



International Conference

Turning Down The Heat: Can We Mine Our Way Out of the Climate Crisis?



14-15 NOV. 2019 | OTTAWA

We would like to thank the following sponsors that made this conference possible:

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Location

The conference will take place at the **Delta Hotel Marriott** Ottawa City Centre (101 Lyon St N, Ottawa, ON K1R 5T9), Room Richelieu/Frontenac (C Level).

Free daycare services available 8:00-5:00
RSVP diana@miningwatch.ca

We acknowledge that the conference is taking place on unceded Algonquin, Anishinabek territory.

Why are we doing this?

The Problem

It is imperative to cut greenhouse gas emissions in order to keep global warming from getting worse than what is already *locked in*. But many current projections for a *decarbonised* energy economy require massive amounts of metals to generate, store, and transmit electricity.

Improved efficiency, recycling, and new technologies will help meet and reduce that demand, but the current trajectory is towards expansion of mining for increasingly scarce metals and minerals, pushing mining into

ever more remote and fragile places – including the ocean floor – and into ever greater conflict with communities and further destruction of fresh water and biodiversity.

The challenge, therefore, is how to respond to the climate crisis without destroying more of the planet we are trying to save – to reduce the need for more mining, limit and manage its impacts, and to the extent possible, repair the damage it has already done to communities and ecosystems.

The Conference

How Can We Save the Climate Without Wrecking the Planet?

Over the course of two days, we will explore: the implications of this new extractive rush for communities that are already struggling with the impacts of mining; the need for better regulation of mining activity; the potential for reducing the demand for new mined metals and minerals through improved efficiency and recycling; and policies that can account for the full costs of raw metals, as well as larger-scale transformations in transportation,

production, trade, and consumption. We will convene representatives from communities, Indigenous and non-Indigenous, affected by mining on the front lines of *energy metals* extraction from Canada and around the world, researchers and experts on materials efficiency, technology, and energy transition, as well as activists and leaders in the struggle to address the climate crisis. We will map out emerging trends, challenges, and conflicts, and work to identify solutions and strategies to implement them.

Programmation

Wednesday, November 13, 2019

3:00 Indigenous cultural & knowledge activity
Special guided visit of the Canadian Museum of History's *Behind-the-Scene* Archives, and meeting with the Museum's Indigenous Relations and Repatriation team (spaces limited, RSVP to diana@miningwatch.ca) – walk 25 minutes or take a bus, or a cab to Museum from hotel

7:00 Documentary Film
Private pre-screening of an unreleased Argentinian film on lithium mining boom impacts (RSVP to kirsten@miningwatch.ca)

Thursday, November 14, 2019

7:00 Sunrise ceremony
With Monique Manatch (Algonquins of Barriere Lake Knowledge Keeper) & Ramona Nicholas (Wolastoqey Nation) – In Delta Hotel Penthouse Foyer, 26th floor, all welcomed

7:30 Registration

8:30 Opening, Territorial Acknowledgement & Welcome Remarks

- **Monique Manatch** – Algonquins of Barriere Lake Knowledge Keeper, cofounder Indigenous Culture & Media Innovations
- **Verna Polson** – Grand Chief, Algonquin Anishinabeg Nation Tribal Council
- **Donna Ashamock** – Cree Nation, Chair of MiningWatch Canada

9:00 Keynote: Mark Z. Jacobson, Director, Atmosphere/Energy Program, Stanford University (USA)

9:30 On the Ground: What are the impacts of the increased demand of minerals for renewable energy?
What are the true costs of mining raw metals for the renewable energy transition? How to address the community, social, cultural, health, gender, and environmental impacts? How are governments and industry using the climate imperative to justify mining more *energy metals*? Who has interests in different narratives, for whose benefits and what purposes?
Moderator: **Joan Kuyek**, cofounder of MiningWatch Canada, author of *Unearthing Justice*

