



Revision of the EPBD - T&E's top 10

Zoom in on the EPBD emobility provisions

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The vast majority of the electric car charging is private charging at home or work (90% according to the European Commission¹) and is not covered by the recently proposed Alternative Fuels Infrastructure Regulation (AFIR, part of the 'Fit for 55' legislative package), which only covers public charging.

The Energy Performance of Buildings Directive (EPBD, 2018/844) complements AFIR by mandating the deployment of private charging points in buildings. The current emobility provisions in the EPBD focus primarily on charging in (new) residential and non-residential (i.e. workplace or commercial) buildings –which is expected to take up a significant share of charging needs as emobility is democratised². But current plans for the revision **fall significantly short of ensuring the right conditions for the mass adoption of EVs.**

To ensure those conditions are met the ongoing revision of the EPBD should address the following ten points:

1. EPBD must be aligned with the EU Green Deal commitments;
2. Integrating emobility with buildings rather than silo-thinking;
3. EPBD should establish an EU “*right to plug*” for EV drivers into the law;
4. Scope of the EPBD, especially as regards the EV charging provisions, should be *extended to cover existing buildings*;
5. All parking spaces in buildings should be *cabled for multiple-user EV charging by 2035 with intermediate targets for 2025 and 2030*;
6. Harmonised minimum requirements for charging points in existing buildings;
7. EPBD should mandate all charging in buildings to be *smart charging ready*;
8. EPBD should link to the Renovation Wave and Strategic Roll Out Plan by ensuring that funding and recovery plans tackle *EV charging for all renovated buildings*;
9. Re-evaluate and remove current cost and scope exemptions to address as much building renovations as possible;
10. Addressing charging at private depots and logistic hubs for trucks;

¹ “Private charging represents more than 90% of charging. It will maintain a very high share in the future.” European Commission (2021), Proposal for a regulation on the deployment of alternative fuels infrastructure. [Link](#)

² Eurostat, Housing in Europe Statistics Visualised 2020 edition. Consulted on 19/08/21. [Link](#)

Introduction

The **EPBD is the only EU legislation to address private charging**³ and by failing to make this a focal point of the roadmap and the Impact Assessment, the EU would be **missing an essential piece of the European Green Deal and the Climate Target plan**.

The recent surge in electric vehicles (EV) sales (10.5% EV sales in 2020 and 15% in the first half of 2021⁴) highlights the need to ensure charging infrastructure keeps pace with the rapid growth of the EV market. The vast majority of EV charging will continue to happen in a private, often shared, space in buildings where EV charging is most affordable. However, current provisions for EV charging in the EPBD are inadequate and **—under its current form— the legislation would fall significantly short of setting the right conditions** for the mass adoption of EVs.

To **ensure buildings are ready for the emobility era**, 10 points must be addressed.

1. The EPBD needs to deliver on the SSMS commitment

On mobility in general, the EPBD roadmap only says that “*measures fostering sustainable mobility might also need to be updated*”. This lacks any clear strong commitment to update the infrastructure requirements for private buildings and fails to target EV charging specifically. Which thus highlights that the current EC plans for the revision of the EPBD are not fit for the purpose of the EU Green Deal nor the EV sales surge.

The EPBD revision must be aligned with the commitment of the Sustainable and Smart Mobility Strategy (SSMS) to recast the EPBD “*with a view to increasing the goals for charging points in our buildings*”⁵. This commitment was re-confirmed in a 2021 report from the European Commission (COM(2021) 103 final) stressing that “*private recharging infrastructure in residential and non-residential buildings will be addressed in the revision of the EPBD*”. The Commission should therefore deliver on its promises.

2. Integrating emobility with buildings rather than silo-thinking

With the majority of charging to happen in private (residential or work), commercial (shops and hotels) and public buildings, EPBD is the only law at European level to support this type of charging. To address this it is essential the EV charging in building is covered together with the building energy system, i.e. emobility should be integrated and interact with the building energy system. As such, the EPBD revision cannot be a buildings-only discussion where EV charging would be left to market mechanisms or the

³ T&E welcomes the change of legal instrument from a directive (AFID) to a regulation (AFIR), as demanded by nine key emobility stakeholders in July but regrets that the European Commission didn't use this change to extend the scope of the regulation to go beyond public charging and set harmonised requirements on private and semi private charging as well.

⁴ Transport & Environment (2021), *Plugged-in: T&E's EV market watch*. Retrieved from: transenv.eu/2020EVmarket

⁵ European Commission COM/2020/789 final, Sustainable and Smart Mobility Strategy – putting European transport on track for the future. [Link](#)

lowest common denominator. By failing to create the adequate link between EVs and buildings, the EU would miss on a crucial policy that will serve to charge millions of EVs and would have to revisit this issue in the near future.

