

South Oxfordshire and Vale of White Horse Retrofitting Homes Task and Finish Group

Recommended Ways Forward

August 2021

South Oxfordshire And Vale of the White Horse District Councils Joint Scrutiny Task and Finish Group 2021

Chair: Cllr Sam Casey-Rerhaye (South Oxfordshire)

Cllr David Grant (Vale of the White Horse)

Cllr Sue Roberts (South Oxfordshire)

Cllr Hayley Gascoigne (Vale of the White Horse)

Cllr George Levy (South Oxfordshire District Council)

Forward

Retrofitting homes for energy efficiency, so we can all cut carbon emissions, is not a new idea, but it has become increasingly evident that a strategic approach to this urgent and complex area of tackling climate breakdown is needed. From being a 'niche' idea 5 or so years ago it is now discussed nearly everywhere – look at this BBC report for example:- <https://www.bbc.co.uk/news/science-environment-58320578> .

This Task and Finish Group formed out of frustration with the approach government are taking, shown in the failure of the Green Homes Grant to achieve even a tiny proportion of its objectives.

This report summarises our approach to the issues, gives a precis of what we heard from the people and organisations who came to talk to us and offers recommendations and proposed projects for the two District Councils and the wider local area to consider implementing. We looked at three main areas: advice, funding and installation, and investigated the issues and barriers to all three.

The members of the group would like to thank the people who came to give evidence and information to us. We gained a huge insight into many aspects of this industry and really appreciate the time given but also the commitment to helping us that all those invited showed. We would also like to thank the officers from South and Vale Councils who supported this group, helping in drafting the Terms of Reference and writing the initial Scoping Paper to start us off.

Contents

INTRODUCTION	4
TERMS OF REFERENCE AND METHODOLOGY	4
CONTEXT	5
KEY INSIGHTS AND ISSUES FROM THE EXPERTS WHO CAME TO GIVE INFORMATION AND EVIDENCE TO THE GROUP	6
SUMMARY	9
PROPOSED PROJECTS	10
RECOMMENDATIONS	14
ANNEX A	15
ANNEX B	18

Introduction

A large proportion of greenhouse gas emissions comes from heating and running homes across the world. For the UK to tackle the climate emergency, making our homes more energy efficient is crucial. Home energy consumption accounts for around 30% of total energy used and 20% of total carbon emissions in the UK. In Oxfordshire around 25% of GHG emissions are residential. Improving the energy efficiency of homes will reduce carbon emissions and help us to achieve our carbon reduction goals for the districts by 2030.

The Oxfordshire Energy Strategy of 2019 recommended that 4,000 deep retrofits need to take place *each year* in the County to halve emissions by 2030.

There are other benefits to retrofitting homes which include improving the health and wellbeing of residents as a result of living in homes that are warmer and less damp in the winter, keeping houses cooler in summer when there are heatwaves, and financial savings from more efficient energy use, which is particularly relevant for the 'fuel poor'. Fuel poverty is defined as a household that has above-average energy costs, and if paying those costs would push it below the poverty line as far as its remaining income is concerned.

There are campaigns and community groups working on this issue: e.g. <https://www.householdsdeclare.org/> which has a series of interventions they are asking government to consider to help retrofit and energy saving measures in homes. In Oxfordshire, there are the Community Action Groups, as well as umbrella groups such as the Low Carbon Hub and South Oxfordshire Sustainability. Oxford University's Environmental Change Institute has also been deeply involved in the retrofit landscape.

In 2020 the UK government announced a grant scheme, called the Green Homes Grant, which proposed to help people financially to have some energy-saving retrofitting work completed in their homes. The grant was available for 6 months, from September 2020 to March 2021.

In light of complaints about the difficulties encountered by both contractors and homeowners in accessing this grant and having the work carried out, the South Oxfordshire Scrutiny Committee discussed setting up a Task and Finish group to look at the problems and issues around the grant, and to investigate barriers and challenges in retrofitting homes in the District in general. The Committee were concerned that achieving the target of carbon neutrality in the District by 2030 would not be possible if the schemes set up to accelerate retrofitting did not work, acknowledging that although this was a national scheme, it had a direct effect on the District's own targets and ultimately the well-being of its residents.

After interest from the Vale of the White Horse District Council's Scrutiny committee, the Task and Finish group became a group from the Joint Scrutiny committee of both councils.

Terms of Reference and methodology

Terms of Reference were agreed, and are attached as Annex A. Methodology was agreed as a series of meetings with identified organisations and individuals who would be invited to give a short introduction to their work and its connection with retrofitting, and the committee members would then ask a series of questions, similar for each meeting.

An initial Scoping Paper was written for the Group, attached as Annex B.

The group heard from the following speakers, who had been identified as key partners on this work and would provide a well-rounded perspective on the different aspects of retrofit:

- Richard Byard, OxLEP
- Tim Lunel, Low Carbon Hub and Cosy Homes Oxfordshire
- Russell Smith, Retrofit Works and Cosy Homes Oxfordshire
- Roger Westall, Abingdon and Witney College
- Paul Roberts, Aspire Oxfordshire
- Phil Hodge, Federation of Master Builders
- Professor Rajat Gupta, Oxford Brookes University

Context

Both South and Vale have carbon neutral targets for their districts, with South Oxfordshire aiming to be carbon neutral as a district by 2030 and the Vale of White Horse aiming to do this by 2045 with a 75% reduction by 2030. In terms of carbon emissions, homes account for around a quarter of total carbon emissions in both districts and therefore retrofitting homes will be vital.

Retrofit refers to a range of measures that can be made to improve the energy efficiency and temperature control of a building (which includes cooling and preventing over-heating in summer and heating effectively and efficiently in winter). Retrofit options include loft and wall insulation, low carbon heating systems for water and space, improved ventilation, energy-efficient lighting and often renewable energy generation.

Retrofitting homes is a priority for both councils, as identified in South and Vales' Corporate Plans:

- **South Oxfordshire:** under the theme of homes and infrastructure that meets local needs, there is a specific action on retrofit and fuel poverty: 'support and encouragement for the retrofit of our existing housing stock for low-carbon performance and to eliminate fuel poverty'
- **Vale of White Horse:** in the tackling the Climate emergency theme, there is a project to 'work with local partners and Government to encourage retrofitting houses with sustainable energy schemes; help residents to take advantage of schemes that come along to help with costs'

As stated in the introduction, the Oxfordshire Energy Strategy recommends that 4,000 deep retrofits need to take place each year to halve emissions by 2030. The number 4000 comes from the Oxfordshire Low Carbon Economy Report of 2014: which called for 64,000 retrofits in total in the 16 years to 2030. Retrofits have not been occurring at scale, and now there are only 9 years left until 2030, not 16. This means to halve carbon emissions by 2030, 7100 homes a year (2.5%) should be retrofitted.

