

Summary

Target Emission Source: **Power Generation**

Emission Reduction Strategy: **Power Generation Optimization**

Project Type: **Research & Development**

Entry TRL: **3**

Target TRL: **7**

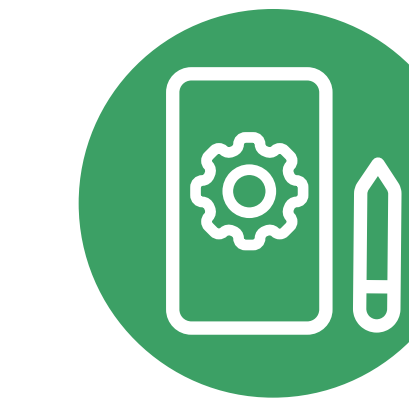
Field Trial Required: **No**

The Project

Hibernia Management and Development Company Ltd. has built a power generation optimization system prototype for the Hibernia platform. The digital prototype provides the ability to simulate various power generation scenarios with accompanying greenhouse gas (GHG) emission estimates. The digital prototype was developed based on historical power generation data and eventually can be adjusted using real-time data thereby providing insight into GHG emissions reduction opportunities.



Benefits



Development of digital prototype of the power generation system expands digitalization of Newfoundland and Labrador's offshore



Simulation of power generation scenarios will help determine potential associated GHG emissions reduction opportunities



Tracking the energy users of electrical power through the power generation optimization system can help provide insight to the more efficient use of electrical power in Hibernia's operations

Opportunities & Next Steps

Integrate real-time data into digital prototype

Further develop the power generation optimization system to enhance the emissions profile, based on simulation of various power generation scenarios