- **Pia Marchegiani** (FARN, Argentina) & **Lucio Cuenca** (OLCA, Chile) – Impacts of lithium mining in South America
- **Jonathan Mesulam** (West Coast Development Foundation, Papua New Guinea) – Deep sea mining
- **Emmanuel Umpula** (AFREWatch, Democratic Republic of Congo) – Cobalt mining issues (short video)
- **David Pharand** (Mayor Duhamel) & **Louis St-Hilaire** (Lake Protection Associations) – Graphite mining in Canada
- Invited respondents: **Pablo Heidrich** (Carleton University, Global and International Studies Programme), **May Dagher** & **Rodrigue Turgeon** (Community members affected by lithium & graphite mining in Canada)

10:45 Break

11:15 **Going Deeper: Understanding the trends & predictions of minerals demand for renewable energy**

What are the current trends and projection scenarios of metal demands for renewables? What are the key drivers and assumptions behind these scenarios? How do the scenarios change if different assumptions are made? What limiting factors may significantly affect access to raw metals and the outcomes of current predictive models (e.g. resources limits, ecological limits, socio-political limits/conflicts, technological shifts, etc.)? What are the knowledge gaps: What we know, what we don't know, what we need to know?

Moderator: **Geoff McCarney**, Research Director, Smart Prosperity Institute

- **John Drexhage** (Consultant at the World Bank) – The Growing Role of Minerals and Metals for a Low Carbon Future
- **Elsa Dominish** (Institute for Sustainable Futures, Australia) & **Payal Sampat** (Earthworks, USA) – Minerals Sourcing for Renewable Energy & Making Clean Energy Clean
- Invited respondents: **Pablo Heidrich** (Carleton University, Global and International Studies Programme); **May Dagher** & **Rodrigue Turgeon** (Community members affected by lithium & graphite mining in Canada)

5 min written participatory exercise

12:15 **Lunch**

1:35 **Keynote: Loretta Williams (Xeni Gwet'in Nation), Chair, First Nations Women Advocating Responsible Mining (Canada)**

2:00 **Towards Post-Extractivism: How to reduce or eliminate demand for mining raw minerals?**

What is the potential to meet the increased demand with greater efficiency initiatives, such as recycling, reusing, urban mining, circular economy, extended producer responsibility, etc.? Beyond efficiency, is *needs-based* mining possible, how and under what conditions, to meet what (and whose) needs? What metals should be left in the ground as unnecessary to meet climate goals? How can large scale societal choices, such as urban design, transportation modes, energy infrastructures, conservation, and trade help curb both global warming & metal demand? What roles are there for citizens, civil society, industry, governments, and international institutions to drive change?

Moderator: **Julie Gelfand**, Former Canada's Commissioner for the Environment & Sustainable Development

- **Kate Raworth**, Economist on (de)Growth (short video, with permission) – Author of the *Doughnut Economics* of social and planetary boundaries
- **Benjamin Hitchcock** (War on Want & London Mining Network's report, UK) – A just transition is a post-extractivist transition: what options forward?
- **Gavin Mudd** (Mineral Policy Institute, Australia) – Mining waste issues & needs-based mining: what minerals to leave in the ground?

- **Josh Lepawsky** (Memorial University, Canada) – Electronic waste: what lessons for the renewable energy sector?
- Invited commentators: **Cynthia Morinville** (University of Toronto, Canada – Metal recycling in West Africa); **Christian Simard** (Director, Nature Quebec)

3:15

Break

3:45

Towards Post-Extractivism (continued) – Breakout Sessions

Room A (English only) – What is a just transition? Degrowth, wealth redistribution, alternate economies & metal substitutions

- Moderator: **Jamie Kneen**, MiningWatch Canada
- **Sarah Cornell** (Stockholm Resilience Centre, UK) – Social development & planetary boundaries: What is a *safe operating space for humanity?* (short video)
- **Patrick Rondeau** (FTQ Workers Union, Canada) – Opportunities & challenges of Quebec's Just Transition Intersectorial Table
- **Leah Temper** (McGill University, Canada) – Exploring degrowth at a societal level: between theory & practice
- **Sylvain Ménard** (Université du Québec à Chicoutimi, Canada) – Substituting metal with wood in construction & infrastructures
- Invited respondents: **Dennis Howlett** (Global Alliance for Tax Justice), **Andrew Linton** (Institute of the Environment and Research Fellow at Smart Prosperity Institute)

Room B (free space)

For informal meetings or work

Room C (En-Fr translation) – Urban infrastructures & transportation: What policies for low carbon/metal solutions?

