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A NEW DEAL FOR LOCALLY LED HOME UPGRADES

BOOSTING CAPACITY TO DELIVER AREA-BASED RETROFIT SCHEMES

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Local authorities are uniquely positioned to coordinate area-based retrofit programmes. However, at present, many do not even have internal capacity to apply for grant schemes. A new deal for locally led delivery is needed to address the postcode lottery, provide clarity and a stable model for allocating funding.

This briefing sets out how locally led approaches to home upgrades should develop, in order to contribute to a well-functioning ecosystem of retrofit schemes. After ten years of cuts to local authorities' core services, and amid ongoing financial and supply chain challenges, a holistic approach is needed to level up access and end the postcode lottery.

The next evolution of locally led retrofit will require:

- > **A long-term infrastructure investment pledge**, with a ten-year plan outlining the commitment to public funds to upgrade low-income homes.
- > **Flexible, needs-based funding allocation**, and revenue funding to bolster and upskill authorities who need support to level-up their capacity to deliver.
- > **Support for skills and supply chains** through direct support for further education courses and guidance on authorities' role.
- > **Regulation and resource for heat and energy planning** to ensure every local area benefits from flexible energy use and efficient heating solutions.



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Room for improvement in support for home upgrades

There is widespread consensus on the need to upgrade the UK's cold and leaky housing stock. Benefits include greater energy security, lower bills, better health outcomes and cutting carbon emissions.¹ Moreover, retrofitting is essential if the UK is to reach its legally binding net zero and fuel poverty targets.² During the current parliament, the Conservative government increased public investment in home upgrade schemes to around £1bn a year, and have committed an increase to £2bn a year in 2025–28.³ If elected, Labour would raise investment to around £2.6bn a year in 2025–30.

In the decade between 2012 and 2022, Westminster and the devolved governments introduced at least 30 publicly funded schemes to support fabric upgrades and heat decarbonisation.⁴ The proliferation of short-term and sometimes conflicting public schemes has damaged supply chains, resulted in public sector capacity gaps, and ultimately reduced the number of homes upgraded. The priority of the next government should be to develop coherent, consistent, and long-term support for home upgrades.

The various delivery avenues include local authority and energy supplier delivery of retrofit grants, technology grants to individual households, and strategic support for heat and energy planning. A combination of delivery channels will likely remain important to ensure good coverage across regions, demographics, and housing archetypes. Those approaches need to be complementary so that all eligible households are supported, and the most appropriate methods can be used in each case. Before 2020, the obligation on energy suppliers to improve domestic energy efficiency was the main route to deliver subsidised and fully funded home improvements. Over its three decades of operation, the obligation has (largely) proved to be a stable source of funding for home upgrades. Therefore, when local approaches were introduced to England, this was a break from convention.

The locally led approach to retrofit could have significant social and economic benefits. Important housing and planning functions already sit with authorities, and the scope and nature of projects depends on local conditions, which makes

¹ International Energy Agency, 2023, **Multiple benefits of energy efficiency: Health and wellbeing**

² CCC, December 2020, **The Sixth Carbon Budget: The UK's path to net zero**

³ UK government, 18 December 2023, **Families, business and industry to get energy efficiency support**

