

REPORT JULY 2023

ENABLING LOCALLY LED RETROFIT

REFORMS TO SCALE UP EFFECTIVE DELIVERY

JAMES DYSON





E3G

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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.

www.e3g.org

Berlin

Neue Promenade 6 Berlin, 10178 Germany +49 (0)30 2887 3405

Brussels

Rue du Commerce 124 Brussels, 1000 Belgium +32 (0)2 5800 737

London

4 Valentine Place London SE1 8QH United Kingdom +44 (0)20 7038 7370

Washington

2101 L St NW Suite 400 Washington DC, 20037 United States +1 202 466 0573

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SUMMARY

There is an intrinsically local dimension to the decarbonisation of our homes and buildings. Building types, the age and condition of the housing stock, density, conservation or listed statuses, the natural environment, climate conditions, and demographic and socioeconomic factors all influence the kinds of retrofit that are necessary or achievable in a given area. Home retrofit upgrades also cannot succeed without the support and involvement of households and a skilled local workforce.

Local authorities are therefore critical to the rollout of retrofit programmes. They are involved in the delivery of several government retrofit schemes. However, there is significant variation in capacity among UK local authorities, both between and within different tiers of local authorities. This makes it difficult to take a systematic approach to local retrofit delivery, which is also held back by supply chain difficulties and a public and private investment gap.¹

At the same time, both the Conservative and Labour parties have promised to devolve more decision making to sub-national governments. The government has promised all areas of England access to the "highest level" devolution settlement by 2030 and Labour have promised "a huge power shift out of Westminster". Local authorities, particularly at city and regional level, may soon have a much greater formal role in the delivery of net zero policies, including retrofit, than they have had before.

Moving new powers, responsibility, oversight, and funding out of central government is the right medium-term step for retrofit delivery. However, the transition to this new role could create serious delivery risks. While some local authorities would be ready to take on new responsibilities quickly, many others need time to build their internal co-ordination, planning and project management capacity and local supply chains.

This report sets out a series of near-term steps the government could take to improve local retrofit delivery immediately, while smoothing the transition to more comprehensive devolution. It proposes simple changes related to central government grant disbursement, planning laws and local energy planning that

¹ E3G and WWF, 9 November 2022, **E3G and WWF Joint Report – The UK's Net Zero Investment Gaps**



would address commonly faced challenges raised by local authorities, while laying the foundation for more in-depth reform.

- Funding and project design: To enable greater long-term planning and
 "place-based" approaches to upgrade multiple eligible properties at once,
 the government should consolidate the various English local retrofit schemes,
 allocate funding on a three-year basis via "challenge funds" rather than
 competitive allocation, and increase local autonomy over household and area
 eligibility.
- 2. **Reforming the planning system:** Align the National Planning Policy Framework with net zero by balancing conservation and retrofit principles and provide additional resource to speed up the planning system.
- 3. **Energy planning for net zero:** Appoint a central body to help local authorities produce local area energy plans and give the Future System Operator regional system planning responsibilities, starting in areas with significant local grid congestion.



E3G INTRODUCTION

The local retrofit challenge and opportunity

There is consensus on the need to upgrade and decarbonise the UK's cold and leaky housing stock, with benefits including greater energy security, lower bills, better health outcomes and cutting carbon emissions.² If the UK is to reach its legally binding net zero and fuel poverty targets, a successful retrofit programme is essential.³

Local authorities are likely to be a key actor in the design and delivery of retrofit programmes. Many important housing and planning functions sit with local authorities, and the scope and nature of retrofit projects depends on a variety of local factors, which means that local authorities are clear candidates to run schemes optimised for their area.⁴ However, there are important barriers to delivery that hold local authorities back. Progress on some barriers can be addressed by reform to central government policy. Others – particularly those related to supply chains – will require a combination of government (central and local) and private sector action to solve. This report sets out how these barriers can be overcome.⁵

Future devolution and the next decade of retrofit

The UK's system of government is unusually centralised relative to its peers. Local authorities are responsible for around 30% of spending compared to an average of 50–75% in other European countries. However, both major political

² International Energy Agency, 2023, Multiple benefits of energy efficiency: Health and wellbeing

³ The CCC's balanced net zero pathway assumes £250bn in investment in homes by 2050, largely from private sources. The bulk of energy efficiency upgrades in the CCC's forecast come before 2035, with total investment around £45bn. CCC, December 2020, **The Sixth Carbon Budget: The UK's path to net zero**

⁴ UKRI, March 2020, **Accelerating Net Zero Delivery**; UK100, September 2021, **Power Shift: Buildings – National Government**; NEF, October 2021, **Warm Homes Fit for the Future**; IPPR, September 2022, **Plan for a retrofit revolution**; Friends of the Earth, June 2022, **An Examination of Blockages to Retrofitting**; TCPA & RTPI, January 2023, **The Climate Crisis**; CLES, December 2022, **Retrofitting Housing**

⁵ This report focuses on locally led home retrofit in England, although some of the recommendations will have broader applicability. Scotland has led the way in some areas of locally led home retrofit, providing case studies to learn from in the rest of the UK. For example, the Scottish regulation for every local authority to produce a Local Heat and Energy Efficiency Strategy and Delivery Plan will contribute to a more strategic approach to retrofit. Wales has run the UK's longest serving retrofit scheme, Nest, over the past ten years and the government has engaged with local authorities to undertake local area energy plans (LAEPs). Northern Ireland's Sustainable Energy Programme (NISEP) funds energy efficiency improvements.

