

## INTEGRATION OF SOLAR ENERGY RECOVERY SYSTEMS IN URBAN DWELLINGS

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### ABSTRACT:

At a local and global scale housing is a matter of the utmost complexity and actuality. The present challenges and the need for proper guidance concerning the future developments are topics of study and debate not only for architects, planners and engineers, but also for the highest political and administrative institutions, for researchers from different fields of activity (psycho-sociology, economics, natural sciences, etc.), for the media and the general public [*e.g.*, Lepadatu 2011].

Exploiting the potential of solar radiation during the hot season aims at reducing the costs for heating and domestic hot water and increases the comfort level for the inhabitants. Therefore, it is important to focus primarily on accumulation of information that could form the basis for defining, conceptualizing and implementing a strategy to facilitate the integration of solar systems.

The main objective of this paper is to analyze several proposals for solar systems applied to a collective housing building's architecture. The multi-criteria analysis will take into account several coefficients that influence mostly the process (technical, architectural, legal, energy efficiency).

Keywords: solar energy recovery systems, urban dwellings, energy efficiency, annual coverage, architectural interventions