

# Microgrids bring sustainable power to remote communities

## CHALLENGE:

Help an indigenous community in Canada sustainably source power, reduce emissions and cut energy cost

## SOLUTION:

Eaton's Power Xpert Energy Optimizer™ controller system providing centralized microgrid control for solar PV, energy storage components and diesel generator systems

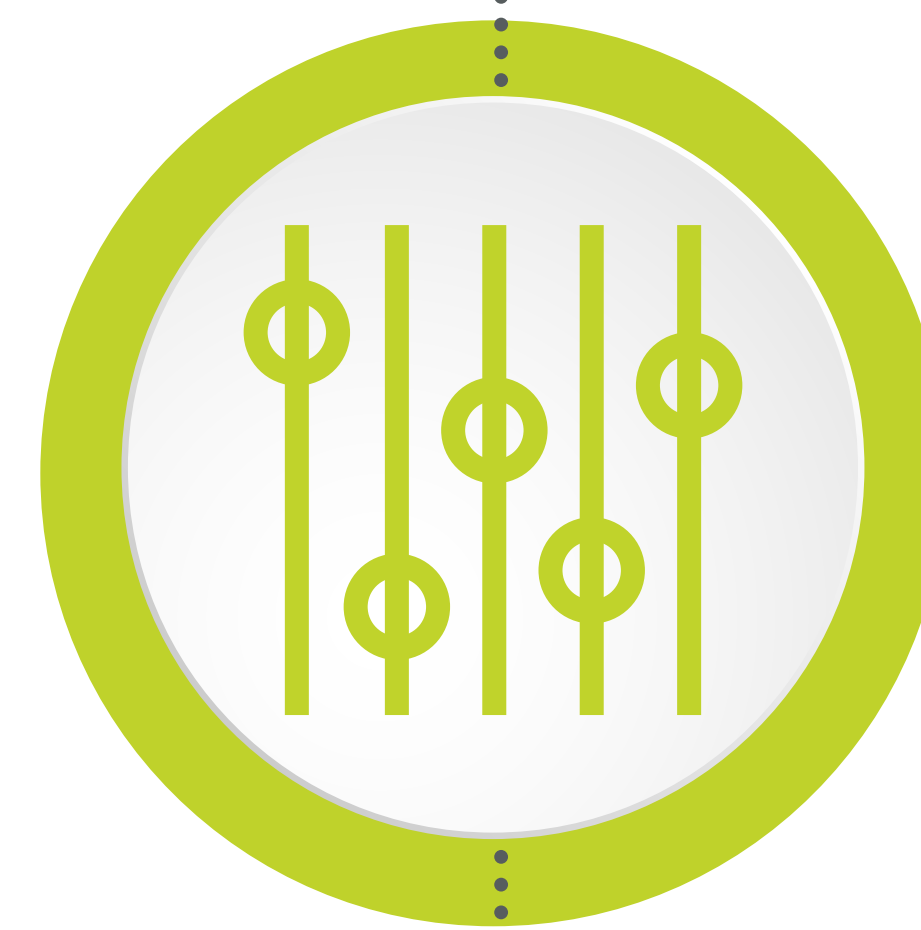
### Eaton's Power Xpert Energy Optimizer controller system



