

RESEARCH PAPER · 2026

The Missing Property Metric

Why Every Home Needs an
Electrical Health Score

Published by VoltScore Ltd · voltscore.co.uk

19,300

accidental electrical fires
in UK homes yearly

63%

of buyers complete
without electrical check

>1 in 3

of buyers find faults
after completion

VoltScore
voltscore.co.uk

FOREWORD

After years working as an electrician, I noticed something that bothered me.

Homeowners would receive an Electrical Installation Condition Report (EICR) and be told their installation was satisfactory, yet many still had little understanding of what that actually meant for their home.

Two properties can both receive satisfactory reports and still be in very different positions. One may be well prepared for future technologies such as EV charging, solar generation and battery storage. Another may be approaching the point where significant upgrades will soon be needed.

The inspection has been completed. The certificate is issued. But the wider picture often remains invisible to the person who owns the property.

That is the gap VoltScore was created to address.

VoltScore translates technical electrical information into something homeowners can actually understand and use. A simple, accessible Electrical Health Score that helps explain the condition of an installation, highlights opportunities for improvement, and supports better-informed decisions about the future of the home.

It is not a replacement for an EICR.

It is a way of making electrical health visible.

Matthew Sloan
Founder, VoltScore

EXECUTIVE SUMMARY

The problem

Around 19,300 accidental fires in UK homes are caused by electricity each year. Nearly two thirds of homebuyers complete a property purchase without any electrical check. Over a third then discover faults after moving in. This is not a niche risk: it is a structural gap in how UK properties are assessed, bought, sold, and insured.

What is missing

The EPC tells buyers about energy efficiency. The homebuyer's survey covers visible structural defects. Neither touches the electrical installation. There is currently no standardised, accessible metric for residential electrical health available to homeowners, buyers, agents, landlords, or property professionals. That is the gap this paper addresses.

The product

VoltScore is a UK electrical health scoring service. Homeowners complete a structured online assessment; a BS 7671-qualified electrician personally reviews the responses and issues a 0–100 Electrical Health Score with accompanying A–F grade band within 24 hours. A free indicative score is available instantly. The result is a single, accessible number that makes an invisible risk visible — for the homeowner, the buyer, the agent, the landlord, and the insurer.

Two theses, both true

VoltScore operates on two parallel premises. The first is that voluntary market adoption works today: fall-through reduction, insurance self-interest, landlord compliance pressure, and EV/solar installation requirements already create real demand for a standardised electrical grade. The second is that regulation will catch up: the legislative trajectory — mandatory EICRs for landlords since 2020, active government consultations on owner-occupier checks, Scotland and Northern Ireland already ahead of England — points toward an eventual mandate. VoltScore is building the voluntary infrastructure that becomes mandatory standard when that moment arrives. Both theses are sound. Both are in play simultaneously.

The dataset opportunity

Beyond the individual score, VoltScore is building the first national dataset of residential electrical health — mapping risk by region, property age, and tenure. This dataset is of direct interest to policymakers, insurers, lenders, energy researchers, and retrofit funders. It does not currently exist anywhere else. The score is the product. The dataset is the opportunity.

KEY FIGURES

19,300 accidental electrical fires in UK homes per year	63% of buyers complete without any electrical check	Over a third discover faults after moving in	£40,000 max landlord fine for missing EICR
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CHAPTER 01

The Problem

Every year, around 19,300 accidental domestic fires of electrical origin occur across the UK. In England, electrical faults are linked to roughly 14,186 accidental dwelling fires annually – 53.4% of the total – when fires are counted by electrical origin rather than by single ignition source. Yet the condition of a home's electrical installation is almost never assessed before a property is bought, sold, or let.

19,300

accidental electrical fires in UK homes per year (IET / Home Office)

53.4%

of accidental dwelling fires in England with electrical origin

£12bn

estimated annual economic and social cost of fire in England (Home Office, 2023)

An invisible hazard

Structural defects are visible. Damp leaves a stain. Subsidence cracks the plaster. But a deteriorating electrical installation hides behind walls, under floors, and inside consumer units – invisible to the naked eye and entirely absent from the standard property inspection process.

