

# High-power electric vehicle charging: Low-carbon grid integration pathways with stationary lithium-ion battery systems and renewable generation

## Paper Highlights:

- Extension of the LEES methodology to include grid energy
- New state variable for BESSs – the State of Carbon Intensity (SOC<sub>I</sub>)
- Methodology to assess carbon footprint of High-Power Charging for EVs at grid-constrained sites using the LEES metric
- Comparison of the carbon footprint of Battery-Assisted High-Power Charging (BA-HPC) with Grid Reinforcement (GR) with and without local renewable generation

