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## APPLICABILITY OF THE ASSESSMENT FRAMEWORK ON BUILDING RENOVATION OF THE EUROPEAN UNION IN SPAIN

## Markel ARBULU1\*, Xabat OREGI2, Markel RUEDA3, Belinda LÓPEZ-MESA4

- 1-3 CAVIAR Research Group, Department of Architecture, University of the Basque Country UPV/ EHU. Plaza Oñati. 2. 20018 Donostia – San Sebastián. Spain
- <sup>4</sup> Department of Architecture, University of Zaragoza, 50018 Zaragoza, Spain
- \* Corresponding author. E-mail address: markel.arbulu@ehu.eus

**Abstract** - The energy renovation of buildings is one of the main keys to achieve the decarbonisation objectives of the European Union as defined in the European Green Deal. To proceed with them, some of the main tools are the Energy Performance of Buildings Directive (EPBD) and the Commission Recommendation (EU) 2019/786, with an assessment framework composed by Measurable Progress Indicators (MPIs) to assess the decarbonisation process of the national building stock of the Member States. The objective of the study is to analyse the applicability of the MPIs of the assessment framework in Spain. The study carries out deep research of the viability of the MPIs in terms of data availability as well as a round table of 39 experts from different national organizations focused on the energy efficiency of buildings. Thus, the methodology is developed in three stages: (1) the analysis of the viability of each MPI in the Spanish context in terms of data availability; (2) prioritization of the MPIs through a round table of experts in energy efficiency of buildings; (3) critical evaluation of the priority MPIs regarding the efficient applicability in Spain. Firstly, the analysis of viability shows that it is possible to develop most of the MPIs of certain evaluation scopes, like 'Overview of policies and actions to target the worst-performing segments of the national building stock' with 6 out of 7 MPIs viable; however, in some other scopes very few or none of the MPIs are viable, like in 'Policies and actions to target all public buildings'. Secondly, the expert round table prioritized 8 as the most important MPIs to evaluate the renovation of the national building stock, addressing different evaluation fields like environment and energy, renovation progress, social measures, and integration of technologies. Thirdly, the evaluation of the selected eight priority MPIs show that half of them is not viable in Spain according to the data availability, one partially viable, and only three of them are viable, but with limitations in the data quality; in the viable MPIs, the available data sources that allow the processability, exist only for two of them; georeferenced data exist for none of them. In conclusion, the MPIs of the EU's assessment framework provide convenient indicators to assess the renovation of the national building stock according to the expert round table, but due to the data availability, it shows a limited applicability in the context of Spain.

Keywords – Decarbonising; Energy Performance of Buildings Directive (EPBD); European policy; long term renovation strategy (LTRS); Measurable Progress Indicator (MPI); National building stock

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