It is worth being precise here, because the two ways of counting tell different stories. Measured by ignition source, the Home Office records cooking appliances as the largest single cause of accidental dwelling fires, at around 44%. But cooking appliances are themselves overwhelmingly electrical – ovens, hobs, microwaves – and when fires are grouped by electrical origin rather than by the appliance involved, electricity becomes the dominant thread, running through more than half of all accidental dwelling fires.¹ Either way, the conclusion for the property market is the same: the electrical installation is implicated in a large share of domestic fires, yet it remains the one system almost entirely absent from the standard property transaction.

In 2024 alone, more than 1,140 accidental electrical fires involving white goods – washing machines, tumble dryers – were recorded in England. That is three fires every single day, from appliances plugged into wiring that may itself be decades old.

The confidence gap

A 2026 survey by the IET (Institution of Engineering and Technology) found that 79% of UK adults feel confident about the electrical safety of their home. Yet fewer than a third had their electrics checked by a qualified electrician in the past decade, and one in five (20.1%) did not know that checks were required at all.²

This confidence gap – between perceived safety and actual inspection history – is the core of the problem. Homeowners are not negligent; they are simply operating without information. No accessible metric exists to tell them how their home's electrical installation is performing relative to current safety standards.

The IET's finding is stark: most UK homes have gone five, ten, or even more years without a professional electrical inspection — yet the majority of owners believe their home is electrically safe. Perception and reality have diverged.

A problem built into the housing stock

56% of the English housing stock was built before 1965 (English Housing Survey, DLUHC 2016 data). Even homes that received a rewire in the 1980s now have electrical installations that are over 40 years old — approaching, or already beyond, the recommended inspection interval.³

A 2018–19 English Housing Survey found that only 63% of all homes had all five modern electrical safety features: PVC wiring, proper earthing, modern consumer unit, miniature circuit breakers, and residual current devices (RCDs). That means roughly 37% of English homes — millions of properties — were lacking at least one basic modern safety feature.⁴

1. Electrical Safety First analysis of Home Office Fire Statistics (England). 'Electrical origin' follows ESF's methodology, which counts accidental dwelling fires with an electrical ignition source — including electrical cooking and other appliances, faulty leads, and misuse — and is therefore broader than, and not additive with, the Home Office's single 'cooking appliances' ignition category. The 19,300 figure is UK-wide; 53.4% (≈14,186 fires) is the England dwelling-fire figure. IET press release, April 2026: [theiet.org](https://www.theiet.org).

2. IET press release, April 2026. [theiet.org](https://www.theiet.org)

3. English Housing Survey, Stock Condition report (DLUHC/MHCLG, 2016 data): 56% of the English housing stock built prior to 1965. [gov.uk/EHS-stock-condition](https://www.gov.uk/EHS-stock-condition)

4. English Housing Survey 2018–19, MHCLG. [gov.uk](https://www.gov.uk)

CHAPTER 02

Why Electrics Matter More Than Ever

A decade ago, the typical UK home drew electricity for lighting, a few appliances, and an electric shower. That picture has changed fundamentally. The electrification of heat, transport, and energy generation is placing unprecedented new demands on domestic electrical installations — many of which were never designed to carry them.

~1.3m

UK homes with rooftop solar (est. residential, DESNZ)

100k+

OZEV-grant home EV chargers installed (OZEV/DfT)

80%

of EV drivers charge primarily at home

Electric vehicles: a step-change in home demand

The UK government's Zero Emission Vehicle mandate requires 80% of all new cars sold to be zero-emission by 2030, rising to 100% by 2035. This is not a distant policy — it is already reshaping domestic electrical demand.

By mid-2024, the UK had installed over 100,000 home EV chargers through OZEV grant schemes, with industry estimates suggesting hundreds of thousands more self-funded installations across residential properties.⁵ The Department for Transport estimates that 93% of EV drivers have access to home charging and the majority charge overnight.

A 7kW home EV charger — the standard domestic unit — represents a significant new load on an existing electrical installation. For homes with ageing consumer units, insufficient earthing, or circuits already running close to capacity, adding an EV charger without a prior electrical assessment risks overloading the installation.

