



Creating Resilient Homes

A vision for partnership to enable the local delivery of retrofit at scale



ABOUT THIS DOCUMENT

There are huge benefits to be realised by getting the upgrade of the nation's homes and buildings right. This document sets out the opportunity for Government and Industry to partner in co-creating a clear and comprehensive policy direction and retrofit strategy.

This document outlines key insights from the National Retrofit Hub (NRH), developed over nearly two years of cross-sectoral collaboration, on what the industry needs to deliver retrofit in the most just, effective, economic and inclusive way. We explore the economic growth and national prosperity outcomes of well-delivered retrofit, and discuss a few ways that these can be protected.

This document provides an overview of the current state and scale of retrofit delivery, and details how the National Retrofit Hub is playing a key role in enabling the local delivery of retrofit at scale.

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Introduction

Over the past 18 months, since we stepped into our roles as co-directors, we have witnessed the retrofit community make significant progress in addressing the complex challenges associated with retrofit. A deepening understanding of the critical factors necessary to solve these problems has emerged, along with a stronger alignment among key stakeholders.

This period has seen a substantial shift towards collaboration across multiple sectors, each bringing their expertise to the table, with a shared focus on decarbonising our building stock and creating warmer homes and more resilient neighbourhoods.

The growing openness among partners to share knowledge and best practices has proven invaluable, leading to the creation of actionable solutions and strategies. This collaborative spirit has moved beyond merely questioning and debating the "sticky" problems of retrofit, to providing clear, implementable steps to tackle both immediate and long-term challenges. These outputs not only offer tangible benefits for citizens and communities, but also lay the groundwork for sustainable, scalable solutions to the retrofit agenda.

Looking ahead, the power of collaboration remains central to our optimism for the future. We are committed to fostering even stronger partnerships, with government, industry, and all retrofit stakeholders, to ensure better outcomes for individuals and communities. By focusing on occupant health, building decarbonisation, and the creation of decent jobs while strengthening the skilled workforce, we aim to empower local communities in their role as change-makers. This approach will help build a nation where resilient neighbourhoods thrive, driven by collective action and shared expertise.



THE OPPORTUNITY

There are numerous opportunities within retrofit to drive significant outcomes, including the creation of high-quality jobs, improved health and well-being, and substantial social and economic value.

This document outlines how government can collaborate with industry to make these opportunities a reality.

JOBS

Historic England estimates that we need

86,000 new workers

every year to deliver Net Zero for England's Historic Buildings alone. [1]



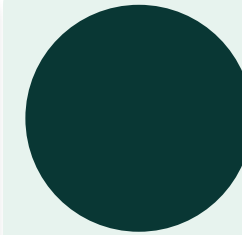
66%

Two thirds of employers

are struggling to recruit into roles that support the Net Zero economy. [2]

HEALTH

The BRE estimates that it costs the NHS **£1.4 billion per year** to treat people impacted by poor quality housing. [3]



28% of young people living in cold homes were found to have four or more negative mental health symptoms, compared with

4% of young people who had always lived in warm homes. [4]

In 2022, there were approximately **3,000 excess deaths** due to heatwaves.

These heatwaves will become more common, so providing overheating resilience in homes is crucial. [5]

VALUE



The wider societal costs, of poor quality housing including care, loss of economic potential, and poor mental health is around

£18.5 billion per year. [3]

The social benefits of the transition to Net Zero are even greater than the financial and carbon benefits, with

79%

of the benefits being social, or 'co-benefits'. [6]

