Distributed Underground Air Compressors Demonstration

Grid Innovation Fund Project Details

Lead Proponent: Newmont (formerly Goldcorp)

Partners: Drager, Technosub

Strategic Area(s):	Electrification / Decarbonization, Enabling Non-Wires Alternatives
Project Total Cost:	$1,517,462
Year Contracted:	2018
Location:	Chapleau, Ontario
Economic Development:	N/A

Project Objectives

This project will seek to verify how small distributed air compressors can meet compressed air needs in mines using 50% less energy compared to a conventional central surface compressor plant with the associated underground distribution. The project will produce learnings on the business case and safe implementation of this novel approach.

Expected Outcomes

If successful, this project will increase mining sector interest and confidence in this innovative approach to air compression, ultimately leading to wider implementation within and beyond Ontario and enhance the case for building new mines or converting existing mines to "all electric."

Given the timeline of the demonstration project, it is anticipated that this project could lead to new Industrial Accelerator Program applications.

Expected quantifiable outcomes include:

- Reduced compressed air consumption up to 75% compared to the baseline.
- 100% employees trained on the new equipment procedures.
- A case study, including energy benefits, cost evaluations, change management and lessons learned.