

The challenges, insights and evidence gaps of retrofit

A case study from the private rental sector



The Let Zero project

Let Zero is a service which aims to improve housing in the private rented sector

April 2024 to September 2025

InnovateUK funded service development & pilot

October 2025 onward

Further 6 months funding confirmed to develop Let Zero

Preparing to enter a **growth phase**



The customer journey

- Recruit landlords via marketing and Energy Cafés
- Portfolio Review
- Retrofit Assessment of properties
- Retrofit Scenarios report
- Initial funding scoping based on tenant eligibility
- Discussion with landlord about preferred improvements
- Home Action Plan report
- Connecting landlords to trusted installers

The properties



Challenges

- Many properties with traditional solid brick construction or non-traditional forms such as system build
- Tenants unfamiliar with heating and ventilation systems, and not using them properly
- Landlords not always aware of maintenance issues until there is a serious problem or carries out work incorrectly to minimise costs
- Landlord and tenant improvement regimes not synchronised
- The onus is on the landlord to invest but it's the residents who benefit – different dynamic compared to owner occupied investment



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Insights

- Need to understand the landlord's and tenants' motivations and limitations and work together to find a solution that benefits everyone
- Educating tenants on how to use their home is vital – even things as simple as the need to open windows and not turn off continuous ventilation systems
- Educating tenants on recognising when something is failing helps to prevent problems e.g. inadequate ventilation, leaks, rising damp etc



Evidence gaps

- The following are not routinely undertaken
 - air tightness testing
 - monitoring relative humidity, temperature and indoor air quality levels
 - measuring actual energy use (pre- and post-retrofit) – energy use is measured by pre- and post- EPCs
- The value of λ need for controlled ventilation in properties that already have a high level of uncontrolled ventilation (e.g. traditional / historic properties)

Score	Energy rating	Current	Potential
92+	A		
81-91	B		82 B
69-80	C		
55-68	D	66 D	
39-54	E		
21-38	F		
1-20	G		

Recommendations

- More detailed building performance evaluation should become the norm
- Landlords and tenants need to work together to understanding the properties they own and occupy
- Further research is needed to understand retrofit in historic buildings, focusing on ventilation as well as fabric, heating and renewable technologies