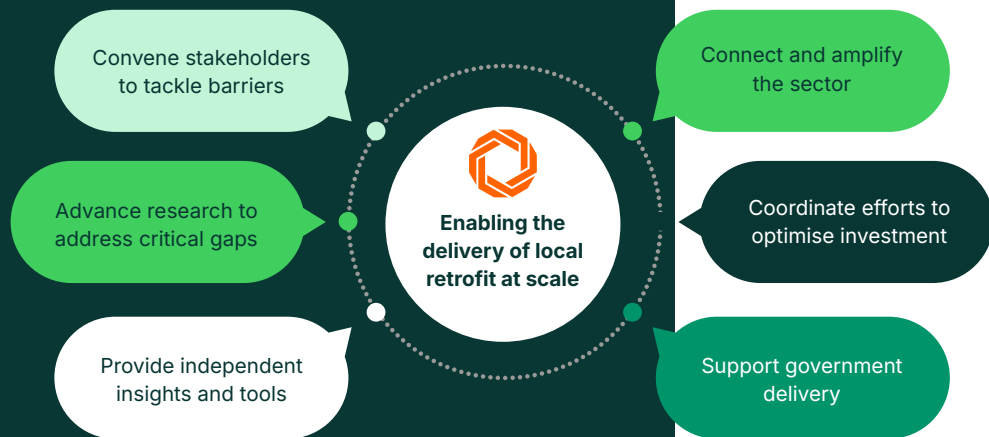


OUR ROLE

The National Retrofit Hub brings together all those involved in retrofit to collectively drive and accelerate the local delivery of retrofit at scale.

Through collaboration, evidence-based insights, and coordinated action, we work across industries to overcome barriers, optimise investments, and ensure long-term, impactful progress in decarbonising homes and buildings.

We do this through a unified approach, focusing on our role to:



OUR PURPOSE

We are an independent network focused on enabling the delivery of retrofit at scale. This means making it easier for everyone: communities, financiers, and professionals alike, to decarbonise homes and buildings.

Achieving success requires collaboration across the entire sector to address strategic gaps and stimulate economic growth.

We achieve this by providing the leverage, guidance, and infrastructure needed to align industry efforts, co-create solutions, and deliver actionable recommendations in collaboration with government and stakeholders.

Our work is underpinned by three core pillars—**Convene**, **Evidence**, and **Action**—that define how we address barriers, align efforts, and enable progress across the sector.

CONVENE

We deliver scalable, targeted solutions by overcoming barriers through convening stakeholders, fostering cross-sector collaboration, and co-creating actions that drive collective progress and long-term impact.

By bringing together diverse perspectives, from communities and industry to policymakers and financiers, we create the connections and shared understanding needed to unlock retrofit at scale.

EVIDENCE

We gather, distil, and build on evidence to ensure it is robust and actionable.

By synthesising complex information and answering critical questions, we provide insights that drive informed decisions and meaningful action, making them accessible and useful for those involved in delivering retrofit solutions.

ACTION

We enable action by stimulating growth and building resilience across the retrofit sector. This includes:

- Supporting the development of a skilled and adaptable supply chain by addressing gaps in capability, fostering innovation, and promoting training initiatives to meet retrofit demands.
- Shaping leadership and policy by providing evidence-based recommendations, facilitating dialogue between industry and government, and ensuring strategies are aligned with sector needs.
- Assisting government, local authorities, and organisations by offering guidance, tools, and insights that enable them to plan and deliver building upgrades efficiently and at the scale, pace, and quality required.

Through these efforts, we ensure the sector is equipped to deliver meaningful impact and sustained progress.



NATIONAL PROGRESS ON RETROFIT

The current state of retrofit delivery shows significant gaps, highlighting the scale needed to meet national targets.



