

IMI DEMOday 2019

Introduction

DEMOday is returning April 3, 2019 – and will again enable suppliers to Saskatchewan minerals companies to showcase their innovations in equipment, technologies, products or processes with the intent of attracting industry interest and subsequent investment.

Background

Innovation is important to Saskatchewan's minerals industry and the province. That is why the International Minerals Innovation Institute (IMI) was formed in 2012, and introduced new funds to support research, development and demonstration of innovations that matter to mining in 2017. It is also why IMI, in cooperation with the Saskatchewan Industrial and Mining Suppliers Association (SIMSA), introduced **DEMOday** in 2018.

DEMOday 2019 will build on the success of last year's first-time event in which selected supply chain companies presented their innovations directly to Saskatchewan's major mining companies and had them considered for further review and potentially financial and in-kind support, to help move them down the path to commercialization. IMI and its minerals company members believe that innovations aren't innovations if they are not put into use, and supply chain companies are invited to pitch their innovations in equipment, technologies, products or processes to industry members that may be used to improve one or more of the pillars of industry sustainability – economic, environmental or social performance.

This second **DEMOday** will be held on April 3, 2019, on the eve of the 11th Annual Saskatchewan Mining Supply Chain Forum in Saskatoon.

DEMOday and Innovation

Supply chain companies are again invited to submit innovations they believe would be of value to mineral companies' existing operations and can be advanced down the path to commercialization with assistance from IMI. The innovations must be applicable to more than one mining company to be considered for this event. For the IMI, innovation involves; ideas, discoveries, or tools that may change or create new scientific or engineering concepts or educational or training practices that, if put into use, would benefit the minerals industry.

IMI's collaborative activities in this regard may include; pilots or test projects, proof of concept, prototypes, feasibility analyses, research, development or demonstrations or any other type of project that produces improved knowledge, practices or technology useful in filling an innovation need that matters to mining.

IMI's major minerals member companies have identified challenges and opportunities with respect to:

- Enhancing productivity through new technologies to optimize material and equipment flow, including new methods or advanced instrumentation for mineralogical and process control

purposes, improving anticipation of failures, increasing mechanization through automation, and monitoring performance in real time;

- Reducing greenhouse gas emissions through alternatives to the use of diesel on site, greater efficiency in stationary combustion sources (e.g., dryers), combining energy storage with renewables at industrial scale;
- Improving waste management practices with new technologies to reduce reagent use, sort ore from waste (ore pre-concentration);
- Improving energy efficiency through process improvements, such as the application of new sensors (e.g., in-line moisture sensors before and after dryers that are sufficiently accurate and reliable) to allow for real-time management of energy consumption;
- Increasing safety through mining automation systems and removing workers from areas with potentially higher safety risks; and
- Advancing “digital mining” using ultra-reliable networks underground and on surface, as well as analytics and big data processes to identify trends for greater productivity;

Successful proposals will be considered for funding under IMII’s *Operationalizing Innovations* program and may be a candidate for the **Saskatchewan Commercial Innovation Incentive** if subsequently commercially developed in the province.

Selection of DEMOday Participants

All submissions are to be received by IMII by **January 18, 2019**, at 11:00 pm and will undergo a merit-review selection process involving representatives of IMII member companies. Thereafter the subject matter experts announce which innovations they have a special interest in, and which they would like to take part in discussing. At least two subject matter experts from different IMII member companies must announce an interest in an innovation for it to be included in **DEMOday 2019**.

The selected participants will pitch their innovation to industry for 5-8 minutes. The size of the group is limited to interested industry subject matter experts and 2-3 people from the supply chain company.

Unless part of the pitch to industry, other supply chain companies do not participate. Confidentiality of intellectual property is thus maintained.

Suppliers should consider this event as a “catalyst” for getting their innovation in front of and possibly selected for technology advancement support from the minerals industry.

At the end of the pitch sessions, industry subject matter experts will select those innovations/supply chain companies from which they are interested in receiving a project proposal. As per IMII requirements, as least two industry members must select an innovation for it to be considered.

IMII will notify each supply chain company after the event if they have been selected.

Entry Requirements

- The clear intent of the entry is to build and bring to market an economically viable innovative technology that meets a demonstrated need of the Saskatchewan minerals industry
- The participant bears solely the responsibility for the preparation of its entry
- The entry meets all the entry requirements, as listed below
- The participant must be intent on commercializing intellectual property that meets at least one of the following criteria:
 - It is an innovative product or service involving new technology;
 - It combines existing technologies in a way that results in new intellectual property;
 - It utilizes technologies to develop new or improve existing products or services;
 - It utilizes technologies to develop new or improve existing production processes; and/or
 - It is not a commercially available product already being distributed in the marketplace
- The Participant must
 - Be a supply chain company (not a professional service firm); and
 - Have an interest in the promotion and growth of Saskatchewan's mineral industry supply chain.
- All entries must be made by stated deadlines
- The participant has registered for the Competition by completing the Innovation Submission form found online at www.imii.ca/initiatives/demoday/ by the stated entry deadline

Deadline

Completed registration and an outline of the business idea using the online form must be submitted electronically by **January 18, 2019**, 11:00 pm.

Required Information

The submission must show how the participant meets the eligibility requirements. Please use the information below to help prepare your application prior to submission.

1. Company description – A summary of the company, similar to what would be used at the end of a press release or in a presentation (maximum 100 words).
2. Company history – Describe the origin and founding of the company, including key dates (maximum 300 words).
3. Innovation name – The name should briefly describe the product or service offering (maximum 20 words).
4. Innovation description – Describe the scientific or technological innovation behind the idea without disclosing proprietary technology (maximum 500 words).
5. Stage development – Indicate what level of development your innovation is at.

6. Industry analysis – Describe what the demand is for your product/service and how you know that (maximum 500 words)
7. Differentiation – Describe what makes this innovation unique. Identify what third party validation has been achieved to date (maximum 500 words).
8. Path to commercialization – Describe how the innovation may transition into a commercial product. Provide a product pitch as it would be described to a group of mineral company executives (maximum 500 words).

All information submitted will be kept confidential.

To Apply

Please contact the IMII at (306) 668-2070 or admin@imii.ca. The application form is available online at www.imii.ca/initiatives/demoday/.