on efficiency	Fragmented market and access to trained installers	Lack of access and accessibility of quality, trusted advice and information
Private Rented (small and large landlords, asset managers)	High upfront costs, particularly for multi-property portfolios; currently unable to aggregate demand	No financial incentives or support; limited capacity to leverage credit, limited awareness for acquiring finance	Lack of long-term certainty Ambiguity on new standards	Fragmented market and access to trained installers	Landlord-tenant split incentive District Heating: size of market, lack of regulatory environment

Social Rented (Including Housing Associations and local councils)	High upfront costs to decarbonise large portfolios	Higher cost of borrowing for Housing Associations than local authorities; many social landlords close to borrowing limits	Lack of long-term policy certainty and capital investment from central government	Supply chain maturity Stock often dispersed	Short-term grant profile difficult to reconcile with long-term objectives District heating: size of market, lack of regulatory environment
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We believe that the following actions from the Welsh Government and its partners could help unlock these barriers:

- Lobbying Westminster to introduce structural incentives to increase demand for retrofit, such as differential stamp duty based on energy efficiency. Further information about the proposed SDLT incentive is provided below.
 - Lobbying Westminster to provide clarification on forthcoming MEES policy.
 - Expanding the scope of the Optimised Retrofit programme to include support for the owner occupied and private rented sector
 - Adopting a model of supporting local authorities to build their capacity to drive retrofit across tenures
- **how the right balance can be struck between influencing/incentivising home owners and private sector landlords to retrofit their properties and regulating to increase standards to drive progress;**

As outlined above, to drive retrofit forward, we need a suite of regulatory drivers, incentives and subsidies, as well as support for householders and supply chains. We recognise that many of these levers reside with Westminster, and therefore we would urge the Welsh Government to lobby for their implementation:

Regulation

Industry, consumers and the market need long-term signals in order to shift behaviour at scale and pace. It is critical that timelines are published for minimum energy efficiency standards for all housing tenures (including tightening standards in the private rented sector and gradually introducing measures for owner occupiers) and the phase-out of fossil heating systems.

Measures like requiring mortgage lenders to disclose the average energy efficiency of their lending portfolio can also spur innovation and interest in financial products like green mortgages.

Incentives

Structural incentives to drive household action and investment are vital.

Introducing an *Energy Saving Stamp Duty Incentive*. As described above, this incentive would motivate homeowners to upgrade the energy performance of their homes at the point of sale of a property or shortly afterwards - a time when capital is released from equity and people commonly consider the most significant home improvements. It can also be used to drive more sustainable new homes.

Homeowners can be incentivised - nudged but not told - to improve their own homes to allow funding to be directed to those that don't have means or access to finance.

It will ensure that installation of vital energy efficiency measures become part of the house purchase process, acting as a driver for discussions with banks or other lenders about funding. The incentive will encourage people to actively think about the energy performance of the home they are considering purchasing, about potential improvements, consider any retrofit costs and plan ahead to realise the rebate, reducing the cost of retrofitting under-performing homes.

The adjustment can provide a long-term, revenue neutral, structural driver for change at scale and over time. The long term, stable character of the measure will be critical in rebuilding business confidence to invest, skill up and scale up.

This intervention is backed by groups ranging from: Consumer finance organisations, consumer facing groups, retailers, builders / installers and manufacturers.

Removing the legacy policy costs from electricity bills and moving them to general taxation. These policy costs, especially the legacy element raise the price of electricity disproportionately relative to gas. Removing these policy costs will lower bills immediately while also encouraging a switch to clean electric heating.

Targeted public funding

The cost of living crisis means that millions more households are now in critical fuel poverty. It is urgent that they are supported to reduce their gas waste and therefore bills. A new support mechanism begun this year ahead of winter would give hope and a lifeline to help struggling families to upgrade their homes. Expanding ECO to include a new "ECO Plus" scheme giving families on lower incomes access to subsidised energy efficiency measures delivered by their energy companies. With £1bn per year of additional government funding, ECO Plus could support up to 2.1m households over three years. The scheme would be only part-subsidized, and will therefore also act as an incentive to leverage private finance.