Moderator: **Julie Gelfand**, Former Canada's Commissioner for the Environment & Sustainable Development

- **François Saunier** (CIRAIG, Canada) – Metal circularity opportunities & challenges (lithium, copper, iron)
- **Daniel Breton** (ex-environment minister, Quebec) – Are electric cars the solution?
- **Jérôme Laviolette** (Polytechnique Montreal) – Rethinking urban transportation for low carbon/metal solutions
- Invited commentators: **Stefan Girtler** (Propulsion Quebec – Lithium recycling opportunities & challenges); **Pia Marchegiani** (FARN, Argentina)

5:00

Reception: MiningWatch Canada's 20th Anniversary Social (drinks, finger food, speeches) ending at around 7:30pm

- Speakers to include MiningWatch Canada's founding Board members **Alan Young** (Minerals Efficiency Research Group), **Julie Gelfand** (former Canada's Commissioner for the Environment & Sustainable Development), and others.

Friday, November 15, 2019

8:00 Registration

8:35 Welcome Remarks

8:45 Keynote: **Dianne Saxe, Former Environment Commissioner of Ontario (Canada)**

9:15 **Protecting the Planet & Peoples: Is responsible sourcing of minerals for renewable energy possible?**

What core conditions, policies, laws, and international instruments need to be implemented to ensure the protection of peoples and the environment affected by the metals' extraction and lifecycle? How can human rights and Indigenous rights, including the rights to sovereignty, self-determination, and Free, Prior and Informed Consent (FPIC) be upheld? How should *no-go zones* for mining to protect ecologically, socially, and culturally sensitive areas be identified and enforced? How can intergenerational impacts from toxic mine waste disasters and contamination be prevented? What is the role of supply chain controls: laws, voluntary standards, and certification initiatives? What about Indigenous laws, policies and Indigenous-led initiatives?

Moderator: **Ian Thomson**, Policy Specialist, Extractive Industries, Oxfam Canada

- **Clare Church** (IISD, Canada) – Green conflict minerals: fuel of conflicts for the transition to a low-carbon transition
- **Lucie Chatelain** (Sherpa, France) – European human rights due diligence laws for international accountability
- **John Cutfeet** (Kitchenuhmaykoosib Inninuwug (KI) First Nation) – Indigenous-led protocols and policies to access land & resources
- Invited respondents: **Alex Neve** (Amnesty International – Ethical Batteries Campaign); **Emily Dwyer** (CNCA, Canada); **Dayna Scott** (York Research Chair in Environmental Law & Justice in the Green Economy, Canada)

10:30 Break

11:00 **Protecting the Planet & Peoples (continued)**

Room A (English only) – Between mandatory laws and voluntary standards: What role for supply chain controls?

Moderator: **Catherine Coumans**, MiningWatch Canada

- **Carmen Teichgraber** (IMPACT, Canada) – Supply chain controls for cobalt artisanal mining in Africa
- **Lisa Sumi** (IRMA, USA) – Initiative for Responsible Mining Assurance for industrial mining
- **Salvador Herencia-Carrasco** (IRGTE, Canada) – Recommendations for Global Affairs and Canadian's foreign policy
- Invited respondents: **Ana Leyva Valera** (CooperAccion, Peru), **Joan Kuyek** (author, *Unearthing Justice*), **Emily Norgang** (Canadian Labour Congress, Canada)

Room B (free space)

For informal meetings or work

Room C (En-Fr translation) – What policy changes needed to respect community rights and control of toxic mine wastes?