⁶ Resolution Foundation, March 2023, Cutting the cuts



parties have committed to further devolution, particularly in England, in the coming years.

In its Levelling Up strategy, the government promised that every part of England that wants them will have powers at or approaching "the highest level of devolution". In March 2023 the government announced new "trailblazer devolution deals" to greater Manchester and the West Midlands, devolving additional powers and adopting new funding models. Labour leader Sir Keir Starmer has promised "a huge power shift out of Westminster" in a "Take Back Control Bill". Labour has also committed to a major energy efficiency drive, promising to upgrade nineteen million homes over a decade "going street by street in locally delivered programmes". Labour has also commet to upgrade nineteen million homes over a decade "going street by street in locally delivered programmes".

Local authorities may well therefore be asked to play a much bigger role in delivering retrofit programmes in the next decade – particularly if the government's ambition on decarbonising homes is raised, as Labour have suggested. There are strong reasons to believe this could be a good thing. However, if too much is asked of local authorities too quickly without paying sufficient attention to co-ordination, procurement, and project management capacity, this could create significant delivery risks.

Locally led retrofit is one avenue for retrofitting homes in the UK, alongside the obligation on energy suppliers (ECO), and national schemes to subsidise and incentivise private retrofits, such as the Boiler Upgrade Scheme. All approaches will be important for the UK to meet its targets, and a range of approaches will help to mitigate overreliance on only one avenue. Overcoming issues in the planning system and energy planning for net zero, which are addressed in this report, is also crucial to accelerate retrofits across the different approaches.

This paper reviews the landscape of local authorities retrofit programmes, identifies problems that have emerged in how these are managed from central government, and proposes some alternatives. These alternatives should improve retrofit delivery and local authorities' internal capacity immediately, while also reflecting some of the changes we might expect with greater devolution in future years – for example, longer term project horizons, more emphasis on place,

⁷ Department for Levelling Up, Housing and Communities, February 2022, **Levelling Up the United Kingdom**

⁸ Institute for Government, March 2023, **Trailblazer devolution deals**

⁹ Politico, January 2023, **Keir Starmer vows post-Brexit 'take back control bill'**

¹⁰ Labour, June 2023, Make Britain a Clean Energy Superpower



greater control over programme scope and eligibility, and more responsibility for managing multi-year project budgets.

Research methodology

E3G undertook a series of semi-structured interviews with a wide range of local authorities, trade associations, industry groups, retrofit installers and central government representatives (see the Annex for a stakeholder list). Based on the findings of the interviews and complementary literature review, we proposed recommendations and tested them with stakeholders.

We focus on practical issues related to how central government funding is disbursed and then spent, and the systematic issues regarding coordination, capacity and planning issues that local authorities encounter. We also consider other emerging issues like the increasingly important relationships between local authorities and Distribution Network Operators (DNOs). Addressing these foundational "nuts and bolts" will be essential if local authorities are to play a greater role in the future delivery of net zero policies, and if further devolution of responsibility for home retrofit and wider net zero delivery is to be implemented successfully.



CHAPTER 1

LOCAL APPROACHES TO RETROFIT

The delivery of retrofit schemes involves a wide range of stakeholders, including different central government, devolved and local authorities' departments – as well as installers, housing associations and energy suppliers. There will also be an increasing role for mayoralties and combined authorities.

Government-funded home retrofit schemes

During this parliament (since 2019), 13 programmes for energy efficiency and heat decarbonisation have been active in the UK. These are administered by different actors, including national and devolved governments, energy companies, local authorities, and social housing providers. Out of the 13 schemes, local authorities are involved in direct delivery of 6 (and assists in the delivery of the energy company obligation), amounting to £3.23bn of the £8.9bn total funding (see Table 1).¹¹

Table 1: Overview of locally led home retrofit schemes this parliament.

Scheme	Coverage	Value this parliament	Eligibility: tenure
Social Housing Decarbonisation Fund	England	£1.04 bn	Social housing, low-income by default
Home Upgrade Grant (HUG)	England	£0.95 bn	Off-grid private homes, low-income
Local Authority Delivery (LAD)	England	£0.79 bn	Private homes, low-income
Social Housing Net Zero Fund (SHNZ)	Scotland	£0.20 bn	Social housing, low-income by default
Scotland Area-Based schemes (ABS)	Scotland	£0.10 bn	Private homes, deprived communities
Optimised Retrofit Programme	Wales	£0.15 bn	Social housing, low-income
ECO 4 local authority Flex	Great Britain	N/A	Low-income homes

¹¹ E3G calculations



Amid this emerging and evolving landscape, local authorities are engaged in several aspects of home decarbonisation. Levels of engagement vary significantly. Authorities have finite resources (which have been reduced since 2010), multiple social and economic objectives, and a set of non-negotiable statutory obligations. Some have already developed comprehensive local retrofit programmes, as seen in Oxfordshire and Greater Manchester. However, most authorities have limited in-house capacity.