⁴ E3G research

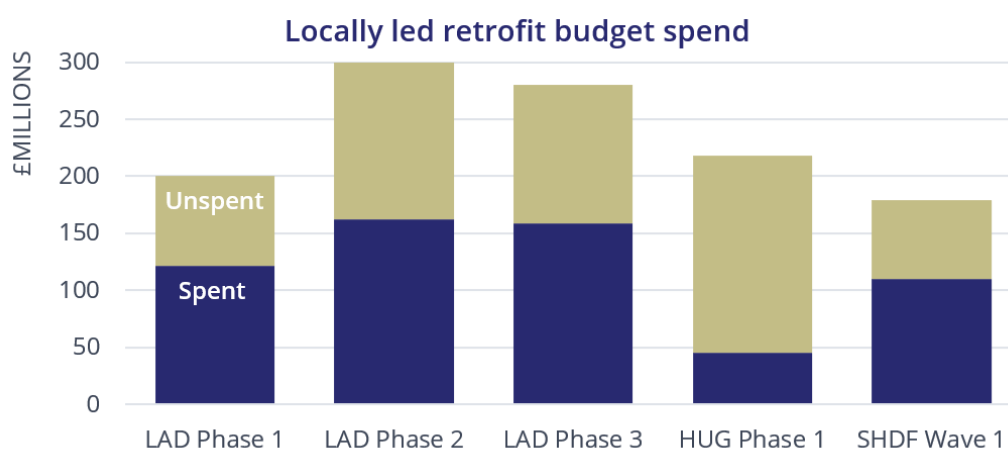


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authorities clear candidates to run schemes optimised to their area.⁵ Local retrofit schemes implemented in the 2020/25 parliament have shown positive outcomes, including street-by-street approaches which deliver multiple benefits for residents and the wider community.⁶ Several local authorities have combined funding streams to launch area-based schemes. For example, Milton Keynes completed upgrades on their social housing stock where they combined energy efficiency work with other general maintenance upgrades to improve cost-effectiveness and reduce hassle for residents.

Delivery challenges

Despite the benefits, delivery problems have meant the underspend of the main programmes was high; 43% of LAD and SHDF and 79% of HUG (see Figure 1). This issue was felt most acutely in Home Upgrade Grant phase 1, where only 21% of funds were spent. Delivery shortfalls were caused by problems with scheme design, low capacity among installers, and the disruption due to the COVID-19 pandemic and Russia's invasion of Ukraine. The tight timelines to apply for funding and delayed scheme guidance made delivery difficult for authorities. Many less experienced authorities relied on large consortia to manage projects. When supply chain issues affected consortia, millions of pounds worth of funding were not delivered.



Source: HULA Release December 2023



Figure 1. Budget allocated versus reported spend of locally led retrofit grants.

⁵ E3G, 11 July 2023, **Enabling locally led retrofit**

⁶ Ibid

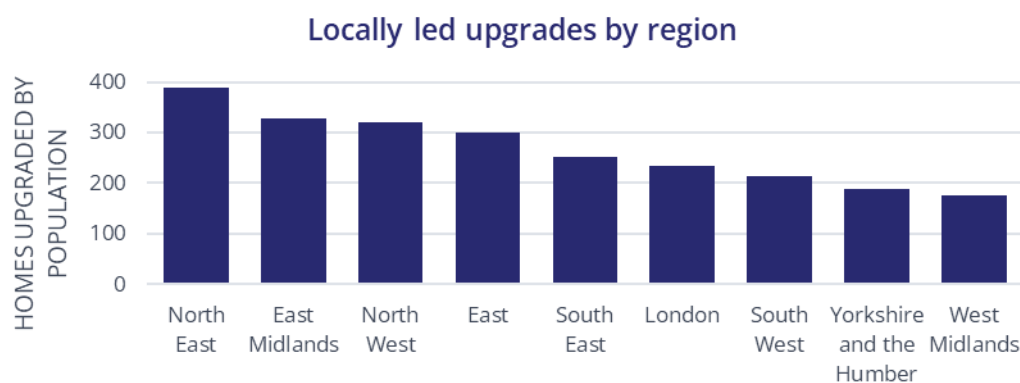


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Scotland’s Area-Based Schemes (ABS)

This locally led programme to upgrade fuel poor homes, running since 2013, delivered successfully in part, due to the programme’s consistency and longevity.⁷ Scottish authorities and central government are in the process of making improvements to the scheme, including shifting to multi-year funding settlements. In its first seven years of operation underspends were minimal, however, in 2020/21 and 2021/22 underspends of 35% and 53% were recorded, due to problems with supply chains.⁸ Similar problems are likely to have damaged prospects for English schemes.

There is high variation between English regions’ level of delivery (see Figure 2). While some variation might be expected, it does not reflect the support going where it is needed most. For example, homes in the West Midlands and Yorkshire and the Humber have the lowest median energy efficiency – yet also retrofitted the lowest number of homes with local authority funding.⁹



Source: HULA Release December 2023 and Office for National Statistics, Estimates of the population for the UK, England, Wales, Scotland and Northern Ireland



Figure 2. Households upgraded and measures installed by regional population.

