EuropeOn
ELECTRICAL CONTRACTORS ASSOCIATION

Electrification Action Plan

Position Paper

EuropeOn position paper on the Electrification Action Plan

Introduction and summary

Electrification provides proven and readily available solutions for Europe to decarbonise while enhancing energy security, competitiveness and better control energy prices. However, the rate of electrification has been stagnating for decades and calls for more direct action.

The EU has recognised the need to support and increase electrification with a dedicated Electrification Action Plan, as called for by EuropeOn[1] and the Electrification Alliance[2] ahead of the 2024 elections, and by setting 32% electrification KPI for 2030. Now is the time to deliver and ensure Europe electrifies in time.

Electrical contractors, represented by EuropeOn, represent an indispensable steppingstone towards electrification. The 2.7 million qualified professionals[3] from the electrical contracting sector make electrification happen on the ground for all types of energy consumers. Increased electrification is both a growth opportunity for the electrical contracting sector, and its 420k businesses[4], as well as an economic opportunity to create thousands of green jobs across Europe's regions.

To this end, EuropeOn has gathered feedback from our sector in 7 key points:

1. **Clear and dedicated electrification targets** - We call on the EU to ensure predictability for electrical contractors (among others) by delivering on the 32% electrification KPI with existing policies such as the ETS2, EPBD, or CO2 standards for cars/vans, by tracking electrification in NECPs, and avoiding any policy reversals through so-called simplification proposals.
2. **A fully qualified workforce fit to electrify Europe** - The "lack of talent and skills in the installation sector" identified in the Call for Evidence for this Action Plan should be addressed with a dedicated *Installer Action*, by ensuring the implementation of the Energy Efficiency Directive's workforce provisions, by including workforce tracking in NECPs and by aligning the upcoming VET Strategy with the aims of the Electrification Action Plan.
3. **Make the Primary Energy Factor work for electrification, not against it** - The PEF for electricity is an effective tool to penalise electrification, by over-inflating electricity consumption and making it appear less efficient than it really is (by a factor of 1.9 currently). The Commission must address this incoherence in its 2026 review of the PEF and start by specifically evaluating how the PEF can support electrification and the 32% KPI.
4. **A financial framework geared towards electrification** - Financial and fiscal rules currently hamper electrification by providing incentives for fossil fuel consumption and disregarding climate externalities. The ETS2 has immense potential to enhance the business case for electrification while fostering a just transition, provided it is duly implemented and ensures revenues can be frontloaded and used for electrification. Fiscal policy must also shift the burden towards the most polluting energy sources and away from electricity.
5. **Demand-side solutions and flexibility first** - Electrification enables decentralisation and calls for more attention to demand-side solutions. Full electrification of buildings where possible can yield the most benefits, while smart meters and flexible consumption can limit spending on power grids and supply-side solutions. Behind-the-meter electrical installations will also require consideration and renovations to enable safe and efficient electrification of buildings.

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[1] https://europe-on.org/wp-content/uploads/2024/02/2024-Manifesto.pdf
[2] https://electrification-alliance.eu/wp-content/uploads/2024/09/EA_RECS-FOR-AN-EAP_2024.pdf
[3] EuropeOn (2024), Electrical Contractors: Problem solvers in a fast-changing Europe
[4] ibid

6. **Electrification as a central enabler of (energy) security** - This new European priority makes electrification an even more compelling solution. Beyond energy independence, Europe should seek to enhance the resilience of buildings by ensuring they can function autonomously (eg in island mode), harnessing energy communities and fine-tuning crisis communication protocols.
7. **Simplification: easier permitting and digitalisation** – To foster the competitiveness of European businesses, electrification should be made easier, including by simplifying the operations of electrical contractors. Harmonising and digitalising grid connection procedures would enable installers to cut the time spent on administration.

1. Clear and dedicated electrification targets

Electrical contractors, like many others in the energy sector, thrive on predictability and visibility for the future of the energy system. Stable and clear policies make it easier to invest with confidence and reap the benefits of the energy transition.

