

ENERGY PERFORMANCE CERTIFICATES (EPCs) AS AN EFFECTIVE TOOL TO MAP EUROPE'S BUILDING STOCKS, TO MONITOR THE IMPACT OF BUILDINGS' POLICIES

In Europe, availability of building data is rather poor, which results both from data gaps, but also from low transparency and limited access to data. Each country has its own approach to gathering data, while differing conventions make immediate comparisons very difficult.

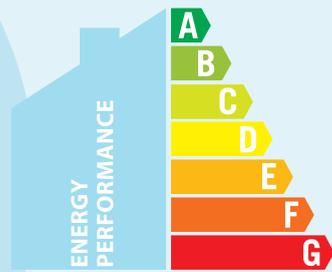
The Energy Performance Certificates (EPCs), an integral part of the Directive on Energy Performance in Buildings (EPBD) (2002/31/EC); (2010/91/EU), are an important instrument that should contribute to the enhancement of buildings' energy performance.

EPCs can be a powerful market tool to create demand for improved energy performance in the buildings sector. Studies prove that EPCs have the potential to be important sources of information on the energy performance of the EU building stock and affect renovation measures.

EPCs are more than an information tool. They are an effective instrument to map energy performance of building stock in the country, to monitor the impact of buildings policies, to support minimum energy requirements within the regulatory process and much more.

EPCs ARE CURRENTLY AMONG THE MOST IMPORTANT SOURCES OF INFORMATION ON THE ENERGY PERFORMANCE OF THE EU BUILDING STOCK.

HOW TO MAXIMISE THE USEFULNESS OF AN EPC REGISTER for policy makers, market actors, research organisation and others



TOOL TO MONITOR IMPLEMENTATION AND IMPACT OF POLICIES AND PROGRAMMES
e.g. support for independent control systems, monitoring of the Art 5, EED

DECISION-MAKING SUPPORT TOOL
e.g. setting minimum energy requirements, input to national renovation strategies, improvements and design of the new support mechanisms

MARKET AND ECONOMIC ANALYSIS
e.g. analysis of retrofit investment needs

POLICY MAKERS

REAL ESTATE

BENCHMARKING TOOL OF ENERGY PERFORMANCE IN BUILDINGS

INFORMATION TOOL TO INCREASE MARKET EFFECTIVENESS

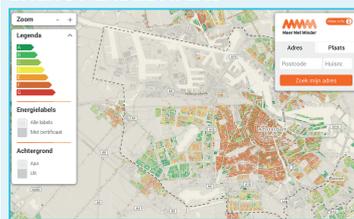
SOURCE OF INFORMATION OF BUSINESS ANALYSIS AND RESEARCH PROJECTS
e.g. EPISCOPE project (IEE funded project) that uses EPC data to assess building energy performance before and after renovation (in some pilot projects)

PRIVATE SECTOR & RESEARCH

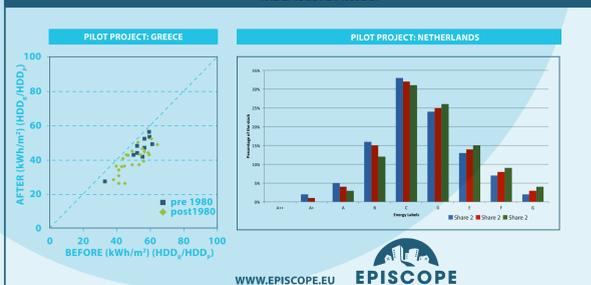
ENERMAP



ENERGY LABEL ATLAS



THE EPISCOPE PROJECT



CURRENT STATUS OF THE CENTRALISED EPCs REGISTERS ACROSS EUROPE

While it is not compulsory to set up a central/regional EPC register, almost all MSs have advanced in setting up a system to collect EPC data. These measures were mostly taken in the context of monitoring and quality control of energy certification processes (required by the EPBD).

In 2014, 24 countries have an operational central/regional EPC registers (plus Norway; Poland, Latvia, Luxemburg and the Czech Republic lining up to launch their own registries). In some countries (e.g. the United Kingdom and Belgium – Flanders), there are separate databases for residential and non-residential buildings. For Italy and Spain the databases are only available in selected regions.

