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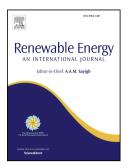
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A financial approach to renewable energy production in Greece using goal programming

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Abstract

Investing in renewable energy production is a high interest venture considering global energy needs and the environmental impact of fossil fuel consumption. Motivated by the goals set by the European Union towards 2020, this study aims at designing a renewable energy map (installing solar power plants) in Greece. Three aspects are considered, namely, social, financial, and power production aspects. A goal programming model is developed under target and structural constraints, and all possible weight combinations are examined. The solutions derived from each iteration are subjected to a financial meta-analysis, considering different tax and return scenarios aligned

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