Several areas have been identified where local authority involvement can add value in supporting retrofits, sitting alongside their role in the delivery of government funded retrofit schemes, such as the Home Upgrade Grant and the Social Housing Decarbonisation Fund. These include:

- > Leading and supporting social housing decarbonisation.
- > Area-based coordination of retrofit for low-income households.
- > Community and business engagement.
- > Enabling measures within the planning system.
- > Local energy planning.

These areas are the foundation for locally led retrofits, and an argument in favour of further devolution when capacity allows.

Retrofit of social housing

In England, there are 1.6m local authority owned social homes, representing 36% of all social housing. ¹³ Authorities with their own stock are often well placed to coordinate wider efforts, with opportunities to leverage expertise from social housing retrofit into other tenures.

Area-based retrofit for low-income households

Area-based retrofit is when retrofit projects undertake large numbers of retrofits in one local area, aiming to maximise social co-benefits and reduce costs through economies of scale. These commonly combine different tenures (social housing, private rented, owner occupied) in similar properties (e.g., a housing estate, block of flats). This can be more cost effective than an untargeted, home-by-home approach. Furthermore, authorities make the most of their existing datasets relating to properties and residents, which allows them to reduce

¹² IFG, March 2020, Local authorities funding in England

¹³ UK government, 25 October 2022, Local authority registered provider (LARP) social housing stock



search costs and target schemes effectively. Several local authorities including Milton Keynes, Leeds and Bristol city councils have combined funding streams to launch their own area-based schemes. For example, Milton Keynes used grant funding plus maintenance and improvement funds for social housing to conduct retrofit on estates with similar housing archetypes. They completed energy efficiency work alongside other general maintenance upgrades to improve cost-effectiveness and reduce hassle for residents. The case study box below explains what a multifaceted and multi-tenure area-based scheme can look like.

Area-based approaches to retrofit vary between local areas. A concentrated street-by-street approach might not work in more rural areas because of varying housing archetypes and the distance between homes. Councils in rural areas have successfully undertaken home retrofit programmes adapted to their local geography. Working in consortia, East Lindsey District Council, South Holland District Council, and Boston Borough Council pooled resources to deliver the Home Upgrade Grant, undertaking a targeted letter-based outreach scheme. The high number of potential properties for upgrade in the area meant in this case, the retrofit team did not need to use a highly targeted approach to identifying residents. As a result, the team undertook a broad search, using accessible data open access EPC data and off-grid postcodes to identify homes. This shows how authorities can tailor project delivery based on their local area.

Area-based retrofit by Leeds City Council

Leeds used an area-based approach to retrofit in Victorian terraces in Holbeck, one of the most deprived areas of the city. They combined grant funding streams to work across tenures with a strong focus on tackling social issues alongside retrofit. The scheme continued until grant funding was exhausted.

The presence built in the area through the retrofit investment allowed Leeds to engage residents and build trust. Working with residents, they identified key local issues which could be worked on alongside retrofit. This included replacing bin yards — which were hotspots for fly tipping, vermin, and anti-social behaviour — with larger unenclosed bin areas. Alongside material improvements, Leeds introduced new services to the area, such as, selective licencing for private rented properties, regenerating empty homes and establishing a community hub.



To support their work Leeds also developed their own database to help target retrofit works, which combines information on the built environment, thermal imaging, and indicators for deprivation.¹⁴

Community and business engagement

Local authority engagement with residents and businesses can play an important role in the success of a retrofit project. Between 2008 and 2012, the Carbon and Energy Reduction Target (CERT) and Community Energy Saving Programme (CESP) programmes delivered millions of home energy efficiency measures. When the schemes closed, the government's evaluation process concluded local authorities had a central role in building trust, which improved operational efficiencies in surveying, installation, and delivery. Table 2 (next page) outlines the variety of approaches to community engagement taken by authorities.

The planning system

Local authorities' role in the UK planning system gives them a unique role in the transition to net zero. ¹⁶ Authorities' planning departments make decisions based on planning policy, which affects both retrofit and new builds. These are informed by national policies in the National Planning Policy Framework (NPPF), and authorities' own Local Plans. The NPPF sets government's planning policies for England, and how they are to be implemented. This framework is essential to setting the boundaries and terms of retrofit for homes situated in conservation areas. The planning system can drive forward action on decarbonisation, however, it requires reform to align it with net zero. ¹⁷ Some local authorities are leading the way by setting planning policies that require developments to go further than building regulations. ^{18,19} Further devolution to local authorities would increase the importance of planning departments in the delivery of net zero, making alignment all the more important.