- 11.8 MILLION HOMES ARE CURRENTLY BELOW EPC C

- 2.17 MILLION RETROFIT MEASURES HAVE BEEN DELIVERED SINCE 2013

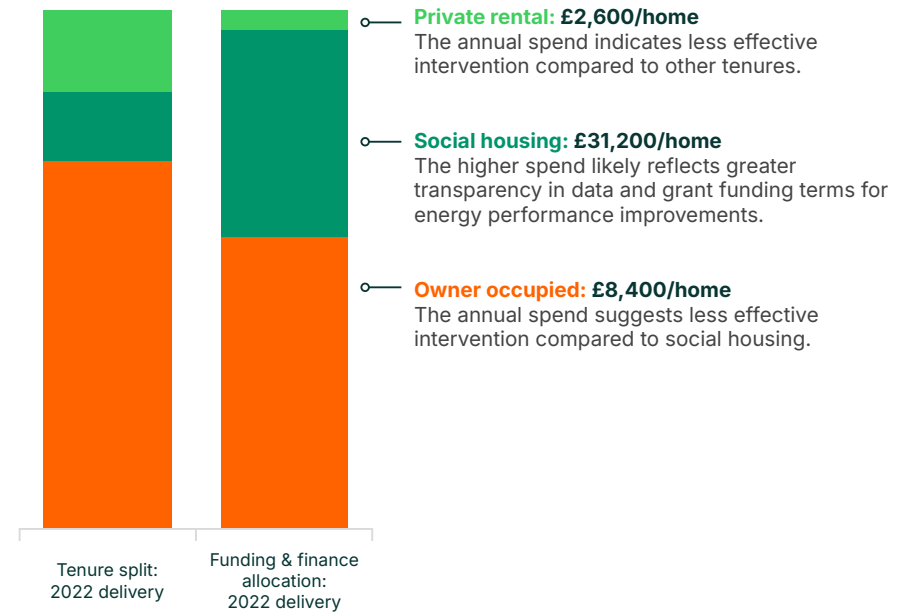
- 2.1 MILLION OF THOSE WERE THROUGH THE ECO (ENERGY COMPANY OBLIGATION) SCHEME

- 725,000 OF THESE ECO MEASURES WERE BOILER REPLACEMENTS

*Ratio of boiler measures based on national breakdown for England

DISPARITY ACROSS TENURES

What we are spending on different types of homes is uneven and inequitable. Some tenures are being left behind.



Source: SHDF1 Release February 2024; HULA Release February 2024; ECO energy efficiency statistics detailed report; BUS delivery statistics.



OUR KEY MESSAGES

Our key messages, based on insights from extensive stakeholder engagement, reflect the critical areas that will shape the future of retrofit in the UK.

Retrofit is a lever for economic growth and national prosperity.

There are a raft of benefits that can flow from the upgrade of the nation's homes and buildings, these are discussed in more detail on the next page.

Spend on retrofit should deliver better value.

Government funding needs to build capacity, skill and trust, while creating opportunities for private finance. More robust outcomes measurement, and better utilisation of data would ensure better value-for money.

The low carbon heat transition must be considered holistically.

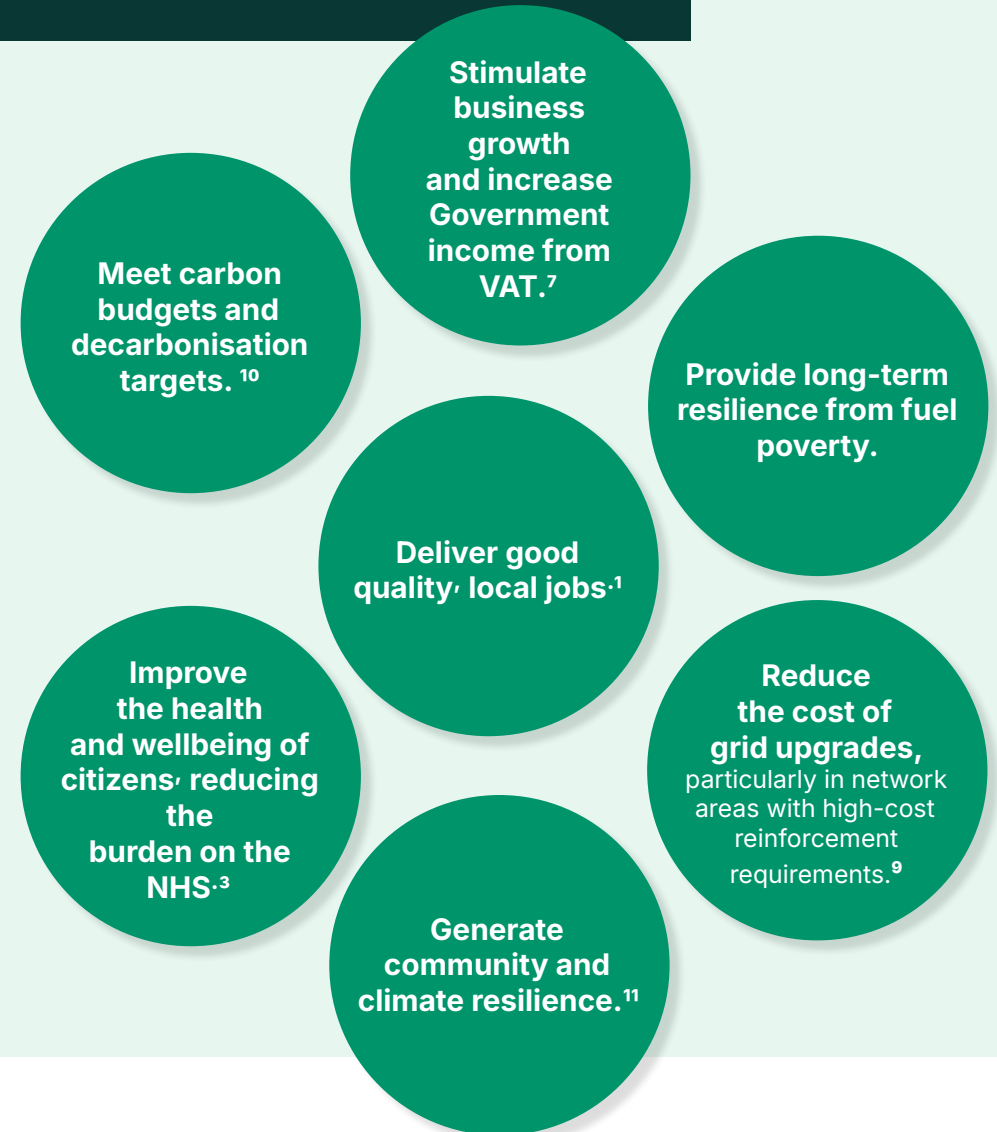
Fuel poverty, whole life carbon, health, thermal comfort, social justice and citizen readiness should all be considered, alongside contextual issues such as local climates and grid capacity.

