

Local Area Retrofit Accelerator (LARA) Pilot

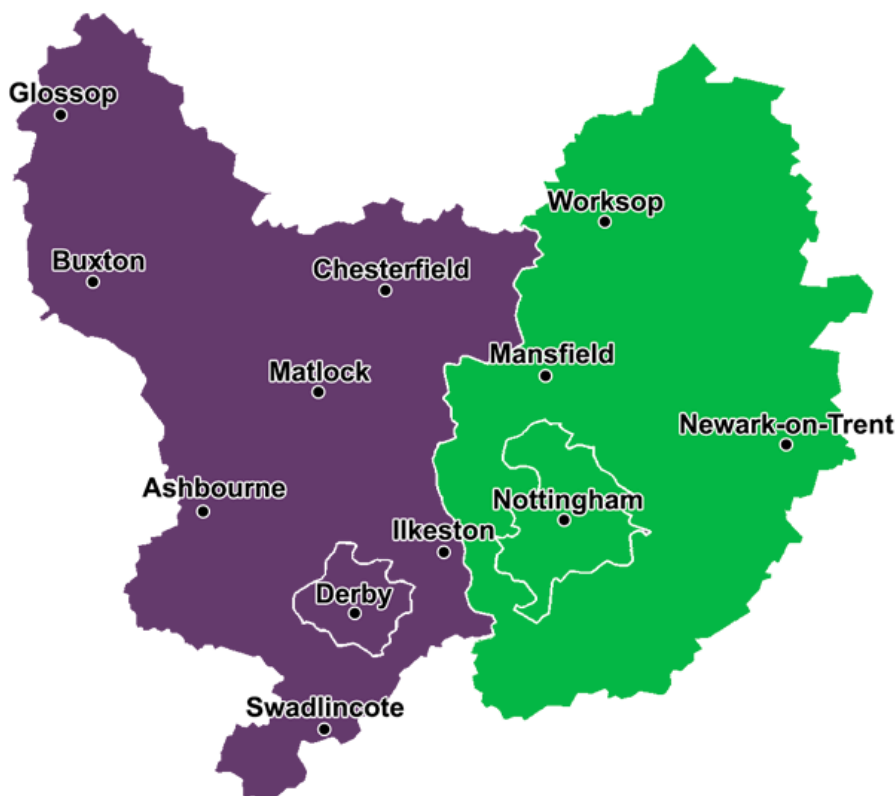
East Midlands Locality Assessment Report

April 2025

1. Overview - Locality Assessment Report

- 1.1. The Locality Assessment Report aims to bring together qualitative and quantitative research gathered by the Local Area Retrofit Accelerator (LARA) team into a coherent report. It will aim to; inform the workshops, specifically the Shared Understanding and set a baseline understanding of the locality's retrofit system to enable the creation of the most strategically prudent goals and actions.
- 1.2. The Locality Assessment report details specific geographic and demographic information about the locality, as well as insight into activity within the locality in relation to each of the six pillars (a definition of the six pillars can be found in the Appendix).
- 1.3. This will include a summary table as well as more detailed overview information derived from the stakeholder interviews. And information on the quantitative dataset with a RAG rating for selected measures in terms of the locality in comparison to the national picture.

2. Desk review findings



Source: Derbyshire and Nottinghamshire LMI

2.1. Demographic

- 2.1.1. The East Midlands region - are home to some 2.2 million people across almost 800,000 (360,290 Nottinghamshire/434,908 Derbyshire) households. D2N2 experiences comparable levels of fuel poverty and life expectancy with the national average. People in D2N2 have higher average pay and the number of free school meal recipients are lower than the national average.
- 2.1.2. In terms of deprivation, in Derbyshire 22 lower super output areas (LSOA) (4%) fall within the 10% most deprived nationally and 64 areas (13%) in Derbyshire fall within the 20% most deprived nationally. In Derby, 16% of areas are in the 10% most deprived areas and 14% in the 20% most deprived areas. In Nottinghamshire, there are 31 areas that fall within the 10% most deprived in England, 5 of these areas are within the 2% most deprived and 16% of people in Nottinghamshire are amongst the 20% most deprived areas in England. In Nottingham city, 31% of areas fall amongst the 10% most deprived in the country and 57% in the top 20% most deprived.