The practical reality: installing an EV charger is notifiable work under Part P of the Building Regulations. Electricians are required to assess the existing installation before connection. An unknown electrical grade is a risk at the point of installation — and a potential liability for the installer.

Solar panels: generation meeting ageing infrastructure

Around 1.3 million UK homes now have rooftop solar — an approximate residential-only estimate derived from DESNZ deployment data, which recorded 1.595 million total installations (domestic and commercial combined) by mid-2024.⁶ Solar generation connects directly to the home's consumer unit. For homes with outdated fuse boards, old wiring, or insufficient capacity, solar installation may require a consumer unit upgrade or partial rewire before panels can be safely connected.

In Q4 2024, more than 42% of new-build homes in England were built with solar already installed (Solar Energy UK, March 2025).^{6a} The retrofit market — adding solar to older homes — presents the greater

challenge, as the interaction between generation and ageing infrastructure is poorly understood without prior electrical assessment.

Heat pumps: the next wave

The government's target is 600,000 heat pump installations per year by 2028 – a target, not a current figure; actual retrofit installations reached approximately 48,700 in 2024 (DESNZ). Either way, it represents another wave of new electrical demand arriving into the existing housing stock. An air source heat pump typically requires a dedicated circuit and, in older properties, may require a consumer unit upgrade. None of this can be planned without knowing the current condition of the installation.

UK domestic electrical landscape – selected metrics (%)



5. DESNZ Electric Vehicle Chargepoint Grant statistics. Grant-funded home installations; self-funded installs not centrally recorded. [gov.uk/ev-chargepoint-grants](https://www.gov.uk/ev-chargepoint-grants)

6. DESNZ Solar Photovoltaic Deployment Statistics, mid-2024 (total installations domestic + commercial: 1.595m; residential-only estimate ~1.3m). [gov.uk/solar-pv-deployment](https://www.gov.uk/solar-pv-deployment)

6a. Solar Energy UK: 'More than four in ten new homes in England built with solar power', March 2025. [solarenergyuk.org](https://www.solarenergyuk.org)

CHAPTER 03

The Gap in Property Assessments

The UK property market relies on two main assessments: the Energy Performance Certificate (EPC) and the homebuyer's survey. Neither provides meaningful information about the condition of a home's electrical installation. This is not a minor omission — it is a structural gap in how properties are evaluated.

What the EPC covers — and what it does not

An Energy Performance Certificate rates a property's energy efficiency from A (most efficient) to G (least efficient). It is legally required for all sales and lettings in England and Wales, and it is the closest thing the UK property market has to a standardised property health metric.

But the EPC does not assess electrical safety. It does not inspect wiring, consumer units, earthing, or circuit protection. The government's own guidance states explicitly that "the EPC will not comment on the safety aspects or maintenance of the services nor will the assessment confirm that the installed system is fit for purpose."⁷

Assessment	Covers	Electrical safety?
EPC	Energy efficiency rating, insulation, heating type, CO2 output	No
Homebuyer's Survey (Level 2)	Structural condition, damp, roof, services (visual only)	Visual only
Building Survey (Level 3)	Full structural assessment, accessible areas	Visual only
EICR	Full electrical installation test by qualified electrician	Yes - full
Electrical Health Score	Instant grade, risk assessment, improvement roadmap	Yes - accessible

The survey blind spot

A homebuyer's survey — even at Level 3 — is a visual inspection only. Surveyors are not qualified electricians and cannot test circuits, check earthing, or assess the condition of wiring hidden inside walls and floors. In practice, most surveyors note the consumer unit type and recommend 'further investigation by a qualified electrician' as a standard disclaimer.

This disclaimer rarely prompts action. Research by Electrical Safety First found that only 37% of buyers had the electrics checked before purchase. Nearly half were entirely unaware that a specialist check was needed. Over a third then discovered electrical problems after completion.⁸

37%

of buyers check electricians before purchase (ESF)

63%

complete without any electrical inspection

Over a third

discover electrical faults after moving in (ESF)

The average cost of electrical problems discovered after purchase: £1,704 (Electrical Safety First, Home Buyers guidance). For properties requiring a full rewire: £4,000–£12,500 depending on size. These are costs that informed buyers could have negotiated or avoided entirely.