For South Oxfordshire, with its 60,000 homes, this would mean 1500 homes a year from 2021 to 2030. South Oxfordshire's goal is for a zero carbon by 2030, so this should be doubled to 3000 homes a year.

Vale of White Horse has a similar number of homes to South Oxfordshire, but aims for a 75% carbon emissions' reduction by 2030. There the goal should be 2250 homes retrofitted per year, 2021 to 2030.

This gives an idea of **the scale of retrofit that needs** to be completed across the Districts, in a short amount of time.

Supporting and encouraging retrofit across the districts and county is important, however there are several barriers that make retrofitting homes a challenge, which have been identified in research and have arisen from conversations with partners. These include:

- The **absence of government policy** and regulations for this work;
- The **cost** of conducting this work for homeowners and landlords is high, and returns are often over a long period of time and do not accrue directly to landlords;
- There is a **gap in the skills and knowledge** required and **too few personnel** to complete retrofit projects, including for project co-ordination, advice, and installation of energy efficiency measures;
- A general **lack of awareness of retrofit**, both for homeowners, who therefore are not demanding this work, and by building companies who are not recommending energy efficiency measures for projects.
- Concern from householders of the disruption caused by retrofitting
- A **'stop-start' approach** to grant funding from government, changes in feed-in-tariff rates, grant funding ending prematurely and large administrative burdens to both householder and industry to obtain grants and tariffs.

While there are barriers to this work, there are also opportunities, especially locally:

- There is a desire from **partners to work together** to develop this work;
- Partners that are interested have the **relevant skills, knowledge and networks** to make this work successful;
- This work could develop a **local economy** on green skills and retrofit, **creating employment locally**;
- This is a **priority for both councils** and therefore there is support from councillors.
- Fits with the **Oxfordshire Plan 2050 and OXLEP** strategies for Oxfordshire in the next 30 years and Local Authority carbon targets.

Key Insights and Issues from the experts who came to give information and evidence to the Group

Skills in the 'green' sector

OXLEP (Oxfordshire Local Enterprise Partnership) leads the skills programme on behalf of Oxfordshire and Department for Education for skills activity in Oxfordshire.

OXLEP has recently published a paper which looks at wider skills needs, especially post-COVID-19. Oxfordshire's economy is based around academia and innovation and faces labour shortages for 'lower value-added' jobs. Current 'green' business activity in Oxfordshire is mainly in the Electric Vehicle sector.

Developing new skills training can be held back by the skills' indicator code that the Department for Education uses which is out of date, there are no specific 'green' sector codes.

The system that supports skills' training is not agile, demand needs to come from the commercial sector and be supported by funds to Further Education (FE) colleges, and one needs to show the other is in place to start something new - a chicken and egg situation - so a co-ordinated approach is needed. FE Colleges teach the traditional construction skills, and there are plans in Abingdon & Witney College to teach 'green' building skills, but there also

needs to be a general focus on energy efficiency in the whole curriculum, for this to become 'normal'. Apprenticeships do most of their learning onsite, so construction employers/businesses need to be thinking like that too.

OXLEP is working with Thames Valley Chamber of Commerce to create a local skills improvement plan which has been developed by business support with the FE sector. To ensure a green recovery, the development and training around green skills will be vital, and there is an opportunity to do this in the retrofit economy.

However, it is not just a 'green' skills shortage but knowledge of how the work is executed. For example, fitting insulation can be a basic task, but how it works with the rest of the house to keep warmth in and keep the building ventilated can be specialist knowledge. A solution is for the role of a Whole House Retrofit Coordinator to be used to ensure the retrofit is successful with that particular house and similarly the expertise of a Domestic Energy Advisor/Assessor can also help.

The Federation of Master Builders (FMB) knows that good quality work on retrofitting homes is crucial, but the Green Homes Grant just caused problems for the industry. Accreditation times were long and complex, and the Grant was withdrawn quickly. It could have done more harm than good.

FMB are working with the Construction Leadership Council to enable an inclusive, consistent approach, with local authority partners, to:

- Construct zero – encourage carbon zero building
- Transport – zero emissions on transport vehicles; improve logistics of transport; improving software systems so there is less waste
- Measuring carbon throughout the construction phase – how to design it out, using appropriate materials and construction methods

Labour & economy

Two big challenges identified by OXLEP and Aspire are on the supply side: are suppliers (construction partners) ready to scale to meet the demand? Is there the workforce to support the scaling up of retrofit / green skills? Small businesses need business development and awareness of incentives. In a 'tight' labour market like Oxfordshire, where will the workers come from to do this?

While Oxfordshire has had one of steepest rate of increases in unemployment in the country, numbers per se are relatively small. A previously tight labour market means that it is likely that the unemployed may quickly find new jobs. Neighbourhoods with higher rates of unemployment pre-pandemic have been hit the hardest. East Oxford, Abingdon, Banbury have been the worst affected. The Construction Leadership Council says a 'retrofit army' is needed, and what this would look like in Oxfordshire has yet to be envisaged.

Demand for retrofit

Cosy Homes Oxfordshire (a project from Low Carbon Hub) explained that there is retrofit demand in Oxfordshire from homeowners. They are now working at capacity, although they are a small business, so their capacity is limited. Cosy Homes provide a domestic energy report followed by access to a 'retrofit co-ordinator' to create a project plan to ensure the measures taken for energy efficiency in a home are done in the right order. Homeowners can see what needs to be done first, and can choose to take a piecemeal approach, knowing the order in which tasks should be completed and deciding whether to do some or all of the measures.

There is an opportunity here for small businesses. Many of the skills needed are general building skills but what is crucial is the co-ordination of the work which needs to be bespoke for each home.

However, in reality, given the number of homes in Oxfordshire, and the target to retrofit 7100 per year, demand is low. There is no clear understanding of finance and the investment. Payback can be long or may never be recouped, although simple insulation, a 'part-retrofit', usually pays back in a very short time.

People can be apprehensive about having builders in their home. There are two approaches: help people stay elsewhere for the time the retrofit takes; or retrofit room by room (more disruptive but it allows people to stay in their own home). An option is to retrofit only the most-used part of the home – the main communal rooms for example. This could offer some financial savings to the householder and reduce carbon emissions.

The drivers for retrofitting can be very different. Awareness of the climate emergency is high in Oxfordshire and elsewhere and is growing and many will respond for that reason; some like the gadgets in Smart Homes; and there is the fuel poverty driver too. There is a need to tap into the different drivers and segment need/demand and respond accordingly.

There are good examples of whole area approaches such as [Kirklees Warm Zone Project](#) – the Council worked with Scottish Power and did it all in one go, which made the supply chain easier and it was a success. Other local authorities have obtained government grant funding for retrofit projects such as the Isle of White: <https://iow.gov.uk/news/Green-Island-Grant-brings-500-000> and in York: Decision - Council Housing Energy Retrofit Programme (york.gov.uk). Other examples of Local Authorities work in this area are given at the end of Annex B, the Scoping Paper written for the Group.