2.2. Geographic/climatic

- 2.2.1. Derbyshire and Nottinghamshire and the cities of Derby and Nottingham (D2N2) - are in the East Midlands region of the UK. The area is home to former coalfields.
- 2.2.2. The region is a mix of rural and urban areas - as well as the cities of Derby and Nottingham, the area features a diverse landscape of rural farmland, and natural landmarks like the Peak District, Derbyshire Dales and Sherwood Forest. The River Trent and River Derwent are key waterways. While generally moderate, the weather can bring rare heavy snowfall in winter and periodic flooding near rivers.
- 2.2.3. According to the Derbyshire Spatial Energy Study, regional projections suggest between 14,000 - 174,000 heat pumps and similar low carbon heating technologies may be deployed by 2040, alongside wide reaching energy efficiency improvements. In terms of electricity supply, between 50 - 300 MW of low carbon energy generation may be developed in Derbyshire up to 2040, across domestic and commercial solar PV, onshore wind, and supporting technologies (e.g., battery storage). Electric vehicle (EV) deployment is expected to rise from 7,300 vehicles (2022) to between 350,000 - 510,000 by 2040.¹
- 2.2.4. The East Midlands area faces increasing climate risks, including hotter drier summers, and warmer wetter winters, along with more extreme heat and rainfall events and the possibility of high winds, are

1

<https://www.derbyshire.gov.uk/site-elements/documents/pdf/environment/planning/derbyshire-spatial-energy-study.pdf>

expected. This ultimately brings impacts such as storm damage, flooding, drought, heat stress.² Rising temperatures may also threaten biodiversity, particularly in Sherwood Forest and the Peak District, while extreme weather could disrupt transport and infrastructure.

2.3. Housing stock

- 2.3.1. There are 400 conservation areas in the region and almost 10,000 listed buildings.
- 2.3.2. According to the 2021 census there are 942,000 households in the East Midlands and 682,890 Energy Performance Certificates (EPC) have been issued in the area. Of these, data shows that there are 1,044 EPC A-rated (highest performing) homes in the locality, slightly lower than the national average of 0.3%.
- 2.3.3. Most of the houses are in band C (56% in Derbyshire and 58.5% in Nottinghamshire) which is more than the national average of 8.2% of homes in this band. This proportion of band C properties is significantly higher than in other areas, and the distribution of properties in other bands is slighter than in other areas.
- 2.3.4. The East Midlands has comparatively few of the leakiest houses - band G - with just 3,737, or 1.1% of the region's housing stock, against a national average of 1.2% band G properties. The distribution between bands in Derbyshire and Nottinghamshire is relatively comparable.
- 2.3.5. According to the 2021 Census, around 70% of households in Derbyshire own their homes, which is significantly higher than the national average for England (65%). In Nottinghamshire the figure is 61.1%, with Nottingham standing at 45.1%.
- 2.3.6. In 2021, 13% of households in Nottinghamshire and 13.9% in Derbyshire were deemed to be experiencing fuel poverty, which are broadly in line with the national average levels of 13.1%.

2.4. Supply chain

- 2.4.1. The East Midlands has 35 Trustmark certified Retrofit Installers and a further 25 MCS registered installers. Together, these equate to one per 22,700 people in Derbyshire and one per 46,168 people in Nottinghamshire. The UK average is one per 4,600 residents. East Midlands has 426 MCS certified contractors in total.

