



NEXT-GENERATION ENERGY PERFORMANCE CERTIFICATES. USERS AND STAKEHOLDERS REQUIREMENTS AND MARKET'S NEEDS

Abstract

Energy Performance Certificates (EPCs) are a mandatory requirement for the EU Member States (MS) when constructing, selling, or renting a building, acting as a transparent information instrument, for all the involved stakeholders, regarding the energy performance of a building asset. Existing procedures and tools used in assessing buildings' energy performance across Europe, present several drawbacks and discrepancies that delay the energy transition of the European building stock to a greener and sustainable model. In order to have a holistic approach on the drawbacks and requirements of the current EPCs, it is important to capture the stakeholder requirements and feedback, depending on their role on the EPC life cycle.

This study performed under the H2020 project "Next-generation Dynamic Digital EPCs for Enhanced Quality and User Awareness (D²EPC)", aims to identify the needs and requirements of the major stakeholders and the market, concerning the emerging next-generation EPCs. The results of this study will help to understand the potential reach and impact of the next generation EPCs, as well as to adopt EPCs rationale into the current practices of the industry. The methodology suggested by the Project Management Institute (PMI) for identifying EPC stakeholders was employed. A questionnaire concerning the needs and gaps of next generation EPCs was addressed to the identified stakeholders, and the findings were analysed, towards delivering the major trends and challenges of the buildings energy certification field. In terms of this study, desk research involving the assessment of 52 reports was also conducted, with the aim to identify the challenges, needs, and opportunities in current EPC schemes. The findings of the study are anticipated to support the efforts and initiatives conducted on a European level, for the upgrade and improvement of the buildings energy certification.

Keywords

EPC, LCA, BIM, DT, GIS, human comfort, stakeholder, D²EPC.

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