Moderator: **Ugo Lapointe**, MiningWatch Canada

- **Sophie Thériault** (University of Ottawa, Canada) – Reforming *free entry* mining laws to protect Indigenous rights
- **Judith Marshall** (CERCLA, York) – Brazilian & Canadian mine waste disasters also rooted in government failures – how to fix this?
- **Jim Kuipers** (Kuipers Consulting, USA) – Is preventing mine waste disasters & water pollution possible?
- Invited respondents: **Nikki Skuce** (B.C. Mining Law Reform Campaign); **Ramona Nicholas** (Wolastoqey First Nation), **Payal Sampat** (Earthworks USA)

12:15 Lunch

1:35 **Roundtable Discussions: Can we mine our way out of the climate crisis? How can we save the climate without wrecking the planet? What priority commitments need to be made in Canada & internationally in the short (now) to mid term (e.g. 2030 to 2050)?**

Motivation by **Catherine Abreu** (Climate Action Network, Canada), **Patrick Rondeau** (FTQ Workers Union & Just Transition Intersectoral Table, Canada), and **Eriel Tchekwie Deranger** (TBC) (Indigenous Climate Action Network, Canada)

Thematic roundtable discussions organized around two main themes, each with three sub-questions (i.e. six thematic tables in total). The main objective is for participants to share their specific knowledge, expertise, or perspectives on the themes they know best, or feel most comfortable with. Ideas and perspectives will be captured on paper at each table

and/or live on an online webplatform, and be shared later in a brief conference report. Highlights will also be shared during the final open forum before the conference closure. Each participant is asked to join one thematic table for 40 minutes, and if she/he wishes, pick another table for 40 minutes, or stay at the same table all along.

1. Towards post-extractivism: What priority laws, policies, initiatives are needed at the local, national or international level in the short (now) to mid term (2030 to 2050)...

- a. for greater mineral efficiency, recycling, and circular economy of metals for renewables?
- b. to favour needs-based mining and *greener* substitutes to some metals (which metals)?
- c. to move towards system change, de-growth, and alternate local and/or global economies?

2. Responsible sourcing: What priority laws, policies, initiatives are needed at the local, national or international level in the short (now) to mid term (2030 to 2050)...

- a. to uphold human rights and Indigenous rights, including the rights to sovereignty, self-determination, and Free, Prior, Informed Consent (FPIC)?
- b. to identify and enforce *no-go zones* for mining to protect ecologically, socially, culturally sensitive areas?
- c. to prevent perpetual & intergenerational impacts from toxic mine wastes disasters and contamination (water, air, land, health)?

3:15 Break

3:30 Report-back from roundtable discussions

- **Jamie Kneen & Ugo Lapointe** – MiningWatch Canada

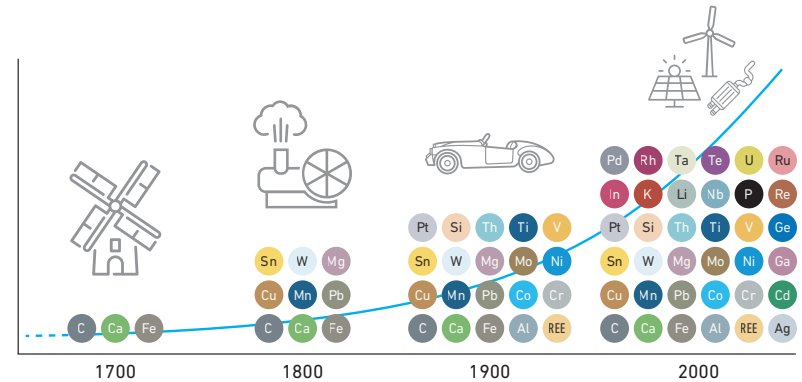
4:00 Closing remarks

- **Donna Ashamock** – Cree Nation, Chair of MiningWatch Canada
- **Monique Manatch** – Algonquins of Barriere Lake Knowledge Keeper, cofounder Indigenous Culture & Media Innovations