This is especially true for electrical contractors (70% of companies have less 10 employees[5]) who need to know how to devise their recruitment strategies and how to invest in upskilling their workers (e.g. in which technologies). Further, training new entrants to our sector to a suitable level of competence requires years (most likely through a multi-year apprenticeship), making long term visibility paramount.

The Clean Industrial Deal already took a step in the right direction by setting out a clear KPI for 32% of electrification by 2030. Now, it is up to the EU and this Action Plan to deliver on this KPI. The Commission should harness its authority to ensure stakeholders, SMEs and independent workers can confidently invest in the green transition. This includes its target-setting power as well as its duty to enforce EU law and ensure compliance by Member States.

➔**Deliver on the 32% electrification KPI** - Ensure other policies, such as the Emissions Trading System 2 (ETS2), the Energy Performance of Buildings Directive or CO2 Standards for Cars and Vans, are implemented and in place to steer energy consumers towards electrification.

➔**Electrification indicator** - NECPs should also include a dedicated indicator for electrification to make the European KPI visible for national stakeholders and businesses and monitor progress towards its achievement.

➔**Avoid policy reversals** - The Commission must avoid reversals of Green Deal legislation or lowering of green ambition, especially when designing any simplification measures aimed at energy and climate legislation.

2. A fully qualified workforce fit to electrify Europe

The Call for Evidence identifies the “lack of talent and skills in the installation sector” as one of the factors at play in the stagnating rate of electrification in Europe. EuropeOn, representing electrical contractors (or installers) has been raising awareness about the

[5] EuropeOn (2024), Electrical Contractors: Problem solvers in a fast-changing Europe

shortage of workers with the right skills since 2019[6] as electrical contracting companies struggle to recruit enough qualified personnel to meet the current demand for electrification. In Germany alone almost 80k workers are currently sought by electrical contractors[7].

Electrical contractors are mainly looking for fully qualified electricians, who have the full skillsets that will enable them to integrate electrical technologies for maximum efficiency and consumer value. Current educational systems are a good basis on which to build, and just need to be reinforced with more investments in VET schools, teachers, and apprenticeships and to make upskilling opportunities easily/freely accessible[8].

The first hurdle to overcome is a **shortage in the number of people entering our sector** and signing up for technical education, stemming from a poor image of technical sectors and undervaluation of technical careers. Solving worker shortages is a long-term endeavour, as it takes time to train the new entrants into qualified professionals, and the Electrification Action Plan should ensure that action is taken immediately.

➔**Launch an EU-wide *Installer Action*** – The Commission should replicate the Nursing Action[9] to fund attractiveness campaigns specific to the installation sector.

➔**Implement Article 28 of the Energy Efficiency Directive** – It requires Member States to assess the gap between available and in-demand energy efficiency professionals, many of whom are relevant for electrification. Such assessments will be key to steer investments and actions to effectively address worker shortages.

➔**Workforce assessments in NECPs** – Member States should report on the amount of qualified personnel needed to achieve their NECPs and outline the measures that will be rolled out to bridge any workforce gaps identified.

➔**European VET Strategy** – Given the prevalence of VET for electrical installation professionals, the Electrification Action Plan should harness this Strategy to address labour and skills barriers hampering electrification.

3. Make the Primary Energy Factor work for electrification, not against it

The Primary Energy Factor for electricity currently works as a disincentive to electrification. The PEF, set at 1,9 for the EU, is applied to electricity consumption to account for the primary energy consumed to produce electricity. The delivered electricity is multiplied by the PEF to determine the amount of primary energy consumed. However,

[6] https://europe-on.org/skills-4-climate/
[7] https://www.zveh.de/news/detailansicht/e-handwerke-fachkraefte-weiter-gesucht-unternehmen-aber-zurueckhaltender-als-in-vorjahren-1.html
[8] https://europe-on.org/wp-content/uploads/2025/08/EU-VET-Strategy-EuropeOn-_GCP.pdf
[9] https://health.ec.europa.eu/latest-updates/launch-first-eu-action-address-nurse-shortages-shows-positive-impact-european-health-union-2025-01-17_en

the methodology to set the PEF and the way it is applied are based on choices which make electrification less appealing in energy policies.