2.5. Political/administrative

- 2.5.1. Prior to the establishment of EMCCA, the area's Local Enterprise Partnership (D2N2 LEP) covered the Derby, Derbyshire, Nottingham,

² <https://www.midlandsnetzerohub.co.uk/wp-content/uploads/2022/03/D2N2-Energy-Strategy.pdf>

Nottinghamshire area and the associated district and borough councils within the region. It was one of the partnerships set up by the UK Government to drive economic development in England in May 2011. The LEP was absorbed into the East Midlands Combined County Authority in June 2024.

- 2.5.2. In November 2022, a devolution deal was agreed by the four upper tier councils of Derbyshire County Council, Nottinghamshire County Council, Derby City Council and Nottingham City Council to establish the East Midlands Combined County Authority (EMCCA).
- 2.5.3. EMCCA is led by a directly elected Mayor. Claire Ward was elected as the first Mayor of the East Midlands region in May 2024.
- 2.5.4. The establishment of EMCCA is seen as a positive development for retrofit insofar as it will make coordination of activity across the region easier and delivery at scale simpler to achieve.
- 2.5.5. The local authorities within the EMCCA region have taken different steps and are at different stages along the decarbonisation journey, with some working at pace. Amber Valley has been highlighted in the locality assessment interviews as a local authority that is very quick to agree and get on with things.
- 2.5.6. The Midlands Net Zero Hub (government-funded regional organisation) and Midlands Net Zero Consortium work with local authorities to share learnings about the use of various Government grants. Councils who want to overachieve may be able to use other councils' money to deliver more measures in their area - this has been seen as one of the main benefits of consortia bids: protection in numbers, and the flexibility to spend in the more productive areas.
- 2.5.7. Derbyshire Dales got Green Homes Grant - Local Area Delivery 1a funding and has spearheaded the flex, local scale approach.
- 2.5.8. Bassetlaw's delivery of retrofit measures is perceived to be improving by interviewees. There has been continued learning internally about how to market retrofit to and involve people.
- 2.5.9. There are significant socio-economic differences in the East Midlands from area to area and a very different political landscape. There are big differences between affluent and poor areas and this can have a big impact on who will be more on board with retrofitting their homes in terms of ability to spend.
- 2.5.10. Nottingham's approach to planning for retrofit is really good. It operates at the Planning Committee level. Nottingham saw one of the first Energiesprong projects in the country. Energiesprong is a relatively new approach to retrofit using off-site manufacturing to reduce installation costs, performance contracting to ensure quality and novel service plan arrangements. The project in Nottingham by Nottingham City Homes is seen as positive and provided significant learnings about the types of approach to retrofit that do and don't work.

- 2.5.11. Combined authorities are starting to have influence over how funding is spent, which is likely to enable more cross tenure schemes and address some of the concerns about short term grants that have been flagged in the research (see below).
- 2.5.12. The region is seeing early signs of integrated working between councils, private contractors, and energy efficiency experts. This collaboration is aimed at developing comprehensive retrofit strategies that not only improve energy performance but also address the financial constraints many local authorities face.

2.6. Financial

- 2.6.1. Nottingham City Council has declared a financial crisis, Derby City Council has not declared but is considered to be in crisis. Most other councils are strained/under financial pressure. Rushcliffe and Derbyshire Dales are the only financially stable councils in the area.
- 2.6.2. The area has a [Warm Homes: Social Housing Fund Wave 3 Consortia Bid](#) - led by Nottingham City Council in collaboration with the Midlands Net Zero Hub it is seeking up to £400m.
- 2.6.3. East Midlands Chamber are actively engaging with supply chain and training providers. Bolsover Council has been successful in securing grant funding to run a Retrofit Green Skills - Employer Forum.
- 2.6.4. Nottingham Energy Partnership has been instrumental in directing householders/homeowners towards Energy Company Obligation round 4 (ECO4) funding, especially ECO flex which is designed to involve local authorities.