No mandatory standard for owner-occupiers

Landlords in England have been legally required to hold a valid EICR since 2020, with fines of up to £40,000 for non-compliance (raised from £30,000 in November 2025). Scotland introduced equivalent requirements in 2015. Northern Ireland made equivalent regulations in 2024, which came into force for new tenancies from 1 April 2025 and for all existing tenancies from 1 December 2025.

For owner-occupiers, no such requirement exists. A seller in England and Wales has no legal obligation to provide an electrical certificate, regardless of when the installation was last inspected or how old the wiring is. The buyer's only protection is to request an EICR themselves — something the majority do not know to do.

7. MHCLG: A guide to energy performance certificates for the marketing, sale and let of dwellings. [gov.uk](https://www.gov.uk)

8. Electrical Safety First consumer research. [electricalsafetyfirst.org.uk](https://www.electricalsafetyfirst.org.uk) / [complete-connectrix.co.uk](https://www.complete-connectrix.co.uk)

CHAPTER 04

What Is an Electrical Health Score?

An Electrical Health Score translates the technical condition of a home's electrical installation into a single, accessible grade — making invisible risk visible and actionable for homeowners, landlords, agents, and property professionals.

The concept

The Electrical Health Score works like a credit score for a home's wiring: a 0–100 numeric score with an accompanying A–F grade band that summarises the known condition of the electrical installation based on a structured assessment. It does not replace a full EICR carried out by a qualified electrician. Instead, it provides an accessible, standardised first view — the metric that is currently missing from the property market.

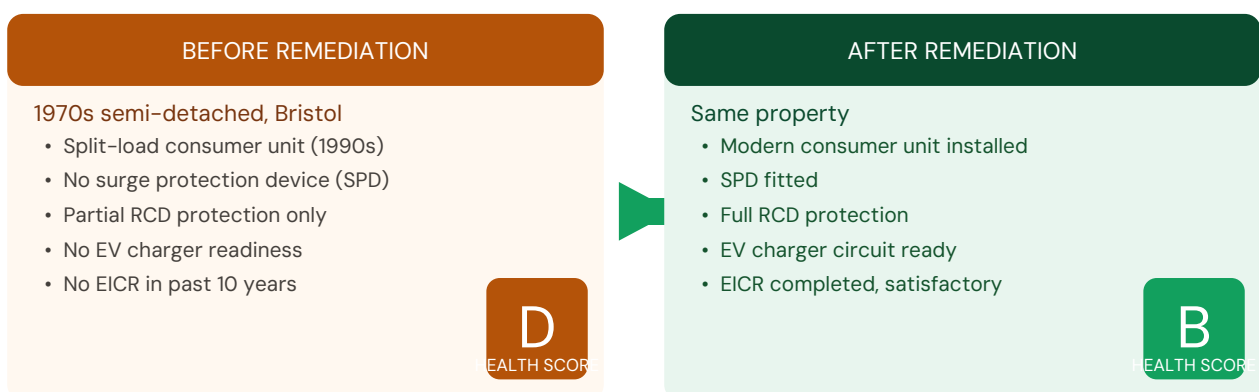
How it works

A homeowner completes a structured online assessment covering the key indicators of electrical installation condition: age and type of wiring, consumer unit specification, presence of RCD protection, number of circuits, recent works and certifications, and any observed warning signs. A free indicative score is available instantly. Each set of responses is then personally reviewed by a BS 7671-qualified electrician, who applies the VoltScore grading framework to issue a full 0–100 Electrical Health Score with accompanying A–F grade band within 24 hours.

VoltScore is currently in early access. Initial scores have been issued across properties in the Bath and Bristol area, with wider rollout under way.

An example in practice

The following illustrative example shows how a typical property assessment translates — before and after remediation — into an Electrical Health Score.



Illustrative example based on typical assessment findings. The same property. A different picture. The Electrical Health Score makes that difference visible before a buyer completes, before a landlord is inspected, and before an electrician is called.

