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Place-based Public Procurement for a Low- Carbon Future: Regional Economic Impacts of Retrofitting

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Place-based Public Procurement for a Low-Carbon Future: Regional Economic Impacts of Retrofitting

The UK Government is committed to achieving net zero by 2050, and a part of its roadmap to get there involves retrofitting housing stock to EPC Band C or above to reduce housing emissions. There is significant regional variation in progress towards achieving EPC Band C and above for all housing. At the current pace of change, most regions will fail to reach this target within the century, let alone by 2050.

Local, place-based public procurement presents a major economic growth opportunity for the West Midlands. By strengthening regional supply chains for green retrofit delivery, the region has the opportunity to retain far more value—boosting output, GVA and jobs—while accelerating progress toward net zero and reducing economic leakage from retrofit investment.

This report uses the case study of the West Midlands to understand the scale of increased investment necessary to achieve EPC band C or above within accelerated timeframes. Without significant acceleration, the West Midlands region and most of England's regions will fall short of the 2030 and 2050 retrofit targets.

Our analysis shows that:

- Achieving net zero in the West Midlands by 2050 requires £12.2bn of investment, rising to £21.2bn under an accelerated 2040 pathway.
- This could generate £16.8–£22bn in UK economic output and support 102,000–135,000 FTE jobs (SEIM-UK model).
- If delivery prioritises local supply chains, the West Midlands' economic benefit could rise from £3.3bn to £14.5bn in output and 99,000 jobs would be created, with 87,000 (88%) retained within the region.

However, the ability to capture these benefits depends on the region's absorptive capacity, which means its skills base, supply chain strength, and innovation potential. Targeted investment in skills, supply-chain development, and green innovation, especially across construction and professional services, will be essential to close these gaps and to ensure that the retrofit transition delivers sustained economic, social, and environmental returns.

Introduction

The UK government has committed to achieving net zero carbon emissions by 2050. Housing accounts for approximately 17% of the UK's total greenhouse gas emissions (CCC, 2024) and heating and powering buildings account for 30% of the UK's total energy use (Franks, 2023). The **UK Net Zero Strategy**, published in 2021, outlines the government's roadmap for achieving net zero through improving the energy efficiency of homes and buildings (Government, 2021), including:

- All social housing to reach EPC Band C by 2030, improving insulation, heating systems, and ventilation.
- A long-term target to phase out gas boilers in homes by 2035, encouraging the adoption of low-carbon heating solutions such as heat pumps.
- Increased public investment in retrofitting schemes, particularly for low-income and vulnerable households.

Beyond its environmental objectives, increased investment in retrofitting through procurement has the potential to generate significant economic and social benefits. These include job creation, stimulating local demand, and improving residents' well-being and living conditions in social housing. Additionally, by creating demand for new technologies and services, retrofitting procurement can serve as a catalyst for innovation, unlocking further economic value.

Procurement in retrofitting will play an important role in realising the opportunities for job creation and economic growth it presents. Existing initiatives, including the Warm Homes Plan and the Social Housing Decarbonisation Fund (SHDF), have demonstrated their ability to facilitate retrofitting in social housing.

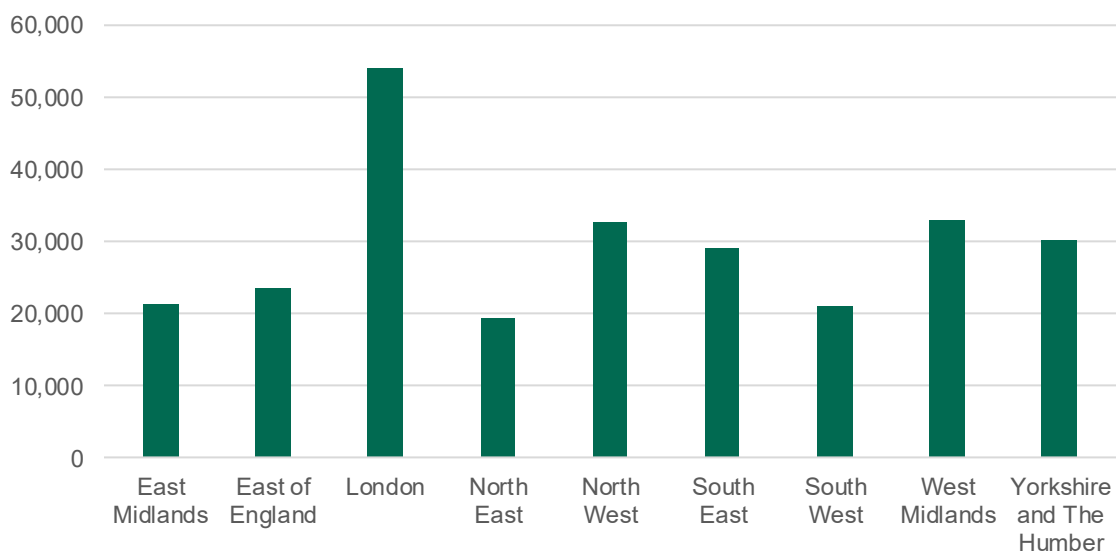
This research seeks to explore the economic implications of public procurement investments in net zero retrofitting. The report seeks to understand how policies aimed at accelerating the net zero transition by expanding procurement activity will impact the regional and national economy in terms of output (GVA- Gross Value Added) and employment, using the West Midlands region as a case study.