¹⁴ Combined datasets include Housing Leeds data, Housing Energy Efficiency Database and EPCs, improving this by sifting out inaccurate EPCs and categorising homes according to archetype. This data was combined with other information, such as gas maps, Indices of Multiple Deprivation, and thermal overflight data.

¹⁵ Department for Energy and Climate Change, 5 September 2014, CERT and CESP Final Evaluation

¹⁶ NAO, 16 July 2021, Local authorities and net zero in England

¹⁷ CCC, June 2023, **Progress in Reducing Emissions**

¹⁸ LGA, 31 October 2022, **LGA submission to Review of Net Zero: call for evidence**

¹⁹ UK100, 16 September 2021, **Power Shift: Buildings - National Government**



Table 2: Engagement approaches taken by different authorities, grouped by approach.

Authority	Approach
Milton Keynes CC	Estate Renewal Forums are established to set up a conversation between residents and the council, allowing residents to feed into design and implementation.
Leeds CC	Engaged residents to understand how social issues (such as fly tipping and anti-social behaviour) could be addressed simultaneously through retrofit programmes. This gained significant traction with residents, and the council successfully extended the programme until funding ran out.
Boston, East Lindsey, and South Holland	Outreach campaign to residents potentially eligible for HUG funding. Their letter-based campaign saw a response rate of 30 to 40% from residents contacted.
Hampshire CC	The Greening Campaign, a charity supported by the council, engages residents in home retrofit by lending out thermal imaging cameras and gaining planning consent to retrofit homes. The local forums feed back to the council.
Leeds CC and Doncaster CC	Both authorities used door knockers to directly engage with residents on retrofit programmes. Funding for this comes from across the council budget, acknowledging that retrofit is unlikely to be the only topic residents raise.
Doncaster, Westminster, Bristol, and Walthamstow	Retrofitted common housing archetypes and used them as show homes to give residents confidence in what could be delivered in their own homes.

Local area energy planning

The transition to net zero will need strategic infrastructure decisions regarding the future of the gas network and electricity grid across the country, as more homes switch to electric heat pumps. Planning and investment is required to avoid restrictions on new demand or generation connections and delays in achieving net zero – for example, through limiting heat pump deployment.

There is currently no obligation on any party to undertake local area energy planning, although many local authorities already fulfil this function. Over time,



government could support more local authorities to produce these plans, providing the necessary resources. Methodologies can be standardised (e.g., the Energy System Catapult has been publicly funded to develop a tool to support local authority energy planning) and technical expertise provided centrally.

The government will need to undertake a central role in putting in place clear guardrails for local authorities in energy planning. Further devolution would, again, make this need more acute. For example, the failure by central government to be clear about heating policy, leaving open the option of hydrogen for heating, is delaying the rollout of local heating plans and confusing consumers. Hydrogen for heating would cost twice as much as heat electrification and 37 independent studies have concluded it is not a viable solution.²⁰ The government needs to quickly rule out hydrogen for heating to provide local authorities and regulators with clarity to guide future heat planning.

In the meantime, local authorities can move ahead with plans to electrify heating. They can also engage proactively with Distribution Network Operators (DNOs) to explore how retrofit programmes can be delivered to create broader energy system benefits. Ofgem is currently consulting on the governance of local area energy planning insofar as it affects DNOs and electricity market developments.

²⁰ Rosenow, J., 2022, Is heating homes with hydrogen all but a pipe dream? An evidence review



CHAPTER 2

FUNDING AND PROJECT DESIGN

Local Authorities in England play a central role in delivering publicly funded retrofit schemes for low-income households. However, at present, structural challenges in the schemes are holding back local authorities from fulfilling their potential in the efficient delivery of these schemes. Reforming funding is necessary to improve implementation and is a stepping stone to further devolution from Westminster. Reforms should ensure no local area is left behind by creating an environment where all local authorities can invest in skilled teams and undertake long-term and locally led home retrofit schemes.

Currently, local authorities submit bids to central government programmes to fund their retrofit schemes. In England, funding is distributed from the £1.2bn Social Housing Decarbonisation Fund and the £0.95bn Home Upgrade Grant (focused on low-income homes that are off the gas grid with residents in fuel poverty). While some local authorities supplement central government grants with their own funds, solicit private investment (from households) and combine delivery with the energy supplier-led ECO scheme, the bulk of capital investment is dependent on regular bidding processes.

This funding system influences the way money is distributed, the level of autonomy held by local authorities, and the ability to build a skilled supply chain in different regions. Local authorities reported several challenges associated with the current regime. Key issues raised were short-term funding windows, inflexible implementation criteria, and inconsistent application processes.

The design of grant schemes, including the way funding is administered, is instrumental to effective delivery. There are early reports of significant underspend in the first wave of the Home Upgrade Grant (HUG). For example, The Greater South East Net Zero Hub ran into serious challenges procuring management agents and installers to undertake the retrofit work. Of its LAD 2 and HUG 1 funds, only 34% and 15% were spent respectively. The Hub argues the supply chain was ill-prepared for a large influx of funding, especially following historic failures using grant funding. Secondly, the short-term nature of the funding made delivery extremely challenging because such a high volume of work needed to be undertaken in a relatively short window.



