

The cadastre of buildings' energy performance

The Case Study of the Regione Lombardia

Massimiliano Romagnoli (Italia)



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May 6-10 2012
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A recent national legislation provides that, in successive times, all Italian properties with a heating/conditioning system are required to adopt a document, also known as Energy Performance Certificate (ACE "Attestazione Certificazione Energetica"), which indicates the energy performance of the building on a conventional scale.



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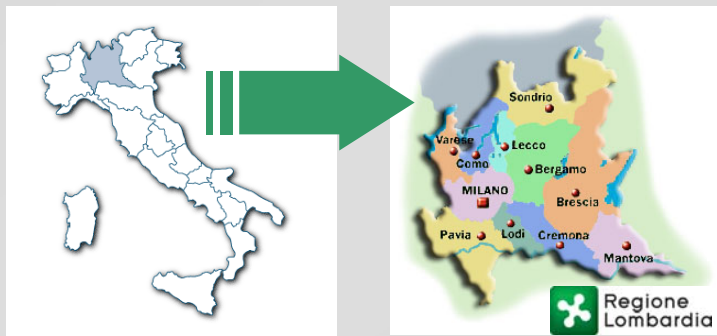
One of the most important priorities in the Italian legislation, is the rational use of energy in order to reduce pollution in areas with high smog levels.

We could reach this target by :

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In order to implement federalism in Italy, the national law provides that each region could define, through its own regulations, the principles of the national standard. In this (case) study I would like to describe which actions Regione Lombardia (one of the largest and most populous Italian region) has made to achieve its goals



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Regione Lombardia is located in Northern Italy, in the heart of Europe .

It is the most economically advanced area of transit to the Mediterranean sea and a bridge between east and west of the old continent.



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The strategic geographical position has favored the fact that Regione Lombardia has become one of the most industrialized and densely populated regions of Europe.

Regione Lombardia is also characterized by a serious air pollution due to :

- *important industrialization and urbanization*
- *the region's territory characteristics*
- *the continental climate, that is distinguished by cold winters and hot humid summers with few constant winds.*



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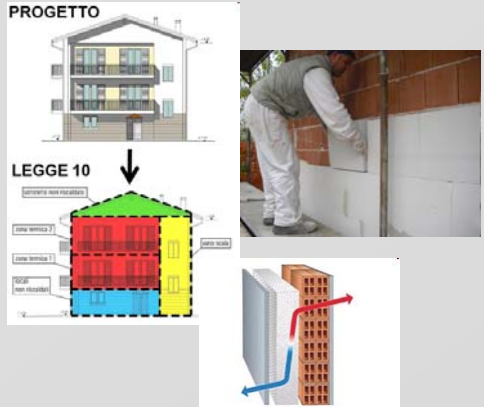
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Regione Lombardia has prepared very detailed rules on certification and buildings' energy efficiency.

These rules provide that any work on buildings must be aimed to save the energy.

Obviously different ways were identified according to performance standards' consistency for building construction and equipment by building's enclosure

These limits are more restrictive than the current national standards and anticipate the goals of the national framework law in terms of timing and energy performance.



To make a performance monitoring of the buildings Regione Lombardia has created a public company called CESTEC.

The specific competencies of this institution are :

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The main subject of this report is to describe the procedure for energy certification that updates buildings' energy cadastre .



This update is executed by qualified professional surveyors.



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To make this job ,the surveyors not only must have the required qualification and skills, but need to attend a specific course organized by CESTEC of at least 80 hours.

At the end of the course, the surveyors have to pass a professional examination to obtain the accreditation.



In addition, the professional has the obligation of continuing education according to CESTEC rules, in order to be updated on legislation, technology and construction techniques involved.



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The surveyors process an Energy Performance Certificate (ACE) according to regional calculation procedure,

on the bases of a previous detailed analysis of the building shell and equipments installed inside.

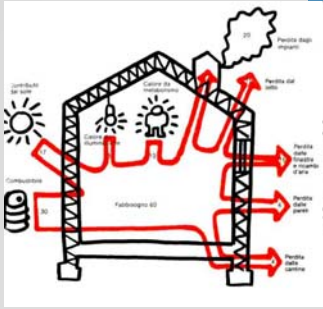


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To certify a property, the following activities are required by the professional:

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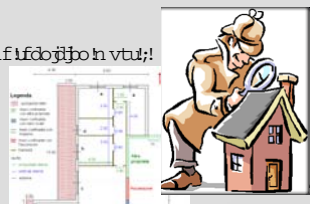


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To certify a property, the following activities are required by the professional:

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To certify a property, the following activities are required by the professional:

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To certify a property, the following activities are required by the professional:

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The document ACE

The document ACE consists of two A4 pages :



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The document ACE

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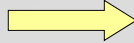
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Conclusions : "The role of modern Italian surveyor"

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