Grade	Condition	Typical characteristics (VoltScore framework)
A	Excellent (85+)	Modern consumer unit, RCD protection, recent EICR pass, PVC wiring throughout
B	Good (70+)	Mostly modern, minor improvements possible, no known faults
C	Fair (55+)	Older installation, some features present, inspection recommended within 2 years
D	Poor (40+)	Dated consumer unit, limited RCD protection, inspection overdue
E-F	At Risk (below 40)	Old rubber or fabric wiring, no RCD, unsatisfactory previous EICR, immediate action required

The grading methodology

The 0–100 Electrical Health Score with accompanying A–F grade band is a proprietary VoltScore classification — it is not a British Standard or a recognised regulatory framework. It is designed to translate the technical indicators assessed in a BS 7671 electrical inspection into a clear numeric score and accessible grade that a non-specialist can understand and act on.

The assessment covers seven core indicator categories: (1) wiring age and type — including the presence of PVC, rubber, or fabric insulation; (2) consumer unit specification and age; (3) RCD and residual current protection coverage; (4) earthing and protective bonding; (5) circuit configuration and load capacity; (6) any known faults, C1/C2/C3 observations from a prior EICR, or outstanding remediation; and (7) future-readiness indicators including EV charger circuit provision and SPD installation. Exact category weightings are proprietary and subject to ongoing calibration as the assessment dataset grows.

The scoring framework is aligned with the categories used in a standard Electrical Installation Condition Report (EICR) under BS 7671:2018 (as amended). Each assessment is personally reviewed by a BS 7671-qualified electrician before a score is issued — there is no fully automated grading.

The score is displayed out of 100. The maximum achievable score for a real-world domestic installation reflects the practical ceiling of current electrical standards — a score that confirms excellent condition, full current compliance, and strong future-readiness. A grade of A (85 and above) indicates an installation in excellent condition that meets current standards and is well-positioned for future electrical demand. A grade of At Risk (below 40) indicates an installation requiring immediate professional attention.

A note for institutional readers

The current methodology is designed for consumer accessibility and is reviewed by a qualified electrician on every assessment. Insurer-grade statistical validation — inter-rater reliability testing, calibration against claims outcomes, and independent audit of the grading framework — is a defined roadmap item as VoltScore's assessment dataset scales. Partners and institutional readers interested in the validation pipeline are welcome to contact VoltScore directly.

What it is not

The Electrical Health Score is not a replacement for an EICR. It does not involve physical testing of circuits. It does not certify an installation as safe. It is an accessible first-stage metric — the equivalent of a doctor asking you about your symptoms before deciding whether to order a scan.

Its value is in two things: awareness and standardisation. It gives homeowners a number — and a grade — they can understand. It gives the property market a common language for a risk that has previously been invisible.

The analogy that matters: every UK home is legally required to have an EPC before sale. The EPC tells you about energy efficiency — something visible in insulation, glazing, and heating type. An Electrical Health Score does the same for safety — the one metric that EPCs were never designed to capture.

The bigger picture: a national dataset

The score is the product. But the dataset is the opportunity. As Electrical Health Scores accumulate across UK properties, something more significant begins to emerge: the first national picture of residential electrical health. Which regions have the oldest infrastructure. Which property types are least prepared for electrification. Where the upgrade burden will fall as heat pumps and EV charging become the norm.

This is data that does not currently exist anywhere. Not in the EPC register. Not in local authority records. Not in EICR databases. The Electrical Health Score is not just a consumer tool — it is the mechanism by which that dataset gets built. For policymakers, insurers, lenders, and energy researchers, that is the real prize.



The score is the product.
But the dataset is the opportunity.

The Missing Property Metric — VoltScore, 2026

CHAPTER 05

Benefits for Homeowners

For most UK homeowners, the electrical installation is the one system in the property they know least about. An Electrical Health Score changes that — turning an invisible risk into actionable information.

Knowledge before major decisions

Buying or selling a property without knowing its electrical grade is the equivalent of buying a used car without knowing its MOT history. The Electrical Health Score gives homeowners a starting point: a grade that tells them where they stand, what the risk factors are, and what a qualified electrician should look at first.

Negotiating power

Over a third of UK buyers discover electrical problems after completion — problems that cost an average of £1,704 to resolve (Electrical Safety First), and in some cases £12,000 or more for a full rewire. A pre-purchase Electrical Health Score gives buyers the information they need to negotiate, request an EICR, or factor remediation costs into their offer.