Regional comparison

The West Midlands region faces significant challenges in improving the energy efficiency of its housing stock, with approximately 2.55 million homes across the region. Of these, 18% (470,000 homes) are social homes, while 82% (2.08 million) are privately owned. The region's housing stock varies in age and condition, contributing to energy inefficiencies that require targeted retrofitting to meet the UK's net zero targets.

Figure 1 presents the estimated number of homes that would need to be retrofitted annually in each region to meet the EPC Band C target by 2030. The scale of the required delivery highlights the magnitude of the challenge across all regions, particularly those with large and older housing stocks.

Figure 1: Estimated Number of Homes That Would Need to Be Retrofitted Annually in Each Region to Achieve the EPC C Target by 2030



Source: Own Calculations

Policy efforts and funding initiatives, such as the SHDF and other grant schemes, will be crucial in addressing these inefficiencies. Figure 2 presents the average number of homes retrofitted annually across different regions of England since SHDF began in 2022. We have included the upgrades under both Waves 1 and Wave 2 since the retrofitting activities overlap across the waves. The average number of homes retrofitted varies significantly across England, ranging from just 385 in the South West to 1,577 in Yorkshire, highlighting the considerable regional disparity in retrofit activity.

Figure 2: Number of Homes Retrofitted Annually under SHDF for all Regions in England



Source: <https://www.gov.uk/government/statistics/social-housing-decarbonisation-fund-statistics-february-2025>

The gap between current and required delivery is large in all regions, but particularly pronounced in regions with large, older housing stocks such as the West Midlands. This highlights that, without a major acceleration in retrofit delivery, most regions are unlikely to meet the 2030 target, and many will remain off-track even for 2050.

The regional economic impact of net zero retrofitting policies

This report uses the SEIM-UK, a macro multi-regional input-output (MRIO) model developed by City-REDI to evaluate changes in regional economies within the UK. In 2022, a total of 19 procurement contracts for social housing retrofitting were awarded, worth £311 million (Rafique and Yuan, 2025). Suppliers span the UK, while only a small proportion of contracts are awarded to firms based in the West Midlands, risking the benefits of retrofitting procurement not being retained within the West Midlands.

Policy Scenarios

To capture the economic impact of the retrofitting project, three scenarios were designed to show three different potential policy pathways:

- a. Business as Usual:** Retrofitting continues at its current pace. Under this trajectory, the West Midlands is unlikely to meet the net zero target by 2050.
- b. Net Zero by 2050 Scenario:** This scenario assumes the region aligns with the national target of achieving net zero by 2050.
- c. Net Zero by 2040 Scenario:** An accelerated pathway in which the West Midlands achieves net zero a decade earlier.

For context, while annual retrofit procurement in 2022 was approximately £311 million, the average annual investment required rises to £560.8 million under the Net Zero by 2050 pathway and £623.3 million under the Net Zero by 2040 pathway (Table 1). This highlights a substantial and persistent funding gap relative to current delivery levels.

Table 1: Investment Requirements of the Policy Scenarios

	Average Cost Per Year (£m)	Total cost (£m)
Business as usual	167.3	2677.2
Net Zero by 2050	560.8	8972.3
Net Zero by 2040	623.3	9972.6

The role of procurement strategy

To assess the importance of place-based supply chains, each scenario is modelled under two alternative procurement approaches:

- **Hands-off procurement:** No policy intervention to steer contracts towards local or regional suppliers.
- **Local procurement:** A place-based strategy in which supply chains are increasingly localised to maximise regional economic retention and spillovers.

The results are presented in Table 2.