Government must work together with existing retrofit organisations to develop, implement and deliver a National Retrofit Strategy.

The industry is ready to deliver on the complexity of retrofit, but requires a long-term vision for the upgrade of the nation's homes.

ECONOMIC GROWTH & NATIONAL PROSPERITY

RETROFIT COULD AND SHOULD:



DELIVERING THE BENEFITS OF RETROFIT

The approach we take to planning and delivering retrofit across the UK will influence the extent to which all the economic and prosperity benefits of retrofit are realised.

Here we explore three critical ways of thinking and acting, informed by our deep engagement across the retrofit sector, that can enable the maximum number of benefits to flow.



1 REFRAME CO-BENEFITS AS CORE BENEFITS

INSIGHT

- Retrofitting improves health and wellbeing, and improves climate resilience, while also reducing energy demand and the need for costly grid upgrades.
- We must frame these as primary benefits, rather than just co-benefits, to ensure full value is achieved.
- Retrofit then becomes a smart, multifaceted solution to societal and infrastructure challenges.

NRH ACTIONS

- We are currently working with collaborators on more effective and holistic outcomes measurement and reporting, to ensure that the benefits of retrofit projects are accurately understood and quantified.
- Our EPC reform recommendations position health, resilience and demand management as essential performance metrics for buildings.

OPPORTUNITY FOR GOVERNMENT

- Co-create programmes, which target the full range of retrofit benefits, and unlock private finance.
- Support place-informed decision making regionally, to demonstrate how low running costs, healthy indoor environments, ethical supply chains, and a resilient grid are achieved as part of the journey towards Net Zero.

2 DESIGN POLICY TO BUILD CAPACITY, SKILL AND TRUST IN THE WHOLE SECTOR

- Government grant funding can be a vehicle to build retrofit capacity, skill and trust in the existing Repair, Maintenance and Improvements (RMI) sector.
- Schemes should be designed to lead best-practice, and build industry competence in: resident engagement, Quality Assurance, at-scale delivery and outcomes evaluation.

- Our 'State of the Nation' revealed missed opportunities to tailor grant-funded projects to enable engagement and delivery by existing SMEs and One Stop Shops.
- Our Digital Building Logbooks Explainer & Data Matrix, and Archetypes Library & Best Practice Guide are two tools to help aggregate and scale delivery.

- Work in partnership with industry, to co-author a National Retrofit Strategy and set a clear 10-year policy direction, positively influencing business investment and unlocking private finance.
- Support SMEs, though delivery within grant-funded schemes, helping them to grow and develop to deliver high-quality retrofit, at scale for the private financed market.

3 RECOGNISE THE POTENTIAL OF PLACE-BASED AND COMMUNITY-DRIVEN APPROACHES

- Retrofitting at the neighbourhood level builds community resilience and addresses climate change.
- Existing community groups are already engaging in retrofit, demonstrating the trust they hold locally is invaluable in informing successful projects.
- However, these groups are under-resourced and under-supported.

- We are working with existing community groups to ensure they are resourced and supported to engage actively with retrofit in their local areas.
- Our support helps them learn from the successes of other groups, and build long-term sustainability.

