Parlikar, Anupam; Schott, Maximilian; Godse, Ketaki; Kucevic, Daniel; Jossen, Andreas; Hesse, Holger (2023): High-power electric vehicle charging: Low-carbon grid integration pathways with stationary lithium-ion battery systems and renewable

## generation. In Applied Energy 333, p. 120541. DOI: 10.1016/j.apenergy.2022.120541.

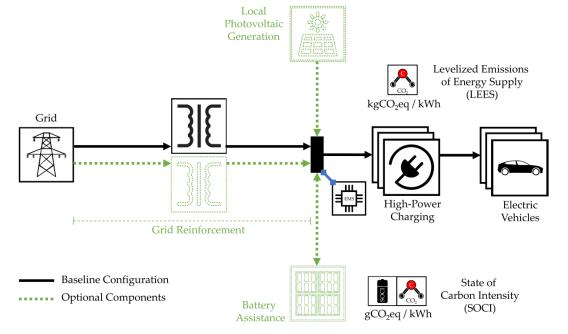
## (BA-HPC) with Grid Reinforcement (GR) with and without local renewable generation

High-Power Charging for EVs at gridconstrained sites using the LEES metric

Carbon Intensity (SOCI) ٠

New state variable for BESSs – the State of

- Methodology to assess carbon footprint of
- Comparison of the carbon footprint of ٠ Battery-Assisted High-Power Charging



with stationary lithium-ion battery systems and renewable generation

High-power electric vehicle charging: Low-carbon grid integration pathways

Paper Highlights:

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Extension of the LEES methodology to ٠ include grid energy