Advice and information and awareness raising

Raising public awareness of the benefits of home retrofit and making the process understandable and straightforward will be critical to drive demand and underpin successful delivery. A series of local 'one stop shops' should be supported, giving customers independent advice on energy saving measures and guiding them through choosing the right steps, finding local suppliers, and accessing relevant support. The UK has a model which could be scaled in the Home Energy Scotland service.

Skills and supply chain investment

To scale up the number of home retrofits possible a huge programme of upskilling and investment is needed across the industry. However, there is no point in training vast numbers of retrofit contractors if there is not sufficient demand for their services. Demand creation and building the supply chain need to go in tandem, as highlighted above. We believe our model can support this.

Retrofit finance options

For households that want to invest further, a number of attractive green finance options are needed, as proposed by the [Green Finance Institute](#).

- **how effective the Welsh Government is influencing decisions on reserved matters to support decarbonisation of these sectors.**

Question not answered

Energy Saving Stamp Duty / Land Transaction Tax Incentive

There is broad consensus on the requirement for net zero carbon emissions by 2050, and the Government has set itself a target of a 78% reduction in UK Greenhouse Gas emissions by 2035. However, over the last 6 years, emissions from buildings have increased, rather than fallen, with the heating and powering of the UK's 29 million homes accounting for 20% of UK carbon emissions.

Similarly, the UK's homes have been long recognised as some of the leakiest and most costly to heat in Europe - wasting vast amounts of heat. Significant increases in energy costs over the last 12 months have brought this into sharp focus.

It is recognised that the net zero homes challenge is both significant and complex. It must be delivered with the utmost efficiency.

- ⇒ **The scale** of delivery required is significant: approximately two low energy home retrofits are needed every minute, for the next 25 years.
- ⇒ **The total cost** is between £300bn and £500bn (circa £20bn per year), equivalent to 5 HS2s or 25 Crossrail projects. Whilst a huge cost, it is not so different to the increase in the value of the UK's housing stock over the last 12 months: about £450bn or 9%

The answer isn't simply more grants but a blend of investment:

Whilst targeted subsidy programmes form a part of any net zero strategy, at this scale and cost, private finance will have to be deployed to deliver the majority of improvements. So how to stimulate such a significant level of private investment? A market-based approach is required which gives householders and home buyers choice and becomes part of the existing home improvement culture.

Structural-incentives provide flexible solutions and allow innovation:

Introduction of long-term 'structural-incentives', such as Stamp Duty/Land Transaction Tax, would create the market conditions to create a thriving energy efficiency market. Whereas the short-term nature of past grant schemes, operating in isolation, has resulted in a 'boom-bust' market and failed to leverage significant private finance, a structural driver would overcome this. Further, as **a structural driver need not be a burden on the Treasury** it can reasonably be expected to remain in place as, and when, administrations change providing the long-term demand so essential for success and lowest costs.

Structural-incentives and subsidy working together:

An Energy Saving SD/LTT Incentive, combined with grants for lower value homes, would be a workable and effective structural solution, working seamlessly with existing green finance arrangements and policies as well as driving innovative new approaches to delivering home upgrades.

How would the Energy Saving SD/LTT Incentive work?

- ⇒ First, the energy demand of the home is calculated from the independently produced Energy Performance Certificate (already a requirement of a house sale).
- ⇒ The SD/LTT to be paid is then adjusted up or down based on the home's calculated energy demand - the better the energy performance, the lower the tax paid.
- ⇒ If the purchaser undertakes low energy improvements within 2 years, and obtains an updated EPC, a rebate would be paid as if the improvement had been made before purchase;
- ⇒ The government could increase the value of the rebate paid to lower value homes to help subsidise the costs of the installed energy performance measures.
- ⇒ Any recognised improvement in a home's energy efficiency would reduce the SD/LTT paid.