Planning for EVs and solar

For homeowners planning to install an EV charger or solar panels, an Electrical Health Score provides the first critical input: is the existing installation likely to support the new load, or is a consumer unit upgrade needed first? This information saves time, avoids abortive installation costs, and reduces the risk of overloading ageing infrastructure.

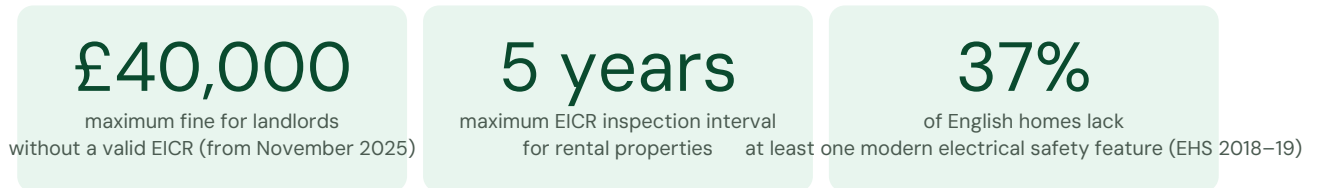
Reducing insurance risk

Insurers increasingly take the age and condition of wiring into account when pricing home insurance. Properties with old or unverified electrical installations may face higher premiums, restrictive conditions, or — in the event of an electrical fire — claims disputes. A documented electrical grade supports insurance applications and demonstrates that a homeowner is aware of and managing their electrical risk.

CHAPTER 06

Benefits for Landlords

Landlords in England have been legally required to hold a valid EICR since 2020. But compliance is not the ceiling – it is the floor. An Electrical Health Score gives landlords and portfolio managers a live view of electrical risk across their properties, enabling proactive management rather than reactive compliance.



Portfolio-level insight

For landlords managing multiple properties, the Electrical Health Score provides a consistent, comparable view of electrical risk across the portfolio. Rather than relying on a collection of EICR certificates with varying inspection dates, a portfolio dashboard built on health scores enables landlords to identify which properties need attention, prioritise inspection and remediation spend, and demonstrate proactive compliance to local authorities and insurers.

Compliance protection

The Electrical Safety Standards in the Private Rented Sector (England) Regulations 2020 require landlords to ensure the electrical installation is inspected and tested by a qualified electrician at least every five years, and to provide tenants with a copy of the EICR within 28 days of a request. Fines for non-compliance reach £40,000 per property – raised from £30,000 in November 2025 when amendments to the Regulations also extended the rules to cover social rented sector tenancies for the first time.

An Electrical Health Score does not replace the EICR – but it provides an interim health check between formal inspections, flags properties approaching the boundary of acceptable condition, and helps landlords prioritise where to direct inspection and remediation budget.

A professional signal

Providing tenants with an Electrical Health Score alongside the EICR signals a level of professionalism that differentiates a landlord from the minimum-compliance majority. It demonstrates that electrical safety is actively managed – not simply filed and forgotten.

CHAPTER 07

Benefits for Estate Agents

Estate agents do not control what buyers discover after exchange. But they do control the information environment during the sale process — and a clear, standardised electrical grade changes that environment fundamentally.

Fewer fall-throughs

One of the most common causes of a sale falling through after survey is an unexpected finding that neither party anticipated. Electrical problems — flagged by a surveyor's generic 'further investigation recommended' note — create uncertainty, delay, and frequently collapse deals that could have been managed if the issue had been known earlier.

An Electrical Health Score, commissioned before listing, eliminates this uncertainty. A C or D grade at listing gives the vendor and agent time to either remediate the issue, adjust the asking price, or present the score transparently — managing buyer expectations from the outset rather than losing a deal three months in.

Faster completions

Properties with a known, documented electrical grade complete faster. Buyers spend less time commissioning their own investigations, solicitors spend less time chasing electrical certificates, and mortgage lenders have less uncertainty to resolve. For agents, faster completions mean earlier fee collection and higher throughput.