Selected measures - at a glance

Factor	Derbyshire	Nottinghamshire	National Average	Derbs. Rating	Notts. Rating
Demographic - Fuel poverty	13.9%	13%	13.1%		
Demographic - Life expectancy	Males - 79.1 years Females - 82.8 years	Males 79.3 years Females 82.8 years	Males - 78.9 years Females - 82.8 years		
Demographic - Average pay	£37,500	£37,813	£35,100		
Demographic - Free school meals	24.7%	22.2%	27%		
Demographic	77%%	74.7%	78.8%		

- Economic activity					
Housing stock - EPC A	0.1% housing stock	0.2% housing stock	0.3% housing stock		
Housing stock - Average EPC band D	14.4% housing stock	13.7% housing stock	38% housing stock		
Housing stock - EPC F/G	3.9% housing stock	3.4% housing stock	5% housing stock		
Strategic - Trust Mark installers	20 TrustMark 15 MCS 1 per 22,700 people	15 TrustMark 10 MCS 1 per 46,168 people	1 per 4600 people		

Below is a table of approximate numbers of homes for which funding has been secured by government grant scheme (multiple sources)

Scheme	Nottinghamshire (Approx. Homes)	Derbyshire (Approx. Homes)	Total (Approx. Homes)
SHDF	1,200	1,000	2,200
LAD	900	700	1,600
HUG	600	500	1,100
ECO	3,000	2,500	5,500
Total	5,700	4,700	10,400

3. Interview analysis

Ten interviews took place to inform the East Midlands Locality Assessment. The following offers initial highlights across the thematic areas identified and additional insight that is of value to the LARA process. It follows the six project pillars (see appendix 1) and outlines issues and information that were raised by interviewees of relevance to the process.

Summary table

Pillar	Key themes	Recommendations for LARA
Community	• Lack of trust in installers • Building good communication and consultation with householders	• Approach needs to be targeted at people not houses and work to build trust in delivery • More focus on vulnerable people - develop a way to identify who needs most help • Establish retrofit referral mechanism via trusted organisations
Skills and training	• Several hurdles and a lack of incentives for installers to invest in training • Some retrofit measures complex requiring more detailed training • Need for wider training provision on retrofit (for health, planning professionals) and more coordinator training	• Focus on education - not just for installers, but also householders and those working in other sectors and the wider industry (health, planning) about retrofit
Homes	• Need for bespoke retrofit approaches to account for needs of individual houses • Difficult coordinating between housing associations	• Case studies on outcomes - more 'good news' human stories. Focus on health benefits not only energy savings
Low carbon technology	• Inception to completion model works well but assessment processes too complicated • Engagement with traditional tradespeople on retrofit	• A 'one stop shop' for people to get everything retrofit done - information, sign up, when things go wrong
Financial resourcing	• More focus on local installers • Understanding the grant landscape well is important • Pay structure for contractors doesn't align with installation of certain measures	• Resource needs to be put in place up front to help with the application processes - need resource to coordinate and not just do the retrofit • Fund for liability risk - for new entrants into the market • Longer term focus - > three years
Governance	• Energy partnership has been very successful •	• Limited collaboration - working with a few trusted, focused partners - forum for putting forward ideas and discussing with local authority directly • Transparent approach and open answers (i.e. a glossary) • Combined authority - coordinated work on the retrofit agenda • Joining all the components up - funding, market creation, skills

The detailed insight from the interviews is grouped below according to these six pillars and then additional themes are discussed below.

3.1. Community

3.1.1. Communication and consultation

Several interviewees expressed the importance of building good communication with householders in the retrofit journey. How people can be made aware of the grants that are available to them, ensuring they have the information needed and in a clear, easy to understand way. Communities should be invited to question and answer sessions, make sure they understand the benefits and noting the invasiveness of the process, and being transparent about what is involved in retrofit is important. Also capturing and sharing positive experiences can make a significant difference in terms of others following once they can see/hear about the changes. In the words of one interviewee - 'make every contact count.'

