

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture for Sustainability
Honors theses

Urban tissue and sustainability: case-studies and design. Eco-Industrial Settlement in Collegno

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The theme of sustainability in architecture arises with increasing relevance and its scope is broad. Talk about sustainability is possible at various scale: building design and land use.

The project dealing with the urban design neighborhood level, was chosen because of the interest in the observation of the benefits generated by an entire system sustainable urban therefore not conceived as the simple sum of individual buildings but as a result of a general design to sustainability.

We studied some of the topics concerning urban ecology and sustainability, through environmental issues and sustainability practices of urban design. Finally, we have considered some fundamental features of the evolution of sustainability in the residential fabric.

The valuation methods are becoming more and more important for critical analysis, verification and decision support. Based on the information gathered, it is found that the Italian picture on the methods of assessment of environmental quality in the residential construction sector at the neighborhood level, is not yet well-defined criteria recognized at a national level are still being defined.

The research for methods of operational assessing is led up to the knowledge of the method LEED for Neighborhood Development, taken as a reference for the analysis of six case studies.

The project carried out, is based on three major themes such as LOCATION, SMART LOCATION & LINKAGE, NEIGHBORHOOD PATTERN & DESIGN and GREEN INFRASTRUCTURE & BUILDINGS.

The final result is a design driven by significant aspects concerning environmental quality, found in the case studies before analyzed, the LEED method, with positive results pointed towards a more sustainable level of settlement, and not only focused on the single building.

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