The market signal: agents who make the Electrical Health Score a standard part of the listing pack — alongside the EPC — are positioning themselves at the leading edge of a transparency standard that is likely to become expected over the coming years. Early adoption is a differentiator; eventual adoption will be table stakes.

A new tool for surveyors and conveyancers

The Electrical Health Score also integrates naturally into the conveyancing process. Solicitors can reference the score when advising buyers on survey findings. Surveyors can use it as a prompt for whether to recommend a full EICR. Over time, the score becomes part of the standard property information pack — alongside flood risk ratings, EPC certificates, and title registers.

CHAPTER 08

Benefits for Insurers and Lenders

Electrical faults are the leading cause of accidental dwelling fires. That makes the condition of a home's electrical installation one of the most significant unpriced risks in the UK residential insurance and mortgage market.

A missing underwriting input

Home insurers currently underwrite residential properties with almost no reliable information about the condition of the electrical installation. The age of the property is used as a proxy – older properties attract higher premiums and, in some cases, restrictions or exclusions on cover. But age is a poor proxy for electrical condition: a 1930s house with a recent rewire is electrically safer than a 1990s house with a failing consumer unit.

An Electrical Health Score would give insurers a direct, standardised input into the underwriting process – one that reflects actual installation condition rather than inferred risk from property age. This enables more accurate risk pricing, reduces adverse selection, and supports fairer premiums for homeowners who have invested in their electrical infrastructure.

Claims implications

The financial consequences of electrical fires are substantial. Industry data consistently shows that home fires involving white goods or wiring faults generate claims running to tens of thousands of pounds per incident, with the most severe cases reaching six figures.⁹

When a fire caused by electrical faults leads to a claim, insurers face complex questions about whether the fault was known, disclosed, or manageable. A documented Electrical Health Score – part of the property record – provides clarity about the state of the installation at the time of policy inception and throughout the policy term. It supports claims processing and reduces disputes.

Mortgage lending implications

An increasing number of mortgage lenders already request EICR evidence for older properties before releasing funds. An electrical installation flagged as unsafe can delay or block a mortgage offer – particularly where it also makes buildings insurance difficult to obtain. A standardised Electrical Health Score as part of the property record would give lenders a consistent, reviewable data point to support their lending decisions from the outset.

£10,000s

typical insurance claim cost
from a home white goods fire

Six figures

cost of the most
severe recorded white goods fire claims

£12bn

total annual economic and
social cost of fire in England

9. Electrical Safety First press release, February 2025. [electricalsafetyfirst.org.uk](https://www.electricalsafetyfirst.org.uk)

10. Home Office: 'Economic and Social Cost of Fire in England', published June 2023. Total economic and social cost of fire in England, year ending March 2020: £12.0 billion. [gov.uk](https://www.gov.uk)

CHAPTER 09

The Future of Electrical Health Data

The EPC was introduced in 2008. Within a decade it had become a standard part of every property transaction — a metric that estate agents, solicitors, mortgage lenders, and insurers routinely reference. It is worth being honest about why: EPCs did not win on voluntary market adoption. They were legally mandated by the EU Energy Performance of Buildings Directive and embedded in UK legislation. Market habit followed the mandate, not the other way around.

A national picture

As Electrical Health Scores accumulate across UK properties, the dataset becomes increasingly valuable beyond the individual transaction. Aggregate data enables mapping of electrical risk by region, property age band, and tenure type. It makes visible — for the first time — the geographic distribution of the UK's ageing electrical infrastructure.

This data is of direct interest to housing associations, local authorities, government departments, and energy researchers. The EPC dataset transformed policy discussions about energy efficiency in housing. An equivalent electrical health dataset could do the same for electrical safety.

Two routes to the same destination

There are two independent reasons the Electrical Health Score becomes standard infrastructure — and both are already in motion.

Route one: voluntary market pull. Fall-through reduction, insurance self-interest, landlord compliance management, and the practical requirements of EV charger and solar installation all create genuine demand for a standardised electrical grade today — without any regulatory mandate. Estate agents reducing deal collapse, insurers seeking better underwriting data, and electricians needing a baseline before notifiable installation work are all natural early adopters.

