

EuropeOn's full position on the Renovation Wave

[EuropeOn](#), the electrical contractor's association, a sector comprising almost 2 million workers across Europe, welcomes this initiative and supports the decarbonisation of Europe's building stock. Electrical contractors employ the qualified professionals carrying out electrical work and installations in buildings and on infrastructure from solar PV and home batteries, EV-charging, heat-pumps and building automation.

A massive pan-European initiative investing heavily in renovation of electrical and technical installations in buildings is the most appropriate response to the twin challenges of climate change and recovery Europe is currently facing. Accounting for about 36% of the bloc's GHG emissions, buildings must be addressed with urgency if the EU is to meet its Paris Agreement commitments. Now, the exigency of economic stimuli and the projected endowments of the latter call for labour-intensive and high value-added targets such as building renovations. Energy renovations will stimulate our economy locally, with the involvement of SMEs and independent workers, and contribute to our climate objectives in a much-needed manner while improving quality of life in the built environment.

This Renovation Wave initiative has the potential to help relaunch our economy in the most sustainable way and future-proof our fast-ageing building stock. However, in order to make the most out of these investments, electrical contractors have formulated recommendations.

Renovation of electrical systems is a prerequisite for a successful deep renovation

Reading through the Commission's roadmap for the upcoming Renovation Wave, we acknowledge and welcome ambitious targets for energy efficiency but we cannot overlook that electrical systems should also be addressed, as electrification plays a key role in decarbonised future-proofing buildings. Worryingly, electricity is not even mentioned in the roadmap.

Indeed, electrical systems of single buildings need to be renovated for both safety and capacity reasons. A large share of multi- and single-occupancy buildings have been built after the Second World War and their electrical systems have not benefited from deep renovations since then. The original electrical systems and wiring are ageing and were not meant for the quantity of electrical devices found in today's buildings. While some building-owners will do some renovations, electrical systems are often the "forgotten systems". Indeed, opening the walls to redo the wiring is both costly and highly disruptive for the occupant.

For instance, in Germany, 70% of buildings rely on electrical systems that are 35 years old or more. As a result the switch boxes are too small and the wiring is too weak to keep up with modern and smart living (Source: [ZVEH](#)). In France, 2/3 of residential housing built over 15 years ago have electrical safety shortcomings (Source: [GRESEL](#)).

In terms of safety, a recent survey from the Forum for European Electrical Domestic Safety showed that electrical fires account for 25-30% of all domestic fires, an increase of 5 -10% in the last 10 year. This increase seems linked to ageing systems (Source: [FEEDS](#)).

In terms of capacity, the renovation of electrical systems should be prioritised because it is a prerequisite to make buildings a hub for smart sector integration. Indeed, modern and capable electrical systems are paramount to the decarbonisation of the building stock and to NZEBs, but also to the renewables targets and transport decarbonisation targets. However, buildings cannot fulfil this role without proper electrical systems that can accommodate all the climate-mitigating electric installations and support other centrally managed technical installations.

Buildings can move from being a climate problem to a climate resource and solution. They have the potential to enable and integrate onsite renewable production (also for local consumption), zero-emissions mobility and electric heating, all with the highest level of energy efficiency. Fostering the "prosumer model", this will put end-users at the center of the energy transition and empower citizens to take control of their energy consumption and locally contribute to the energy transition. For our costly electricity grids, this will also alleviate congestion and shrink investment needs.

The renovation wave offers a unique opportunity to address these short-comings and address the case of low-income households more exposed to electrical hazards (e.g. Grenfell Tower fire) and energy poverty. Additionally, the current lockdown measures have highlighted the crucial role electrical devices and connectivity infrastructures play in our daily lives. As we move towards more home work-



ing and decentralisation of work practices, it is even more important to ensure all citizens can reap their benefits.

Skills & Digitalisation

The skills gap in the energy sector needs to be addressed. EuropeOn has called for skills and training policies to accompany climate initiatives and incentivise both re-skilling and up-skilling, in order to avoid bottlenecks because of skills shortages. Indeed, skills for green and digital installations are already in high demand, a trend that will increase as our building stock decarbonises (Source: our Skills4Climate page and our latest letter).

Further, digital skills are needed for the construction sector to adopt digital processes such as Building Information Modelling (BIM). Such processes lead to more efficiency in the construction phase but also later, allow for energy analysis and predictive maintenance, leading to more longevity of installations. Finally, they go hand in hand with a flexible energy system based on renewable energy sources.