Professor Gupta informed us of the Local Energy Mapping for Urban Retrofit (LEMUR) project run by Oxford Brookes, which targets areas of high energy usage.

The FMB said that Local Authorities could play some part in promoting good quality builders with the right retrofit skills and understanding, possibly having a kite mark scheme or some equivalent for construction businesses with the necessary retrofit understanding and skills, or businesses that have a retrofit capacity.

Energy Demand and Supply

Heat pumps and electric vehicles present a challenge for electricity grid supply. Retrofitting homes for energy efficiency reduces energy demand, but de-carbonising the fuel used for heating and hot water in the main means using electric heat pumps. Smart ways of ensuring that electricity demand is manageable across the country as demand increases is crucial. This could be helped by local production with homes fitted with photo-voltaic (PV) panels as part of the retrofit and batteries to store the energy for use at peak times.

A project at Oxford Brookes, Project ERIC (Energy Resources for Integrated Communities), installed solar PV and smart batteries (internet enabled and controllable) in 82 households in Rose Hill in Oxford. This demonstrated how management of distributed storage can increase self-consumption of PV electricity and reduce peak grid load. It gave householders more control over energy use.

Local Energy Oxfordshire, Project LEO, is run by a consortium including Scottish and Southern Energy Networks, the Universities, Low Carbon Hub and the local councils. It is trialling ways to build flexibility into the market so that energy supply and demand can be balanced locally.

Partnership Working

South Oxfordshire and Vale of the White Horse Councils have signed up to membership of Oxfordshire Greentech, which organises conferences, and arranges collaborations through its network of low-carbon businesses and public bodies. Greentech has a strong focus on low-carbon retrofit and new-build.

Summary

1. **Crucially** there is need for **focused government policy and significant levels of funding** to support retrofit work. Industry and householders need confidence in the longevity of any scheme or policy. Short term, badly-designed schemes such as the Green Homes Grant set this process back by creating confusion, bureaucratic hurdles, financial challenges and stress.
2. Nationally, there is a **lack of relevant skills**, which is reflected locally, and therefore there is a need for upskilling and training to fill this gap, not only for green skills but also for management around this work. There are barriers to developing these skills and approaches in construction training: from the way the Department for Education designs skills qualifications, to the funding of FE colleges, and engagement of LEPS and industry bodies.
3. The role of domestic energy advice and **retrofit coordination is deemed vital**. The co-ordinator role along with domestic energy advice oversees the energy-efficiency work in the home. Each house will need a bespoke retrofit plan and the owner will need to be able to have a 'ladder' of options costed to decide what is best done and when. Cosy Homes Oxfordshire is currently offering this service. There are commercial opportunities here.
4. **Communication/publicity is needed about retrofit** to improve understanding of retrofit and its necessity amongst householders and the construction industry; and show how to think about 'home improvements' in terms of energy efficiency first and foremost. The Council could help build confidence for this work as part of a partnership.
5. Encouraging homeowners to retrofit their homes could increase the demand for **retrofit, creating a local economy** and demand for relevant skills and employment opportunities, which chime with a 'green' industry development across the Districts, the region and the UK. In Oxfordshire, paucity of workers due to low unemployment is a challenge, as well as the high cost of business premises for start-ups.
6. This work must be **commercially viable for builders**, especially as so many are small or medium sized enterprises.
7. Energy networks need to be able to cope with extra demand as people move from gas and oil heating to electric, as well as to electric vehicles. Oxford Brookes has carried out modelling on energy demand, and key partners are the electricity network companies when it comes to a local retrofit partnership. Mapping energy demand can also identify where there are high energy-usage neighbourhood areas to target.
8. Organisations **need to continue working together for a joined-up approach at county and national level**. The Construction Leadership Council has already written a National Retrofit Strategy which a local agency can take and make local with relevant partners.

Proposed Projects

Based on the insights from speakers and research into retrofit and related topics, the table below lists several projects that could be implemented by either Councils alone or Councils along with other relevant organisations. The table includes an influence column, indicating projects where the Councils can make the greatest impact, or where it might be more efficient and effective to conduct this work at county level.

Project	Detail	Timing	Influence
County-wide publicity campaign on retrofit	<p>Provide a simple county-wide communications campaign around retrofit to residents – what it is, what they can do, how much it will cost, how it can link to renovation/improvement work already planned on their homes, how much it will save financially and in terms of carbon emissions.</p> <p>Signpost to other organisations helping in the community: Superhomes, Low Carbon Hub etc.</p> <p>Link to Climate and planning pages on SODC/VOWHDC website</p>	This could be a consistent part of communications messaging	Strong – county and district level
Funding and affordability	Promote funding opportunities schemes and initiatives for improving home energy efficiency; and for training and upskilling, being clear about the costs and benefits.	Ongoing promotion through newsletters and council comms	Strong – county and district level
Staff homes & working from home carbon emissions contribute to the District Councils' emissions	Explore ways to incentivise Council staff to retrofit their own homes: grants/loans/discounts, etc .	Short-medium	Medium – may depend on some external funding grants

Project	Detail	Timing	Influence
Explore with other councils, social housing providers, and fuel poverty groups such as NEA, the overlap between fuel poverty and retrofit.	Explore ways that those least likely to be able to fund retrofit themselves and/or rent their homes can benefit in energy efficiency and reduce carbon emissions, including ways to incentivise landlords to retrofit their properties	Medium term	Medium
Investigate opportunities for the Council to fund loans and start commercial projects; explore ways in which a Councils' retrofit advice and promotion unit can be set up and/or a commercial opportunity to offer energy assessor/retrofit co-ordination service including grants/loan guidance etc for homeowners to use	Are there opportunities for councils to invest in this with a reliable return, thereby encouraging retrofit? E.g. lobby for the Flexible Home Improvement Loan be expanded in its scope to all age groups. A unit in the Councils would be a visible indicator of the importance of retrofit. It could start small focusing on publicity and information, and grow as funding/policy allows.	Short-medium term	Strong
Planning application advice	Provide additional guidance: an information sheet or specialist officers to make comments on applications and also offer a fee-based advice service, on making energy efficiency improvements while building works are taking place (as in Wealden Council). Consider whether training planning officers in retrofit would be beneficial in promoting it.	Seek advice from Planning Department on the feasibility of this	Medium – the feedback will only be guidance

