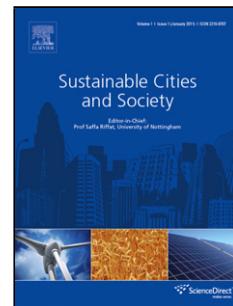


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A Genetic Algorithm to optimize consistency ratio in AHP method for energy performance assessment of residential buildings – Algerian case study

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Research Highlights

- Analysis and presentation of the energy situation in Algeria.
- Analysis and selection of performance indicators “PIs” and development of a methodology for energy performance assessment of residential buildings in Algeria;
- Proposition of an optimization for AHP weighting method basing on the optimization of the decision matrix (or of the consistency ratio) using genetic algorithms;
- Assessment of energy performance level of residential buildings in Algeria using the proposed methodology.

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