3.1.2. Early adoption

This can enable others to follow and generate momentum - People like to see the technology working before taking the big step, plus early adopters share the knowledge with local people and give them reassurance.

3.1.3. Lack of trust - Quality and assurance.

There is a perceived lack of trust in some communities about something that's 'free' being too good to be true, or that the grants available may not be genuine. There is also some nervousness about insulation interventions following Grenfell and lead-generating companies have perpetuated the negative feelings. There is a lot of misinformation and the lack of a national heat pump campaign is an issue. Messy construction, defects and things going wrong in the retrofit process also make it harder to present the benefits of retrofit - especially to people who don't have technical knowledge about the measures. The cost in terms of effort and time are perceived to not be worth the outcome. People need certainty - it is a big undertaking.

3.1.4. Framing the message

Make it about lifestyle and other benefits - not necessarily energy saving, but comfort, highlighting the potential of the interventions to make you warmer in the winter and cooler in summer. One interviewee highlighted that some tenants see that retrofit is just of benefit to the social landlord - the benefits to individual tenants also need to be made clear. Another framing is that measures can potentially increase the house value. Multiple interviewees suggested that marketing and branding to make retrofit measures more desirable would be impactful. Local authorities are trusted messengers and some have local champions who help with

promotion that make a positive difference to uptake. It was stated that if councils or large organisations are supportive of an initiative, it gives householders more assurance that the measures will be installed properly and somewhere to go if there are issues.

3.2. Skills and training

3.2.1. Provision for training and skills

There is a patchwork of provision for training and skills development. Some areas are adequately provided for, whilst others (external wall insulation, retrofit coordination for example) were areas mentioned by interviewees as being inadequately provisioned. Some retrofit measures were seen as being particularly technical and specialised.

3.2.2. Installers

A number of separate but related issues were raised in relation to the installers - both in terms of how they operate and some of the challenges they face in training staff. For those operating in small (1-3 person) teams, the need to be National Vocational Qualification (NVQ) accredited or PAS 2035 (national retrofit guidance) compliant means that installers can't afford to train themselves, or have the time to. There are no incentives for companies to put staff through the training as they are not tied to one installer. Labour tends to be very transient, so it's a mostly a lost investment. These factors mean that the compliant/accredited labour available is very limited, which in turn limits the install capacity that can be achieved. Contractors often struggle to get labour which frequently delays installs.

3.2.3. Complex measures

Some retrofit measures have multiple elements to them and this needs to be reflected in the training provision. External wall insulation for example is a multi-skilled intervention so installers need skills in plastering, rendering, applying the insulation, which is a time learnt skill. There needs to be a way to offer installers qualifications without any cost to them. The fact that some interventions are more complex than others needs to be reflected in the training provision offered.

3.2.4. Strategic alignment

How people are trained and in what areas or technologies should be better linked with policy priorities and available funding. Whilst it was flagged that in the East Midlands, more place-based training and better linking of training with delivery - in terms of procurement and offering on-site training with particular projects - is taking place. However, it was thought that such efforts could be improved if the training provision and skills development process was better linked with the policy landscape. If there were fewer changes made to funding schemes and strategic priority framing and more long term certainty, it would help improve confidence in the sector.

3.2.5. Funding for training

Funding for training is currently short term and unpredictable. At the moment there is often fleeting funding for training that is linked to particular projects. This is not sustainable, predictable or transparent - in terms of how long it will be available. Training centres are open when there is money and then they close again, losing momentum. There needs to be longer term, assured funding for training that isn't linked to short-term projects that are limited in scope and time.

3.2.6. Wider training needs

The wider training needs were identified to improve knowledge about retrofit for those other sectors, including frontline health workers on the links between healthy homes and retrofit and more broadly in the planning sector, for example..

