Great Lakes Protection Fund
1560 Sherman Avenue, Suite 1370, Evanston, Illinois 60201
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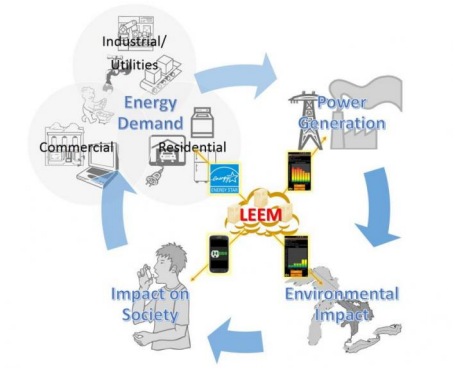
Funded Project

Real-Time Energy Impact Monitors for Residential, Industrial and Policy Use

Project No.	991
Timeline	2013 – 2016
Award Amount	$557,000
Team Leader	Dr. Carol Miller, Wayne State University, ab1421@wayne.edu
Project Website	http://engineering.wayne.edu/wsuwater/index.php



The goal of this project was to refine, test and market a novel technology referred to as LEEM (Locational Electricity Emissions Methodology) that determines, in real time, the fuel sources that are being used to generate electricity and the emissions from those sources, and provides users the ability to reduce emissions by changing the timing of their electricity use.

The team pioneered LEEM in a prior Fund-supported project and embedded the technology in two distinct products: HERO, a phone and web application for individual consumers, and PEPSO, an open source software program designed to optimize pump operations at water utilities. In this project the team improved the LEEM technology, explored the market potential for LEEM, and looked at the potential for embedding the technology into "smart" appliances and building systems, integrating it into the electric vehicle market, and incorporating it into energy standards, demand response/pollution credit programs, energy apps, and energy efficiency programs.

The project resulted in the commercialization of LEEM and the creation of a technology start-up called Energy Emissions Intelligence LLC (E2i). Based on this team's work, LEEM is supplying the data needed for two current Great Lakes Protection Fund grants, Accelerating the Shift to Environmentally Sensitive Electricity through Collaborative Competition and A Self-Scaling Market Mechanism to Reduce Indirect Electricity Pollution.

Smart Energy for a Cleaner Great Lakes from Great Lakes Protection Fund on Vimeo.