Project	Detail	Timing	Influence
Create a database of recommended installers based on national accreditations for retrofit	Create database of local renewables installers accredited with the Micro-Certification Scheme (MCS), windows companies with FENSA; insulation companies with appropriate certifications and memberships of trade bodies.	Short-medium	Strong
Construction Leadership Council	Investigate membership of this as a Planning Authority and how membership could help influence retrofit in Oxfordshire in general and Districts in particular. It is here that energy companies, energy hubs, Shelter, the National Federation of Builders and others are working together for a consistent approach.	Immediate	Strong

Project	Detail	Timing	Influence
<p>Training and green skills-influencing and promoting retrofit to business</p>	<p>Provide Business Support events.</p> <p>Develop and support training in green skills, construction work and future energy systems for unskilled and skilled construction workers. This could include training for retrofit coordinators and domestic energy advisors; and training on managing this type of business.</p> <p>Influence/co-create a countywide policy/approach with key partners</p> <p>For training providers to take on this work, there needs to be demand from students and from employers.</p>	<p>Medium</p> <p>Long term, 5-10 years</p>	<p>Strong</p> <p>Medium – need to work with OxLep, and colleges</p> <p>Medium – collective influence with key partners at county level</p>
<p>Lobbying government</p>	<p>Councillors, councils and relevant organisations to continue to lobby government to support long-term retrofit programmes, funding, and regulations for energy efficiency measures in buildings.</p> <p>Emphasise the damage done by short-term, bureaucratic, unsupported initiatives such as the Green Homes Grant.</p> <p>Lobby for funding/loans etc for landlords to retrofit homes to minimum standards or above</p>	<p>Short</p>	<p>Medium</p>

Project	Detail	Timing	Influence
Councils look to bid for government funding especially for retrofit homes	e.g. York, Kirklees; and expand mapping models to target where need is highest to bid for funding	Short	Strong
Explore how the Councils, along with other partners, e.g. OXLEP, Construction leadership Council etc can monitor numbers of homes retrofitted per year to monitor for carbon targets	e.g. energy consumption data etc that could be used; could work with Oxford Brookes on this.	Medium	Medium

Recommendations

- i. The issue should be a high priority for local planning authorities who are in a good position to shape and influence this. Reducing and de-carbonising the energy demand in homes is a key plank in achieving the net zero carbon targets of both councils.
- ii. Government support needs to be long term, reliable and as simple as possible, influenced by experts in the field and using local authorities and LEPs in partnership as trusted local leaders.
- iii. Both local authorities should work with OXLEP, Greentech, local business and professional organisations to establish an Oxfordshire retrofit partnership board, develop a local strategy, taking into account the Construction Leadership Council's national strategy, and fit it with the larger vision of a 'clean' economy outlined in the Oxfordshire2050 vision,
- iv. Each council should look at small and large actions they can take on their own and as a partnership in the possible projects listed in the table in 6. above.
- v. There are commercial opportunities that can benefit the local economy and residents, and financial investment opportunities for Local Authorities to invest in their own community, and in so doing support some of the most vulnerable. Both Councils should investigate these opportunities, including the commercial and financial opportunities here for Councils.

Annex A

South Oxfordshire and Vale of the White Horse District Council

Joint Scrutiny Task and Finish Group

Scoping Document and Terms of Reference

Name of Task and Finish Group	The Homes Retrofit Joint Scrutiny Group
Members	(Chair) Cllr Sam Casey-Rerhaye Cllr George Levy Cllr Sue Roberts Cllr Hayley Gascoigne Cllr David Grant
Purpose and Scope of Task and Finish Specify exactly what the Scrutiny Review should achieve and refer where possible to VFM issues of service cost, service performance and/or customer satisfaction.	The T&F group will investigate whether there is the skills and capacity within the two Districts' areas to maximise the opportunity the government's grants and other financing for retrofitting old housing stock for better energy performance. This is in line with both the Councils' net-carbon targets, the urgency of climate change as outlined in both Council's Climate Emergency declarations and also to ensure warmer/more energy-efficient homes for those who need it for health and well-being. It is also in accordance with the two Councils' Corporate Plans.
Objectives and Indicators of Success What factors/outcomes will demonstrate that this Scrutiny Review has been a success.	Objectives: develop an accurate and up to date picture (with data where possible) regarding: <ul style="list-style-type: none"> • clarify barriers to improvement and suggest possible solutions • link any recommendations to work for councils, Oxlep, education establishments, and government

<p>Methodology/ Approach What types of enquiry will be used to gather evidence</p>	<p>Meet with task and finish group members to discuss and finalise those to invite to speak to the group, and questions to ask</p> <p>Invite these to 2 or more as necessary separate meetings with the T&F group to answer questions and discuss ideas for solutions</p> <p>Final meeting to discuss and finalise reports</p>
<p>Target body for Recommendations Cabinet, Council, Other/Partners</p>	<p>All Councils in Oxfordshire, Oxlep, BEIS, Oxfordshire Growth Board</p>
<p>Key dates Identify key meeting dates and any deadlines for reports or decisions</p>	<p>Final report should be ready in late Sept 2021</p> <p>Also needs to report to scheduled Joint Scrutiny meetings as close to this as possible</p> <p>CEEAC/CEAC meetings</p>
<p>Risks Identify any weaknesses and barriers to success</p>	<p>Not enough evidence available</p> <p>Too much information to crystallise into recommendations in short time frame</p> <p>Not able to identify right people to give evidence</p>
<p>Witnesses/ Experts/ Site Visits Who, why and when</p>	<p>Oxlep</p> <p>Abingdon and Witney College</p> <p>Chamber of Commerce for contacts in industry/professional body</p> <p>Cosy Homes/Low Carbon Hub</p> <p>Retrofit Works</p> <p>NEF (fund Better Housing Better Homes)</p> <p>Oxford Brookes University</p>

<p>Publicity & Media Do we need to publicise the review to encourage community involvement? What sort of media coverage do we want? Fliers, leaflets, radio broadcast, press release, etc.</p>	<p>Via Council comms social media channels request both professional and personal experiences</p>
<p>Resources & Budget <input type="checkbox"/> specialist staff <input type="checkbox"/> external support <input type="checkbox"/> consultation <input type="checkbox"/> research</p>	<p>Support for minutes, invitations and correspondence on this, Climate Emergency staff - finalising report</p>
<p>Completed by:</p>	<p>Cllr S Casey-Rerhaye</p>
<p>Agreed by Joint Scrutiny on:</p>	

Annex B

Joint Scrutiny Task and Finish Group

South Oxfordshire District Council & Vale of the White Horse District Council

Home-Retrofit Scoping Paper prepared for the Task and Finish Group

1. Purpose of this Paper

Both South and Vale's Corporate Plans address the need to retrofit houses to reach their carbon neutral targets. In the SODC Corporate Plan, under the theme of *homes and infrastructure that meets local needs*, there is a specific action on retrofit and fuel poverty: "Support and encouragement for the retrofit of our existing housing stock for low-carbon performance and to eliminate fuel poverty". Similarly for VOWH, in the *tackling the Climate emergency* theme, there is a project to 'work with local partners and Government to encourage retrofitting houses with sustainable energy schemes; help residents to take advantage of schemes that come along to help with costs'.

