RESOLVE

BRIMM
BRADSHAW RESEARCH INSTITUTE FOR MINERALS & MINING

A Partnership to Develop and Enhance Methods for Sustainable Mining and Restoration of Legacy Sites

Introduction

The mining industry is seeking, at scale, better, faster, cleaner, and more cost-effective methods for exploration, mineral extraction, mining operations, monitoring, and remediation. Startups with innovative ideas working in silos and trying to solve these problems find it challenging to move towards commercial application, especially from the lab to field work at scale. The BRIMM/RESOLVE partnership can address these problems, and donations will supercharge the efforts.

BRIMM at UBC (the Bradshaw Research Institute for Minerals and Mining) and RESOLVE are joining forces to mitigate these problems and advance mining innovation and sustainability. Because innovation is slowed or stymied when research is conducted in silos, BRIMM is focused on catalyzing startups to cross academic boundaries and work with industry to develop promising new technologies. RESOLVE, through its social enterprise Regeneration, focuses on areas impacted by past mining to restore and even enhance biodiversity and ensure that lessons learned can be applied to current mining operations. RESOLVE with Regeneration and BRIMM can work in concert to develop and field test emerging methods to restore legacy sites and for use in operating mines. BRIMM's vision is "No new mining with negative consequences."

BRIMM focuses on research at UBC and other selected universities, in collaboration with industry, to reduce the footprint of mineral extraction and recovery for both legacy mines and current operations, resulting in better metal recovery and more sustainable mining. Projects to date include microbiology for mineral extraction, mineral exploration, dust suppression and other uses; water economics; mine energy; biodiversity; and AI, which is applied across many projects. With the aid of philanthropy and industry, much-needed new projects are added all the time. BRIMM has a unique method for coordinating multidisciplinary research across multiple areas, including microbiology, water stewardship, metal recovery, natural capital and biodiversity, and AI.

RESOLVE is a global NGO that forges sustainable solutions to critical social, health, and environmental challenges by creating innovative partnerships where they are least likely and most needed. RESOLVE has a 45-year track record in structuring interest-based, multistakeholder dialogues regarding the use or development of natural resources and the impact these activities have on nearby communities and ecosystems. This proactive approach addresses stalled projects, legacy environmental impacts, and social tensions—empowering all parties to develop balanced land-use visions collaboratively, agree on fair benefits, and safeguard both people and the natural world. RESOLVE created Regeneration, a restoration and metals recovery social enterprise, to transform legacy mine sites into ecological and community assets while producing minerals for the energy transition and sustainable brands. Regeneration is backed by Apple, Rio Tinto, Caterpillar, and Mejuri. Salmon Gold produced by Regeneration, supplies sustainable gold from remined placer sites in Alaska and the Yukon to the Canadian jewler, Mejuri. RESOLVE and Regeneration will provide access to sites and materials so that we can prove technologies in the field and then scale them commercially.

RESOLVE and BRIMM together can, with the evolution of the right technology scaled by effective field use, provide the mining industry with improved tools to deliver the minerals we need to prosper. RESOLVE and BRIMM bring together leaders in science, mining science, restoration and biodiversity, policy, and community participation to address the global problem of legacy mine sites. They have shown that, given the opportunities and leadership, with the vital help of philanthropy, leading research and innovation can, and does, accelerate the responsible production of metals essential to the energy transition.

Our partnership will help break through traditional research silos to combine expertise and create innovative solutions.

Community Innovation

Innovative community processes and resources can reduce conflict and ensure rights are respected and benefits shared. Trusted third-party-driven dialogue builds trust, bridges capacity gaps, and supports enduring agreements.

BRIMM continues to develop a framework to support Indigenous-academic collaborations in natural resources and mining research, the Indigenous Research Support Initiative (IRSI) at UBC. BRIMM also has a partnership with the Turtle Island Connection (TIC), a non-profit, to engage Indigenous youth in natural resource development opportunities. As part of this the Future Minerals Leadership Committee convenes young Indigenous and non-Indigenous leaders to address sustainability and Indigenous methodologies in mineral exploration.

Donor support enables skilled mediators to proactively build relationships, reduce division and conflict, and find solutions by designing, convening, and guiding challenging conversations, building collaboration capacity on the ground, and supporting the implementation of solutions that respect human rights, restore nature, protect human health, and promote climate resilience. Investing in resource mediation is an investment in more effective partnerships, stronger communities, and healthier landscapes for generations to come.

Support the Fund

Our target is $2.5M USD ($3.4M CAD) for technology development and innovation, community innovation, and delivery of Nature-Positive projects for Regeneration sites in Canada. Funds can be donated to the BRIMM Foundation or to RESOLVE and will be distributed equitably. Impact reports will be provided annually to donors, detailing the specific use of funds and the resulting tangible benefits. Funds can be donated in $USD or $CAD to either BRIMM Foundation or to RESOLVE.