Key benefits of the Energy Saving SD/LTT Incentive:

- ✓ Provides confidence that a home's energy performance will be reflected in its selling price;
- ✓ Encourages homebuyers to seek advice, determine the potential energy improvements to a home, understand the costs and develop a plan at the time of purchase – alongside other renovation plans;
- ✓ Embeds necessary improvements to a home's energy performance in the wider discussion about financing the purchase together with any other improvements the homebuyer may be considering;
- ✓ Recognises most homeowners undertake significant improvement works shortly after they move in – combining these with energy improvements reduces the faff, time and disruption;
- ✓ Rewards homebuyers that improve the energy performance of their homes;
- ✓ It 'nudges' homebuyers to take action on energy efficiency in a way that is proportionate to the home's value, and doesn't impede housing sales, affordability or social mobility;
- ✓ Is not a subsidy. The Stamp Duty Incentive itself would be revenue neutral for government – i.e. stamp duty rises are off-set by stamp duty reductions. However, it is capable of being blended with grant funding for those that are struggling;
- ✓ Helps establish a stable home retrofit market creating a sustainable supply chain, jobs, and skills;
- ✓ Reduces home energy use and carbon emissions, making a major contribution to national policies on net zero, energy security, and Levelling Up;
- ✓ If running for 8 years or more, could see over 3 million homes, across the UK, upgraded to a decent level.

If the government made an announcement or **statement of intent** now, with implementation in 18 months to 2 years, homeowners considering selling would have time to act, should they wish, and businesses and government would have the time to prepare. Introducing the policy in this way would smooth roll-out and allow companies to ramp-up capacity and delivery – ensuring a quality retrofit programme for all, in the knowledge there is market demand at the end.

Organisations supporting an Energy Saving Stamp Duty include:



For more information, please contact:

David Adams, EEIG SDLT spokesperson at david@theeeig.co.uk or,
 Sarah Kostense-Winterton, EEIG Chairman on sarah@theeeig.co.uk

Local Authority Facilitated Mass Scale Retrofit Brief

Context

In response to the Climate Emergency, the Government has set itself a target of achieving a 78% reduction in all UK Greenhouse Gas emissions by 2035 and our homes across the UK will have to be “net zero” by 2050. To achieve this, homes will need to use as little energy as possible, and the energy that is used, be clean and renewable.

However, the reality is that emissions from our existing homes have increased over the last 6 years. The heating and powering of the UK’s 29 million homes accounts for circa 20% of UK carbon emissions.

Similarly, the UK’s homes have been long recognised as some of the ‘leakiest’ and energy inefficient in Europe and expensive to heat, adding to financial pressures on our bills. Combined with the significant increases in energy costs over the last 12 months, this issue has been brought into stark focus for both the government and public.

Whilst national government has some programmes to improve the energy performance of fuel poor and low-income homes, uptake varies across the country. There are no policy drivers or programmes to encourage the ‘able to pay’ homeowners to upgrade the fabric of their homes. Where the fabric of a home is of adequate standard, there is grant support for owner occupiers and landlords to switch from gas and oil fired boilers to heat pumps.

Even those homeowners that are motivated to act, and have means or access to finance, frequently fail to improve their homes’ energy performance - a fundamental problem but also an opportunity.

There are circa 19m owner occupiers in the UK. 54% don’t have a mortgage.

Most local authorities, particularly those that have declared a climate emergency, have recognised that homes are a significant source of carbon emissions, but many do not have the capacity, resources or experience to establish programmes in their areas.

Building on the UKGBC’s Retrofit Playbook developed in 2020, the UKGBC, MCS Foundation, leading local authorities and other parties joined forces to identify successful retrofit approaches and address the barriers to adoption with the aim of catalysing ‘Mass Scale Retrofit’ programmes across the country.

Key observations gathered from five stakeholder workshops in early 2022

- There is a significant lack of capacity within most local authorities to work on home retrofit. Most local authorities do not even have one full time (equivalent) officer with responsibility for developing and supporting retrofit initiatives.
- The boom-bust nature of past grant funding programmes has resulted in little supply chain delivery capacity and limited retrofit knowledge / experience within local authorities.
- Many local authorities do not have programmes which can take advantage of the retrofit funding available from central government.
- In most areas of the country there are not the businesses (supply chain) locally to undertake low energy retrofit, beyond basic measures, even where the homeowners are motivated to act.
- Should national government decide to provide, or stimulate, investment in low energy retrofit, many areas simply do not have the local authority experience and capacity nor supply chain to deliver.
- Existing builder, contractor and installer companies can be trained and supported to provide the needed retrofit services.

