PROEMPO – Proactive Energy Management and Performance Optimization

Grid Innovation Fund Project Details

Lead Proponent: LeapFrog Energy Technologies Inc.

Partners: Lambton College, Ziegler Associates, Marshall Compressed Air, Narmco Windsor, Magna Windsor Integram, Peel Condo Corp #661

Strategic Area(s): Enhancing Forecasting and Planning, Enabling Non-Wires Alternatives

Project Total Cost: \$636,200

Year Contracted: 2019

Location: Mississauga, Trenton, Hamilton, Aurora, Newmarket and Toronto

Economic Development: 5-7 jobs



Flow Pressure Sensors

Sensor Connection Ports



Project Objectives

This project will design and build Proactive Energy Management and Performance Optimization (PROEMPO) devices for the measurement and verification of process equipment in field-testing. This can provide a cost-effective, accurate, and objective value proposition to Ontario's industrial and mining facilities for continuous energy performance optimization and reduced operating costs. It will be an open standard hardware and software technology platform to rapidly deploy cost-effective energy efficiency programs, build an ecosystem for collaboration, and make Ontario a global leader in energy efficiency innovation.

Expected Outcomes

If successful, the project will develop a low cost, open standard, scalable, and accurate tool for small and medium enterprises to reduce energy and optimize the performance of air compressors, pumps, fans and motor-driven equipment.

The tool will be self-installable which allows smaller manufacturers to implement energy efficiency improvements based on accurate information that is strengthened by artificial intelligence algorithms.