Delivery over time has also been inconsistent due to the short-term and fragmented deployment of the locally led retrofit funding. It might be expected that more homes are upgraded in the summer when better weather makes external works easier. However, Figure 3 shows that delivery does not follow a

⁷ Existing Homes Alliance, 9 October 2023, **Rapid Review of Scottish Government’s Fuel Poverty and Energy Efficiency Delivery Programmes**

⁸ Scottish Government, November 2022, **Home Energy Programmes Report 2013/14 – 2023**

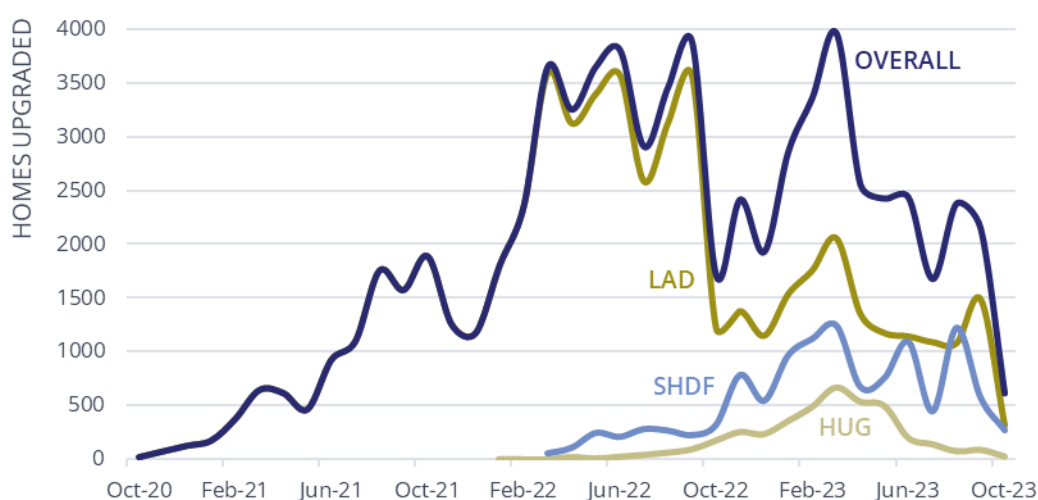
⁹ Office for National Statistics, 2023, **Energy efficiency of housing in England Wales 2023**



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seasonal pattern. Neither is there upward progress in line with increased investment, capacity, and experience. Instead, the number of homes upgraded is sensitive to various schemes coming on- and offline. The resulting instability encourages private sector installers to shift between the most profitable schemes. This is unnecessarily challenging for experienced authorities to manage, and impossible for less experienced authorities to engage with.

Locally led retrofit measures per month



Source: HULA Release December 2023



Figure 3. Households upgraded by local government, October 2020 to October 2023.

Local authority financial challenges

Local authorities’ financial state is a key risk to delivery. Following deep cuts to core services in the decade from 2009/10 to 2019/20, authorities have had to focus limited resources on fulfilling legally binding statutory duties. Since 2020/21, government has gradually increased local authority revenue and grant funding, with a further 6.5% funding increase for 2024/25.¹⁰ Even accounting for this 2024/25 increase, council real-term spending will still only be around the same level as in 2015/16, far off 2009/10 levels.¹¹

Despite the negative impact of this financial squeeze, it is possible for delivery to continue. Retrofit spending comes from capital grant funding – meaning an authority might not need to cut grant-funded positions and programmes.

¹⁰ UK government, 18 December 2023, **£64 billion funding package for councils proposed by Government**

¹¹ Institute for Fiscal Studies, 19 December 2023, **The 2024-25 local government finance settlement**



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Nonetheless, cuts to other council departments not supported by retrofit grant funding (such as planning and legal), will make delivery more difficult. County councils not involved in delivery, but which make important contributions to local climate action by coordinating regional stakeholders, must suspend this work if the authority issues a section 114 notice. Authorities which have not yet established retrofit teams will be more capacity constrained to make the initial investment needed to access capital funding.

