

# Double Vortex Aerator

## Grid Innovation Fund Project Details

**Lead Proponent:** IPEX Technologies Inc.

**Partners:** OCWA, Ailsa Craig Wastewater Treatment Plant, Watford Wastewater Lagoons, Ontario Water Consortium

Strategic Area(s):	Electrification/Decarbonization
Project Total Cost:	\$146,400
Year Contracted:	2020
Status:	Active
Location:	Ailsa Craig and Watford, Ontario
Economic Development:	10 jobs



Wastewater treatment plant

# Project Objectives

The project aims to demonstrate energy savings by replacing the existing diffused aeration systems in two municipal wastewater treatment plants with a hydraulically driven double vortex aeration device.

# Expected Outcomes

If successful, this project will demonstrate the energy savings possible as a result of using a hydraulically driven aeration device as compared to the existing diffused aeration systems.

The project aims to demonstrate that installing the double vortex aerator would result in approximately 15%-30% of energy savings at the lagoon. Some specific project outcomes include:

- Installation of a Double Vortex Aerator(s) at a wastewater treatment plant.
- Measurement and verification report for the aeration performance of the Double Vortex Aerator compared to the baseline existing diffused aeration system.
- Analysis of data/potential shortcomings and learnings.