Long-term funding and stability

The short-term and cyclical nature of funds creates challenges for even the best-prepared local authorities. In a Local authorities Authority survey, "short-term funding necessitating 12-month contracts" was the most common answer when asked what the main challenge was to securing expertise and skills to tackle climate change.²¹

Short-term funding cycles with tight deadlines to spend grant money mean that, instead of smooth and rising installation figures, there are peaks and deep troughs. Figure 1 shows there are two significant falls in installation numbers in October and November of 2021 and 2022. Winter can be more difficult time to do retrofit for many reasons, for example, it is more difficult to dry out homes before work is completed. However, compared to data from the Installations Assurance Authority on private retrofits, grant funded retrofit contains more significant ebbs and flows. This indicates the funding deadlines create unnecessary ebbs and flows in installations. Stakeholder evidence suggests that spikes in regional demand is leading to bottlenecks and spikes in pricing.

Locally led retrofit in measures per month

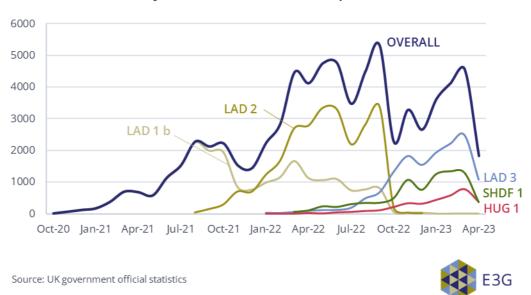


Figure 1: Households upgraded by month, October 2020 to April 2023. Based on data from the UK government HUG, LAD and SHDF statistics.

²¹ Local authorities Association, 5 April 2021, Climate change survey 2021



Inconsistent spikes in demand cause delivery to be constrained by supply chain capacity and disincentivises investment in a sector perceived as risky. If funding is uncertain and inconsistent, local authorities cannot invest in high quality home retrofit teams to manage projects and develop knowledge to support more effective projects that can be planned and delivered over multiple years.

Competition, challenge and needs-based allocation methods

The allocation methodology selected by central government to distribute funds between local authorities influences how effectively home retrofit can be planned and delivered. Competition funding means some applicants' bids will be rejected outright, while a challenge framework guarantees all eligible applications will be successful following review and revision, if necessary. A competitive system is used for the Social Housing Decarbonisation Fund (SHDF). The Homes Upgrade Grant (HUG) allocates funds under a challenge framework, although its predecessor the Local Authority Delivery (LAD) scheme used competition funding.

A needs-based approach to funding allocation is an alternative approach. Under a needs-based approach for home retrofit, central government could combine metrics such as the quantity of social housing, number of households in fuel poverty, and energy efficiency of the housing stock to allocate money between local authorities. Peeds-based approaches are not used in any aspect of local net zero funding, but it is used in other areas. An example of needs-based funding from central to local authorities is the Dedicated Schools Grant, which allocates funds based on a publicly accessible methodology.

Competition funds are not conducive to effective locally led retrofit

Authorities repeatedly stated the funding regime has created unnecessary challenges and damaged delivery. Research on the allocation process for the Levelling Up Fund found that bids cost on average £123,000 (the figure does not include uncosted staff time, which authorities say is crucial to completing bids) and 90% of local authorities employed consultants in their bid writing.²³

²³ Ibid



Bidding disadvantages authorities without existing resource and capability to compete for funding, and the uncertainty means it is risky to invest in developing in-house capacity. Even larger local authorities with more money and betterestablished teams find that competitive allocation makes it impossible for them to plan for the long term, without being certain of the level of investment they will be able to deliver. This has been particularly relevant for local authorities that do not own significant social housing stock, because they will generally not have an existing team with expertise in residential building management.

Inequality between local authorities

The funding regime is worsening existing inequality between local authorities' resourcing for tackling climate change. There remain many authorities that have only one climate change officer, or no climate change role at all. By contrast, some authorities have dedicated climate change teams, or climate officers embedded across departments. These authorities have been more successful in bidding for recent government funding, integrating climate action across departments and developing new approaches to leveraging finance.

Some local authorities, such as Nottingham and Doncaster city councils have successfully run small energy efficiency consultancy services from their housing and sustainability teams. Doncaster's consultancy programme provides heat and energy efficiency advice to schools. These schemes enabled the local authorities to maintain in-house skills in sustainability and homes despite cuts to local authorities funding.