Time for a new deal for locally led home upgrades

In an earlier report, E3G evaluated key problems in locally led retrofit, and suggested solutions relating to delivery, funding and planning.¹² In December 2023, the government committed to introduce a new Local Authority Retrofit Scheme, consolidating the current grant schemes delivered by local authorities, allocated via a challenge model and issued over a three-year period. This means some improvements will have been introduced.

However, to build a successful locally led approach to home upgrades, government needs to address the deeper structural issues that undermine delivery. The current fragmented system does not lend itself to strategic long-term approaches, and disadvantages areas covered by authorities that do not have the resource and political will to engage with the schemes. This worsens the postcode lottery for retrofit, and means locally led programmes continue to underperform.

It is essential to invest in the fundamentals needed to unlock different approaches to home upgrades. Experts have recognised that a formal framework is needed to support local authorities' contribution to the UK's journey to net zero – including on retrofit – and should be complemented by a package of support that includes a long-term, sustainable funding model, and technical and strategic assistance for local authorities.¹³

¹² E3G, 11 July 2023, **Enabling locally led retrofit**

¹³ CCC, 9 December 2020, **Local authorities and the sixth carbon budget**; UK100, 16 September 2021, **Power shift: Buildings**; Mission Zero, September 2023, **The future is local**



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Unlocking innovative approaches to home retrofits

The Innovate UK funded project, Net Zero Terraced Streets, will create a standardised, replicable, scalable model to decarbonise urban terraced streets, which make up around 40% of the UK's total housing stock. Although some of these homes could be treated with air source heat pumps, ground source heat pumps drawing from a shared ambient ground loop could be more efficient and cost-effective. This kind of approach could make access to home fabric and heating upgrades easier for low-income homes. To unlock this, local authorities need better oversight of where these projects could be viable, with support for local heat and energy efficiency strategies.

Designing the deal

There is no existing vision or approach for locally led climate action, including retrofit. Table 1 outlines different past, present and related approaches to support and guide local action to tackle emissions. They demonstrate varying levels of financial, political, and legislative commitments, and show different ways to translate national policy and funding to local.

The Scottish Area-Based Schemes (ABS) approach is the most comparable approach and has been active for a decade, meaning valuable lessons can be drawn from its design and performance. Learnings from the National Indicators (2008 to 2010) and existing air quality strategy (framework for local authority delivery) can also be taken when considering how to apply indicators on progress to reaching retrofit targets.

The design of future approaches to local climate action, including on retrofit, can draw from each of these policies. Scotland ABS demonstrates how long-term and consistent funding gives authorities and industry confidence to invest in skills and capacity. It also shows that stable funding needs to be backed up with multi-year settlements which enable authorities to enter longer term relations with suppliers. Applying this kind of approach must consider varying internal capacity between authorities. To even out differences between authorities' internal capacity to deliver retrofit, revenue funding needs to be more targeted to help level-up.



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Table 1. Past, current and suggested types of deal to guide action

Approach	How it works
Scotland Area-based Schemes (ABS)	ABS is a locally led programme introduced by the Scottish Government in 2013 to upgrade the least efficient, fuel poor homes at no or low cost to the household. Funding is allocated to authorities using a formula which uses multiple criteria to estimate the investment need in each local authority. The longevity and flexibility of ABS has been attributed to its success, both in terms of achieving real outcomes and low underspend. ¹⁴ Although the overall approach has been effective, there are points for improvement, for example, funding is allocated on an annual basis rather in a multi-year framework, and some authorities have a larger underspend. ¹⁵
National Indicators	From 2008 to 2010, a performance framework was used to manage local authority outcomes. Indicators were agreed between government and 150 Local Strategic Partnerships (each representing key players in a local area), which agreed a Local Area Agreement (LAA) with central government. Out of 150 agreements, 100 included targets on National Indicator (NI)186 on per capita emissions in their areas, 56 on NI 188 (adaptation) and 40 on NI 185 on operational emissions. ¹⁶ An Audit Commission report found NI186 “has, in many areas, prompted concerted action for the first time.” ¹⁷
Air quality framework	This approach allocates responsibilities for monitoring air quality and declaring management plans when poor air quality is detected. The framework is based on the 2021 Environment Act and sets out a process to monitor air quality and reduce it when hotspots are detected. It does not rely on statutory duties for authorities and there is no additional resource for authorities to employ officers and conduct appropriate monitoring.

