Cruising with a Battery-Powered Vehicle and not Getting Stranded

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PLANNING ENERGY-EFFICIENT ROUTES

With Loading Stations (LS)

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EV-REACHABLE NODES

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FEASIBLE ROUNDTOURS

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How can I minimize the number of recharging events?

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Which destinations can be reached when recharging is allowed?

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W ith Loading Stations (LS)

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Path where recharging is necessary twice to reach the target (black) from the source (green). LS are marked blue.

Query times for computing $C(v)$ are equal to $O(\log n + m)$.

Experimental results for the graph of Southern Germany $(N=1,600, m=11,685)$.

Which roundtours are feasible when recharging is allowed?

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