This paper provides background information on home retrofit, the current situation on retrofit and fuel poverty, and identifies options for developing a dedicated retrofit programme in the districts that will contribute to meeting the Councils' carbon neutral targets.

2. Background

2.1 What is retrofit?

Retrofit refers to a range of home improvement measures that can be made with the aim of ensuring that a property operates in as energy-efficient a manner as possible. Retrofit options include loft insulation, replacing gas boilers, improved ventilation, switching to efficient lighting or swapping to renewable energy sources

Whole House Retrofit is a complete approach to making homes more energy-efficient, focusing on the fabric of the house first including the walls, roof, floors, windows and doors, to strategies for ventilation, heating efficiency and cooling in the summer months. While individual measures for retrofit can be done, it is most effective and efficient to do a whole house retrofit.

Private homeowners, private landlords and social housing landlords can all retrofit their properties.

2.2 What is Fuel Poverty?

Fuel poverty is where a household's fuel costs are above average and if the household were to pay that amount, they would be below the poverty line. There tend to be three factors that affect fuel poverty: low household income, poor energy efficiency of homes (leading to higher energy bills), and high energy prices. Inability to pay for heating in the winter results in fuel poor households often being cold which has huge health implications, particularly on the cardio-vascular and respiratory systems, as well as affecting mental health, and contributes to health inequalities. In 2017, fuel poverty in South Oxfordshire made up 7.7% of households and in the Vale of White Horse, 7.4% of houses were fuel poor.

Improving the energy efficiency of a home through retrofit will help mitigate fuel poverty by lowering bills and warming houses, as explained in 2.3.

2.3 Why is retrofit important?

Retrofitting homes is vital for addressing climate change and helping both councils to reach their carbon targets. Home energy consumption accounts for around 30% of total energy used and 20% of total carbon emissions in the UK. In Oxfordshire around 25% of GHG emissions are residential. Improving the energy efficiency of homes will reduce carbon emissions and help us to achieve our carbon neutral goals for the district by 2030. The Oxfordshire Energy Strategy recommends that 4,000 deep retrofits need to take place each year to halve emissions by 2030..

There are other benefits to retrofitting homes which include improving the wellbeing of residents by living in homes that are warmer and drier in the winter, and financial savings from more efficient energy use, which is particularly poignant for those who are ‘fuel poor’.

2.4 What are the barriers to retrofit?

While retrofitting is a win-win option, as it improves energy efficiency and will reduce bills, there are several barriers to homeowners retrofitting. These include:

Awareness and knowledge of retrofit	Not all homeowners are aware of the changes they can make to their homes to be more energy efficient, as well as the benefits this has to the environment and their savings. Also, the term ‘retrofit’ is not a term which many people understand. Clear communication about what it is and how to do it will be key.
Costs	Making changes to your home can be expensive and the payback periods are long. Finding upfront cash can be difficult. The government conducted a study to determine costs of retrofitting different types of homes, which can be found here , with costs ranging massively depending on the size of the property and the types of retrofit projects conducted. Efficiency improvements are not thought to increase the value of a home, which does not incentive homeowners to invest in retrofit. There is funding available but it might not cover all the costs and many people are not aware of it.
Skills	There is a lack of tradespeople with the expertise and skills for conducting retrofit, especially as many different skills are required for retrofitting. This is a significant and recognised problem in Oxfordshire.
Rented sector	Around 20% of the UK’s homes are privately rented and about 50% of those homes are EPC rating D ¹ . According to the Minimum Energy Efficiency Standard (MEES), all private rental properties must have an EPC rating of E or above. Tenants can act on their rights to ensure the home they are renting meets the MEES. Tenants rely on their landlords to make home improvements and landlords tend to focus on repairs rather than major improvements or retrofit. Improvements are often made between occupancy periods and landlords can then increase rental rates to cover the building costs. While energy efficiency measures will benefit renters as they will have lower bills, this doesn’t have a direct impact for most landlords.
Leaseholders	Getting agreement from multiple homeowners and tenants in shared buildings is a complex process which acts as a deterrent to embarking on retrofit.

Policy	There currently isn't comprehensive government policy for retrofit or any enforcement mechanism.
--------	--

2.5 What is best practise for retrofit programmes?

Local authorities and combined authorities are well placed to deliver retrofit schemes because of their ability to support key stakeholders and are often seen as a trusted partner by residents and businesses. Working in partnership with stakeholders allows for sharing of best practice and resources, including funding.

A 'one-stop-shop' is considered best practise for developing a retrofit scheme where homeowners and landlords can go to one service for their retrofitting needs. This service includes raising awareness of retrofit options, undertaking assessments and designs for homes, arranging contractors, and offering financial advice. A retrofit coordinator offers this role, which is the case with the Cosy Homes Oxfordshire initiative.

Appendix A provides examples of retrofit programmes conducted by other councils. There are different approaches depending on the target of the service, whether it is fuel poverty or whole house retrofit. Schemes addressing fuel poverty tend to partner with advice services to support residents to improve the warmth of their homes. For whole house retrofits, the role of the retrofit coordinator is vital for ensuring that the work is to standard and to help find qualified tradespeople.

2.6 What certifications are needed for retrofit?

Having trusted contractors and practitioners is vital for ensuring quality service that homeowners respect and recommend. In terms of accreditation needed for energy efficiency measures under government supported initiatives, such as the Green Homes Grant, contractors must be certified to install the measures against the Public Available Specifications (PAS) Standards 2035 by a certification body that has been accredited by UKAS. For installing low-carbon heat measures, Microgeneration Certification Scheme (MCS) standards are needed. Contractors must also be TrustMark certified to install Green Homes Grant projects. The TrustMark quality standard is endorsed by Government for trades that operate in and around the home, and has recently expanded to include energy efficiency, repair maintenance and improvement and retrofit sectors.

Retrofit Works, an approved provider for TrustMark and a partner organisation of the Cosy Homes Oxfordshire initiative, offers a membership for practitioners which provides training and knowledge of the UK's retrofit industry. Members are also given work opportunities.

2.7 What national funding and support is available?

There are several grants and schemes available for home retrofit and to support those that are fuel poor, however there is a lack of large-scale programmes specifically for retrofit.

