

**REGIONAL SOLID WASTE MANAGEMENT IN THRACE THROUGH
SPREADSHEET ILP MODELING**

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ABSTRACT

An ILP spreadsheet-based model is presented for regional solid waste management, with an application to Thrace, Greece (300,000 pop.). Emphasis is placed on the practicality of the analysis. The waste management options: 17 Transfer Stations, 11 Landfills, and 11 sorting and composting plants. The model minimizes total cost (transport; facilities setup and operation costs; minus the revenue from compost). An upper limit of 10,000 GRD/ton is computed for SWM. Critical ranges are established for unit transport cost and compost revenue over which the central facilities and the composting plant are selected. Useful conclusions are drawn for a local administrator.