



# HEAVY METAL

## EARTH'S MINERALS AND THE FUTURE OF SUSTAINABLE SOCIETIES

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# The Face of Mining

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*Carol Liao*

The seminar room is too small for the growing crowd of people who pack themselves in, ever tighter, hoping to find a spot with an unobstructed view of the front. It is December 2018, before the COVID-19 pandemic, when a warm, crowded room was fathomable without a second thought. One group of people, the lucky ones who arrived early, is seated around tables arranged in a circle. Another row of latecomers is pressed tightly along the walls. At the invitation of a friend, I had made a special trip from Vancouver to the University of Victoria to attend a talk on China's investment in the green economy. The presenter is a newly minted PhD graduate whose doctoral research focused on a Kenyan mine acquired by a Chinese state-owned enterprise (SOE). Her talk showcases some of China's accomplishments in building community-engaged green energy infrastructure, and the message feels surprisingly uplifting—there is a lot to be said about green improvement, and China is seemingly emerging as a globally-important player in the clean energy transition. If you had left the room at that moment, you would have thought all was rosy.

Then a woman in the audience raises her hand. She introduces herself as a PhD student from Kenya and begins asking some pointed questions that reveal a different side of the story. 'What about Chinese mining companies controlling the economic livelihoods of Kenyans?', she asks, 'and what about the enormous financial debt and

debt-trap diplomacy that the Kenyan government now finds itself in with China?’ What followed was a riveting discussion about the challenging future of global mining. As interesting as the discussion itself, were the people engaged in it—two young women, one from China and the other from Kenya. Together, they represented a glimpse into the changing face of mining, an industry that was once dominated by the West, with a long history of colonialism, white supremacy and misogyny.

Today, five years after that seminar, the geopolitical arena has changed rather significantly. China’s ascendancy as a global superpower has forced the mining industry and its observers to adapt to shifting and often uncomfortable realities. The country’s growing investment and soft power around the world, particularly in Africa and Latin America, is redefining the key players in the global mining sector. But the stage itself and its notable actors still include some big question marks. How does an industry reconcile a racist, colonial history with a rapid geopolitical shift in global power to China—what some are calling ‘a new colonialism’? The face of mining is trying to undergo a significant makeover, but entrenched power disparities within the industry have ensured that some groups remain at the margins.

The very same month of the seminar, Chinese Huawei executive Meng Wanzhou was arrested in Vancouver for financial fraud, and nine days later, Canadians Michael Kovrig and Michael Spavor were detained in China. These arrests set off a chain of diplomatic disputes that left Canada–China relations in tatters, abruptly ending the growing cooperation the two countries had been enjoying in legal and economic matters. Layered onto these political tensions, a global pandemic originating from Wuhan, China, forced the world into crisis, lockdown and transition. Donald Trump, then-President of the United States, touted COVID-19 as the ‘Kung flu’ and ‘China virus’, and anti-Asian hate crimes in North America reached record heights.

In the wake of the Huawei affair, trade woes between Canada and China increased significantly. By 2022, Canada had introduced new rules governing foreign investment in critical minerals, with a particular focus on restricting the influence of (Chinese-dominated) SOEs in this sector. Tensions were further heightened by subsequent

accusations of foreign influence and meddling into Canadian elections, with Canadian politicians of Chinese descent finding their loyalties increasingly, and offensively, questioned.<sup>1</sup> The presence of suspected Chinese surveillance balloons over Canadian airspace in 2023 did not help matters.<sup>2</sup>

As a resource-rich, but relatively small, player on the world stage, many worry that Canada's growing conflicts with China will leave it poorer, and less able to address long-term global threats such as climate change.<sup>3</sup> The Canadian government's 2022 Indo-Pacific Strategy (IPS)—with its notable shift away from the term 'Asia' to 'Indo-Pacific'—is the country's first policy document focused on expanding trade, security and green economic partnership with the region's forty nations. Collectively, these Indo-Pacific countries are projected to host a third of the world's middle-income population by 2030, and half of the global gross domestic product (GDP) by 2040.<sup>4</sup> Both China and India feature prominently, but very differently, in the IPS. India is portrayed as a cheerful and promising ally, and a noteworthy counterweight to China, the troublesome, long-awakened giant.