Route two: regulatory convergence. The legislative direction is clear. Mandatory EICRs for private landlords in England have been in force since 2020. Scotland introduced equivalent requirements in 2015. Northern Ireland made equivalent regulations in 2024, coming into force from April 2025 (new tenancies) and December 2025 (all existing tenancies). The government has actively consulted on extending mandatory electrical safety checks to owner-occupier sales — a logical next step given the gap between landlord and owner-occupier obligations. When that mandate arrives, a standardised Electrical Health Score is the infrastructure that enables compliance at scale.

VoltScore does not depend on regulation to validate the product. But regulation is the context that makes the dataset irreplaceable. Every Electrical Health Score issued today is a data point in the national picture that will matter enormously when owner-occupier checks become mandatory. VoltScore is building the voluntary infrastructure today that becomes the standard when it does.

International context

The UK is not alone in grappling with this gap. Belgium mandates a pre-sale electrical inspection for residential properties under the AREI/RGIE electrical regulations — properties with installations predating 1981 must be inspected before transfer of ownership, and sellers are required to disclose the result to buyers. France mandates a diagnostic immobilier covering electrical installations for all properties over 15 years old before sale — a requirement introduced in 2009 that now covers the majority of the French housing stock. Australia mandates electrical safety certificates at point of tenancy in several states — Victoria, for example, requires a check every two years under the Residential Tenancies Regulations 2021. None of these countries stumbled into mandatory electrical assessment — they legislated it in response to exactly the fire statistics and insurance loss data that this paper documents.

England is the outlier among comparable housing markets. That is the opportunity and the risk simultaneously. The regulatory gap creates space for a voluntary product now. Regulatory convergence — the direction of travel — transforms that voluntary product into infrastructure.

Integration with green home retrofits

The net zero transition depends on residential electrification. Every heat pump, EV charger, and solar installation added to an existing UK home intersects with the condition of that home's electrical installation. A national Electrical Health Score dataset would, for the first time, give retrofit planners, installers, and funders visibility into the electrical readiness of the housing stock — a critical missing input for delivery at scale.

Data governance

Building a national property-level dataset raises legitimate questions about privacy, consent, and data security. VoltScore is committed to handling assessment data in compliance with UK GDPR and the Data Protection Act 2018. Individual property scores are processed with explicit homeowner consent and are not shared with third parties in individually identifiable form without the data subject's agreement. Any aggregated or anonymised dataset made available for research or policy purposes will be de-identified to a standard that prevents re-identification of individual properties or their owners. A formal data governance framework — covering retention periods, third-party access protocols, and subject access rights — is in development and will be published before any institutional data partnerships are established. Partners and researchers interested in access to aggregate data are invited to make early contact with VoltScore to inform the design of that framework.

The opportunity: the UK is about to spend billions electrifying its housing stock. Almost none of that investment currently accounts for the baseline electrical condition of the properties being upgraded. The Electrical Health Score is the data layer that makes that baseline visible.

CHAPTER 10

About VoltScore

VoltScore is a UK electrical health scoring service — one of the first dedicated electrical health scoring platforms in the UK, giving homeowners, landlords, and property professionals a standardised, accessible grade for the electrical condition of a residential property.

What we do

VoltScore enables any UK homeowner to complete a structured electrical assessment online. A free indicative score is available instantly. A qualified electrician personally reviews the responses and issues a full 0–100 Electrical Health Score with accompanying A–F grade band within 24 hours. The score includes a breakdown of risk factors, a priority improvement list, and — for subscribers — ongoing monitoring and alerts as conditions or regulations change.

For landlords

VoltScore's Monitor service gives portfolio landlords a live dashboard of electrical health scores across all properties — enabling compliance management, risk prioritisation, and proactive maintenance planning from a single interface.

For estate agents and electricians

VoltScore provides tools for estate agents to commission and display Electrical Health Scores as part of the listing process, and for qualified electricians to access the platform and generate quote estimates for homeowners considering inspection or remediation work.

Our mission

To make electrical health a standard, visible, and actionable metric in every UK property transaction — so that no buyer, tenant, or homeowner is ever again surprised by a fault that a score could have flagged.

Get your free Electrical Health Score

voltscore.co.uk

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