Autonomy Sensor

Grid Innovation Fund Project Details

Lead Proponent: JDRF Electromag Engineering Inc.

Partners: McMaster Innovation Park

Strategic Area(s):	Enabling Non-Wires Alternatives, Electrification / Decarbonization
Project Total Cost:	$1,131,782
Year Contracted:	2019
Location:	Hamilton
Economic Development:	4 jobs

Project Objectives

This project is intended to demonstrate the capabilities of autonomy sensors and the operational readiness of the underlying suite of technical innovations, which can provide smart lighting system at a cost comparable to the minimum code-compliant alternative.

The autonomy sensors use machine learning, edge-computing and sensor fusion to eliminate human involvement in the setup and maintenance of a system and are expected to deliver smart lighting energy savings, analytics capabilities. It is estimated the system of fixture-mount sensors can cut the total cost of adoption of smart lighting by 75%, and can eliminate all design, setup and maintenance work done before, during and after deployment. The system would operate without the need for auxiliary control hardware.

The demonstration site is located within McMaster University's Innovation Park.

Expected Outcomes

If successful, this project will demonstrate that the autonomy sensor delivers all the features and energy conservation benefits of smart lighting at the cost of the minimum code-compliant lighting control system which will lead to wider adoption of smart lighting in commercial spaces.

The project will quantify the energy savings resulting from this demonstration.