- Strategically invest in skills and reform procurement processes to both prioritise the inclusion of diverse groups, SME's and local delivery and ensure the creation of real social value outcomes.
- Prioritise the creation of local job creation, ensuring that all communities have the opportunity to participate in, and benefit from, this transformation.

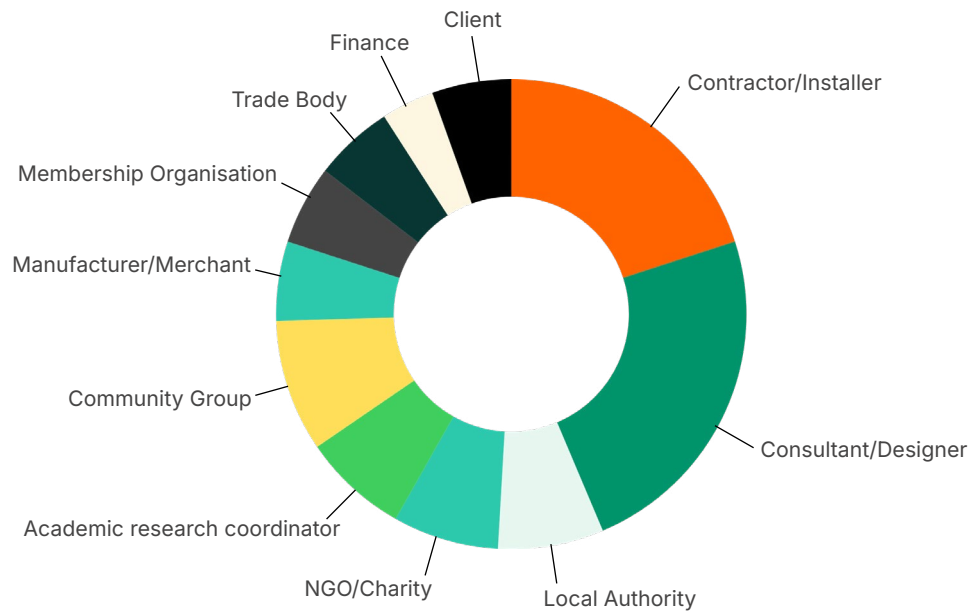


THE WORK OF THE NATIONAL RETROFIT HUB

We engage with over 650 industry professionals, across 6 working groups, to draw together insights and produce actionable outputs. The next few pages give a brief summary of our outputs to date, the missions of our working groups, and how to get involved.

Our work is enabled by our diverse network of participants, representing the following sectors:

WHO WE ARE - OUR NETWORK



Over 8,000 views from professionals across the UK of our key resources



View resources online here:

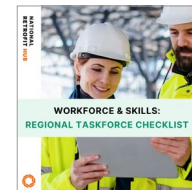
OUR KEY RESOURCES

We don't just talk – we produce real, actionable resources that are shaping the future of retrofit. These, and more, are available in our online Knowledge Hub.



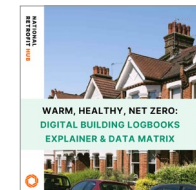
Training & Qualifications Map

Publicising retrofit qualifications available throughout the UK.



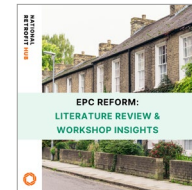
Regional Taskforce Checklist

Strengthening connections between retrofit delivery and economic development programmes.



Digital Building Logbooks Explainer & Data Matrix

Laying the foundation for future ready homes.



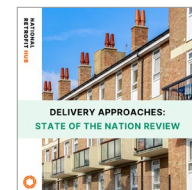
EPC Reform Insights

Shaping the future of energy performance certificates.



Retrofit Advisory Services for Local Authorities

Helping local authorities efficiently deliver retrofit.



Delivery Approaches: State of the Nation Review

Evaluating the progress the UK has made in delivering retrofit.



Archetypes Library & Best Practice Guide

Unlocking scale and enabling stepped approaches.



OUR WORKING GROUPS - MAKING IT HAPPEN

The NRH leads six working groups, each focused on tackling key challenges in retrofit:



650+

EXPERTS PARTICIPATING IN OUR WORKING GROUPS.

WORKING GROUP 1

Warm, Healthy, Net Zero Homes

- Providing **access to data, tools, and design guidance** to ensure high-quality, scalable retrofits.
- Exploring **methodologies for retrofit project engagement** and aggregation, and producing best practice guidance.
- Ensuring **quality assurance** in every project and reviewing the uptake of retrofit standards.