7:00 Post-Conference Event – Book Launch: *Unearthing Justice*

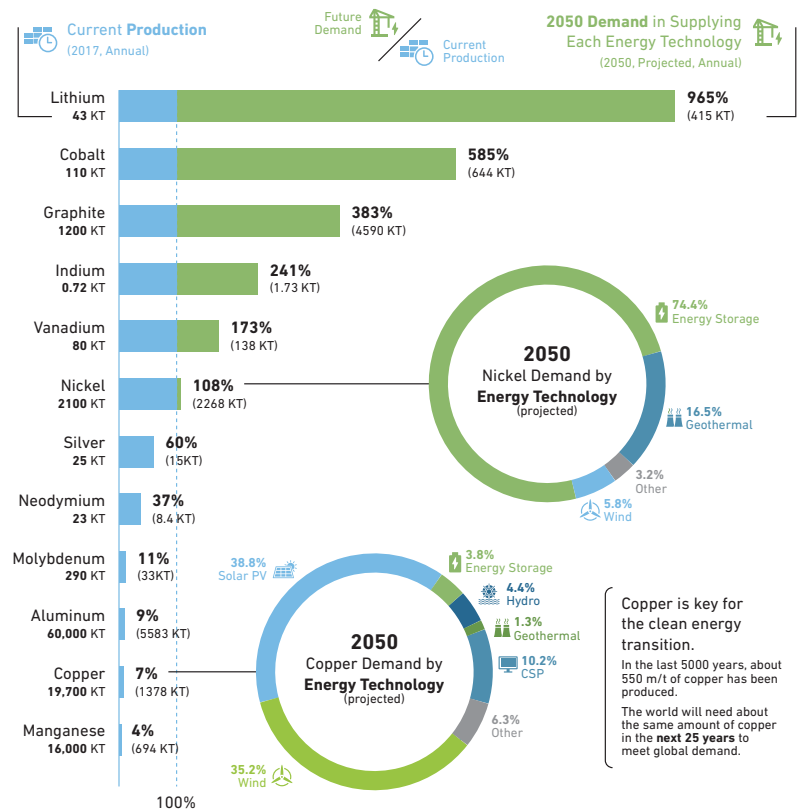
Author and co-founder of MiningWatch Canada **Joan Kuyek** in conversation with MiningWatch’s **Jamie Kneen**, with special guest **Eriel Tchekwie Deranger**, Denesūline (Athabasca Chipewyan First Nation), Executive Director of Indigenous Climate Action 7:00 pm at the Social Innovation Atelier, St. Paul University, 95 Clegg St. at Main St., Ottawa

Elements Widely Used for Green Energy Technologies



Elements widely used in Energy Pathways. Source: *The Conversation*. Nov. 14, 2017. Damien Giurco et al. Time for a global agreement on minerals to fuel the clean energy transition.

Growing demand



Copper is key for the clean energy transition.
In the last 5000 years, about 550 m/t of copper has been produced.
The world will need about the same amount of copper in the next 25 years to meet global demand.

Source: World Bank. Climate-Smart Mining: Minerals for Climate Action.

With the participation of

Catherine Abreu, Executive Director, Climate Action Network-Canada

Donna Ashamock, Cree Nation, Co-Chair, MiningWatch Canada

Daniel Breton, Former Quebec Environment Minister, former special advisor to Quebec's Premier Office on electrification of transportation (Canada)

Lucie Chatelain, Advocacy Officer, Sherpa, on European Human Rights Due Diligence Laws for international accountability (France/Europe)

Clare Church, Policy Analyst, International Institute for Sustainable Development, on green conflict minerals for the transition to a low-carbon transition (Canada)

Sarah Cornell, Lead researcher, Stockholm Resilience Centre (Stockholm University), and Coordinator, International Planetary Boundaries Research Network (Sweden)

