

Osborne

# Six Reasons to Focus on Energy Efficiency Rather than Renewables

The vision for net zero carbon housing is clear: Homes will be exceptionally well insulated so that they can be powered entirely by renewable energy.

Instead of gas boilers there will be heat pumps and district heating systems powered by solar, wind and other carbon free generation.

The pathway to get there for over four million social homes presents choices - and plenty of complexity. Do you work property-by-property, carrying out deep retrofits? Or do you take a more pragmatic, phased approach?

Osborne believes there are six big reasons to be pragmatic and prioritise improving energy efficiency across the entire stock. Here's a summary of those reasons.





## The 2030 Deadline

Before we get to the 2050 net zero target, there's the vital intermediate deadline of ensuring all social homes achieve EPC Band C by 2030. Evidence suggests that most social housing providers are a long way from meeting this objective. In many cases planning is still at an early stage.

The **English Housing Condition Survey** of 2019 reported that 44% of social homes were rated D or lower. Many providers also admit that their stock condition data is incomplete - so the real number may be higher. Realistically, many providers won't have the financial resources to hit the 2030 target while simultaneously fitting solar PV and heat pumps to large numbers of properties.

## The Energy Crisis

Wholesale energy prices may have peaked but no analyst believes they will return to pre 2022 levels for the foreseeable future. Residents in poorly insulated, draughty homes will continue to struggle to heat their homes adequately.

With this comes the risk of damp, mould and associated health problems. Making home insulation the priority could provide relief for millions of social housing tenants and help prevent issues with meeting the Decent Homes Standard.

## Environmental Impact

The average UK home produces over **8 tonnes of carbon dioxide** per year. If we were able to halve that amount for the approximately 2m social homes that urgently need better insulation it would cut UK emissions by over 8M tonnes per year. With the will and resources, that's a tangible benefit we could achieve within a few years.

Of course, replacing every gas boiler with a heat pump will eventually have a bigger positive environmental impact. But heat pumps need well-insulated homes to be effective. Also, the electricity grid isn't ready to replace the peak energy load currently met by gas.





## Technology Will Improve

Not so long ago people were replacing incandescent light bulbs with mini fluorescent tubes. This made sense as they consume about 75% less energy. Now, if you visit your local recycling centre you'll see dozens of these tubes that have presumably been replaced with even more efficient LED bulbs.



The history of technology shows that performance improves and costs come down over time. That's not to say that we should wait for the perfect low carbon heating technology before acting, but it's a factor in immediate priority-setting.

## Skills

The workforce needed to install low carbon heating systems to millions of UK homes doesn't yet exist. On the other hand, installing loft, wall and floor insulation, and replacing doors and windows is technically more straightforward.

It's more feasible to rapidly build capacity in these areas. This would also deliver a substantial social value boost through local job creation.

## Supply Chains

A similar argument can be made for the supply chains needed to deliver low carbon heating technology on the scale needed in the UK. These will eventually emerge. But social housing residents need help urgently.

Accelerating home insulation programmes is a practical and deliverable option right now. A more measured approach to expanding capacity in, for example, heat pump installations will help ensure that high quality standards are maintained.

## What Next?

Zero carbon retrofit is a multi-faceted issue. There are many elements that need to be planned and coordinated. The details of the property type, age and condition determine the most effective approach.

But while there will be some instances where a deep retrofit to zero carbon performance makes sense, the reality for most is that a phased approach will deliver a more effective balance of short and long-term benefits. It's also important to remember that improving home insulation now can be done in a way that's completely compatible with the net zero target.

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For ideas about how to increase the rate of progress towards net zero carbon social housing visit [our resource centre](#). Or contact Nick Davidge [nick.davidge@osborne.co.uk](mailto:nick.davidge@osborne.co.uk)