3. Create a consumer “right to plug” in buildings

Burdensome and lengthy approval procedures are one of the main barriers for charging roll-out in member states. In many countries, drivers have to wait for the general assembly to have formal approval and start installation work or pay for the whole building to be rewired if they are the first to get an EV.

To ensure EV drivers can easily install charging where it is most needed, it is essential that the EPBD establishes an EU consumer “right to plug” into the law. This means that any EV driver that lives in multi-dwelling buildings has the right to get a charger installed in their shared garage once they make a request upon a purchase of an electric vehicle.

The EPBD (article 8.7) only requires member states to “simplify” the deployment of recharging points in both new and existing buildings without detailing what this means and how to do it, in other words, this vague requirement which has led to weak requirements and fragmented procedures among member states.

This provision needs to be strengthened by enacting the “right to plug” as an enforceable right in all buildings with shared parking spaces which should apply to tenants as well as co-owners in multi-unit buildings. Such a “right to plug” would incentivise smart and efficient EU infrastructure planning and permitting. It also should remove administrative hurdles (e.g. approval procedure) and collective action problems (e.g. split incentives).

Requesting and accessing an EV charger should be as simple as a subscription to other services (e.g. internet/phone provider) and the waiting time between the request and the installation in a private location should not exceed 3 months. Anticipating the planning of a collective charging infrastructure project and its sizing in condominiums – which go beyond individual initiatives and include multi-connector EV chargers – should be standard practice in order to reduce further connection costs.

At the workplace, employees should have the right to a dedicated or shared charger. The EPBD should explore how MS can incentivise workplace charging for employees in office buildings.

4. Extend scope of EV charging provisions to existing buildings

As highlighted in the evaluation of the 2014 AFID⁶, published alongside the Impact Assessment for the revision of the AFID: *“The current provisions of the EPBD focus primarily on certain new and renovated buildings (residential and non-residential) that represent a small share of the stock and introduce additional*

⁶ European Commission SWD(2021) 637 final, Evaluation of Directive 2014/94/EU on the deployment of alternative fuels infrastructure. [Link](#)

exemptions.” The document also reminds that “many stakeholders have raised doubts as to how much should be expected from the implementation of that Directive”.

The European Commission has highlighted that “AFID and EPBD are required to work together to provide a sufficient level of recharging infrastructure”. This can only be achieved by **extending the scope of the EPBD EV charging provisions to cover existing buildings** (see also point 5 and 6 below). Given the lower turn-over of the building stock, only setting requirements for private EV charging for new and heavily renovated buildings—would indeed not be sufficient to match the charging needs.

5. All existing buildings to be EV-ready by 2035 with intermediate targets for 2025 and 2030

The revised EPBD should make **all parking spaces in buildings cabled for EV charging by 2035**—which is the date by which all new car and van sales will have to be zero emission. This would cover both residential and non-residential buildings with more than ten parking spaces. This infrastructure consists in the pre-equipment (cable path, technical sheaths, drilling) as well as in the creation of collective electrical installations (switchboard, horizontal electrical column, bus cable) allowing the later connection of any EV user (tenants and employees/employers). These multi-connector EV chargers allow to connect individual charging points at a later date, at minimum cost, by simply installing a wallbox.

Intermediate targets of 10% in 2025 and 30% in 2030 are needed to achieve this target. By extension, all new or heavily renovated buildings⁷ (both residential and non-residential) with more than ten parking spaces should be made EV-ready (i.e. cabling for EV charging).

For buildings with more than 10 parking spaces, a collective recharging plan should be established in order to achieve these goals. The sizing (e.g. power availability) must be anticipated and go beyond individual initiatives.

6. Harmonised minimum requirements for charging points in existing buildings

Currently the EPBD only asks Member States to require a minimum number of chargers in non-residential buildings without setting a minimum threshold (Art 8.3). The revised EPBD should set a **harmonised requirement for the installation of a minimum number of charging points in all existing buildings** (both residential and non-residential) of more than ten parking spots which is in line with EV market uptake: at least **5% in 2025, 10% in 2027 and 15% in 2030**. For buildings of less than 20 parking spots at least one charge point should be provided by 2025, two by 2027 and three by 2030⁸. By extension, this

⁷ Improvement to Article 8.2 (non-residential: ducting of 1:5) and Article 8.5 (residential, ducting of all)

⁸ Improvement to Article 8.3 (which requires member states to require a minimum number of chargers in non-residential of more than 20 parking spots). The fleet percentages are based on the expected share of EVs in the fleet (current policies, ambitious scenario): 5%-7% in 2025, 8%-11% in 2027 and 14%-19% in 2030.

should also apply to all new or heavily renovated buildings⁹. When installing chargers, collective recharging plan should be favoured in order to allow for multi-connectors installations which allow connecting multiple EVs at a later stage, rather than more expensive individual connections.

