

OCI (Ontario Centres of Innovation) Public Press Release

Improved mine planning is necessary for the effective and efficient development of mineral resource assets. It is challenging to develop robust mine plans due to ore grade uncertainties and metal price volatility. Additionally, the ventilation system needed for underground mines is typically the largest single contributor to overall mine energy demand. Robust mine planning requires life-of-mine schedules resilient to ore valuation uncertainties and adhering to mine ventilation constraints. The Robust Mine Schedule Optimization project aims to develop a software tool that integrates with a mine schedule optimization software to adapt the long-range mine schedule to account for uncertainties in ore valuation and mine ventilation constraints. The proposed project will provide a commercial-grade software tool for mines in Ontario and globally to improve the economic resiliency of mining operations and reduce overall energy demand.