





Special Issue Reprint

# **Alternative Energy Systems in Buildings**

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Edited by Antonio Colmenar Santos David Borge Diez Enrique Rosales Asensio

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The main objective of this book is to evaluate alternative energy systems in buildings, regardless of their location and climatic conditions. Over the past few years, the use of passive cooling and heating technologies has become more common for reducing the energy consumption of buildings. However, for some building systems, these technologies are not used very often. Buildings intended for children or the elderly are often climatized to improve indoor thermal conditions. In this Special Issue, a cost reduction in climatization based on passive systems is expected to be conducted. Building site optimization is expected to be performed, to improve thermal behavior. To achieve this, computational fluid dynamics tools are expected to be used. These reductions are expected to be studied for conventional and renewable energy systems, showing that passive systems provide better thermal comfort and reduce the initial investment and energy consumption, making low-cost buildings feasible.





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