

# Additional written evidence submitted by Electrical Safety First (DHH0146)

## 1. Introduction

- Electrical Safety First is the only UK charity dedicated to reducing deaths, injuries and fires caused by domestic electrical accidents. **Every year, thousands of people are injured in their homes due to electrical accidents and incidents, and some tragically lose their lives in fires caused by electricity.**
- We welcome the BEIS Select Committee Inquiry on decarbonisation of homes, and how the Government's net zero target will be achieved by decarbonising all buildings by 2050. **As the Committee considers how to engage and protect consumers in the transition to low carbon domestic heat we urge it to give consideration to the implications for the safety of consumers.** We do not believe that sufficient consideration is being given to safety issues with respect of the transition to net zero, and the successful decarbonisation of homes

## 2. Why is electrical safety important as part of 'net zero'?

- The Government's target for 'net zero' greenhouse gas emissions by 2050 has significant implications for the future use of electricity. As heat accounts for over a third of the UK's greenhouse gas emissions, meeting these targets will require the decarbonisation of heat and a move to new lower carbon technologies, such as electric heat pumps will see a growing reliance on electricity to heat people's homes. One of the biggest issues for the UK will be ensuring that the decarbonisation agenda considers electrical safety right from the outset.
- Whilst new build homes should be built to the Future Homes Standard, with systems that can cope with the electrification of heat, existing housing stock will prove more of an issue. A big consideration for any retrofit programme will be whether the existing housing stock will be fit for the demands placed on the electrical installations, and relatedly, how to ensure the safety of owners/tenants, through new regulations and educational programmes, as unfamiliar modes of heating are introduced.

## 3. Current issues with electrical safety that need to be addressed to achieve net zero

- In order to achieve net zero, the UK needs to resolve legacy problems with electrical safety in domestic homes that will ensure that consumer live in homes that are safe and do not create a future that is further unsafe by the increasing use of electricity. **The UK Government as part of its net zero strategy needs to have electrical safety in domestic homes at the forefront of policy development.**
- **Electricity regulation lags behind gas.** Electricity causes more than 14,000 domestic house fires a year – almost half of all accidental fires. Decarbonising heating within homes, will have an impact as increased electrical usage will increase the risk. For over 20 years, landlords across all sectors have been subject to the Gas Safety (Installation and Use) Regulations, which requires an annual gas check. Yet in 2019-20, six times more fires in

England's homes were caused by electricity than by gas and but current legislation leaves renters with different tenures varying levels of protection from electrical risk.

- **Decarbonisation means that the UK's housing stock will need to be retrofitted and wiring installations future proofed.** Homes built before 1919 are already identified as having a high risk of fire<sup>ii</sup> often due to older electrics. In order to meet net zero some homes across the UK will need to have their electrical safety improved. According to the Independent Committee on Climate Change, it costs £4,800 to install low-carbon heating in a new home, but £26,300 to retrofit an existing house<sup>iii</sup>. However, there is no clear strategy on support for consumers to meet these costs, yet it is imperative that electrical installations in homes are safe and able to cope with new low carbon heating. The figures below show fires caused by wiring in England since 2015 – without improvements to electrical installations, the transition to net zero will likely increase these numbers : -

Year	Number of Fires attributed to domestic wiring in England
2019-20	1,672
2018-19	1,597
2017-18	1,745
2016-17	1,724
2015-16	1,694

#### 4. Our 5-point action plan for Electrical Safety to ensure safer increased use of electricity

We ask that the BEIS Select Committee considers the following in order to achieve successful and safe decarbonisation of heat for consumers across the UK: -

- **The Government must introduce a strategy to take all necessary steps to maintain electrical safety as a priority matter.** The desire for a speedy transition to a Net Zero state is welcome but cannot be allowed to compromise safety in any way and so the Government must act to guarantee a robust and well-resourced consumer safety environment.
- **Mandatory 5 yearly electrical safety checks which are already in place in the private rented sector should be extended to cover the social rented sectors and in all tenures in High Rise Residential Buildings (HRRBs).**
- **Better data needs to be collated by respective UK Government and Devolved Administration Housing Surveys** to understand the age of wiring in UK Homes to assess the need for remedial action for increased electrification in UK Homes.
- **UK Government schemes introduced to incentivise low carbon heating need to support electrical improvements where there is a need to upgrade electrical installations.**

- **An educational campaign on electrical safety by the expansion of the ‘Fire Kills Campaign’ to include important advice for consumers.** Electrical Safety First has been supporting and promoting consumer facing online campaigns for many years, as a means to helping the public understand and mitigate risks and to make the safest choice when choosing tradespersons to perform domestic electric work.

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<sup>1</sup> Electrical Safety First analysis of Home Office Statistics 2018-19 <https://www.electricalsafetyfirst.org.uk/what-we-do/our-policies/westminster/statistics-england/>  
<sup>2</sup> English Housing Survey [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/445702/EHS\\_Fire\\_and\\_fire\\_safety\\_2013-14.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/445702/EHS_Fire_and_fire_safety_2013-14.pdf)  
<sup>3</sup> <https://www.bbc.co.uk/news/science-environment-47306766>