- Where local authorities have leadership buy-in and allocated resource, effective retrofit programmes have been delivered to low income and fuel poor households.
- Examples where local authorities have successful facilitated/supported owner occupier retrofit delivery do exist.
- Local authorities are ideally placed to engage with local groups that facilitate the development of the retrofit supply chain.
- Local authorities are keen to work together.

Approach

- 1) To help 20 or 30 keen, but capacity limited, local authorities to encourage low energy retrofit service provision initially focused on the two most readily delivered approaches:
 - Identified small local area, multi tenure retrofit delivery (street by street) - utilising existing grant funding.
 - A wider area scheme focused on homeowners, and landlords, that are motivated and have means or access to finance – without being reliant on government grant funding programmes

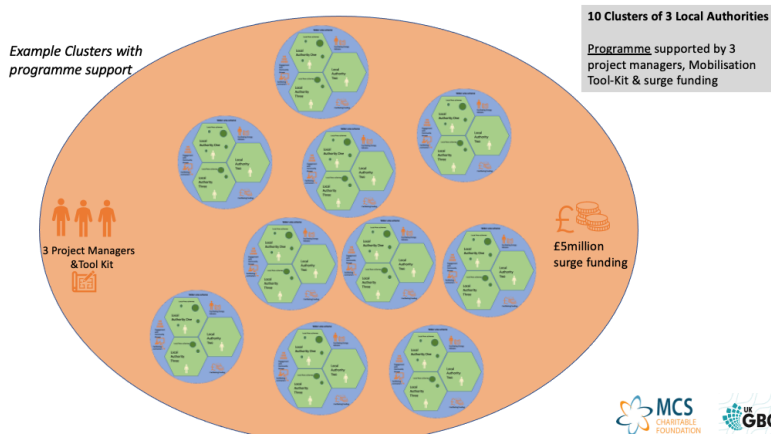
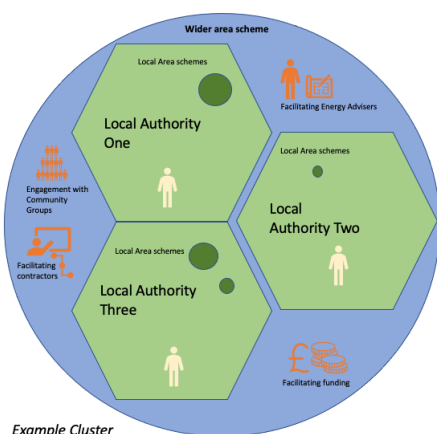
Once these are firmly established, widen and deepen the target markets and scale.

- 2) Provide easy to adopt materials and ‘in person’ support to help local authorities recruit and train retrofit officers, develop the strategic business cases and, as appropriate, support the procurement and mobilisation of a retrofit facilitation service provider.
- 3) Raise ‘surge funding’ to support the retrofit facilitation service during its early years and, potentially provide funding to cover some local authority retrofit officer salary costs in the first year.
- 4) Facilitate a straight-forward application process for local authorities by making the successful completion of the programme milestones the ‘gateways’ for securing the surge funding, and maintaining continued project manager support.

Broad structure

Clusters of local authorities come together to procure, or provide themselves, a retrofit facilitation service for owner occupiers.

Each will commit to employing a full-time (equivalent) retrofit officer who is responsible for engaging and coordinating with all the appropriate parties within the Local Authority. Utilising resources currently in development the retrofit officer will develop the business case, drawing heavily on template documents and support from programme project managers, for the wider area retrofit delivery programme, and work with colleagues to apply for government funding for the local area retrofit scheme delivery.



