

TIMEPAC – Suggestions for the ongoing discussion on the EPBD recast 18 December 2022

Article 10 Renovation passport

The passport can be a useful tool to plan and finance step by step renovations in order to achieve defined targets (based on near-zero energy and zero emissions targets, respecting the energy efficiency first principle), to track the implementation of renovation measures and their impact in terms of energy efficiency improvements and greenhouse gas emission reductions.

The compromise version of the proposal for the recast EPBD (21 October 2022) contains the voluntary version of the Renovation passport (article 10) that will probably not be sufficiently effective and thus will not meet the intention of the recast EPBD. If decarbonisation of the building stock is a serious goal, then every building that does not have zero emission performance must have a renovation plan or show in some other way that this goal can be achieved. Therefore, it cannot be voluntary. It is true that the system boundary of the building is not always appropriate. However, solutions can be found for this case.

Article 13 - Smart readiness of buildings

The text is quite general because the SRI methodology is still in a testing phase. It is stated that "The rating shall be based on an assessment of the capabilities of a building or building unit to adapt its operation to the needs of the occupant and the grid and to improve its energy efficiency and overall performance." But if the goal of an SRI is to assess the smart readiness of the overall building, an SRI of a building unit might be irrelevant.

Article 14 - Data exchange

It is very promising that the proposal to recast the EPBD clearly recognises that if we want to make the EPC an effective tool for the analysis and improvement of the energy performance of buildings, the quality of the information it contains must be improved. It is also very promising that it considers that "The energy performance of a building shall be determined on the basis of calculated or actual metered energy use and shall reflect typical energy use for space heating, space cooling, domestic hot water, ventilation, built-in lighting and other technical building systems" (Annex I). However, it data exchange is to be relevant for the generation of the EPC, it is important to use measured data whenever possible.

Article 16- Energy performance certificates

The energy performance assessment can be done for a part of the building (i.e. a building unit) or the whole building. It is necessary to distinguish between both, and to have both types of assessment:

- to make it possible for owners or tenants to compare and assess the energy performance, it is preferable to consider a single building unit,
- recommendations for the cost-effective improvement of the energy performance and the reduction of operational greenhouse gases emissions should be preferable referred to the whole building.

Moreover, there are other sections in the directive where the expression "building or building unit" is used, as if they would be equivalent. In many cases, they cannot be considered as such. Moreover, the parts and whole are interrelated in ways that might be difficult to demonstrate. For instance, to determine the impact that a renovation of a building unit might have in the overall building performance (SRIs, but also deep renovation), could be problematic.

Article 19 Databases for energy performance of buildings

Data accessibility is mainly based on the European General Data Protection Regulation (GDPR). However, this regulation has several so-called opening clauses which allow for specific provisions to Member States. Such provisions have created barriers to the effective use of existing building data and will hinder the use of data repositories for building renovation purposes in some Member States.

Databases are a big step forward but it is not clear how actual energy-consumption data will be combined with targeted, specific energy-saving measures (for example, obtained from energy audits or technical inspection reports) in order to have an enhanced, more effective, EPC. A minimum set of publicly available data needs to be set up in the databases. Also, it is not clear how databases will be implemented in different Member States. In this regard, it is recommendable to apply FAIR (Findable, Accessible, Interoperable and Reusable) principles to foster the reuse of building data for third parties to provide new energy services.

Article 22- Independent experts

It directs to the Article 26 – "Availability of qualification, accreditation and certification schemes" of the EED recast. Unfortunately, in the EED training is once again not obligatory. It is up to Member States to decide if they actually need it.

Building log book and databases

A digital building logbook is described as "a common repository for all relevant building data, including data related to energy performance such as energy performance certificates, renovation passports and smart readiness indicators, which facilitates informed decision making and information sharing within the construction sector, among building owners and occupants, financial institutions and public".

On the other hand, national databases for energy performance of buildings are referred to with these terms: "The database shall allow data to be gathered related to energy performance certificates, inspections, the building renovation passport, the smart readiness indicator and the calculated or metered energy consumption of the buildings covered".

There is some overlapping between the two terms, building log book and database, while the possible connections between both are not mentioned (aside from the reference to the intereconnectivity of databases). In any case, the use of building log books and building databases to improve the energy certification of buildings is an ongoing field of research that might be difficult to cast in legislative terms.

Primary energy

"Primary energy" is mentioned several times throughout the text. In Annex I can be read that "Primary energy factors or weighting factors shall be defined by Member States. The choices made and data sources shall be reported according to EN 17423 or any superseding document". According to the EN 17423:2020 standard, "Primary energy may be related to non-renewable energy and renewable energy. If both are taken into account, it is called 'total primary energy'". In the text of the directive, wherever the term "primary" energy" it quoted, it should be specified whether it is meant "non-renewable primary energy" or "total primary energy", if relevant. Below are the points to be amended:

- Article 3, subparagraph 1, letters e, g
- Article 9, subparagraph 1
- Article 9, subparagraph 2
- Article 15, subparagraph 1
- Article 16, subparagraph 1
- Annex I, subparagraph 1
- Annex II
- Annex V

In Annex V, points "f", "g" add "calculated" at the beginning of the sentence. In Annex V, point "h" change "operational" to "calculated".