There is also a lack of forward thinking with many of these schemes (such as ECO) as they are not installing low carbon solutions but merely, for example, replacing old gas boilers with new ones. This creates uncertainty and frustration for both contractors and households, and does not consider the energy efficiency opportunities. The current schemes available are:

Green Homes Grant	<p>One strand of the programme earmarked £1.5bn in vouchers of up to £5,000 to help homeowners upgrade their homes, and up to £10,000 available to some of the UK's poorest families. It ran from September 2020 and has recently been scrapped by the government, with no new applications being accepted after the end of March 2021.</p> <p>There have been serious issues with the administration of this fund and many are waiting for reimbursement for their retrofit projects, including contractors and some of whom are getting into debt as a result of the slow paybacks.</p> <p>The Government has said there will be £300million of funding directed toward helping people on low-incomes gain access to energy efficiency improvements through local authorities.</p>
Warm Home Discount Scheme	<p>This scheme offers a one-off discount of £140 on a homeowner's electricity, or electricity and gas if it is the same supplier, if the homeowner receives the Guarantee Credit element of Pension Credit or is on a low income</p>
Winter Fuel Payment	<p>For those born before 5 October 1954 and either receive a state pension or get another social security benefit, they will receive between £100-£300 to help pay for heating bills.</p>
The Regulatory Reform Order 2002	<p>The Regulatory Reform Order 2002 gave local authorities wider powers to introduce policies to assist individuals with renewals, repairs, and adaptations in their homes through discretionary grants or loans. The power includes awarding discretionary grants or loans in addition to statutory DFGs.</p> <p>One of the aims of this policy is to reduce fuel poverty and the effects of living in cold homes, including excess winter deaths and illness.</p>
<p>The Essential Housing Repair Grant</p>	<p>The Essential Housing Repair Grant are small grants available to improve the warmth, comfort, condition, safety or security of homes and can be used for energy measures, except when other grants are available.</p>
The Flexible Home Improvement Loan	<p>The Flexible Home Improvement Loan also offers is available to make the home safer, warmer, healthier or more comfortable for owner occupiers aged 60 or above, including the opportunity for renewable energy generation technology.</p>
Disabled Facilities Grant	<p>For those that are disabled and need to make changes to their home, they can apply for this grant to widen doors and install ramps; improve access to rooms and facilities; provide heating systems suitable for needs; and adapt heating and lighting controls to make them easier to use.</p>
Fuel Poverty Grants Scheme	<p>This is administered by National Energy Foundation (NEF) and provides grants of up to £1000 for essential energy saving repairs and improvements to homes with a specific focus upon energy efficiency and energy saving measures.</p>

Warm Homes Grant	<p>This is a discretionary grant that may be available to top up the Fuel Poverty Grant, and may be a total of up to £1000. The grant is available to homeowners and private tenants who meet the eligibility requirements of the Fuel Poverty Grant, but where the costs of energy efficiency, energy saving measures or essential energy saving repairs exceeds the Fuel Poverty Grant maximum.</p>
Rural Community Energy Fund , Greater South East Energy Hub	<p>Greater South East Energy Hub is offering this fund which is a £10 million programme for community renewable energy generation that benefits the community and environment. It supports rural communities by implementing renewable energy that can generate income locally, helps to achieve the Government's renewable energy and carbon reduction targets, and provides social and economic benefits to rural areas, such as through job creation and rural growth.</p>

In terms of support, the Department of Business, Energy and Industrial Strategy published a report in February 2021, Sustainable Warmth – Protecting Vulnerable Households in England, which outlines the Government's plan to address fuel poverty. This will include:

- Further funds to retrofit social housing, including a £60 million investment and £150 million invested into a Home Upgrade Grant
- Expand the Energy Company Obligation (ECO)
- Investing £2 billion in the Green Homes Grant to improve energy efficiency of households
- Extending the Warm Home Discount
- Investing £10 billion on energy efficiency measures through the Private Rented Sector
- Improving energy efficiency standards through the Future Homes Standard and the Decent Homes Standard
- The Government has identified eight strategic challenges that need to be addressed to tackle fuel poverty.

Over the next few years it is likely there will be more funds to reduce fuel poverty and support retrofit projects.

3. Retrofit progress in South Oxfordshire and Vale of White Horse

3.1 EPC rating in South Oxfordshire

In terms of home energy efficiency in South Oxfordshire, most dwellings have an Energy Performance Certificates (EPC) ratingⁱⁱ of D, and flats have an average EPC rating of C, which reflects the average rating for the UK, and can be seen in the table below. From ONS data in 2019, new houses and flats in South Oxfordshire had a median EPC of B.

South Oxfordshire EPC rating by type of dwelling Jan 2008 to December 2020

* It should be noted that this is the rating of a property when it is sold, let or constructed, so does not reflect smaller home improvements which could include energy efficiency measures.

	A	B	C	D	E	F	G	Total

Bungalow	0.2%	2.3%	14.6%	48.3%	24.8%	8.0%	1.9%	9.5%
Flat	0.1%	24.7%	38.0%	25.0%	8.3%	2.6%	0.8%	16.2%
House	0.2%	13.0%	21.1%	39.6%	18.5%	6.2%	1.5%	72.6%
Maisonette	0%	9.6%	39.2%	30.2%	14.1%	5.2%	1.7%	1.8%
Total	0.1%	13.8%	23.5%	37.9%	17.4%	5.8%	1.4%	

In terms of rental properties, which make up less than 30% of households in the district, they have the following EPC ratings:

Type of Tenure	EPC Rating
Socially rented flats	C
Socially rented houses	C/D
Privately rented flats	D
Privately rented houses	D

By law, all rented properties must have an EPC rating of at least E, which is met here.

3.2 EPC rating in Vale of White Horse

In Vale of White Horse, most dwellings have an EPC rating of D, with the average house EPC rating at D and the average EPC rating for flats was C. ONS data found that from 2019, new houses and flats had a median EPC rating of B.

Vale of White Horse EPC rating by type of dwelling Jan 2008 to present

* It should be noted that this is the rating of a property when it is sold, let or constructed, so does not reflect smaller home improvements which could include energy efficiency measures.

	A	B	C	D	E	F	G	Total
Bungalow	0.1%	2.2%	20.1%	47.2%	22.1%	6.3%	1.9%	7.8%
Flat	0.0%	34.6%	41.1%	17.0%	5.1%	1.4%	0.7%	17.8%
House	0.2%	27.7%	20.8%	33.5%	13.0%	3.9%	0.9%	71.8%
Maisonette	0.1%	16.0%	47.5%	24.1%	8.2%	3.1%	1.0%	2.6%
Total	0.1%	26.6%	25.1%	31.4%	12.2%	3.7%	0.9%	

Vale's homes that are rented make up 30% of all households and their average EPC rating are:

Type of Tenure	EPC Rating
Socially rented flats	C
Socially rented houses	C
Privately rented flats	C

3.3 What is currently being done locally?

Both districts aim to support and encourage retrofit programmes. Across the county there are schemes that are supporting residents in both districts to complete retrofit work and address fuel poverty. These schemes are Cosy Homes Oxfordshire and the National Energy Foundation's (NEF) Better Housing, Better Health.