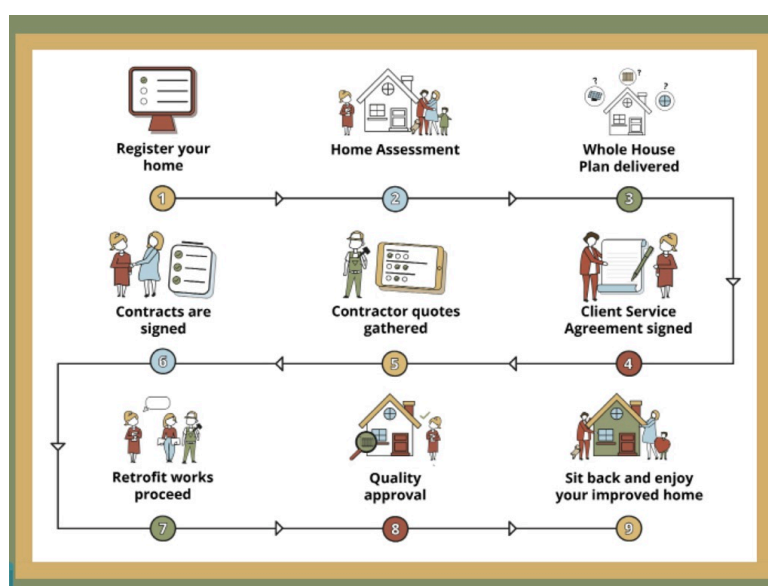
Wider Area Retrofit scheme

To provide a sufficient pipeline of owner occupiers that are ‘early adopters’ - circa 400k to 500k homes – across 3 or 4 local Authorities work together to form a cluster and procure, or set up, a Retrofit Facilitation Service.

The Retrofit Facilitation Service has a number of key roles:

- Co-designing the service, together with the local authority, with strong engagement with local groups and businesses, to meet local needs and aspirations.
- Engaging with potential householders, often via existing trusted community groups, and helping these households on their retrofit journey.
- Identifying, and working with local businesses to develop retrofit design & delivery skills/capacity.
- Providing householder support and independent advice throughout the retrofit journey.
- Providing quality assurance.
- The local authorities in the cluster would determine if the retrofit facilitation service also undertakes retrofit works, although this has additional implications and may place it in unhelpful competition with potential local providers.

An example customer journey is shown below:



Courtesy of RetrofitWorks

Experience suggests that, after a very strong initial surge of pent-up demand, interest grows modestly.

A conservative estimate is year 2 circa 50 retrofits per annum rising to circa 600pa in year 5 per cluster. The recent increases in energy costs may well increase this if prices stay at current levels.

Local Area Scheme

A tried and tested approach is the delivery of retrofit to small defined local areas consisting of typically 100 to 200 poor performing homes, in low income areas and across all tenures.

Needing full or high level of grant funding, these schemes are often financed through a combination of central government, energy company obligation and local authority (historically through EU support) money. Despite the track record of success, many local authorities currently do not have the capacity of bandwidth to engage with these programmes.

The 'other half' of the local authority Retrofit Officer's role would be to support, coordinate and drive the application and delivery of local area schemes so at a minimum one programme is 'in delivery' at any one time. A sustained programme of delivery is required to build capacity, drive down cost and drive-up quality. It is better to have three schemes running in series than three delivered concurrently.

The customer journey is similar to that with the wider area scheme, but much more can be done as a community together from initial engagement through to handover. Indeed, one of the most effective approaches to household engagement is to employ keen local residents, develop their retrofit skills and knowledge and have them undertake many of the engagement tasks with appropriate support. This is not only more efficient but also invests in the local community and leaves a legacy to keep initiatives running after the work has finished.

Once a base of capacity is established scaling can be undertaken by running programmes concurrently as well as in series provided funding can be maintained. Experience from the energy company obligation CESP schemes, Welsh Governments ARBED amongst others, again shows it is perfectly possible to run multiple schemes concurrently once supply chain capacity is established. Subject to funding, it is entirely possible to consider 4 schemes concurrently from year 5 at circa 800 homes per year per cluster.