Some authorities have overcome capacity barriers by bidding in consortia. In the most recent round of HUG funding, 279 different authorities (out of a potential 316 in England) were allocated funding. 22 of the applications were made in consortia of authorities. ²⁴ The largest two bids comprised 64 and 63 authorities, or 46% of all successful applicants. In these consortia, a lead authority or organisation applies on behalf of authorities who do not have capacity – allowing a sharing of knowledge and resources. Consortia can use the scale of the operation to their advantage, conducting studies on skills and supply, and housing stock analyses, while convening a full team to manage bids, including a liaison officer, supply chain team, and supply chain intelligence. However, reliance on consortia makes it more difficult for authorities to take ownership of their retrofit programmes even where it might be more desirable. In consortia

²⁴ UK government, 8 December 2021, Sustainable Warmth Competition: successful local authorities



there is limited headroom for authorities to build internal capacity so that next round, they can consider whether self-delivery might be more effective.

Recommendations to reform the funding system

Make a long-term commitment to retrofit investment, and structure the funding system to sustain continuous investment

- > Set out a ten-year investment plan for retrofit, with three years' guaranteed funding for locally led retrofit to improve supply chain certainty.
- > Introduce a single application route for social housing and low-income homes, both on- and off-grid, so that authorities can consolidate funds.
- > Allocate funds under a "challenge" allocation model.
- > Make application forms for the grant programme consistent and easier to complete, to reduce barriers to entry.
- > Allocate funding on a quarterly basis to enable authorities to apply in timescales which suit their position, and stagger funding allocation.
- > Set spending deadlines on a project-by-project basis to stagger demand and make project timelines more realistic.

Local authorities and the supply chain need long-term and consistent funding to give them the certainty to plan and invest. Central government departmental spending reviews are currently allocated over three years. Therefore, where projects spill into the following funding cycle, central government will estimate the funds available in the following cycle. The way funds are allocated over the three-year period, especially in its first and last year of operation, should be designed carefully with flexibility. This should also stagger demand for installers and project management agents and give authorities more time to design and develop a project if they need it.

The current funding landscape is fragmented, and local authorities submit either bids or challenge forms to different programmes which conform to slightly different requirements and metrics. This makes it harder to layer the different funding streams so that they can be mutually supportive and enable more ambitious, area-based programmes — even though this is the model that many of the most successful local authority programmes have tried to create.



A simpler system would be more efficient and effective. The Social Housing Decarbonisation Fund and Home Upgrade Grant could be combined into one local authority retrofit grant, which would be awarded on a challenge-fund basis. This means that local authorities would submit a single application, with central government either approving it or asking authorities to revise and re-submit. The Department for Energy Security and Net Zero (DESNZ) could continue to set nationwide targets for the level of investment in off-grid homes and social housing, but with further eligibility criteria devolved to local authorities.

A combined funding pot should improve how easy it is for authorities to adopt area-based approaches, for example by offering retrofit measures to fuel-poor households in other tenure types (particularly in homes in close proximity to socially rented homes). This would make it easier for local authorities to address fuel poverty in their jurisdictions and could lower overall projects costs.

Application for funding should be made consistent and simplified where possible. For example, authorities should receive notification of any changes to application forms, with sufficient lead time before the changes are introduced. Anti-fraud processes and other governance procedures in the applications should be reviewed and aligned with policies that most authorities are likely to have in place. Finally, resource to process applications in DESNZ must be improved to avoid project delays.

Application windows should open on a quarterly basis. The budget available for each quarter should be aligned with the amount allocated in the three-year funding periods, anticipating a higher level of demand in the early application windows. The deadline for project completion should be negotiated on a project-by-project basis between central government and authorities. This approach should help authorities that are less experienced in retrofit.

Increase local authority autonomy by devolving eligibility criteria

- > Give authorities independence to suggest eligibility criteria suitable for their local social, economic, and physical geography.
- > To enable area-based delivery, soften eligibility cliff edges by allowing a defined percentage of grants to be spent on otherwise ineligible homes.

To enable an area-based approach in a single local retrofit investment programme, local authorities should be given the right to propose alternative eligibility criteria for households. This would allow local authorities to target



specific areas in need, factoring in social and income-based factors, housing types, and other relevant metrics; enabling them to identify eligible neighbourhoods and residents and reducing search costs. These would be reviewed and agreed with DESNZ, which could issue an illustrative list of acceptable methodologies, criteria, and case studies. This would strike a balance between allowing for greater local variation according to need, making areabased retrofit programmes easier, and retaining a sharp focus on households in fuel poverty or with very low incomes.

This would be particularly beneficial for enabling area-based approaches to home retrofit – for example if a small number of properties on an estate or row are ineligible, this could prevent a local authority from upgrading a series of properties in one go and benefitting from economies of scale and easier logistics. By basing the amount of allowable investment for ineligible properties on cost, rather than number of households, local authorities would retain the ability to solicit household co-investment where appropriate (for example, from private landlords).

Provide resources and capacity to support local retrofit delivery

- > Allow local authorities to use funds flexibly to build internal capacity, for example, knowledge development and training (e.g. for retrofit coordinator and project management qualifications).
- > Review the proportion of funds available for project management to ensure projects have the management needed to be successful.

The current funding system allows for up to 15% of the capital award to be used for project management, retrofit co-ordination, community outreach, and other overheads. Some of these project management processes can be handled inhouse at more advanced local authorities, but many are outsourced either to specialist project managers or consultants, or to retrofit companies themselves.