Not surprisingly, critical minerals are conspicuous in Canada's 2.3 billion-dollar IPS. In terms of global demand for minerals, there is 'no market more important than China'<sup>5</sup> and a significant portion of the IPS focuses on how Canada will negotiate with that country, at a time when Western nations are looking to shift their industrial supply chains towards more 'like-minded' and 'friendly' partners. Yet, many of the most important drivers of climate change are found in China. With an immense population quickly shifting into the middle class, and hundreds of millions of people adopting consumption-driven lifestyles, China is placing growing demands on global energy supplies. By 2035, little more than a decade from now, the Asian Development Bank predicts that the demand for electricity in India and China alone will exceed 75% of the world's total.<sup>6</sup> These energy needs are increasingly met by coal-powered plants, producing high greenhouse gas (GHG) emissions that significantly contribute to climate change.

In the face of an ongoing climate crisis linked to global GHG emissions, the political and economic relationship between China and Canada sits at a precarious

juncture. Canada is a global powerhouse for mineral resources, with several large mining companies and thousands of small ‘junior’ exploration companies. Most of these mining and mineral resource companies are based in Toronto and Vancouver, cities which both have large Asian populations. Vancouver is also a major international port city, situated on ancestral and unceded First Nations territories. The reach of Canadian mining companies extends far beyond Toronto and Vancouver, with mining and mineral processing operations spread across the world—collectively these companies contribute to Canada’s position as one of the world’s top ten largest producers of platinum, titanium, gold, nickel, cobalt, iron ore, lithium and copper. Building on this current position, the Canadian Critical Minerals Strategy (CMS), released by the federal government in 2022 (the same year as the IPS), seeks to establish Canada as a global supplier of choice for critical minerals needed for electrification, wind turbines and solar panels, enabling the country to play a leading role in the clean energy transition.<sup>7</sup> At present, the CMS remains aspirational, and realizing its vision will require significant international cooperation to develop the entire value chain from minerals to refined metal. But recent events suggest that economic and geopolitical factors may pose increasing challenges to such cooperation in the face of mounting governmental interventions into Canada–China business relations.<sup>8</sup>

Clim ate change is forcing fundamental shifts in how companies around the world conduct their business, creating systemic and interconnected risks that amplify financial uncertainty. To its credit, China has anticipated many of these risks, preemptively securing global critical mineral supply chains through its Belt and Road Initiative and other efforts. Over the past several decades, China has slowly, but surely, acquired about 60% of worldwide critical mineral production, buying up mines like properties in a game of *Monopoly*. The country now also accounts for the vast majority—about 85%—of critical mineral processing capacity (the conversion of raw mining products into refined metals used in various applications). Chinese SOEs have taken ownership positions in countless mining companies across five continents. For instance, China now owns almost all of the producing mines in the Democratic

Republic of Congo, which supplies 70% of the world's cobalt.<sup>9</sup> Chinese mining and battery companies are also behind most of Africa's lithium projects, as well as major mining projects in Latin America exceeding one billion US dollars.<sup>10</sup> By 2035, it is estimated that China could secure one-third of the world's lithium mining capacity.<sup>11</sup> These ownership positions are not limited to the developing world. Chinese SOEs are the biggest single shareholders in Canada's three largest mining companies: Teck Resources Limited, First Quantum Minerals and Ivanhoe Mines.

The rise of China as a dominant force in the global mineral supply chain has been facilitated, in large part, by governments and corporations around the world hungry for foreign investment. So why is there now so much concern about the dominance of Chinese SOEs?

Surely, other global superpowers like the United States would have beaten China to the punch if they had the foresight and determination to corner the world's market on critical minerals. Is it mainly the economic stress of failing to capitalize on opportunity that is driving angst over China's growing dominance of the critical mineral supply chain? Or perhaps the vulnerability of economic dependence on an authoritarian state? Or maybe there is something else; the sense that an Asian country, and not the great Western powers, might lead the world towards renewable energy systems.<sup>12</sup> American commentary on China's dominance of the global mining sector routinely invokes Orientalism stereotypes, and assumptions that African nations would certainly prefer to deal with Uncle Sam as opposed to Yellow Peril.<sup>13</sup> But the United States, itself, also has a violent history of pillaging and corruption in its search for natural resources.<sup>14</sup> And the track-record of other competing countries has also not been particularly good, with several notable legal cases exemplifying egregious human rights abuses by Canadian mining companies in developing countries. Over the past century, the history of the global mining industry has had more than a few examples of violence and racism.

