



A Safer Future for an Electric World

**Electrical Safety First's
Manifesto**



Ⓜ Electrical Safety First's vision

Electricity isn't merely a commodity; it forms the foundation of our modern existence, driving our economy, enabling greener transportation, warming our homes, and facilitating our daily purchases.

As we transition to low-carbon energy solutions for our homes, the significance of this shift grows ever clearer. However, we frequently undervalue the pivotal role electrical safety plays in our path to achieving net-zero. This oversight highlights the pressing necessity for robust safeguards to ensure the well-being of those in our electricity-dependent lives. Electrical incidents account for nearly two-thirds of house fires, imposing a staggering annual cost of 1.7 billion on public finances.

Presently, a patch work of regulation exposes certain households to increased electrical risks. This is particularly concerning due to the proliferation of dangerous electrical products on online marketplaces and our increasing adoption of greener e-bikes and scooters, which carry numerous product safety concerns.

We face a scarcity of comprehensive data regarding the readiness of UK housing for net-zero retrofitting. Our electrical safety standards are fragmented, with protection against electrical risks contingent upon your tenure status.

Electrical Safety First has four key asks of the next UK government. These proposals prioritise home electrical safety, promote cleaner and safer transportation, and strengthen consumer protection in online shopping, all with a particular emphasis on safeguarding the most vulnerable in our society. These measures are cost-effective and practical, with minimal impact on the public treasury.

Consumer protection acts as the common thread binding these issues together. I am confident that the measures outlined in this manifesto, if implemented, will help save lives.



Lesley Rudd,
CEO, Electrical Safety First

Ⓜ Summary

Electricity is an indispensable part of our lives that many of us cannot imagine life without, cooking our food, keeping us warm, and powering our daily enjoyment. As we progress towards a net-zero future with eco-friendly technologies, our dependence on electricity will only grow.

However, the tragic loss of life and colossal annual toll inflicted by electrical house fires, amounting to 1.7 billion pounds, emphasise the need to prioritise the safety of our people in our increasing electrified world.

Electrical Safety First, a UK charity dedicated to preventing electrical-related deaths and injuries, presents this manifesto for potential inclusion in the policy programme for the next UK Government. It proposes cost-effective measures to safeguard our people from electrical dangers and ultimately to save lives.

1. Strengthen E-Micromobility Regulations

The UK is facing a disturbing projection of almost one e-bike or e-scooter fire per day in 2023, resulting in tragic deaths, hospitalisations, homelessness, and staggering financial losses. To tackle this escalating danger and support our transition to greener transportation, government must introduce:

- Ⓜ **Third-party safety certifications for all e-bikes, e-scooters and the lithium-ion batteries that power them before entering the UK market.**
- Ⓜ **Improved product standards for the safe usage and charging of lithium-ion batteries.**
- Ⓜ **Regulations to ensure responsible disposal of batteries at the end of their life.**

2. Enhance electrical safety in housing

Much like cars require regular MOT checks for safety, our homes' electrical installations demand an equal degree of attention and care. While current safety regulations do exist for rented homes, they only protect long-term tenants, leaving those staying in the booming short-term let sector overlooked.

Moreover, the owner-occupied sector, housing a significant number of vulnerable people, particularly the elderly, also suffers from inadequate protection.

There is also a concerning discrepancy in mixed-tenure high-rises, where leaseholders will soon be excluded from the safety regime in this living environment with elevated fire risks.

As we embrace greener, electrified homes, securing electrical safety becomes paramount. These steps move us toward that goal:

- ⓔ **Mandate free electrical safety checks for financially challenged homeowners by energy suppliers, similar to gas safety checks for those on the Priority Services Register.**
- ⓔ **Require electrical safety certificates during property sales to safeguard more people living in the owner-occupied sector.**
- ⓔ **Implement mandatory five-yearly electrical safety checks for the short-term let sector and leaseholders in mixed-tenure blocks.**

3. Fair business environment and consumer protection

Online marketplaces present a huge risk when it comes to unknowingly purchasing dangerous products. In an investigation conducted by Electrical Safety First, a staggering 93% of sampled electrical products from these platforms were deemed unsafe.