3.2.7. Training provision

Training provision needs to be better linked to the demand for training courses. A question was raised about what constitutes 'enough' trainers. This is linked to the need for a wider understanding of what the skills shortages actually are. Baselineing or taking steps to better identify/audit the provision, the demand and the availability of trainers/courses would enable a more informed improvement plan.

3.2.8. Building on success

It was emphasised by multiple interviewees that there are some great things happening - in terms of collaboration for example. However, it was highlighted that collaboration between the colleges could be improved - by simplifying processes such as course creation. More could also be done to improve education about retrofit in schools.

3.3. Homes

3.3.1. Retrofit assessments

Interviewees suggested that scaling the amount of retrofit assessments done would also enable localities to scale the number of properties retrofitted. Therefore more attention should be focused on getting more properties assessed sooner to enable this scaling of effort to take place.

3.3.2. Challenges with particular properties

Calls were made for changes to government policy needed to address some of the inconsistencies in terms of which measures for which properties receive support. Examples included the fact that houses are seen (generally and explicitly in Government policy) as assets - which can complicate investment on retrofit. The region has many off-gas properties and retrofitting them is seen as expensive. This higher express is complicated by the property cost cap in government grant schemes, particularly the Home Upgrade Grant phase 2 which has a value for money trigger. Because interventions in off-gas grid properties may be more expensive, the need to provide

justifications for measures in these types of houses can represent a challenge in terms of the additional cost associated with them.

3.3.3. Bespoke and individual approaches

A need for more bespoke and individual approaches to tackling properties was suggested. House surveys which could personalise solutions and focus on the changes that people can actually make would improve the situation. Heritage properties for example, would be easier to tackle if this approach was taken. is important.

3.3.4. Housing association coordination

The difficulty in coordinating between housing associations was highlighted. As social housing ownership is not uniform, streets can become 'pepperpotted' with different owners for particular buildings, which means achieving retrofit at scale can be challenging. Better communication and collaboration between social landlords could deliver this scale. Social landlords taking a fabric first approach can also sometimes be limited in the measures they can install (for example, delivering external wall insulation on terraced streets can be difficult).

3.3.5. Supported housing

It was flagged that supported housing (housing which provides accommodation alongside support services to help individuals live as independently as possible in the community) can experience difficulty in claiming grant funding, because it can sometimes be hard to prove that the property is in fact domestic. Social housing also has planning restrictions placed upon it which can make it difficult to retrofit too.

3.3.6. Investment and delivery

Interviewees saw that the investment and delivery being made in private homes to improve energy efficiency has been positive. Furbnow has been mentioned by multiple participants as an example.

3.4. Low carbon technology

3.4.1. Delivery models

Participants believed that an 'inception to completion' delivery model - where the retrofit measures are handled by a central point of contact for the duration of the project - has worked well. This doesn't rely on householders being in contact with multiple different contractors and providers, but is coordinated as a whole.

3.4.2. Assessment processes

The EPC as an assessment tool was flagged as something which could be improved/replaced. Something more bespoke to a particular house and taking account of the saving measures through addressing heat loss and building fabric improvements, and not be based on averages would be better. When a retrofit assessment is bespoke, it is easier to understand whether a particular intervention works in a particular situation and therefore the most appropriate

system for a house can be chosen. One participant highlighted that there are some tech solutions that could help with the process that need to be investigated further. End to end products that simplify and clarify the process.

3.4.3. Types of heating

Linked to this, identifying the types of low carbon heating which are suitable for particular properties is a challenge. A community of practice to help address this was suggested.

3.4.4. Relationships between local authorities and Tier 1 Contractors

An issue was raised in relation to using non-local and/or Tier 1 contractors and how well they can deliver without understanding the local context or the grant scheme they are being funded through.

3.4.5. Data and information gaps

There is a lot of research underway to help fill data and information gaps and improve knowledge. Joining up the research efforts and collaboration between research organisations could make the access to data and insights, as well as the availability of resources and funding more efficient. Partnerships with National Retrofit Hub, and the MCS Foundation could enable this.

