

A Summary Briefing

Future Homes - Electrical Safety in the Net Zero Home Growing the Installer Base

The UK has set climate change targets which will mean an inevitable change to our housing stock and the way we use energy. However, we must ensure that this does not come at the expense of consumer safety.



Introduction

Electrical Safety First is the UK charity dedicated to reducing deaths and injuries caused by electrical accidents. Our report focuses on some of the technologies that may be present within the home of the future, the potential electrical safety risks that may be associated with the net zero transition and recommendations to mitigate them.

This summary focuses specifically on the safety risks outlined in the report that may be associated with the transition to a low carbon future in relation to **growing the installer base**.

To read the full report visit:

www.electricalsafetyfirst.org.uk/futurehomes



What Does the Future Home Look Like?

A net zero ready or future-proofed home is likely to consist of a highly insulated building fabric and include many technologies and solutions that are not commonplace within the UK today. Features may include low carbon heating, on-site renewable electricity generation and highly efficient building services installed to make homes comfortable and functional, such as improved ventilation and lighting. It is also increasingly likely that many homes will have an electric vehicle and associated on-site charging.

This summary details safety risks that may be associated with growing the installer base and recommendations to mitigate them.

Growing the Installer Base

It is paramount that the tradespeople supporting the net zero transition are upskilled to a high standard to ensure they are competent and possess the skills required to install measures whilst minimising any risk of unintended consequences.

Installers need to assess and minimise safety risks, advise consumers on operation and maintenance and understand how technologies interact, as well as ensure that systems are installed to a high standard.

The shortage of registered electricians and suitably qualified and competent heat pump engineers presents a significant challenge. Barriers to upskilling faced by electricians and heating engineers must therefore be addressed to ensure high quality installations and prevent a situation whereby homeowners are exposed to unnecessary risk due to poor installation practices or unavailability of specialised and certified installers.

A clear and consistent policy framework is needed to provide individuals and enterprises with the confidence to upskill and invest to deliver high quality installations of low carbon and energy efficiency measures and support the retrofit of the UK's building stock. It is essential that all competent tradespeople are held to consistently high standards and that there are not discrepancies in the level of service provided to customers depending on the solution installed or source of funding.

Risks	Recommendations
<p>The Climate Change Committee has noted that “the chopping and changing of government policy has inhibited skills development in critical areas. Without certainty and in the absence of regulation, monitoring and enforcement, essential investment will not be made and inexperienced and unqualified individuals could present significant risks to safety if allowed to operate in the industry to meet increasing demand.</p>	<p>Government should introduce a clear and consistent policy framework to provide industry with long-term certainty of demand and encourage investment in upskilling.</p>
<p>Research suggests that even if an additional 5,000 new apprentices qualify by 2023 (a 33% increase from today), there will be a significant shortfall in registered electricians. Furthermore, whilst the Heat Pump Association has advised that 69,500 heat pump engineers could be required by 2035, currently less than a thousand are trained.</p>	<p>Government should introduce grants and/or tax incentives to encourage individuals or enterprises to upskill and enter the low carbon market.</p>
<p>A rapid growth in demand may lead to an influx of rogue traders or installers who do not have the skills and training required to deliver high quality installations. This would put the safety of customers at risk.</p>	<p>Education authorities and training providers should continue to develop high quality training courses and regulated qualifications to support the upskilling of professionals. New and existing apprenticeship standards should also incorporate energy efficiency/low carbon content. This could be supported via a combination of current and additional government funding.</p>
<p>Although anyone can use a TrustMark/MCS installer, which is a requirement for government funding, not all installers are TrustMark and/or MCS certified and not all adhere to PAS2035. This creates a disparity across the sector and could put consumers who self-fund measures at risk if they do not use competent tradespeople.</p>	<p>As the market grows, Government should introduce minimum installation quality standards across the whole industry.</p>

Conclusion

There is a risk that a rapid growth in demand for low carbon heating installers and electricians will lead to unqualified and incompetent individuals operating in critical areas of the industry. This could present significant safety risks for consumers.

Steps should therefore be taken to develop the skills base so that low carbon measures can be installed safely. The Government should introduce minimum installation quality standards across the industry and put in place a clear and robust policy framework supported by grant/tax incentives to encourage individuals to take up additional training. Education and training providers should also continue to develop and provide high quality training opportunities, supported by government funding.

Contact Us

To discuss any of the recommendations detailed in this summary or in the wider report, please contact the Electrical Safety First team.

Email: policy@electricalsafetyfirst.org.uk