Cosy Homes Oxfordshire, funded by the Department of Business, Energy and Industrial Strategy, is a pilot retrofit project that launched in 2019 to improve the energy efficiency and sustainability of homes in Oxfordshire. They offer a 'one-stop-shop' on home eco-retrofitting where a Retrofit Coordinator first assesses a home and identifies appropriate energy efficient measures, creates a tailored whole house improvement plan and then the Retrofit Coordinator supports the contractors and installers throughout the improvement works by ensuring technical requirements and standards are met. The initiative also links homeowners with trusted contractors, who have been assessed by the RetrofitWorks team, a partner organisation for the scheme. The initiative has been very popular and they are currently experiencing a back-log for appointments. The take-up has mostly been from those in the 'able to pay market.' The pilot is scheduled to finish in March 2021 and Cosy Homes Oxfordshire intends to continue its services.

Additionally, Better Housing, Better Health, a NEF scheme, provides home energy checks and grants for energy efficiency improvements where someone's health is being impacted by living in a cold or damp home in Oxfordshire. This project aims to support those that are at risk of fuel poverty and the health effects of cold homes. NEF also provides the councils' fuel poverty grant scheme, as outlined in the table in section 2.6. In the 2017-2019 financial years, 27 households in South Oxfordshire were awarded a total of £30,281 worth of fuel poverty grants for 19 heating improvements and 8 insulation improvements, and the Vale of White Horse was awarded fuel poverty grants of £19,738 to 24 households for 18 heating improvements and 4 insulation improvements.

As of February 2021, Oxfordshire County Council received GHG LAD Phase 1b funding to support 150 low income / poor performing homes with energy retrofit measures with an average grant spend of £8,500.00 per home. Plans are being developed as to how this will be implemented. There are also plans to implement the GHG Phase 2, which supports fuel poor homes with retrofit projects.

3.4 What is the local skills landscape for retrofit?

There are around 20,000 construction jobs in Oxfordshire making up about 5% of employment. There has been a recent growth in the construction sector, however they are seeing skills shortages. Retrofit Works, who supports Cosy Homes Oxfordshire, have found through this scheme that there aren't the skills to meet the demand for retrofit projects, not only for the wide range of construction skills needed for retrofit projects but also the business management skills to run a retrofit business. In addition, many local contractors are unaware of the Green Homes Grant scheme, don't have the demand from customers for retrofit projects, and therefore don't have the qualifications needed to take part in it. Several contractors didn't think it was worth paying for a membership to be TrustMark qualified until they had the demand for retrofit projects. While contractors felt they had the skills to conduct retrofit projects, they needed advice and direction on what to do to ensure energy efficiency measures were met, which tends to be the role of a retrofit coordinator. Without policies that

require contractors to conduct sustainable construction and a demand from homeowners for retrofit, there will continue to be a skills gap.

OxLEP have various programmes in place to address meeting the needs of local employers and the skills shortages in Oxfordshire's labour market. This includes the Community Employment Plans to ensure local people have better access to employment and training opportunities in Oxfordshire, and Oxfordshire Apprenticeships which promotes awareness of apprenticeships and traineeships to young people, parents and employers. There is potential to utilise apprenticeships and the Community Employment Plans to address technical skills shortages in the construction field.

Recently, a new construction skills college has opened in Oxfordshire at Abingdon and Witney College with funding from the Local Growth Fund 3. The curriculum will reflect Oxfordshire's innovation in low-carbon technologies and support the UK's goal to reach net-zero carbon emissions by 2050. They also plan to support 400 apprenticeship over the next five years.

Oxford Brookes University also offers several construction related courses but they do not have a focus on sustainable methods. There might be an opportunity to work with them to address construction skills gaps in the county.

Nationally, the government has recently launched a Green Homes Grants [skills training competition scheme](#) which provides training in home energy retrofitting and low carbon heat insulation. This will provide tradespeople with the required skills and qualifications to deliver projects under the Green Homes Grant Scheme.

4. Key considerations

To determine the target audiences of retrofit programmes, the types of households and dwellings need to be considered in terms of their financial ability to pay as well as the need to improve the energy efficiency of the household.

Key household types are:

- Socially rented houses
- Socially rented flats
- Privately rented houses
- Privately rented flats
- Leasehold arrangements (for both flat rentals and flat ownership)
- Owner occupied houses
- Owner occupied flats

In terms of financing retrofits, for rental properties the landlord or housing association would be responsible for this. Therefore, the landlord would have to be willing to forgo rent while they make improvements, as well as having the funding to do so, which could come from government schemes. Also, the landlord won't directly benefit from the warmer home or lower bills so conducting retrofit would be to achieve a desired EPC rating and for their reputation or environmental credentials. For social landlords, they are likely to react to government policies to improve the energy efficiency of their property.

Owner-occupied houses and flats, which make up 74% of households in South Oxfordshire and 70% of households in Vale of White Horse, will be divided into those that are able to pay and those that aren't able to pay for retrofit projects. Those that are able to pay might do so if they have knowledge of retrofit, want to improve the energy efficiency of their home, and

the pay-back period doesn't affect them financially. For those that aren't able to pay, they would likely take up grant offers if they are aware of them and know the benefits of retrofit.

When considering the energy efficiency of a home, a better EPC rating will have a lower environmental impact and reduced energy bills. Referring to the tables in section 3.1 and 3.2, the EPC rating F and G make up just over 6% of all households in South Oxfordshire and just under 5% in Vale of White Horse. These households could be a target group for retrofit projects as well as addressing fuel poverty.

The councils may address these factors using different methods which will have varied inputs and impacts.

5. Project Options

Three options have been identified that could all form part of a retrofit programme to take forward each Districts' Corporate Plan priorities to support and encourage the retrofit for existing housing stocks.

5.1 Signposting and awareness raising

One programme of work is a communications strategy to raise awareness of retrofit and information about what projects can be conducted, including costs, encouraging residents and landlords to implement retrofit solutions in their homes. Information about funding and support available should also be promoted. The communications would be shared on each councils' webpages and social media, as well as in resident newsletters. Case studies of what residents have done to their homes could be shared to make the information more relevant and tangible.

Advantages:

- This is a low-cost option as it would use resources that already exist
- Would have substantial impact in terms of reducing carbon emissions if there is take-up

Disadvantages:

- There could be reputational damage to the Councils by promoting ineffectual government schemes or schemes where the district does not have the labour to support implementation
- Without targeting it could result in limiting take up to the able to pay market.

5.2 Retrofit Service

A second option is to provide a retrofit service. There are different ways that this service could be set up, including engaging with the existing Cosy Homes Oxfordshire service as well as the wider county. Three options are outlined below:

(i) Setting up a new Council run retrofit service

This would involve each district designing their own retrofit service, based on best practice, and developing an officer or team to manage the programme. Funding would be needed to support this. The two councils could partner on this or each Council could develop their own service.