The level of local government which funding is deployed to must accommodate for varying regional responsibilities, governance arrangements and levels of capacity. The air quality framework allocates responsibility to all upper tier authorities, which provides a clear delegation of responsibility. Different regional delegation of responsibilities and the possibility to share the administrative burden between smaller authorities means the kind of clear delegation achieved in the air quality framework would not be possible, or desirable in the context of a deal for home upgrades. Appropriate regional agreements, such as those that were used in the National Indicators are more likely to be successful, and can inject a local dimension to developing targets. To guide action, indicators can be

¹⁴ The Existing Homes Alliance, 9 October 2023, **Warmer Homes Scotland, Area-based Schemes and the Social Housing Net Zero Heat Fund**

¹⁵ Ibid

¹⁶ UK government, 19 November 2008, **Government response to EAC report**

¹⁷ Audit Commission, October 2009, **Lofty ambitions**



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used to help authorities' work, and motivate political leadership to boost performance. Excessive reporting requirements will be criticised as bureaucratic.

To coordinate design and implementation of a deal for local home upgrades, national government should coordinate a delivery unit with key stakeholders. Although funding is likely to come from the Department for Energy Security and Net Zero, other departments with interest and information in retrofit, such as the Department for Levelling Up, Housing and Communities must also attend.

Recommendations for a locally led home upgrade deal

Without an ambitious and comprehensive deal, upgrades to low-income homes will continue to be inefficient and unevenly distributed across England and the UK. We suggest a long-term plan for locally led home upgrades should cover:

- > **A long-term infrastructure investment pledge**, with a ten-year plan outlining the commitment to public funds to upgrade low-income homes.
- > **Flexible, needs-based funding allocation** and revenue funding to bolster and upskill authorities who need support to level-up their capacity to deliver.
- > **Support for skills and supply chains** through direct support for further education courses and guidance on authorities' role.
- > **Regulation and resource for heat and energy planning** to ensure every local area benefits from flexible energy use and efficient heating solutions.

Local home upgrade investment pledge

Government should give local authorities and the private sector long-term confidence in the amount of investment and the way it will be delivered. We suggest a timeframe of at least ten years, or two parliamentary terms. English authorities, businesses and devolved administrations require certainty to invest in capacity and build out supply chains to successfully undertake large home retrofit projects. This will be needed to build back the capacity lost between 2012 and 2022.

Within this commitment, government could:

- > Define how financial flows will change over the period, including both capital grants and targeted revenue funding to level up authorities.



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- > Assert that support will be directed towards low-income homes as a priority, fully aligned with a commitment to eradicate fuel poverty.
 - > Work with the devolved governments to enable them to make long-term funding commitments to authorities via respective schemes.
 - > Describe the role central government expects authorities, energy companies and financial institutions to play in supporting retrofits; and consider how areas with and without devolution deals will be treated differently.
 - > Indicate how public funds will be used to leverage private finance and more innovative approaches to home retrofit.

Needs-based allocation funding

The next locally led scheme needs to transition to allocating funding based on each area's individual needs. This will likely have the single largest impact on the successful use of public funds. The current funding allocation models has created a fragmented, short-term approach that has contributed to delivery challenges.¹⁸ The level of government at which funding is allocated also needs to be considered, to ensure funds are delivered locally, while avoiding duplicating efforts between authorities. As part of this approach, the government could:

- > Design a needs-based allocation model in collaboration with authorities and industry, to be implemented in the next parliament.
- > Encourage local groupings (e.g., collections of districts) of authorities to deliver allocated funds, phasing out large regional consortia.
- > Immediately introduce a revenue funding pot to support authorities to build internal capacity, focused on low-capacity authorities.
- > Agree indicators with local groupings to allow oversight of where delivery is working well and target further support where it is needed.

Challenge, competitive and needs-based allocation

So far, funding has been allocated to English authorities on a project-by-project basis. Projects are designed by authorities, submitted to central government, reviewed and funding is received if proposals meet the criteria. Funding has generally followed annual cycles, although under the most recent phase of HUG and the proposed future local authority scheme will shift to multi-year

¹⁸ Competitive funding is when authorities bid for grant funding for individual projects and the strongest projects win, while lower-scoring projects receive no funding at all. In challenge funding, authorities still apply on a project basis, but projects are reviewed and revised, and funds are distributed to all projects so no one project loses out completely (but higher scoring projects are more likely to receive full funding).