What's especially concerning is that consumers on these platforms often remain uninformed, unaware that they do not benefit from the same essential safeguards available to high street shoppers and those using trusted online retailers. Urgent government intervention is imperative.

- ⓔ **Online marketplaces must be recognised as actors in the supply chain, so shoppers enjoy the same level of protection when making online purchases as they do when shopping in physical stores.**

4. Ready homes for a green future

As the UK shifts towards net-zero and greater electrification, we must not overlook home readiness. With rising electricity use and adoption of electrical powered technologies, our aging housing stock needs attention. Enhancing the English Housing Survey can provide crucial data for targeted support, including financial assistance and electrical upgrades for low-carbon measures.

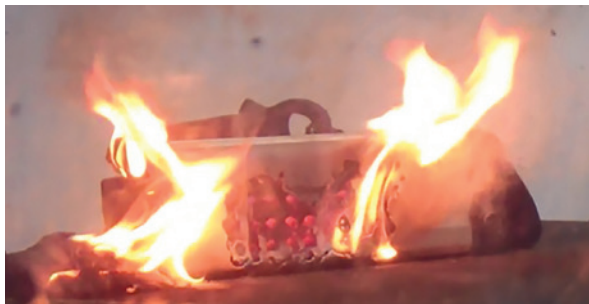
- ⓔ **The government should enhance data collection by upgrading their English Housing Survey.**



1. Strengthen E-Micromobility regulations

Electric micromobility, including e-bikes and e-scooters, has soared in popularity for its eco-friendliness, cost-effectiveness, and health benefits, supporting the UK's net-zero transition.

Mishandling, damage, or substandard chargers can unleash uncontrollable fires, spewing toxic gases at temperatures exceeding 600 degrees Celsius within seconds.



An e-bike or e-scooter battery contains the same amount of energy as the TNT in six hand grenades

Fires sparked by lithium-ion batteries in e-scooters and e-bikes have quadrupled since 2020, resulting in tragic fatalities, hospitalisations, homelessness, and staggering financial losses. A grim projection looms of nearly one e-bike or e-scooter fire daily in the UK in 2023. Already, over 150 parliamentary constituencies have witnessed fires caused by these devices.

Currently, these vehicles and their batteries can self-declare safety compliance, unlike other high-risk items such as fireworks, heavy machinery, and medical devices.

“On occasions batteries can fail catastrophically, they can ‘explode’ and lead to a rapidly developing fire.”

Prominent voices, including the National Fire Chiefs Council (NFCC), local Fire and Rescue Services, insurers, and safety organisations, have sounded the alarm about the gravity of this lithium-ion battery crisis. NFCC states that, “On occasions batteries can fail catastrophically, they can ‘explode’ and lead to a rapidly developing fire.”

While no single solution can eliminate all safety concerns in e-micromobility, the proposed measures below aim to ensure safer access and use for sustainable transportation while advancing the UK's net-zero objectives.

- Third-party safety certifications for all e-bikes, e-scooters and the lithium-ion batteries that power them before entering the UK market.
- Improved product standards for the safe usage and charging of lithium-ion batteries.
- Regulations to ensure responsible disposal of batteries at the end of their life.





- The Priority
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- overlooking the
- equally vital
- necessity of free
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- checks.

e 2. Enhance electrical safety in housing

Inconsistencies in current regulations have led to an unjust safety lottery across the UK, with varying protections from electrical risks across our homes.

While existing laws mandate electrical safety checks in rented sectors, these vital measures are missing in the owner-occupied sector, where many vulnerable people live in older homes with outdated electrics and limited resources. Additionally, leaseholders in high-rise buildings are exempt from these checks, despite the heightened fire risks in densely populated housing.

Enforcing safety measures in owner-occupied homes is challenging, but this shouldn't deter us from introducing necessary preventive actions.

