

POLITECNICO DI TORINO  
FIRST SCHOOL OF ARCHITECTURE  
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***Honors theses***

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**Building environmental assessment tools and Protocollo ITACA: proposal for Sardinia Region**

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The purpose of this thesis regards both a critical and analytical evaluation with a special attention on projecting through the following aims: first of all, an underlining of the building environmental assessment tool, with special focus on planning processes, is essential; as a further matter, the main part will regard an hypothesis to propose a Protocol ITACA for Sardinia Region in order to sensitize the Government on the guardianship, on environmental protection and, finally, on energy conservation.

First chapter describes the most popular international assessment tools (such as Breeam- UK, LEED- USA, Green Star- Australia e Casbee- Japan). A few comparisons will be done between the followings topics: the application parts of the methods, the destination of use, the characteristics of the contextualization, the costs of evaluations and certifications, the main regulations, the actors involved, the topic areas, the scores and the labelling.

Second Chapter will regards on the comparison between three specific assessment tools which are used in Italy: the Protocol ITACA, the SB100 and the LEEDitalia. A full analysis will be carried out regarding the following subjects: the parts of application, the destination use, the actors involved, the evaluations and the certifications.

In Third Chapter a further comparison will be done, mostly regarding four Protocol ITACAs related to the following Italian regions: Piemonte, Lazio, Marche and Puglia. A special analysis of the macroareas and the categories of requirements for each region will be carried out in order to consider the different geographic contexts.

Fourth chapter will be about the original project of synthetic protocol ITACA for Sardinia Region described in thirty-nine papers. This papers, regarding sustainable materials, are differentiated from the others protocols, because of the implementation which refers to the technical Report UNI 11277: 2008. One of these papers also, which is completely original, is about toxic materials in constructions with the identification of the risk phrases and the COV concentration.

At the end, Fifth Chapter will show critical considerations and final conclusions.

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