7. Smart charging

The AFIR proposal mandates that “operators of recharging points shall ensure that all publicly accessible normal power recharging points operated by them are capable of smart recharging” while the EPBD currently focuses on new or heavily renovated buildings (which are thermally enclosed). The RED III proposal¹⁰ (also part of ‘Fit for 55’) rightly identified that a “gap exists for structures and areas not within the above categories, such as multi-storey parking structures and off-street parking areas with controlled access.”. The European Commission has thus proposed, as part of the RED III, that all new non-public normal chargers (i.e. all slow or normal private chargers) should support smart charging functionalities (and bidirectional charging functionalities when appropriate) in order to complement AFIR and EPBD “by creating transversal requirements for charging points to be deployed and operated in a manner that optimizes their contribution to the system integration of renewable electricity”. This should be supported and agreed as the final legal requirement in the coming years to ensure a flexible energy system that makes the best use of renewables across Europe.

RED III should be the main instrument to address smart charging for non-public chargers, and the revised EPBD should build on and align to the RED III smart charging provisions by translating these smart charging requirements for chargers installed in private buildings. In other words, the existing requirements in EPBD should be safeguarded and complemented by mandating **smart charging readiness for all new and renovated charging infrastructure in residential and non-residential buildings**. Furthermore chargers in buildings should be integrated in the building’s energy management system to facilitate integration of these vehicles and bi-directional flow of electricity into the grid while parked. The functionality levels elaborated for the domain of ‘Electric Vehicle Charging’ for the Smart Readiness Indicator offer a useful starting point. to this wider.

8. Link with Renovation Wave and Strategic Rollout Plan

In line with the Renovation Wave, the European Commission also needs to ensure that funding and recovery plans include and prioritise EV charging for all renovated buildings. A long-term funding programme for local authorities and governments could be developed and channeled through the MS to support the cabling of parking spots in residential and office buildings.

⁹ Improvement to Article 8.2 calling for at least one recharging point for non-residential buildings of more than 10 parking spots)

¹⁰ European Commission, 2021/0218 (COD)[Link](#)

The Strategic Rollout Plan¹¹ was published alongside the AFIR proposal and outlines a set of supplementary actions and measures to support the deployment of charging infrastructure. It enumerates the EU financing mechanisms which will be “reinforced and better targeted to attract private investment and increase (charging) capacity”. These instruments include for example the upcoming Alternative Fuels Facility (AFF), the Cohesion Fund or InvestEU. Regrettably, financing and funding for the deployment of charging infrastructure in buildings is not mentioned for any of these mechanisms. Crucially, the AFF —which will be presented in September 2021 as part of the new CEF II 2021-2027— should also be designed to support the deployment of charging infrastructure in shared buildings, especially in less wealthy areas.

9. Re-evaluate and remove current cost and scope exemptions

T&E —as well as many stakeholders (see point 4)— are concerned that current exceptions which limit the number of renovated buildings covered under the EV charging provisions could open loopholes. The European Commission should therefore re-asses the following exceptions to ensure the framework is not weakened and ensure that all (or most) building renovations are covered:

- The derogation for buildings for which the cost of the recharging and ducting installation exceeds 7% of the total cost of the building renovation.
- Exclusion of renovated buildings for which the renovation doesn't cover the car park or the electricity infrastructure of the building.

10. Private depots and logistic hubs

The scope of the EPBD — new buildings and major renovations — should be extended to all road vehicles, chiefly commercial vehicles. There is currently no framework for the deployment of (semi-)private charging infrastructure in private depots where trucks charge overnight and at logistic hubs (or distribution centers) where trucks load or unload cargo (usually for 1-3 hours). The EPBD is the right legislative instrument to support this type of charging and silo-thinking limiting the scope to traditional residential and non-residential buildings should be avoided. All new or renovated depots and logistic hubs should be required to make depots and garages at freight terminals ready for future battery electric truck charging. This include pre-equipment (notably cable path) as well as the rightly-sized and future proof grid connection¹².

¹¹ European Commission, COM(2021) 560 final, A strategic rollout plan to outline a set of supplementary actions to support the rapid deployment of alternative fuels infrastructure. [Link](#)

¹² For indicative purposes, a connection which could deliver 100 kW for each overnight truck parking spot and 350 kW for each opportunity truck parking spot should be considered as future proof.

Further information

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