

(54) Title of the invention : Selection of Optimal location and capacity of EV charging station

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(57) Abstract :

ABSTRACT Selection of Optimal location and capacity of EV charging station The deployment of Electric Vehicle (EV) charging stations across cities is of increasing importance in order to create a more sustainable mode of transportation. The selection of the optimal location and capacity of the charging stations is a major concern for the EV industry. Different decision-making approaches have emerged in the past to effectively address this problem, and the Data Envelopment Analysis (DEA) is among the most promising ones. DEA is a non-parametric approach which incorporates performance measures to determine the best solution. It has shown to effectively identify the best allocation of resources via its efficiency scores in order to determine the optimal location and capacity of the EV charging stations. Moreover, DEA can be manual or automated, allowing the user to select the exact specifications of the problem based on their requirements. This paper aims to discuss the selection of optimal location and capacity of EV charging stations using DEA.

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