

Advancing flexible buildings through the EPBD revision

smartEn contribution to the European Commission's Inception Impact Assessment

smartEn welcomes the launch of a consultation phase with stakeholders in view of the revision of the Energy Performance of Buildings Directive (EPBD).

Considering the roadmap and scenarios proposed by the Commission in its Inception Impact Assessment, smartEn supports Option 3 to amend the EPBD in a coherent way with both the Renovation Wave and the Energy System Integration Strategies.

The business community we represent calls for an ambitious regulatory framework that would enable buildings to become flexibility assets, fully integrated energy infrastructures in the energy system, and whose demand-side flexibility would increase the efficiency of the energy system. As calculated by the Commission itself¹, €5bn/year could be saved at low voltage level from the activation of distributed flexibility; a large share of this potential relies in buildings and their smart interaction with the e-mobility sector.

To this end, smartEn would like to highlight the following inputs and recommendations in view of the EPBD revision:

- **Introduce Mandatory Minimum Requirements (MMRs) (in addition to Minimum Energy Performance Standards) to unlock the demand-side flexibility potential of buildings**
 - Beyond setting MMRs to reduce final energy consumption and CO₂ emissions of buildings, clear MMRs should be introduced to specify how to activate the distributed flexibility of buildings and contribute to their reduced carbon footprint. Specific eligible actions should be contemplated.
 - Among these eligible actions to support MMRs for flexible buildings, interoperable Building Energy Management Systems (BEMS) to enable automated flexibility should be mandated in all new and renovated buildings from 2025. This requirement should complement existing BACS provisions.
 - Progress on MMRs for flexible buildings should be measured in view of the contribution of smart buildings to the achievement of the 10% peak reduction binding national target in 2030 that each Member State should set to stimulate and valorise demand-side flexibility.
- **Expand the current EPC framework to reflect the carbon footprint of buildings and include actual performance metrics to support their carbon neutrality trajectory**
 - Quantifying both the actual CO₂ and demand-side flexibility performance of a building² rather than providing an indicative energy performance figure would provide more accurate information to drive change, pull and push for smart building renovations as well as accurate data to end-users, market players and authorities.
 - In this light, EPC should evolve to integrate key elements from both Building Renovation Passports and Building Digital Logbooks instead of the development of additional and parallel certificates.
 - This EPC evolution should also consider the impact of EV charging in view of an energy system integration of building and transport sectors.

¹ https://ec.europa.eu/commission/commissioners/2019-2024/simson/announcements/speech-commissioner-simson-smart-energy-europe-smarten-online-symposium_en

² For more information: smartEn's Position paper '[Towards a Quantification of the Demand-side Flexibility of Buildings](#)'. October 2020

- **Strengthen e-mobility provisions by mandating smart chargers integrated in EMS for all new and renovated multi-family and non-residential buildings**
 - Aligned with a definition on smart charging that smartEn calls for in the AFID revision, the existing requirements set in art. 8 of EPBD should be strengthened to support the deployment of smart charging to allow the integration of EVs with buildings and the power system as Decentralised Energy Resources.

- **Expand the current NZEB requirement (for new buildings from 2021) to Positive Energy Buildings**
 - This new requirement would support the move to a more decentralised energy system where buildings would consume, store and generate energy in a flexible way to contribute to the more variable renewable system while increasing system efficiency. The contribution of EV smart charging in buildings as well as of smart controllers to all high usage appliances should be also considered for the qualification of Positive Energy Buildings in line with the Energy System Integration Strategy.

- **Mandate the SRI deployment at least for demonstration trials**
 - While keeping the voluntary nature of the Indicator, this measure would get Member States acquainted with the SRI and contribute to push and pull the development of smart buildings.