

PRESS RELEASE

For immediate release

CMIC and CEMI ensure the future of mining is CLEER with joint submission to the Federal Innovation Supercluster Initiative

Canada (July 21, 2017) – The Canada Mining Innovation Council (CMIC) and the Centre for Excellence in Mining Innovation (CEMI) led a joint Letter of Intent (LOI) submission to the Federal Government’s *Innovation Superclusters Initiative*. Working on behalf of the mining industry, CEMI and CMIC proposed the creation of a clean resources supercluster called, CLEER (Clean, Low-energy, Effective, Engaged and Remediated). This CLEER supercluster will transform the mining sector’s productivity, performance, and competitiveness. This will be achieved by tackling global challenges of water, energy, and environmental footprint, with bold targets of 50% reduction in each area by 2027. CLEER will engage the mining services and supply sector (MSS) and anchor mining companies, accelerate collaborative innovation, stimulate investments exceeding \$5B, with the objective of growing SMEs, improving industry productivity, initiating export pathways, and creating more than 100,000 jobs.

In May, the Honourable Navdeep Bains, Minister of Innovation, Science and Economic Development, opened the application process for the Innovation Superclusters Initiative. The 2017 Federal budget has made \$950 million available over five years, starting in 2017-18, to support a small number of business-led innovation superclusters that have the greatest potential to accelerate economic growth. Innovation superclusters will build a better Canada by creating good-quality jobs for Canadians, helping businesses succeed in the marketplace, and fostering stronger collaboration between the private, academic and public sectors. Applicants of this initiative will be informed at the end of August 2017, if they are invited to proceed to the full application process.

If successful in the application process, this CLEER Supercluster will position Canada as a global leader in both clean resources and clean technology development as well as in the responsible sourcing of metals. This is essential for clean growth, given that the Canadian mining sector is a key global provider of the raw materials used as inputs for the development of clean technologies, including for the clean energy transition (*e.g.* solar panels, battery electric vehicles, SMART grids, and wind turbines). *In essence, clean resource development in Canada is indispensable to growth in clean tech and to the clean economy of the future.*

Douglas Morrison, President & CEO, Centre for Excellence in Mining Innovation (CEMI) remarked, “The CLEER Innovation Supercluster is an important strategic development for the support and expansion of the Canadian mining sector. Canada needs to sustain its existing mines and open new mines by improving productivity and ROI. We believe that CLEER Innovation Supercluster will position the Canadian Mining Industry as the global leader in

accelerating the commercialization and adoption of step-change innovation nationally and internationally.”

The supercluster is an industry-led, multi-stakeholder consortium comprised of four existing clusters, which, combined, represent an initial 8 resource companies, 12 post-secondary institutions, 42 SMEs and 25 other support organizations. To date, the CLEER supercluster has attracted a total investment of \$376M of cash and in-kind from a combination of MSS companies and resource companies. CLEER is seeking to leverage this investment with \$185M in ISED funds.

Carl Weatherell, Executive Director and CEO, Canada Mining Innovation Council (CMIC), states that “True innovation is about transformation and asking tough, uncomfortable questions. CLEER challenges the very notion of superclusters offering an innovative approach positioning the mining sector to take global leadership roles on three fronts. More importantly, it is demonstrating an unprecedented level of collaboration not available in any resource industry globally.”

CLEER will focus on the technical themes that are critical to the industry, and that will allow all the organizations in the current ecosystem to participate and play their part in transforming the industry. In collaboration with other mining companies, we have identified these strategic innovation themes:

- **Energy technologies:** renewable energy generation and storage; mine electrification; battery-electric vehicles; ventilation; automation; sensors and sensor-based sorting; advanced comminution; and, standards and guidelines.
- **Water technologies:** water conservation technologies; water treatment technology; and, water quality sensors.
- **Environmental footprint reduction technologies:** mapping; land reclamation and remediation technology; and, sensors and sensor-based sorting.
- **SMART Technologies:** sensors; data analytics; pattern recognition; predictive analytics; high performance computing; artificial intelligence; and, mine digitization and digital communications.

Pierre Gratton, President and CEO of the Mining Association of Canada, the national voice of Canada’s mining industry, states that “The CLEER Supercluster will help Canada become the leading supplier of sustainably-sourced minerals and metals the world needs, and the technologies the world needs to best extract them. This is especially important in the transition to a low carbon future, which will only increase the demand for our products. Through this project, industry and governments can be powerful partners in achieving this vision.”

To learn more about this CLEER Supercluster application and how to get involved, please contact us. Additional information will be available on CEMI’s and CMIC’s website.

About CEMI

CEMI - Centre for Excellence in Mining Innovation is a not-for-profit organization that helps solve mining industry challenges by delivering commercially viable innovations to improve heat & rock stress issues, mine productivity and safety, ore discovery and environmental performance. CEMI engages in cross-sector collaboration with Canadian and global mining companies, universities & colleges, governments and innovative SMEs within the service and supply sector. Our systematic approach ensures innovations can be implemented and are economically feasible. Our goal is to help mining companies achieve better operational performance for a faster return on investment. www.cemi.ca

About CMIC

We are a national non-profit organization that coordinates and develops projects and programs in response to *life of mine* challenges defined by its industry members. Our members include mineral exploration and mining companies and their service providers, working together towards common solutions to common challenges. This allows for shared financial and technology adoption risk, faster development of solutions and wider spread benefits. Challenges are defined and prioritized, and programs developed by CMIC technical groups. CMIC technical groups are led by Canadian company vice presidents and populated by leading industry experts in the fields of mineral exploration, extraction, processing, mine waste management and energy. <http://cmic-ccim.org/>

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