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**Mitigation of Congestion Related to Quick Charging of Electric Vehicles Based on
Waiting time and Cost–benefit Analyses: A Japanese Case Study**

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Highlights

- Quick charging service for electric vehicle is modeled as queueing problem
- Quick charging records are used to evaluate both charging and inter-arrival times
- New quick charger is necessary when usage frequency exceeds 7 vehicles per day
- Cost-benefit analysis is performed to evaluate both social and initial costs

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