



SOLVING THE PROBLEM

PowerFlex is a service company that develops, deploys and manages large-scale adaptive charging networks that enable mass charging and a greener building. Their adaptive electric vehicle (EV) charging technology provides a target charging capacity at 40 percent lower infrastructure and operating costs, reducing the carbon footprint of a building by tracking renewable generation and demand response signals from the grid.

THE IMPACT:

To reduce their carbon footprint and drastically improve sustainability, buildings must support renewable generation and EV charging. Electricity generation and transportation combined constitute two-thirds of all energy consumed and emits more than one-half of greenhouse gases in the United States. PowerFlex minimizes peak power demand, thus capital and operating costs are reduced. Additionally, it enables mass charging and helps integrate renewables, allowing negative carbon footprint.

HOW IN² IS HELPING:

PowerFlex Systems is in need of funding for product development, for both hardware and software. The company is seeking help in testing joint optimization of EV charging and grid operation. PowerFlex Systems will also utilize NREL's expertise in executing strategies.

TIER 1: Bench Scale

- Concept development stage
- Develop plans for prototyping & testing
- 3 – 5 years to market

TIER 2: Prototype

- Available for testing & validation
- Plans for development of final product
- Less than 2 years to market

TIER 3: Commercially Ready

- Models available in limited quantity
- Integrated demonstration
- Less than 18 months to market testing

ABOUT THE IN² PROGRAM

IN² is a technology incubator that fosters and accelerates early stage technology companies that provide scalable solutions to reduce the energy impact of buildings. Through a \$30 million program funded by the Wells Fargo Foundation and co-administered by the U.S. Department of Energy's National Renewable Energy Laboratory (NREL), sustainable building technologies are able to evolve and develop, contributing to the overall goal of a Smart and Connected Community that uses energy, water and other resources efficiently, reducing the negative impact on the environment.