FIG.1 EPCs REGISTERS ACROSS EUROPE

BPIE Survey 2013

- CENTRAL EPC REGISTER
- REGIONAL EPC REGISTER
- PLANNED
- REGIONAL AND PLANNED ON CENTRAL LEVEL



FIG.2 UPLOAD OF EPC DATA

BPIE Survey 2013

- AUTOMATIC REGISTRATION EPC DATA
- MANUAL REGISTRATION OF EPC DATA
- CENTRAL SECRETARIAT TRANSFERRING DATA
- DEPENDS ON REGION
- EPC REGISTER IS NOT AVAILABLE
- MANUAL AND AUTOMATIC REGISTRATION OF EPC DATA
- VALIDATION REQUIRED FOR ISSUING EPC
- EPC ISSUED BY QUALIFIED EXPERT



UPLOADING OF EPC INFORMATION IN THE DATABASE IN ALMOST ALL MS IS EXCLUSIVELY THE RESPONSIBILITY OF THE QUALIFIED EXPERT. POSSIBLE WAYS OF UPLOADING THE EPC TO THE REGISTER ARE:

An automatic upload of EPC data through standardised data protocol (e.g. xml, editable pdf) which can take place either before or after issuing the certificate;

A manual upload of EPC data conducted (usually) through an input form on the online platform. In this case, the expert needs to manually retype the results of the EPC in the input forms.

An electronic copy of the EPC is sent to the Central Secretariat, who is responsible for storing and/or transferring information to the EPC database.

In some countries the EPC must be firstly officially validated/approved and then uploaded to the EPC database.

FIG.3 PUBLIC ACCESS TO EPC DATABASES

BPIE Survey 2013

- PUBLIC ACCESS WITH PROTECTED PRIVACY
- ACCESS FOR SOME ORGANISATIONS
- DEPENDS ON REGION
- NO PUBLIC ACCESS
- EPC REGISTER NOT AVAILABLE
- PROVISION OF AGGREGATED STATISTICS



PUBLIC ACCESS TO EPC DATA

The level of publicly available information in EPC database varies between Member States.

In some cases open access to selected EPC information is provided directly from the database (in Denmark, Estonia, Hungary, Ireland, Lithuania, the Netherlands, Portugal, Sweden, parts of the United Kingdom-England and Wales and Norway); whereas in other, only aggregated results are made publicly available (Belgium-Flanders, Greece, Croatia, Hungary, Romania).

In several countries the access to EPC information is provided upon request of a third party organisation, mainly for research and (sometimes) commercial purposes. In some countries (i.e. Bulgaria, Germany, Finland, Malta and Cyprus) there is no public access to the EPC database.

RECOMMENDATIONS

EPC schemes are not yet fully implemented in all MS, nor are they sufficiently enforced. Therefore, EPC quality, credibility and usefulness vary largely among MS, and there is still a need to further support and set guidelines for the implementation of EPC schemes at the national level. The potential to change the status quo lies in effective implementation of the requirements of the recast EPBD (2010/91/EU), such as establishing a well-functioning system for independent EPC control, and also enforcement of penalties for non-compliance.

- There is a need to introduce further measures for quality assurance, especially during the early stage of the certification process.
 - There is an increasing number of countries that use tools for plausibility checks of EPC data in the calculation software and/or the EPC registers. Errors in input data are among the most typical factors that influence the quality of EPCs. For example, in Hungary and Ireland, the first plausibility check on EPC data is conducted before the certificate is officially issued.
- There is a need for guidance in the development of centralised EPC registries, not only to support the independent control system, but most importantly as a tool to map and monitor the national building stock. Therefore, the European Commission should provide further recommendations and enable exchange of best practices towards functional, interlinked, and automated databases.
- There is a need to promote effective use of EPC data. A well-functioning EPC system, accompanied by an EPC database, provides a ready-to-use source of information on the building stock. There is an increasing number of best practices across Europe that demonstrate the added value of EPC data for policy making (e.g. to inform relevant renovation strategies) and monitoring, as well as market and research analysis. For example, Bulgaria used the EPC register to inform the national renovation strategy (Art. 4, EED).

BPIE studies on Energy Performance Certificates are available on our website.