

From Energy Certificate towards Sustainability Report ?!

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Abstract

To increase the demand for energy-saving, environmentally friendly and sustainable buildings it is- among other things - necessary to describe their advantages, to assess their performance and to signal their quality to investors, buyers and/or tenants. For this purpose numerous assessment methods and tools, rating and certification systems were and are presently developed in several countries. These methods, tools and systems are used on a voluntary base.

In parallel to this trend, at the present an energy certificate system is launched in Europe. According to the Energy Performance Directive 2002/91/EC it will become obligatory to present this certificate to each customer during every transaction (sale or renting). This is to ensure that every tenant or buyer can inform himself about the energetic quality/energy performance of a building or flat.

The paper discusses the advantages and disadvantages of the approaches, based on voluntary activities respectively on legislation.

The "Thematic Strategy on the Urban Environment " (COM (2004) 60) suggests to advance the energy certificate. One of the medium-term goals is to develop a document that can be used to describe and evaluate the contribution of buildings to a sustainable development.

The paper introduces and discusses possibilities for the further development of the energy certificate towards a sustainability report. Starting point is the "energy pass", which will soon be introduced in Germany. The paper presents possibilities of integrating the aspects "global and local environmental protection", "operation costs" and "thermal comfort" into an energy certificate as an attempt to consider the ecological, economic and social dimension of sustainability. Additionally it

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shows how a connection between an energy certificate system and a system for monitoring/controlling the energy consumption can be established.

Finally the paper illustrates the present workings on a system of design and assessment tools in Germany. These tools complement one another and make a complex evaluation of a building's contribution to a sustainable development possible.

Keywords: energy performance, energy certificate, sustainability, assessment, design and assessment tools

Theme: Education and Market Transformation

Topic: Energy Conservation and Auditing