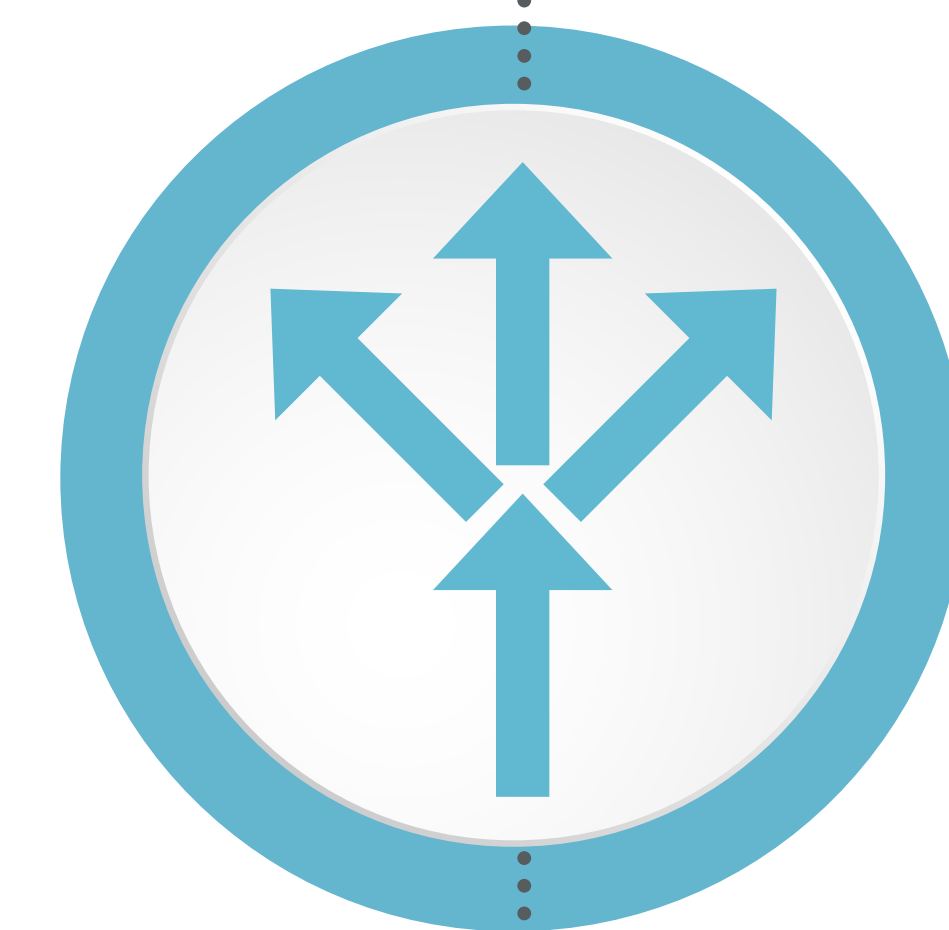
250-kilowatt solar PV array



200 kilowatt-hours of lithium battery energy storage

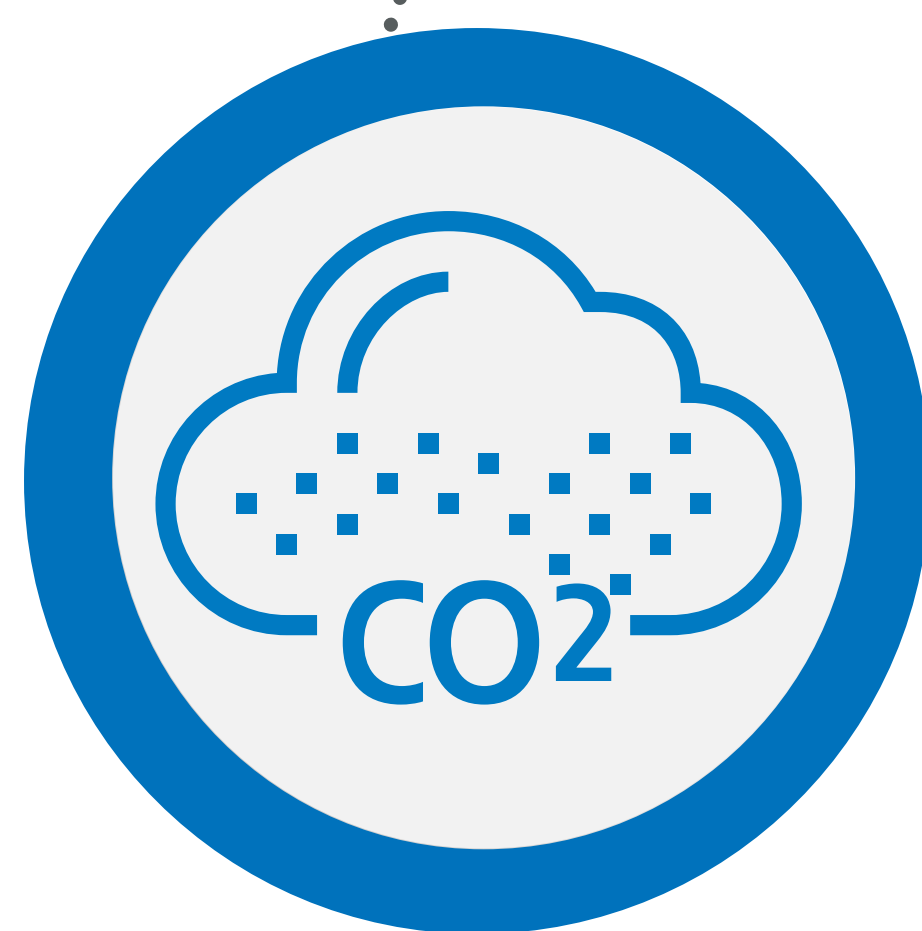


Upgraded generator controls

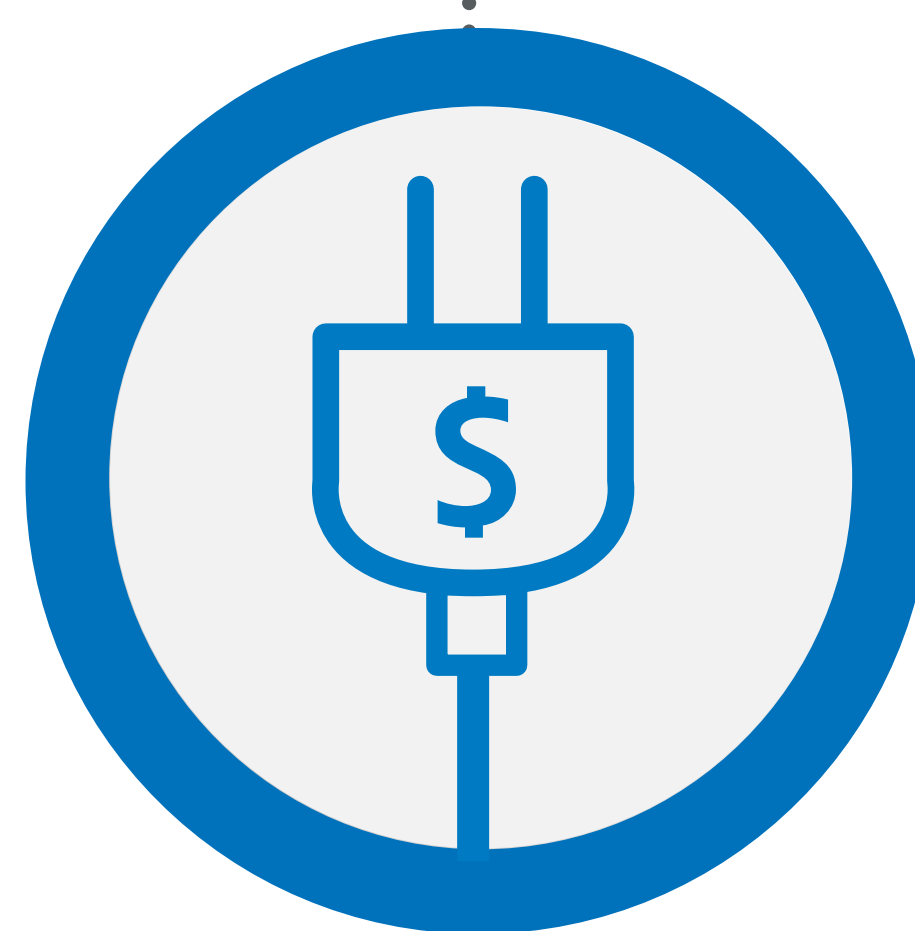


Dual-port power inverter to convert existing single-phase distribution into a three-phase network

## Results



**REDUCE**  
harmful emissions and reliance on diesel generators



**MINIMIZE**  
cost of energy and required maintenance



**MITIGATE**  
risks associated with transportation and storage

### Microgrid applications are as unique as our communities:

This project demonstrates the benefit of microgrids for powering remote communities. Eaton's expertise can be applied to grid-connected communities, businesses and institutions to support more resilient, sustainable and affordable power.



Powering Business Worldwide

For more information, please visit [Eaton.com/microgrid](https://www.eaton.com/microgrid)