Lucio Cuenca, Observatory of Latin American Environmental Conflicts (OLCA) (Chile)

John Cutfeet, Kitchenuhmaykoosib Inninuwug (KI) First Nation, Yellowhead Research Fellow, Strategic Support for Nishnawbe Aski Nation

May Dagher, Spokesperson, Coalition des opposants à un projet minier en Haute-Matawinie, graphite mining impacts (Canada)

Eriel Tchekwie Deranger, Denesųtine (Athabasca Chipewyan First Nation), Executive Director, Indigenous Climate Action Network (Canada/USA)

Jason Dion, Lead researcher, Canada's EcoFiscal Commission (Canada)

Elsa Dominish, Senior Researcher, University of Technology Sydney's Institute for Sustainable Futures, co-author of *Responsible Minerals Sourcing for Renewable Energy* (Australia)

John Drexhage, Consultant at the World Bank, lead author, *The Growing Role Minerals and Metals for a Low Carbon Future* (Canada)

Emily Dwyer, Coordinator, Canadian Network on Corporate Accountability (Canada)

Julie Gelfand, (former Canada's Commissioner for the Environment & Sustainable Development)

Stefan Girtler, Coauthor of Propulsion Quebec's report *Lithium-ion Batteries Sector* (Canada)

Pablo Heidrich, Assistant Professor, Carleton University, Global and International Studies Programme, on impacts of lithium extraction South America (Canada)

Salvador Herencia-Carrasco, Director, Inter-American Human Rights System, Interdisciplinary Research Group on the Territories of Extraction, University of Ottawa (Canada)

Benjamin Hitchcock, Lead author, *A Just Transition is a Post-Extractive Transition*, London Mining Network & War on Want, (U.K.)

Dennis Howlett, Global Alliance for Tax Justice, formerly Executive Director of Canadians for Tax Fairness (Canada)

Mark Z. Jacobson (KEYNOTE), Director of the Atmosphere/Energy Program at Stanford University and lead author of *100% Renewable Energy Roadmaps for 139 Countries* (USA)

Guillain Koko, Project Coordinator, African Coalition for Corporate Accountability ACCA (Democratic Republic of Congo)

Jim Kuipers, Kuipers & Associates Engineering on mine waste & water pollution control issues (USA)

Jérôme Laviolette, PhD candidate at Polytechnique Montreal, David Suzuki Foundation Transport & Climate Change Fellow (Canada)

Andrew Linton, Master Candidate, University of Ottawa, Institute of the Environment and Research Fellow at Smart Prosperity Institute (Canada)

Josh Lepawsky, Professor at Memorial University, Author of *Worlding Electronic Waste* (Canada)

Ana Leyva V., Director, CooperAccion (Peru)

Monique Manatch, Algonquins of Barriere Lake Knowledge Keeper, cofounder Indigenous Culture & Media Innovations

Judith Marshall, Associate Fellow at the Centre for Research on Latin America and the Caribbean (CERLAC), York University, formerly with United Steelworkers' Global Affairs Department (Canada)

Pia Marchegiani, Environmental and Natural Resources Foundation (FARN), Lithium Triangle issues in Latin America & Pre-COP meeting on UN Climate Convention in Chile (Argentina)

Geoff McCarney, Research Director, Smart Prosperity Institute (Canada)

Sylvain Ménard, Professor, Civil Engineering, Structure, Wood Design, Université du Québec à Chicoutimi (Canada)

Jonathan Mesulam, Director, West Coast Development Foundation and Deep Sea Mining Campaign (Papua New Guinea)

Cynthia Morinville, Trudeau Scholar and PhD Candidate, University of Toronto, researcher about e-waste & metal recycling in West Africa

Gavin Mudd, Associate Professor, RMIT University, Melbourne, and Chair, Mineral Policy Institute; co-author of *The energy-materials nexus: the case of metals* (Australia)

Marc Nantel, Spokesperson, Regroupement Vigilance Mines Abitibi-Témiscamingue (REVIMAT), regional mining & metal recycling impacts (Canada)

