

# CENGN

## Smart Mining Living Lab



CENGN's Smart Mining Living Lab is located in the NORCAT Underground Center in Onaping Falls, Ontario. A research facility built using Nokia & Northern Light Technologies' solutions in a real mining site.



Canada's production of minerals and metals contributed **\$97B** to GDP in 2018.



The smart mining market is expected to grow **150%** over the next 7 years.

## Accelerating Innovation in Mining

The Smart Mining Living Lab is designed and funded to support Canadian companies in the testing and commercialization of smart mining solutions.

Each project will involve the testing of physical products in the living lab at the NORCAT site. Project companies will have a direct connection to CENGN's cloud infrastructure, allowing them complete end-to-end testing of their solution; from device to hub to their cloud platform.

This opens the door for scale testing and validation of complex machine learning (ML) and artificial intelligence processing, mass Internet of Things (IoT) deployments and other technologies related to mining.

### LAB TECHNICAL INFRASTRUCTURE

The lab is fully equipped with Nokia's advanced LTE/4.9G private wireless network and NLT's lighting and communications solutions.



### SUPPORTED APPLICATIONS

- Mission-critical push-to-talk (PTT) and push-to-video (PTV) services
- Low-latency edge computing for remote and Automated operations and drone surveillance
- Low-power sensor networks,
- Telemetry
- IoT sensor deployments

## Smart Mining Project Categories



Smart Clothing, Helmets, Lights, or other Wearable Devices



Inventory, Productivity, or Workflow Tracking for Mining Operations



Autonomous Mining Equipment and Robotic Mining Devices



Drone-Mounted Mining Devices

Enable your innovative mining solutions by leveraging CENGN's Living Lab, Cloud Infrastructure and Expertise.

Submit A Project: [cengn.ca/smart-mining-program/](http://cengn.ca/smart-mining-program/)