



Viviane Lapointe

Member of Parliament / Députée
Sudbury

Marc G. Serré

Member of Parliament / Député
Nickel Belt

August 23rd, 2023

MP Lapointe and MP Serré announce boost for projects funded by the Mining Innovation Commercialization Accelerator Network (MICA)

SUDBURY – The growing demand for critical minerals presents a generational opportunity for the Canadian mining industry. As we move toward a low-carbon economy, large amounts of minerals such as graphite, copper, lithium, and nickel will be needed to power the green and digital economy at home and around the world.

Today, Viviane Lapointe Member of Parliament for Sudbury and Marc G. Serré, Member of Parliament for Nickel Belt and Parliamentary Secretary to Minister of Official Languages, highlighted \$2,060,027 for 3 Sudbury projects funded through the Mining Innovation Commercialization Accelerator (MICA) Network. Each organization will use this funding to develop projects focusing on the commercialization of mining technologies that will make the mining sector more productive and sustainable and that will strengthen our economy.

MIRARCO Mining Innovation - \$287,027: MIRARCO's project will focus on one of three bioleaching processes to extract battery metals, Nickel, and Cobalt, from pyrrhotite tailings. The funding received will be used to support the recruitment of personnel, infrastructure developments, and piloting of the BacTech process using pyrrhotite tailings from Vale. The research is supported by industry partners Vale, and SME BacTech Environmental.

Symbioticware Inc. - \$1,000,000: First integrated IoT+AI software solution for mining powered by satellite connectivity such as SpaceX. The main project activities include the development of the cutting-edge Industrial Internet of Things device for industrial vehicles, used in mining, capable of processing data right on the spot and transmitting it through satellite networks to minimize connectivity costs; development of AI models to predict the potential failure of equipment; piloting the product at the mine sites in ON, QC and Nvt.



RIINO Inc. - \$780,000: RIINO is a zero-emission monorail haulage system addressing material movement challenges in the mining industry. The technology is being developed in collaboration with the Canada Mining Innovation Council (CMIC) and three Tier 1 mining companies. RIINO just recently kicked off the first stage of development study work with plans to fully design, build and validate a full-scale system of the technology before re-deploying the system into a working mining operation by 2026.

MICA's second call for proposals invited applicants to submit projects that will position Canada as a global leader in mining innovation by accelerating the commercialization of made-in-Canada ground-breaking technologies.

MP Lapointe and MP Serré had an opportunity to meet and tour with each of the three organizations to hear more about their projects.

Quotes

"Investing in ground-breaking technologies is crucial to further positioning Sudbury as a key player in the transition to a green economy. Sudbury has all the right ingredients to bolster economic prosperity for generations to come. These projects are the perfect example. Their work will lead to generational opportunities, truly becoming game-changers for mining activity around the world. These investments will have a lasting impact." – *Viviane Lapointe, Member of Parliament Sudbury*

"The work these three organizations do combined with the services others within the MICA network provide, continues to enhance Nickel Belt – Greater Sudbury's capacity as a mining research and development powerhouse. This is a great example of MICA funding finding the right projects to enhance our local capacities to bring them to the global scale" – *Marc G. Serré MP for Nickel Belt and Parliamentary Secretary to the Minister of Official Languages*

"Greater Sudbury boasts the highest density of small and medium-sized enterprises (SMEs) near both active mines and mineral processing facilities. Moreover, the region possesses a robust ecosystem for mining innovation support. The MICA Network is strategically positioned to harness Canadian expertise, thereby facilitating the expedited growth of homegrown solutions originating from Greater Sudbury. By bridging local SMEs with national capabilities, we can firmly establish and maintain the "Canadian Advantage" as these technologies progress to make a significant impact on the global mining sector." - *Chamirai C. Nyabeze, MICA Network Director, CEMI VP Business Development*



"Focusing on 'Made in Canada' scientific solutions for mine waste management makes sense, and bioleaching is well positioned to complement modern mining practices to help extract the critical minerals we need to electrify our society and industry. Partnerships with industry are key to accelerating the scale-up and commercialization of these types of technologies and the MICA grant will help deliver on these goals." – *Dr. Nadia Mykytczuk, CEO/President MIRARCO, Executive Director Goodman School of Mines*

"CEMI is very pleased to be able to support technological developments for mining, across Canada, but especially for companies based in Sudbury. These companies confirm that Northern Ontario is an important centre for technology developments in the mining industry of the future." – *Douglas Morrison, CEO/President, CEMI*

"We are excited to work at the forefront of innovation. The platform we are developing will make the mining industry's future more clean, safe and efficient. The support we received from MICA has been instrumental, and we are looking to see the positive impact of this initiative on the technology ecosystem of Sudbury and Canada overall." – *Kirk Petroski, Founder and Executive Chairman, Symbioticware*

"RIINO Inc. is exceptionally thankful to be a funding recipient of the Government of Canada selected through the MICA | Mining Innovation Commercialization Accelerator network. This funding supports developing our technology solution with a focus on changing the way we mine and reaching the mining sector's net-zero initiatives." – *Aaron Lambert, Founder and President of RIINO*

About MICA

The Mining Innovation Commercialization Accelerator (MICA) Network was created on July 9, 2021 through an investment of \$40 million from the Government of Canada's Strategic Innovation Fund. MICA is a \$112.4 million pan-Canadian initiative bringing together stakeholders from a wide range of fields to accelerate the development and commercialization of innovative technologies to make the mining sector more productive and sustainable.

Quick Facts

- The MICA Network has six main partners across Canada: the Bradshaw Research Institute for Minerals and Mining (British Columbia), InnoTech Alberta (Alberta), Saskatchewan Polytechnic (Saskatchewan), MaRS (Ontario), Groupe MISA (Quebec) and the College of the North Atlantic (Newfoundland and Labrador).
- MICA intends to connect Canada's regional mining clusters and bring together companies, suppliers, academic and research institutions, innovators from all walks of



- life, and others to foster knowledge sharing and collaboration and to create technical and business synergies among its members.
- MICA's funding will fund projects across its 4 Technical Themes:
 - Increase Mine Production Capacity, at Lower Cost,
 - Reduce Mining Energy Consumption and GHG Emissions,
 - Implement Smart, Autonomous Mining Systems,
 - Reduce Environmental Risk and Long-Term Liabilities.
 - The mining industry continues to be a critically important part of Canada's economy and contributed \$125 billion to the gross domestic product (GDP) in 2021, 5% of the total GDP.
 - The Strategic Innovation Fund has provided MICA \$40 million to support the development of the Network and to fund projects for the development and commercialization of new mining technologies.

Associated Links

- [Strategic Innovation Fund](#)
- [Innovation and Skills Plan](#)
- [Centre for Excellence in Mining Innovation](#)
- [MICA Network](#)
- [The Canadian Critical Minerals Strategy - Canada.ca](#)

Media Contact:

Hailey Short
Senior Communications Advisor
Viviane Lapointe, MP Sudbury
hailey.short.503@parl.gc.ca
705 280 6538