Alex Neve, Secretary General Amnesty International Canada

Ramona Nicholas, Wolastoqey First Nation, Elder in Residence, University of New Brunswick (Canada)

Emily Norgang, Senior Researcher, Canadian Labour Congress (Canada)

David Pharand, Mayor Duhamel

Verna Polson, Grand Chief, Algonquin Anishinabeg Nation Tribal Council

Patrick Rondeau, lead environment advisor for a *Just Transition at workers' union Fédération des travailleurs et des travailleuses du Québec* (FTQ)

Payal Sampat, Mining Program Director at Earthworks (USA)

François Saunier, Research Associate, CIRAIQ, Polytechnique Montreal, Institute for the Environment, Sustainable Development and Circular Economy (Canada)

Dianne Saxe (KEYNOTE), Former Environmental Commissioner of Ontario (Canada)

Dayna Scott, York Research Chair in Environmental Law & Justice in the Green Economy (Canada)

Christian Simard, Director, Nature Québec

Nikki Skuce, Director, Northern Confluence, partner in the BC Mining Law Reform Network (Canada)

Louis St-Hilaire, Spokesperson, Regroupement de protection des lacs de la petite nation (Petite Nation's Lakes Protection Association), graphite mining impacts (Canada)

Lisa Sumi, Director of Standards and Assurance, Initiative for Responsible Mining Assurance (IRMA)

Carmen Teichgraber, Senior Project Manager, IMPACT, Transforming natural resource management, on supply chain for cobalt artisanal mining in Africa (Canada)

Leah Temper, Research Associate, Leadership for the Ecozoic, McGill University, Director of the Global Atlas of Environmental Justice (Canada)

Sophie Thériault, Professor at Law Faculty, Vice-Dean Academic, University of Ottawa, on Indigenous peoples' rights, environmental governance & resources extraction (Canada)

Ian Thomson, Policy Specialist, Extractive Industries, Oxfam Canada

Rodrigue Turgeon, Spokesperson, Comité citoyen de protection de l'esker, lithium mining impacts (Canada)

Emmanuel Umpula Nkumba, Executive Director, AFREWatch on cobalt mining issues in the Democratic Republic of Congo (DRC)

Loretta Williams (KEYNOTE), Xení Gwet'in First Nation, Chair, First Nations Women Advocating Responsible Mining (FNWARM) (Canada)

Alan Young, Director, Materials Efficiency Research Group and Circular Economy Leadership Coalition (Canada)

And more...

Vision

MiningWatch Canada works toward a world in which Indigenous peoples can effectively exercise their rights to self-determination, communities must consent before any mining activities may occur, and mineworkers are guaranteed safe and healthy conditions. Affected peoples and communities have the means to protect their human rights, ways of life, livelihoods and environment from the potential or actual effects of mineral exploration and extraction activities, and have effective access to justice and reparations for mining harms.

Mission

MiningWatch Canada works in solidarity with Indigenous peoples and non-Indigenous communities who are dealing with potential or actual industrial mining operations that affect their lives and territories, or with the legacy of closed mines, as well as with mineworkers and former workers seeking safe working conditions and fair treatment. MiningWatch Canada explicitly values the experience and knowledge of Indigenous peoples, mining-affected communities, and workers, and bases its work on mutual learning and participatory, deliberative and transformative methodologies.

In collaboration with national and international networks, organizations and other supporters, MiningWatch Canada:

1. Undertakes research and analysis of industrial mining and related policies and laws, in Canada and concerning Canadian mining operations abroad;
2. Provides timely information, as well as technical, communications and strategic support, to mining-affected communities and related organizations;
3. Campaigns on specific conflicts and issues related to mining abuses, while supporting movement-building;
4. Advocates for greater protections for Indigenous peoples and affected communities, including women and mineworkers, as well as justice and reparations for harms from mining through changes to the policies, laws and economic conditions that perpetuate mining-related abuses and injustice.





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