Some local authorities expressed concerns that project management money was too tightly allocated and prevented them from training their own staff, which led to more outsourcing and cost inflation. The government should review the allowable uses of project management funding and consider allowing a portion of funds to be invested in internal training. Some authorities argued that 15% was insufficient and could lead to project management shortcuts. This figure should also be reviewed, although there is a danger that expanding the percentage available without a dedicated plan to bring more project



management skills in house would simply inflate the consultancy fees that local authorities are charged.

Consult on a statutory duty for net zero aligned with devolution deals

> Launch a consultation on a statutory duty for net zero aligned with the expected devolution deals.

In line with the ambition to deliver devolution deals to every part of England that wants one, a consultation should be launched to understand how responsibility for the transition to net zero could be increased accordingly. The consultation would consider whether a statutory duty is the right regulatory tool, and the sectoral scope of the duty.



CHAPTER 3

THE PLANNING SYSTEM

The National Planning Policy Framework

The planning system is holding local authorities back from being able to act on net zero.²⁵ In the context of home retrofit, the National Planning Policy Framework (NPPF), which provides the framework for action, is acting as a barrier. While the NPPF states "significant weight" should be given to energy efficiency measures in listed buildings, it also states that "great weight" should be given to the asset's conservation. This leads to uncertainty about whether retrofit should be prioritised over conservation.

The planning system is also underfunded. The Royal Town Planning Institute found funding fell 43% from 2009/10 to 2020/21.²⁶ This means planning teams often struggle to carry out even their minimum obligations, with at least £500 million over four years needed to return the service to health.²⁷

In 2022, the Planning Inspectorate blocked West Oxfordshire Council from adopting net zero policies in its Area Action Plan, including requirements for new developments to be operationally net zero, which would have meant low-carbon heating as the norm.²⁸ The Planning Inspectorate ruled the policy as neither consistent with national policy nor justified.

Conducting retrofit in conservation zones

More guidance is required around retrofitting heritage and protected buildings. Conservation zones are defined as "areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance". ²⁹ Local planning authorities have a statutory duty to preserve the character of these conservation areas as part of their function in planning new developments. Two million or 8% of homes in England are in conservation

²⁵ CCC, June 2023, Progress in Reducing Emissions

²⁶ RTPI, September 2022, Planning Agencies

²⁷ RTPI, 24 September 2020, **RTPI calls for £500m boost to England's planning system in CSR response**

²⁸ TCPA, 6 July 2022, The Planning Inspectorate's assault on an exemplary Net Zero planning

²⁹ UK government, 1990, Planning (Listed Buildings and Conservation Areas) Act 1990



zones,³⁰ of which a large proportion are in London.³¹ Conservation areas are not the same as listed buildings, and many homes which are included in them are structurally and aesthetically no different from homes in any other area. The obligation to preserve the character of conservation zones can clash with home retrofit work which can change homes' aesthetics, even for modest work like heat pump installations which would not materially impact the character of an area.

Retrofitting homes within conservation zones can be prohibitively expensive or restrictive where the retrofit might alter the characteristics of the home. This research heard some authorities argue the laws protecting conservation zones can be at odds with delivering home retrofit. A recent study found conservation zones are having a material impact on the energy efficiency of the homes located in them.³² It found there is correlation between homes in conservation areas and lower energy efficiency performance than homes not in conservation areas.

Solutions: Planning system

Resource the planning system and align the NPPF with net zero

The planning system must be provided with sufficient funds to ensure local planning departments have the resource to meet their obligations and the time needed to engage with home retrofit. The NPPF should support prioritisation of net zero so local authorities feel confident to streamline the planning process for listed buildings and conservation zones.

- > The planning system must have an overarching requirement that all planning decisions must be taken giving full regard to the imperative of net zero.
- > Provide an additional £500m in revenue over the next four years to resource the planning system and ensure teams can take training to improve understanding of home retrofit, process applications more quickly, and have pre-application conversations to reduce friction.³³
- > Adjust the wording in chapter 16 of the NPPF to balance retrofit decisions with conservation decisions. A small change in the wording so that retrofit and conservation are both attributed significant weight (rather than great weight) will rebalance the two principles.

³⁰ Fetzer, T., March 2023, **Regulatory barriers to climate action: Evidence from conservation areas**

³¹ Bottrill, C., August 2005, Homes in Historic Conservation Areas in Great Britain

³² Ibid

³³ RTPI, 30 September 2021, £500m investment in planning



> Produce a model design guide for domestic retrofit and require Local Planning Authorities to produce local design guides informed by the national guide, which would carry weight in decision-making.³⁴

³⁴ UK government, 2022, Levelling-up and Regeneration Bill: reforms to national planning policy



CHAPTER 4

ENERGY PLANNING FOR NET ZERO

The energy system will be a critical enabler of net zero homes. However, at present, this is not always the case – and in some places, it can act as a barrier to deployment of EV chargers and heat pumps. Local area energy planning can play a role in guiding the planning and investment needed for the future, and ensuring low-carbon heat ambitions are not obstructed by power network bottlenecks.

