Opto-Electronics Review, 2015, volume 23, issue 1, pp. 85-89

Energy performance assessment with empirical methods: application of energy signature

Belussi, L.; Danza, L.; Meroni, I.; Salamone, F.

DOI: https://doi.org/10.1515/oere-2015-0008

Abstract:

Energy efficiency and reduction of building consumption are deeply felt issues both at Italian and international level. The recent regulatory framework sets stringent limits on energy performance of buildings. Awaiting the adoption of these principles, several methods have been developed to solve the problem of energy consumption of buildings, among which the simplified energy audit is intended to identify any anomalies in the building system, to provide helpful tips for energy refurbishments and to raise end users' awareness. The Energy Signature is an operational tool of these methodologies, an evaluation method in which energy consumption is correlated with climatic variables, representing the actual energy behaviour of the building. In addition to that purpose, the Energy Signature can be used as an empirical tool to determine the real performances of the technical elements. The latter aspect is illustrated in this article.