Optimization of Electric Vehicle (EV) Charging Station Allocation Based on Multiple Data - Taking Nanjing (China) as an Example

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Abstract: Due to the global pressure on climate and energy, many countries are vigorously promoting electric vehicles and building charging (public) charging facilities. Faced with the supply-demand gap of existing electric vehicle charging stations and unreasonable space usage in China, this paper takes the central city of Nanjing as an example, establishes a site selection model through multivariate data integration, conducts multiple linear regression SPSS analysis, gives quantitative site selection results, and provides optimization models and suggestions for charging station layout planning.

Keywords: electric vehicle, charging station, allocation optimization, urban mobility, urban infrastructure, nanjing

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