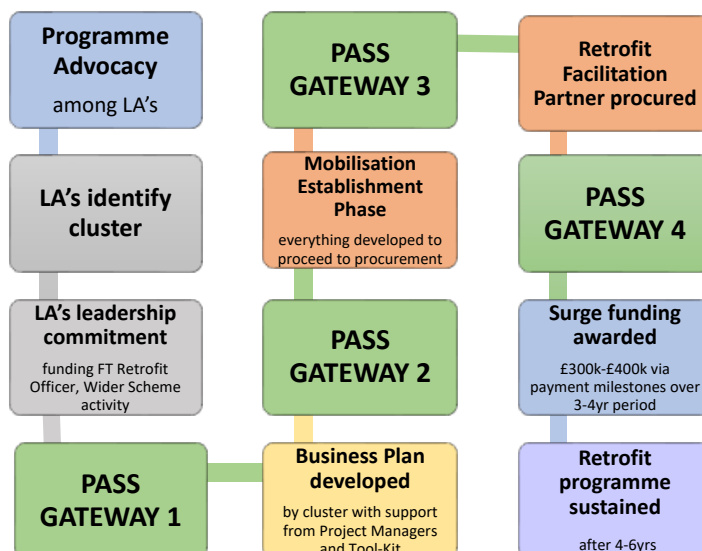
Overall impact

In year 5 a conservative estimate is 600 retrofits per year from the wider area scheme and up to 800 homes per year, subject to funding, for the local area scheme. A total of 14,000 homes pa across 10 clusters. If scaled up to all local authorities in the country that would be 140,000 homes pa, of which 60,000pa would not be dependent on grant funding.

Clearly the 140,000, let alone the 60,000 'able to pays', per year is not sufficient to deliver net zero by 2050. Policy drivers will be required to scale demand to the necessary levels. What the mass scale retrofit programme is intended to deliver is the early supply chain capacity and local authority knowledge building which is an essential step in achieving the established local foundations required for incentivised scaling to launch from.

Local authority Mass Scale Retrofit programme journey

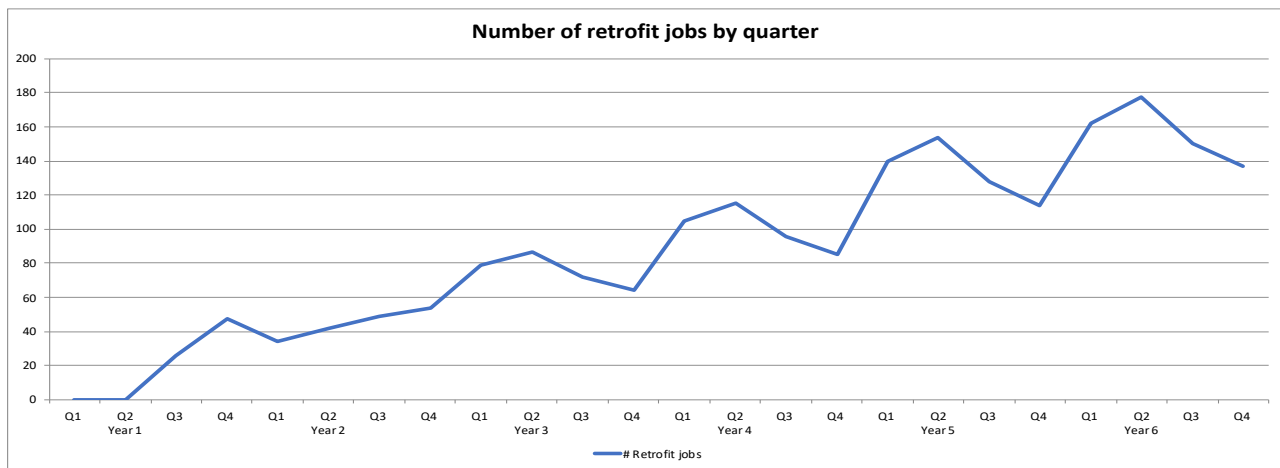
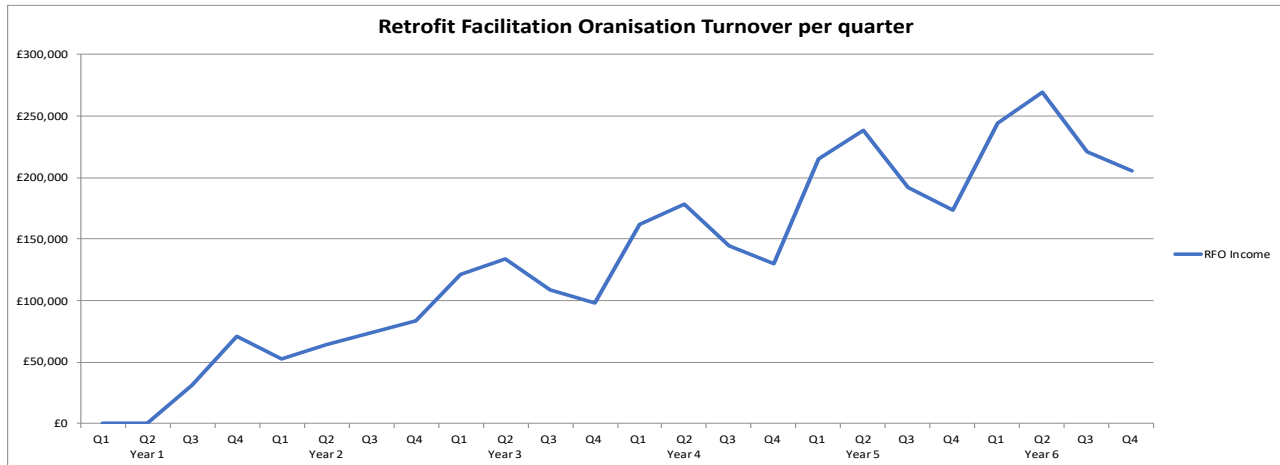
The intention is for the application process for local authorities is very simple, using a series of gateways to trigger additional support and ultimately the surge funding. Throughout the process the local authorities are supported by project managers and resource tool kits.