For instance, in Energy Performance Certificates, the PEF artificially overinflates electricity consumption, making it less (if not un)attractive for consumers to phase out fossil fuels in buildings. In product policy, the PEF for electricity is applied to conversion efficiency calculations for electrical devices, even though it is completely unrelated to the device itself but is only reflective of the state of the electricity system.

The Commission is set to review the default EU PEF by the end of 2026, which was last reviewed in 2022. This presents a timely opportunity for the Commission to use secondary legislation to increase demand for electricity and promote electrification.

➔**Address the PEF methodology -** The Electrification Action Plan must ensure the 2026 revision of the PEF for electricity works as an incentive for electrification rather than as an obstacle, by aligning the underpinning methodology with the Commission's aim to increase electrification.

➔**Harness technical support studies** - The Commission should harness the preparatory work or studies providing technical support to the PEF revision to investigate the most appropriate methodological choices to ensure the PEF is conducive to: the aims of the Electrification Action Plan, the 32% electrification KPI, the aim to phase out Russian gas imports and to the broader climate objectives of the EU.

4. A financial framework geared towards electrification

Clean electrification is a top contributor to affordability[10]. However, electric technologies can come with a significant upfront cost that may deter energy consumers from investing. Fossil fuels also still benefit from significant support structures that need to be addressed to make electrification attractive in the long run, or even to just level the playing field between electricity and fossil fuels in some cases.

The EU Emissions Trading System 2 (ETS2) may be the most effective policy tool to spur on the electrification of housing and transport. However, to make this a success, revenues should be used wisely, and possibly in advance of the implementation of the ETS2, to help vulnerable households and businesses to electrify and offset the burden of carbon taxing where necessary. Ensuring that ETS2 revenues are reserved for climate and energy spending is critical to the credibility of the system.

Further, the ETS2 was proposed and adopted as a central piece of the Green Deal. The underlaying assumptions of ETS2 are linked to the correct implementation of the legislation passed at the same time (such as EPBD, EED, RED or the CO2 standards). The incomplete implementation of these accompanying measures will lower the GHG

[10] https://iea.blob.core.windows.net/assets/86f2ba8c-f44b-494a-95cc-e75863cebf95/StrategiesforAffordableandFairCleanEnergyTransitions.pdf

reductions expected, which will make ETS2 prices higher. Fully implementing the Green Deal framework will alleviate the pressure on ETS2 and hence the carbon costs paid by energy consumers.

While delays in the ETS2 would be a missed opportunity to generate revenues and decarbonise, any postponement must be used to lay the groundwork for a successful and just implementation.

Energy consumers have an active role to play in choosing the right technologies for their own buildings or transport modes. However, they have little control over the prices of the energy delivered to them. The fiscal framework around energy prices still provides an incentive for fossil fuels to the detriment of electrification. Taxation and subsidies must be revised to accompany European consumers and businesses in their shift away from the most polluting energy sources.

Emissions Trading System 2

➔**Using ETS2 revenues** - Revenues should be used to fund energy renovations and electrification. Support schemes using ETS2 revenues should prioritise GHG reductions and electric technologies, including through social leasing schemes.

➔**Frontloading ETS2 revenues** - Enable Member States to make expected ETS2 revenues available already in 2026, potentially leveraging the EIB, to support the electrification of buildings and transport and mitigate sudden price spikes for vulnerable consumers when ETS2 enters into force.

➔**Green Deal framework** - The underlaying assumptions of ETS2 are linked to the correct implementation of the rest of the Green Deal framework, which must be implemented thoroughly and in time.

Fiscal measures

➔**Energy taxation** – The Energy Taxation Directive should ensure a level playing field between electricity and other energy carriers, potentially aligning taxation with the carbon content of energy products. VAT reductions on electricity and electric technologies (heat pumps, EV chargers, etc) should be enabled and (in)direct fossil fuel subsidies should be shifted to electrification.

➔**Non-energy charges –** The practice of adding unrelated charges to electricity bills to fund other public policies should be stopped.

5. Demand-side solutions and flexibility first

While it is paramount to address Europe's ageing electricity grids, putting demand-side solutions (such as self-consumption, storage, automation and flexibility) first will enable a cost-effective dimensioning of grid reinforcements. This Action Plan should ensure electrification is smart and flexible from the start.