For instance, while buying a home requires an Energy Performance Certificate, there is no equivalent requirement for an electrical safety report, leaving countless electrical faults undiscovered until disaster strikes.

"The Priority Services Register is a free support service that ensures additional assistance is accessible to individuals in vulnerable situations" according to the regulator Ofgem. Surprisingly, this service presently offers only free annual gas checks, overlooking the equally vital necessity of free electrical safety checks.

Both logical reasoning and our duty of care underscore this necessity, especially when we consider that electricity causes significantly more fires than gas each year. While the financial cost of these fires can be substantial, the personal toll is even more profound. Vulnerable people, including the elderly face a more heightened risk of fatality in such incidents than any other demographic.

The growing short-term lets sector also poses increased fire risks due to the lack of mandatory electrical safety checks and high resident turnover. Our research reveals that 54% of STL guests experience electrical safety issues ¹.

To tackle these concerns and enhance the safety of our housing, we need to:

- e** Mandate free electrical safety checks for financially challenged homeowners by energy suppliers, similar to gas safety checks for those on the Priority Services Register.
- e** Require electrical safety certificates during property sales to safeguard more people living in the owner-occupied sector.
- e** Implement mandatory five-yearly electrical safety checks for the short-term let sector and for leaseholders in mixed-tenure blocks.

¹ Electrical Safety First, Short-Changed – Electrical Safety in Short Term Lets in England

3. Fair business environment and consumer protection

The evolution of commerce into the online realm has outpaced our outdated legislative framework. The Consumer Protection Act of 1987, conceived long before the explosive growth of online marketplaces, leaves these platforms operating beyond accountability, exposing consumers to a flood of dangerous products on a daily basis.

A snapshot investigation by Electrical Safety First uncovered alarming evidence, revealing over 60 unsafe e-bike and e-scooter chargers for sale on major online marketplaces like eBay, Amazon, AliExpress, and Wish.com². The surge in sub-standard batteries and chargers has led to a concerning increase in fires.




Recalled dangerous white goods, such as tumble dryers and washing machines, have also been found on online marketplaces like Facebook Marketplace and eBay, lacking mechanisms for reporting these unsafe products. In just one of many investigations, Electrical Safety First found 93% of electrical products sampled from online marketplaces were deemed unsafe³.



This crisis affects all demographics, but particularly lower-income households grappling with the cost-of-living crisis, who are vulnerable to purchasing dangerous products online⁴. Our research also reveals a lack of awareness among certain age groups, with older consumers struggling to differentiate between online retailers and online marketplaces using third-party sellers on their platforms.

Online marketplaces enjoy fewer regulations compared to the high street, and other online retailers, fostering unfair competition and enabling the sale of dangerous goods to persist.

We cannot stand idle when lives are at stake, and it is imperative that online marketplaces prioritise consumer safety over profit. To address these concerns:

-  Online marketplaces must be acknowledged as actors in the supply chain, ensuring equal consumer protection for online purchases as in high street stores.

² Electrical Safety First (2023), Battery Breakdown

³ Electrical Safety First (2021), Online Marketplaces: The Evidence and Impact

⁴ Which? (2022) Online Marketplaces and Product Safety

4. Ready Homes for a Green Future

As the UK shifts towards a net-zero economy and greater electrification, we must not overlook the readiness of our homes. This oversight is particularly concerning given the increased time we spend at home, fuelled by the COVID-19 pandemic and the rise of remote working.

Our homes already consume a significant amount of electricity, and with the growing adoption of electrical-powered technologies like heat pumps, electric vehicle chargers, and solar PVs, this demand will only rise.

The UK has the oldest housing stock in Europe⁵, necessitating a renewed focus on preparing our homes for the net-zero transition. An effective way to address this is through an upgrade to the English Housing Survey, providing valuable information on the condition of our housing stock. This data would also facilitate the delivery of more targeted and effective support, including financial assistance and electrical upgrades for the implementation of low-carbon measures.

ⓔ The government should enhance data collection by upgrading their English Housing Survey.



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⁵ BRE Trust (2022), The Housing Stock of the United Kingdom



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