Our research found grid constraints already exist, particularly in areas with aging electricity infrastructure and without a previous requirement to serve demands of heavy industry. Local authorities in affected areas are concerned projected increases in electrification will be stalled by limited electricity grid capacity. Indeed, projects have already been stalled in areas where electrification has progressed either through retrofit or new builds.

In Frome, Somerset, a proposed development of 200 new homes with heat pumps installed was unable to proceed because the local substation was not able to provide the additional capacity needed. In this case, upgrades to the substation would take two to three years. The local authority had encouraged the developer, Curo, to improve the green credentials of the development, who in turn agreed to install heat pumps. Phase one of the development will now proceed with homes heated by gas.

While DNOs are required to consult with all stakeholders regarding their network development plans, local authorities rarely have the capacity or expertise to engage, and the impacts of grid constraints emerge once it is too late to address the issues. If local authorities are given further powers and funding in devolution settlements, the need to engage with DNOs on infrastructure and other plans could increase.

Longer term plans are required to integrate net zero energy requirements (generation and demand) with the network investment programmes of DNOs.



This will highlight for the DNOs where network investments are required and alert local authorities to the advantages in different localities.³⁵

Solutions: Local area energy planning

Resource to support local area energy planning

Producing local energy plans must be as simple to achieve as possible. The Energy System Catapult or another suitable body could be funded to work with local authorities as required to help them produce plans. Priority should be given to those authorities that do not have plans or the capacity to produce one without support.

Coordination with DNOs

Ofgem should progress proposals to create regional system planners. E3G supports the proposal that this should become part of the responsibility of the Future System Operator (FSO) function that is expected to be established as part of the current energy bill process. While the FSO will not initially have the mandate to undertake such planning, Ofgem should support it in trialling this responsibility in areas with significant local grid congestion issues. Until regional system planners are created, all local authorities should consult with DNOs over their local area energy plans. Ofgem should monitor DNO performance in responding to such requests and in addressing grid constraints that emerge and provide resources to help authorities to take forward issues and opportunities. DNOs should be required to provide timely grid reinforcements to new housing developments to allow electrification.

Local energy planning beyond 2025

Longer-term, local authorities can explore opportunities available through deployment of smart digital technology to avoid grid congestion. To support this, Innovate UK and the Energy System Catapult could develop their local area energy planning methodology to incorporate lessons from developing smart local energy systems.³⁶

³⁵ There is also a requirement for DNOs to deploy digital control and instrumentation technology across the grid network to inform on network condition and ensure maximum use is made of available grid assets.

³⁶ Innovate UK funded a series of projects within the Prospering from the Energy Revolution programme. This has provided numerous lessons that can be shared across local authorities.



E3G CONCLUSION

Local authorities will be crucial to delivering high-quality, area-based retrofits in low-income homes, while raising their capacity to do so would act as a stepping stone to devolution. The existing programmes should be developed to ensure home retrofit for low-income homes are deployed across the country. To achieve this, reforms to the funding programme are required and blockages in planning and energy need to be urgently removed. Making the funding programmes longer term and more flexible, and devolving more of the decision making to local authorities, are important steps in the overall shift towards devolution in the UK.

We recommend:

- Funding and project design: To enable greater long-term planning and
 "place-based" approaches to upgrade multiple eligible properties at once,
 the government should consolidate the various English local retrofit schemes,
 allocate funding on a three-year basis via "challenge funds" rather than
 competitive allocation, and increase local autonomy over household and area
 eligibility.
- 2. **Reforming the planning system:** Align the National Planning Policy Framework with net zero and provide additional resource to speed up the planning system.
- 3. **Energy planning for net zero:** Appoint a central body to help local authorities produce local area energy plans and give the Future System Operator regional system planning responsibilities, starting in areas with significant local grid congestion.



ANNEX

Stakeholders interviewed³⁷

I ocal	authorities	

Bristol City Council

Boston Borough Council, East Lindsey District Council, South Holland District Council (consortia)

Doncaster Metropolitan Borough

Council

Cambridge City Council

Essex County Council

Greater Manchester Combined

Authority

Hampshire County Council

Kent County Council

Leeds City Council

London Borough of Hammersmith

and Fulham

Milton Keynes City Council

Royal Borough of Kensington and

Chelsea (Lancashire West

Neighbourhood Team)

South Cambridgeshire District

Council

South Holland District Council

Surrey County Council

Other

Abundance Investment

Curo housing developers

Department for Energy Security and

Net Zero

Edinburgh University, Dr Jess Britton

Existing Homes Alliance

Greater Southeast Net Zero Hub

Green Alliance

Greening Campaign Hampshire

County Council

Installation Assurance Authority

Kensa Utilities

Local Government Association

Nesta

Regulatory Assistance Project

Retrofit London

³⁷ An additional 2 local authorities and 6 other organisations were interviewed but could not be named.