The self-consumption potential of buildings should be maximised thanks to the flexible and smart electrification of heating, stationary storage as well as bi-directional charging of electric vehicles. Indeed, electrification in buildings works best when the full set of technical installations is electrified. This enables the building to make the most of the energy generated, take advantage of time-of-use tariffs and dynamic prices.

Flexible electricity consumption can make electricity bills lower for everyone by taking advantage of times when energy prices are low and reducing peak load at critical times to keep costly grid investment to a minimum.

➔**Full electrification** – Design incentives to promote fully electrified behind-the-meter systems where technically possible, including on-site generation with electrified heating, storage and smart EV charging, to maximise self-consumption first. Global Warming Potential requirements for buildings should value the full life-cycle climate performance of technologies such as solar PV and batteries.

➔**Smart meters** – The rollout of smart metering is still patchy in some Member States and should be addressed as priority to enable smart electrification.

➔**Incentivise flexible consumption** – Once consumers have a smart meter and electrified devices, dynamic pricing and time-of-use tariffs should be made available, while avoiding double taxation of flexible devices. Consumers should receive ample information about flexible pricing schemes.

➔**Electrical installations** – With over 132 million dwellings equipped with outdated electrical installations[11] (wiring, panels, etc), renovations policies and subsidies must address behind-the-meter electrical installations to enable the safe and efficient electrification of buildings[12].

6. Electrification as a central enabler of (energy) security

The EU's fossil fuel dependency has led us to energy import dependency. Indeed, 58% of our primary energy comes from imported fossil fuels[13]. This is an issue for our (energy) sovereignty as well as for our competitiveness, with an import cost of €375 billion in 2024 for Europe[14]. But the EU's fossil fuel imports could be reduced by 50% by 2040, mainly thanks to electrification[15].

[11] https://feedsnet.org/wp-content/uploads/2024/05/FEEDS_EPBD-implementation.pdf
[12] https://europe-on.org/wp-content/uploads/2025/03/ECI_EuropeOn_ZEB_brochure_FINAL_19122024_v2.pdf
[13] https://ember-energy.org/latest-insights/shockproof-how-electrification-can-strengthen-eu-energy-security/
[14] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52025DC0667&qid=1762869324977
[15] https://ember-energy.org/latest-insights/shockproof-how-electrification-can-strengthen-eu-energy-security/

However, making the most of electrification as a provider of (energy) security means rethinking how we conceive our energy system. This means heeding the recommendations for more attention to demand-side solutions outlined in the preceding sub-heading: full behind-the-meter electrification if feasible, promoting flexibility and self-consumption, and ensuring electrical installations are robust.

More specifically, making our decentralised energy system resilient also requires more attention to cybersecurity, enabling buildings(' installations) to switch to island-mode, and more public awareness.

➔**Making buildings autonomous** - Develop EU guidance on how to ensure the resilience of buildings and continuity of energy services in case of disruptions, including island-mode operation, minimum backup power duration, micro-grid infrastructure, and "islanding-ready" EV charging infrastructure.

➔**Community resilience -** Establish a clear regulatory pathway and financial incentives for local energy communities to develop and operate interconnected micro-grids, leveraging distributed energy resources and storage. This multiplies the number of resilient "islands" that can operate independently and reconnect swiftly.

➔**Simplify Crisis Communication** - Develop pre-approved, clear, and immediate communication protocols for use during energy shortages or security incidents, ensuring the public receives timely information and clear instructions on demand reduction.

7. Simplification: easier permitting and digitalisation

Electrical contractors are often responsible for the grid connection procedure, which can take a significant amount of time for a sector where workforce is in limited supply and time is scarce to meet all the current demand.

Harmonising and digitalising these procedures stand to make it much easier for both installers and consumers to electrify. This is a key solution for the EU to simplify and remove administrative burden hampering European businesses.

➔**Harmonisation** – Ensure that DSOs have similar procedures for grid connections, with similar documentation requirements, will make it easier for installers working across DSOs.

➔**Digitalisation** – Connection requests should be as digitalised as possible to make this process easier.