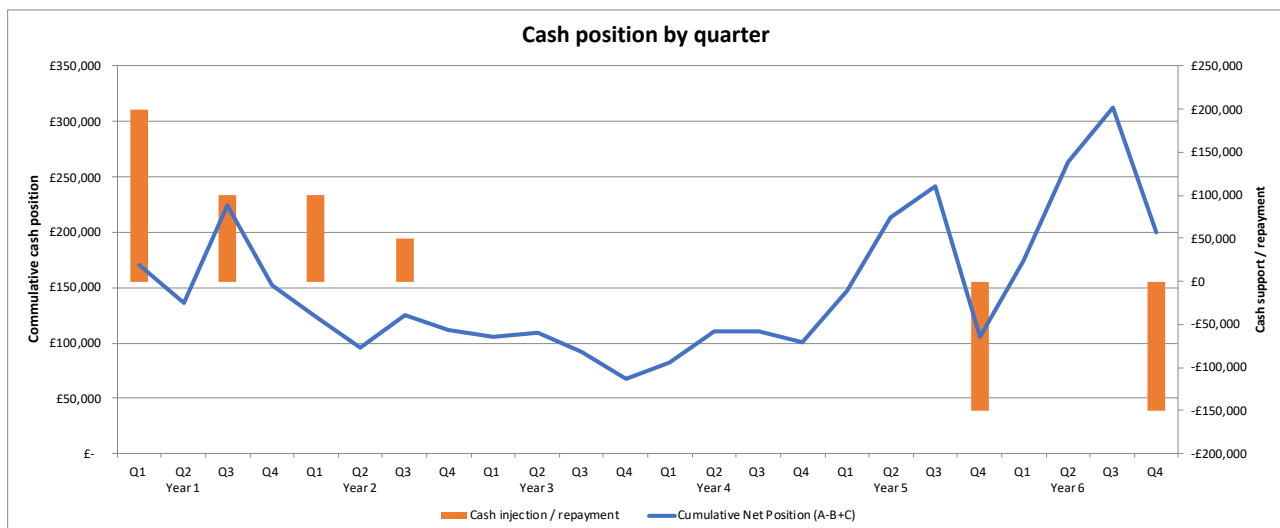
Model Retrofit Facilitation Service financials

Drawing on, and compiling, cost and revenue data from existing schemes a model cash flow has been developed to illustrate the wider area retrofit scheme economics from initial setup to self-sufficiency.

Turnover steadily builds as increasing work is undertaken.



Cash support is required to cover initial set up and while volume of work builds. Year 3 and 4 run at break even and a surplus is made from year 5. From year 5 it is anticipated that the initial finance would be either reinvested, repaid to a lender or into a revolving fund to re-invest in further start up clusters.



An example spend profile is shown below. Note the costs of works are not included as the retrofit contracts are between the householder and contractor and do not flow through the retrofit facilitation organisation.