3.4.6. Connection with traditional trades and suppliers

There needs to be more connection between traditional trades and suppliers i.e. between general builders or kitchen fitters and suppliers of retrofit material and technology. These tradespeople need to know more about retrofit so they can work with homeowners and clients on retrofitting whilst traditional works are being carried out. Raising awareness within the sector that retrofit is potentially a highly lucrative venture for them and can compliment their existing work is not common. For homeowners, a widespread campaign in builders merchants, kitchen, bathroom showrooms etc. to highlight that retrofit can be done in parallel with other home improvements could also be undertaken.

3.5. Financial resourcing

3.5.1. Understanding grants and funding landscape

This has been beneficial to local authorities. By knowing the parameters and details of the grants well, sources of funding have been combined in certain circumstances to tackle particular elements of retrofit (in conservation areas for example). Without this knowledge, some local authorities are limited in how they use the funding.

3.5.2. Design of government grants

The effectiveness of being able to utilise government funding in particular contexts however, is very dependent on the design of the funding scheme and sometimes it is not designed in a way that can be used by certain local authorities. Home Upgrade Grant for

example did not take into account major considerations like electric connections that typically go into 'off gas' properties. Rural additional costs are higher than urban, and it would be useful if such factors were identified - policymakers should speak to industry before designing schemes.

3.5.3. Paperwork/process

Accreditation and certification has addressed concerns about quality, but the filling in the paperwork to obtain the accreditation may not reflect the quality of the retrofit. Some contractors struggle with the paperwork whilst the workmanship of the retrofit could be very high quality. Whilst it is an important process, it could be simplified to manage this risk. Streamlining the auditing processes would also help with delivering the extent of retrofit needed. Too much bureaucracy and red tape issues might discourage installers to not bid for work. Similarly standardised guidelines for householders could also be refined.

3.5.4. Procurement

This needs to be better aligned to local, small installers as without such measures Tier 1/out of area installers may be favoured.

3.5.5. Supply chain

Participants flagged that some negative issues with the supply chain can be linked to grants and subsidies and these trends or patterns need to be mitigated against. When there is a grant or subsidy on a material or measure, this makes things cheaper and therefore there is more demand, which can subsequently make things more expensive, or lead to shortages. With this cycle supply chain challenges can result. Finding a way to move away from this cause-response issue would enable more retrofit to be delivered.

3.5.6. Pay/wage structure for installers

Work can be paid by cubic metre installed (for example on external wall insulation) so local workers are not as keen to take this risk on (potential errors in installs could prove too costly, for example). Also, workers prefer certain properties because they can quickly install larger, less complicated properties. Smaller ones limit worker pay.

3.5.7. Vulnerable people

Are sometimes overlooked in the grant processes and they need more support. Considerations like literacy challenges, mental health conditions may prevent people from engaging in the process. Often the most in need are the least able to reach out and apply for retrofit funding, so Nottinghamshire public health are discussing how they can approach this.

3.6. Governance

3.6.1. Long standing collaborations

Many participants highlighted that the long standing collaborations happening in the area through Nottingham Energy Partnership that have enabled delivery in the area has been very positive. Steps should be taken to make sure the work of EMCCA can be rolled out in a similar collaborative way. Initiating a transparent, systems-based approach to retrofit and unifying the local authorities to keep everything joined up along with the Midlands Net Zero Hub was suggested.

3.6.2. Better links with planning

A need was identified to better link the Midlands Net Zero Hub with planning (both policy and departments within local authorities). It was suggested that making this connection would enable a quicker response to the retrofit and energy challenges being faced.

3.6.3. Wider issue framing

As highlighted in the skills and training section above, the need for retrofit to have a wider framing and be better integrated into social care considerations and public health would allow for a better understanding of the urgency and what's required. It could also facilitate delivery by enabling more joined-up thinking and actions. Links across areas are improving but there is still a need to raise awareness within other teams - for example in terms of the specific grant schemes that are available.