WORKING GROUP 2

Supply Chain, Products & Solutions

- Delivering a **solution-agnostic approach** to products, technologies, and services.
- Overcoming **barriers to supply chain** efficiency and innovation.
- Supporting the development of **new products and technologies** that meet retrofit needs.

WORKING GROUP 3

Workforce Growth & Skills Development

- Embedding **baseline retrofit skills** across all levels of construction training.
- Agreeing on **occupational standards** to ensure consistency in retrofit practices.
- Supporting **procurement** and enhancing opportunities for **SMEs** within the retrofit sector.

WORKING GROUP 4

Finance

- Co-designing **financial solutions** that work for all people, buildings, and tenures.
- Creating **policy incentives** to support the adoption of retrofit.
- Encouraging banks and building societies to take an active role in **understanding and supporting** residents through the retrofit process.

WORKING GROUP 5

Delivery Approaches

- Mapping the current state and **scale of retrofit delivery across the UK**, in the context of government targets.
- Focusing on the **resident journey** and defining the keys to successful delivery.
- Developing **just delivery models** that work across all housing types and tenures.
- Providing access to **delivery support** and advocating for community engagement throughout the process.

WORKING GROUP 6

Driving Uptake

- Empowering organisations to **increase awareness of the importance and benefits of retrofit** as well as demand among homeowners, tenants, and businesses.
- Promoting **collaboration within the construction** and retrofit sectors to create a unified approach to retrofit communications.



SUPPORT THIS MISSION

There is a role for everyone to play in delivering the myriad benefits set out in this document, from Government to industry, and beyond. Our three top asks are:

TO GOVERNMENT

Co-create a 10-year actionable Retrofit Strategy with the NRH to stimulate growth, create jobs, address fuel poverty and deliver better health outcomes whilst driving a just energy transition.

TO GOVERNMENT & INDUSTRY

Fund our work or specific work packages that we can deliver for you - we are a not-for-profit, focussed, evidence based, critical-friend, motivated to deliver retrofit objectives that we share already with government and industry.

Work with the NRH today and benefit from our experience of 2 years of extensive retrofit stakeholder engagement to rapidly develop actionable policy based on insight and evidence.

REFERENCES

- [1] Historic England: Delivering Net Zero for England's Historic Buildings: Local Data on the Demand for Retrofitting Skills and Economic Growth
<https://historicengland.org.uk/advice/climate-change/delivering-net-zero-local-data-demand-for-retrofitting-skills/>
- [2] Groundwork: 'Growing Green Careers', Apr 2022.
- [3] BRE: The cost of poor housing in England by tenure:
https://bregroup.com/documents/d/bre-group/bre_cost-of-poor-housing-tenure-analysis-2023-pdf#:~:text=The%202021%20research%20found%20that,%C2%A318.5%20billion%20per%20annum.
- [4] Public Health England: Local Action on health inequalities
https://assets.publishing.service.gov.uk/media/5a7db875e5274a5eb14e6c73/Briefing7_Fuel_poverty_health_inequalities.pdf
- [5] UK Parliament POST: Public health impacts of heat
<https://researchbriefings.files.parliament.uk/documents/POST-PN-0723/POST-PN-0723.pdf>
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<https://link.springer.com/article/10.1007/s13412-024-00955-9>
- [7] The UKGBC Home Retrofit Investment calculator models the government's return on investment for different retrofit investment scenarios:
<https://ukgbc-calculator.thermly.co.uk/>
- [8] Institute of Health Equity: Left Out in the Cold: The Hidden Impact of Cold Homes
<https://www.instituteofhealthequity.org/resources-reports/left-out-in-the-cold-the-hidden-impact-of-cold-homes>
- [9] The DEFENDER research project considered the benefits of energy efficiency measures to energy networks.
<https://www.nationalgrid.co.uk/innovation/projects/demand-forecasting-encapsulating-domestic-efficiency-retrofits-defender>
- [10] The CCCs 6th Carbon budget includes, within the Balanced Pathway, the upgrade all buildings to EPC C over the next 10-15 years.
- [11] Civic Square: 3degree Neighbourhood
<https://medium.com/neighbourhood-public-square/3%C2%BAC-neighbourhood-582903b050b2>



CONTACT US

If you would like to learn more or arrange a call to discuss further, please **get in touch** via:

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 [National Retrofit Hub](#)