Advantages:

- Ensures close alignment to Council priorities and Corporate Plan
- Easier to make changes based on learning
- Can target certain groups, such as those in fuel poverty or households with low EPC ratings

Disadvantages:

- Significant inception costs
- Time involved in setting up a new unit and recruiting and training staff
- There may not be the labour to support this work locally
- There may not be the demand locally to support this programme

- (ii) Sub-contracting an existing retrofit provider to deliver a bespoke service in the district

A specific contract could be developed for a bespoke retrofit service either for each district separately or both districts together, and could be provided by an already existing retrofit service, such as Cosy Homes Oxfordshire. The contract would include setting targets for certain groups, such as those with high carbon emissions or living in fuel poverty.

Advantages:

- Targeting households with high carbon emissions and in fuel poverty will help each district reach their carbon emission goals
- Utilising an existing service will require less input from either council and it is low maintenance to manage the contract
- Partnering on the contract, or engaging with other councils on the service, might strengthen the overall service provided by ensuring best practice and economies of scale

Disadvantages:

- A bespoke service is likely to be expensive to set up
- There may not be the demand or labour in the district to cover the costs of this programme

- (iii) Provide additional funding to an existing retrofit provider to continue their service, with targets of specified number of home retrofit projects in the districts. This could be done by the councils individually or together.

An existing retrofit provider, such as Cosy Homes Oxfordshire, could be funded to improve the energy efficiency of a certain number of homes each district, while continuing their work across the county.

Advantages:

- Targeting households with high carbon emissions will help each council to reach their carbon emission goals
- Utilising an existing service will require less input from the council and low maintenance to manage the contract

- Cosy Homes Oxfordshire could also provide this service to surrounding councils, each having their own appropriate targets and benefitting from economies of scale (including a wider pool of labour and resources)

Disadvantages:

- There may not be the demand or labour in either district to cover the costs of this programme
- Contracting a service reduces the Councils' control

5.3 Retrofit Skills Partnership

A third option is to set up a partnership to address skills gaps for retrofit as it is vital that our workforce is skilled to meet home energy efficiency needs, helping us to achieve our carbon neutral targets. It is important that the construction workforce meet quality and trademark standards for retrofit, that contractors have the right skills, local training meets the skills need, and that qualified tradespeople are hired locally. Having more skilled labour for retrofit projects could also help to reduce the backlog of appointments with Cosy Homes.

It is recommended to set up a partnership that would address this by working with the colleges to offer the right training, with local contractors to ensure there are jobs for newly qualified tradespeople, and with landlords and construction companies so that local contractors are hired for their retrofitting services. This would also be a great opportunity to address equality and diversity issues in this sector, and to encourage females to train in this field. The Abingdon and Witney College have recently opened a construction school that could support this. It is recommended that the Partnership is at county level to achieve economies of scale and could be part of the environment sub-group of the Growth Board.

To ensure this partnership covers all angles of the skills needs, it is recommended that partners would include:

- OXLEP – who support employment and skills programmes
- Colleges – especially the Abingdon and Witney College with their construction school
- Oxford Brookes University – they have several construction and real estate courses which could be tailored to teach sustainable construction methods and retrofit
- District / county / city councils – to provide support and coordination
- Social housing landlords – who can provide their perspective, opportunities and barriers to retrofit
- Landlords association – providing insights as landlords
- Private Housing Grants officer – to provide support and perspectives on private housing
- Construction representative(s) – who can provide insight into the construction industry, and the barriers and opportunities they face in terms of retrofit
- Cosy Homes Oxfordshire – an existing retrofit scheme who are well connected in the county
- Aspire Oxford – this is an employment charity helping those that are homeless, disadvantaged or facing poverty to find work and housing. They support their clients with employability skills training.

Advantages:

- A whole county partnership approach would result in more joined-up work and pooling of larger resources
- Economies of scale
- Creating a programme that will support retrofit in the future, while also providing jobs

Disadvantages:

- South Oxfordshire would not have complete ownership of this project as they will be working in partnership

6. Conclusion

To conclude, at a minimum, communications need to be shared on retrofit to raise awareness and encourage residents to retrofit their homes. Providing a retrofit service will be needed to support residents to improve the energy efficiency of their homes, but ensuring the right skills are available will be needed for this service to work. A longer-term retrofit skills partnership will be important to ensure the labour market is equipped to conduct retrofit work.

Appendix A

Retrofit Examples

Cornwall Council

In July 2020, Cornwall Council secured £4.2million from the Department for Business, Energy and Industrial Strategy's Energy Innovation Programme for a Whole House Retrofit project. They are working with SSE to improve 83 homes managed by Cornwall Housing and aim to be a cost-effective model for improving energy efficiency while also cutting energy bills and reducing fuel poverty.

Devon County Council

Devon County Council is supporting Cosy Devon which is a scheme for households operated by local authorities and community organisations across Devon and Torbay to save them energy. Through the Local Energy Advice Partnership (LEAP), they offer free energy and money saving advice, targeting households that are in or at risk of falling into fuel poverty.

East Sussex

The Warmer Sussex programme, launched in October 2019 with RetrofitWorks, is a not-for-profit which supports local people to make their homes more energy efficient. They provide a Retrofit Coordinator to all projects who can create a Whole House Plan for the retrofit project, advise on energy efficiency measures and provide options for local trusted tradespeople to do the work. Throughout the process the Retrofit Coordinator

communicates regularly and once the building work is complete, they check that the work meets the required standards.

Ecofurb, London and South Cambridgeshire

This service provides a whole house approach to improving the energy efficiency of a home. Ecofurb offers a free Plan Builder which provides options for retrofitting and renovations, producing a plan for the work. A Home Survey and Ecofurb plan are then completed by the Ecofurb coordinator which highlights the changes to your home's performance that could be achieved and a phased plan for doing so. The Ecofurb coordinator can also get quotes for the work from trusted contractors, and oversee the work to ensure it meets the required standards.

Keep Warm and Well, East Sussex

This programme, provided by RetrofitWorks and Citizens Advice, offers advice and support to keep people warm at home for less, protecting residents from the effects of living in a cold home. The programme provides advice on funding for keeping your home warm, identifies ways to keep the home warm, conducts small works to improve the warmth of a home, and provide access to housing insulation and heating. They also work with partners by offering them training to identify people who might be vulnerable and living in a cold home, and signposting to Keep Warm and Well for support.

ⁱ <https://www.greenfinanceinstitute.co.uk/wp-content/uploads/2020/06/Financing-energy-efficient-buildings-the-path-to-retrofit-at-scale.pdf>

ⁱⁱ For a breakdown of EPC ratings, visit: <https://www.edfenergy.com/energy-efficiency/how-improve-your-epc-rating>