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commitments. Project-based allocation has followed either a competitive or a challenge-based approach. The next local scheme will use a challenge model, which provides a degree more security than competitive allocation.

By contrast, the Scottish ABS scheme allocates funding to authorities using a formula to calculate need. Funding is currently allocated on an annual basis. The recent Verity House agreement between the Scottish central and local powers could herald a new relationship between central and local, which will include an increase to three-year allocation.¹⁹ As discussed above, ABS has had low underspends, and evaluation of the approach indicates the approach is positive, while flagging some issues.²⁰ The two approaches are compared in Table 2.

Table 2. Comparison of needs-based and project-based funding allocation

	Needs-based	Project-based
Relations with supply chains	Allows authorities to develop long-term relationships with suppliers. In turn, suppliers invest in local capability. Procurement frameworks can be used to ensure the market remains competitive.	Forms of longer-term relationships are possible with procurement frameworks. However, because work is unpredictable, suppliers are uncertain about whether to invest in skills and the supply chain.
Internal capacity within authorities	Every area has funding to develop their own team and internal capacity. Revenue not spent on internal capacity can be used as capital. Funding roles in this way could be less efficient than on a project basis if surplus roles are maintained between projects.	Designing and planning the workforce to manage a retrofit project requires revenue funding. Therefore, areas where there is limited resource or political will to engage in retrofit are unlikely to make the investment in internal capacity required to engage.
Central government influence	How funds are directed can be guided by formula used to estimate local needs and scheme requirements. To promote flexibility and local decision making, scheme requirements can be relatively light. Once funds are allocated, government can evaluate.	In addition to scheme design and requirements, government can weight allocation to projects which it feels meets its goals. Funding can also be withheld until project goals are met. Overall central control is typically higher than a needs-based allocation.

¹⁹ Scottish government, 30 June 2023, **New deal with local government – Verity House Agreement**

²⁰ The Existing Homes Alliance, 9 October 2023, **Warmer Homes Scotland, Area-based Schemes and the Social Housing Net Zero Heat Fund**



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Needs-based allocation would provide the predictability and geographic coverage needed to make a locally led home upgrade scheme a success. Government can help delivery by ensuring cash flows are flexible and follow patterns typical to construction costs – with authorities reporting that costs are often higher in the second year of works, compared to the first year. It is typical for more works to be done in summer than winter.

Allocating to the right tier of local government and size of management consortia

The scale, powers and responsibilities of English authorities varies significantly between geographies. Allocating funding to every district and unitary authority is likely to lead to duplication of efforts. Therefore, we suggest exploring local partnerships to deliver funding. For example, East Lindsey, Boston and South Holland District Councils successfully joined forces to deliver grant funding. These kinds of sensible regional groupings can be used to ensure delivery is managed locally without missing out on economies of scale or duplicating efforts. The role of county councils is likely to vary between regions, however, they are most likely to have a useful coordinating role.

Boost authorities' capacity

Authorities differ significantly in their capacity to manage retrofit projects, and shifting to a needs-based approach could exacerbate this inequality. Some authorities would likely be allocated fewer funds than their current capacity allows them to deliver, and others would be allocated far more funds than their current capacity would enable them to spend.

To support a smooth transition to needs-based allocation, capacity should be built up where it is needed alongside completion of all, or most, of the next cycle of challenge-based funding. The next iteration of local authority retrofit schemes should include a parallel pot of revenue funding, taking learnings from Innovate UK's Fast Followers.²¹ This funding would be prioritised for authorities which have not accessed significant portions of retrofit grant funding, helping them to build their capacity over time.

Government should also make resource available for strategic delivery partners to deliver training to retrofit officers and share examples of best practice. In 2021 and 2022, the Local Government Association ran a retrofit leadership and learning programme for around 24 authority representatives.²² Examples that

²¹ Innovate UK, 24 May 2023, **Fast Followers accelerate towards Net Zero**

²² LGA, March 2022, **LGA Building Housing Retrofit Skills Leadership And Learning Programme, March 2022**



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could be shared include how authorities like Boston, East Lindsey, and South Holland District Councils built internal capacity from scratch, or how Surrey County Council's used a partnership with Action Surrey to manage delivery of their grants.