3.6.4. Public sector funding

It was seen that the councils are continually learning and improving and that these local authorities are playing an important function, but also that many of them are virtually bankrupt. With the scrapping of programmes comes a loss of knowledge. More resources would prevent the loss of this valuable institutional knowledge. Most local authorities don't have capacity to run anything except the grant funded programmes that they are politically obliged to deliver, but this alone is not sufficient to tackle the scale of the challenge. Because of the grant timeframes that local authorities are working with, there needs to be an easy contracting process in place.

3.6.5. Formalising sharing

A lot of retrofit work is currently based on good will and interest of staff, a lot of the time there is nothing official in place (i.e. measures in Local Plans). Through EMCCA, there needs to be better information sharing across boundaries - and improved systems to share information effectively. Getting the programmes up and running was seen as something that EMCCA should prioritise to speed up the process, acknowledging that these will be time, admin and resource intensive exercises.

3.6.6. Collaborative contracting

There are gaps in the contractual management of installers currently, and it has been suggested that working together and scaling projects would make a difference. Also encouraging contractors and all

partners to work collaboratively would also be beneficial, as the landscape is currently too fragmented

3.7. Additional insights

Health

In the East Midlands, the emphasis on health impacts and benefits of retrofit is pronounced. There was a lot of mention of the need to connect more with health and information regarding the efforts that are underway. Health outcomes are beginning to be tracked in projects and research is underway exploring whether retrofit reduces medical interventions. It is hoped that making this link will enable more health funding, placing emphasis on future funds that would target health conditions.

Nottingham Trent University research shows that homeowners on coal are not interested in coming off coal. Some think it won't work as well, others are disinterested in the switch - they like the system and the way it works. Being able to look at health benefits, carbon intensity and show how impactful it would be for their direct benefit would really help. Air quality monitors installed and interviewing pre and post intervention is planned.

4. Appendix

4.1. Six pillars

The six pillars are identified as follows:

Community:

- Awareness and appetite for retrofitting from residents
- Trust building
- Participation & engagement

Skills and Training:

- Market size and quality of works
- Range of different programmes, tenures & building typologies
- Skills pipeline needed for future works

Homes

- Building types and tenures across the area
- Approach to the carbon and energy saving

Low carbon technology

- Heat pump 'readiness'
- Energy generation & storage
- Planning & infrastructure eg. grid constraints

Financial resourcing

- Funding and finance
- Variations across tenures & delivery models
- Impacts on quality retrofit works eg. user-centered service models

Governance

- Ownership and governance
- Procurement policy eg. community wealth building

4.2. Sources

<https://www.ons.gov.uk/peoplepopulationandcommunity/housing/articles/researchoutputssubnationaldwellingstockbytenureestimatesengland2012to2015/2020>

observatory.derbyshire.gov.uk

nongasmap.org.uk

<https://storymaps.arcgis.com>

[Nottinghamshire.gov](https://www.nottinghamshire.gov.uk)

<http://nottinghamshireinsight.org.uk/>

<https://www.eastmidlands-cca.gov.uk/what-is-a-combined-county-authority/>

<https://committee.nottinghamcity.gov.uk/documents/s143016/Enc.%201%20for%20D2N2%20wide%20Local%20Area%20Energy%20Planning.pdf>

https://d2n2lep.org/wp-content/uploads/2023/02/D2N2-Local-Skills-Report-January_2022.pdf

<https://www.eastmidlands-cca.gov.uk/news/east-midlands-mayor-gives-green-light-to-countys-largest-local-area-energy-plan/#:~:text=The%20Local%20Area%20Energy%20Plan,create%20jobs%20in%20green%20industries>

https://d2n2lep.org/wp-content/uploads/2022/12/D2N2_Energy_Strategy-1.pdf

<https://d2n2.startprofile.com/page/home-page>