

# Caldera Charge Grid: EV Charging Infrastructure Impact and Strategy Development

## Caldera Charge Grid

Caldera Charge is an electric vehicle (EV) charging infrastructure simulation platform designed to study the impact of EV charging on the grid and develop strategies to manage charging. Its foundation is a library of high-fidelity EV charging models derived from extensive charging and battery testing data that INL has collected over the past decade. The charging models accurately estimate charge power profiles, efficiency, and power factors for various EVs and charging technologies under varying grid conditions. It also contains intelligent charging algorithms for studying how to manage charging efficiently and the ability to analyze the benefits of PEVs scheduling charging at public charging infrastructure. It enables the co-simulation of the transportation network and the grid. It is funded by the DOE's Vehicle Technologies Office and Office of Electricity. This platform is ideal for electric utilities, universities, private research institutions, and industry.

This software is open source and available at no cost. Download now by visiting the product's [GitHub page](#).

## Category

Energy and Power Systems

## Author(s)

Don Scoffield

Manoj Kumar Sundarrajan

Paden Rumsey

## Learn more