Issues with delivery in the current retrofit projects indicate how training authority retrofit officers could improve delivery. For example, expert reporting has highlighted some authorities have not reported data back to TrustMark correctly. The retrofit academy (which already offers several courses focused on undertaking projects aligned with PAS 2035), could introduce a range of courses suitable for retrofit officers in response to such issues.

Indicators to provide oversight of delivery

Indicators can be used to improve oversight and public scrutiny of different authorities' performance, and ultimately, to ensure no local area is left behind. Indicators should not be introduced before all authorities' retrofit have fair resourcing to deliver home upgrades. Their main aim should not be punitive, but to guide action and support a race to the top.

Individual authorities, or regional coalitions, could agree retrofit delivery indicators with central government, based on homes retrofitted, measures delivered, and annual bill savings. Weighting could be different depending on local factors, such as the housing archetypes, history of home upgrades, and fuel poverty levels. Performance against indicators should be made publicly available to allow local and national scrutiny. Poor performance could result in an evaluation process coordinated by central government.

Support for skills and supply chains

Transitioning to needs-based allocation will help mitigate the risks of supply chain constraints and inequality between authorities, but it is not a panacea for transforming the success of locally led retrofit. Government will also need to ensure funding is in place to train skilled workers and acknowledge it will take some years for the workforce to train and grow.

Funding to train skilled energy efficiency and low carbon heat installers needs a significant boost. In 2022, the government announced support for 9,000 training places.²³ However, retrofitting London's properties alone to EPC C by 2035 will

²³ UK government, 1 December 2022, [Training for thousands to take advantage of green job opportunities](#)



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require between 19,000 and 28,000 workers.²⁴ The government should also ensure a trusted body is resourced to share best practice on how authorities can fill skills gaps by engaging with local further education colleges, running green careers fairs and liaising with trusted suppliers.

Heat and energy planning

In England, and to a lesser extent in Scotland and Wales, there is a substantial gap in identifying the most efficient and cost-effective low-carbon heating options and making local area energy plans to anticipate bottlenecks in the electricity grid. Although the government in Westminster has made progress on heat networks, this option will only be deployed in about 20% of homes. Meanwhile, if left unplanned and unchecked, grid constraints could seriously impact the rollout of electric heating.

The UK needs a resourced regulatory framework for all local areas to have heat and energy efficiency strategies, and local area energy plans. Central government has a crucial role to play by funding the Future Systems Operator (FSO) to coordinate, via Regional System Planners (RSP), local area energy planning, and issue long term, non-competitive funding for authorities to deliver plans. Local authorities are stakeholders in development of energy plans, although their technical nature means external input will be necessary.

Heat planning has only been conducted under a regulated framework in Scotland. A 2023 government consultation indicates central government will develop its role in heat network mapping.²⁵ This consultation focuses on heat networks, which are estimated to be feasible for around 20% of homes.²⁶ Therefore, this leaves a substantial gap in identifying the most efficient and cost-effective low-carbon heating options for those homes where heat networks are infeasible. Instead of transitioning to individual air source heat pumps, different approaches, such as, shared ground source heating, could be more efficient.

It is not currently clear what level of local government is responsible for heat and energy planning. In areas such as Cambridgeshire, the county council has already taken a strong role in energy planning. However, in others, the county council does not have the technical capacity to engage. Therefore, regional partnerships

²⁴ Central London Forward, October 2023, **Low carbon retrofit labour demand analysis**

²⁵ UK government, 18 December 2023, **Heat network zoning: Consultation summary**

²⁶ Ibid



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will need to be formed to work with District Network Operators to deliver both heat and energy plans.

The government could:

- > Introduce a regulatory framework for all local areas to have heat and energy efficiency strategies, and local area energy plans,
- > Resource deployment of the plans from a central pot of funding,
- > Accommodate for potential need to stagger development of the plans based on availability of technical expertise to design them.

About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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