Business as Usual (BAU):

- Under a hands-off approach, this scenario is expected to generate £5.6 billion in output, £3.2 billion in GVA, and 34,000 FTEs across the UK, of which the West Midlands captures £1.1 billion in output, £0.4 billion in GVA, and 7,000 FTEs.
- Under the local procurement approach, the impact on the West Midlands increases markedly to £4.9 billion in output, £2.8 billion in GVA, and 29,000 FTEs, a regional gain of £3.7 billion in output, £2.4 billion in GVA, and 22,000 FTEs.

Net Zero by 2050:

- Under a hands-off scenario, this investment scenario generates £18.9 billion in output and 113,000 FTEs. The West Midlands share rises from £3.7 billion in output and 22,000 FTEs.
- Under a local procurement approach, the regional impact increases to £16.3 billion in output, £10.4 billion in GVA, and 96,000 FTEs.

Net Zero by 2040:

- Under the Hands-off procurement, retrofitting procurement generates the largest overall impact nationally, with £20.9 billion in output, £11.9 billion in GVA, and 127,000 FTEs. The West Midlands captures £4.2 billion in output and 25,000 FTEs.
- Under the local procurement, benefits occurred in the West Midlands reaches £13.9 billion in output, £8 billion in GVA, and 83,000 FTEs—a substantial uplift compared with the hands-off scenario.

Table 2: The Regional and National Economic Impact of Different Public Procurement Strategies (Cumulative from 2025 to 2040 Inclusive)

		United Kingdom			West Midlands		
		Output	GVA	Employment	Output	GVA	Employment
Hand off procurement							
	BAU	5.6	3.2	34,000	1.1	0.4	7,000
	Net Zero 2050	18.9	10.7	113,000	3.7	2.1	22,000
	Net Zero 2040	20.9	11.9	127,000	4.2	2.4	25,000
Local procurement							
	BAU	5.6	3.2	32,000	4.9	2.8	29,000
	Net Zero 2050	18.9	10.7	109,000	16.3	9.4	96,000
	Net Zero 2040	21.0	11.9	123,000	18.1	10.4	108,000
Difference							
	BAU	0.0	0.0	-2,000	3.7	2.4	22,000
	Net Zero 2050	0.1	0.0	-4,000	12.5	7.2	74,000
	Net Zero 2040	0.1	0.0	-4,000	13.9	8.0	83,000

N.B: Output and GVA figures in £ billions. Employment figures are FTE rounded to nearest 1,000

Source: SEIM-UK

These results demonstrate that procurement strategy is as important as investment scale in determining regional economic outcomes. While higher retrofit ambition increases total national benefits, without deliberate place-based procurement, most of the economic value leaks out of the West Midlands. Conversely, a local supply-chain strategy transforms retrofit from a decarbonisation programme into a major regional growth and jobs strategy.

In short, net zero delivery choices will shape not only carbon outcomes, but also the geography of economic growth, jobs, and industrial capability.

Conclusion

The analysis confirms that, at the current pace, most regions, including the West Midlands, are not on track to meet the government's EPC Band C target by 2030. The scale of retrofit activity and funding through the SHDF remains insufficient to meet these ambitions. Despite having a large stock of inefficient social housing, the West Midlands ranks among the weakest performers in retrofit progress.

Key findings:

- In 2022, retrofitting procurement in the West Midlands area totalled approximately £311 million, with most contracts awarded to suppliers in the construction and professional, scientific and technical activities sectors. However, the majority of these suppliers are not headquartered in the West Midlands, potentially limiting the extent to which economic benefits are retained within the region.
- Three scenarios were modelled to demonstrate the scale of investment required: Business As Usual, Net Zero by 2050 and Accelerated Net Zero by 2040
- For the government to achieve its 2050 net zero target, an annual investment of £9 billion is required during the period of 2025 to 2050. For the more ambitious 2040 target, an annual investment of £10 billion is required, bringing the total investment to £10 billion. This reveals the potential funding gap to achieve net zero target,
- The potential economic impact of investment could be significant, representing (GVA and FTEs).
- If local suppliers are used the economic impact could be very significant for the region, contributing to other government policy objectives to reduce interregional inequality. The scale of the regional impact could be (GVA and FTE)

While the results highlight substantial economic benefits from retrofitting investments, the lack of investment constitutes a major challenge. However, according to patent data, the West Midlands has a comparative advantage in green technologies, positioning it well to accelerate retrofitting activity and maximise local economic returns.

To maximise the economic and social benefits of retrofitting, public procurement must be designed to meet climate targets and foster innovation, support workforce development, and strengthen local supply chains. A more integrated policy approach that aligns procurement, innovation, and skills will be key to unlocking the full potential of retrofitting as a driver of regional economic transformation.

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