Alongside economic and political considerations, there has been increased pressure for a new post-pandemic era that embraces a green recovery, while also promoting social justice, equity and anti-racism. In the face of mounting reputational risks and

social movements including Truth and Reconciliation, #MeToo, Black Lives Matter and Stop Asian Hate, the mining sector has been obliged to take a hard, unflinching look at itself. Mining companies have begun to reckon with their historic lack of women, Black and Indigenous leaders, and growing expectations regarding free, prior and informed consent (FPIC) for Indigenous rightsholders. Advocates argue that the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) should be more than a symbolic statement—its words should hold the global mining sector to higher standards of engagement with Indigenous peoples from whose territories they extract significant profits.

The statistics on gender, Indigeneity, race and other forms of diversity, already stark within the corporate sector, are particularly egregious in mining, where underrepresented groups are often counted in single digit percentages. There are complex historical reasons underlying this reality, including exclusionary colonial practices, and systemic biases in the fields of science, technology, mathematics and engineering.<sup>15</sup> But understanding the ‘why’ does little to alleviate the daily realities of this underrepresentation, or its ripple effects on racial dominance and inequity. With its acquisition of Western mining companies and large operating footprint in developing nations, China has disrupted this historical trend, significantly increasing racial (if not gender) diversity in the global mining sector. Nonetheless, significant interracial power disparities persist.

Reflecting on the discussion emerging from that 2018 seminar, many intersectional issues arise from China’s growing dominance of the world’s mineral supply chain. In the case of Africa, it is questionable how much benefit is actually received by those countries where China is a major investor. Mining contract concessions are typically opaque, and often heavily tilted in China’s favour.<sup>16</sup> While there is no doubt that Chinese mining companies have created significant local employment opportunities (African employees make up 70–95% of the workforce in these companies), China’s resources-for-infrastructure agreements have often sent billions in minerals to China, with comparatively little local infrastructure actually developed from these deals.<sup>17</sup> Critics argue that China deliberately increases its political leverage by lending large



sums to African countries that will never be able to repay the loans, as was noted by the young Kenyan scholar at the seminar. But the reality is somewhat more complicated; over the past two decades China has restructured or refinanced fifteen billion dollars of debt and canceled 3.4 billion dollars in debt in Africa. Nonetheless, accusations of financial exploitation in Africa, said to have ‘infuriated’ China, led to its decision, in 2022, to cancel twenty-three loans to various African countries.

China’s role in the global mining sector may be on the cusp of significant change. The country’s economy has begun to destabilize, with record-high youth unemployment and a property market in crisis. This economic trouble is having ripple effects across Asia, which is now facing its worst economic outlook in over half a decade.<sup>18</sup> In response, China is ramping up its coal production to meet energy demands, and actively divesting from the Canadian mining sector in the face of tightening foreign ownership restrictions.<sup>19</sup> At the same time, China’s accelerated investment in the green economy worldwide has greatly reduced renewable energy costs, showcasing the nation’s unparalleled ability to scale up zero-carbon generation. Even as its coal production increases, China continues to lead the world in installed wind, solar and nuclear capacity.<sup>20</sup>

Some are calling the future of critical minerals ‘the New Cold War’, as countries battle for ownership of resources and prepare for a net-zero carbon future.<sup>21</sup> As this global economic competition unfolds, the impacts of climate change and mining are likely to expand around the world into previously unaffected areas. Amidst a global climate emergency and sustainability crisis, it seems clear that the economic situation in China will have a major impact on the mining sector. But what that means, in practice, is far from certain.

As we look towards the future of mining, it is important to keep our eyes on the bigger picture. A stable climate underpins the development of our human civilization; climate data inform where it is safe to live, where we can grow food and where to build critical infrastructure. Climate change also continues to exacerbate inequality, with disproportionately negative effects on Indigenous and racialized people, women and

the Global South.<sup>22</sup> Within the power vacuum of a global critical minerals sector and a rapidly accelerating climate crisis, how do we combat the ongoing, harmful effects of racism, misogyny and colonialism? One thing is clear. No sole country can address climate change on its own; international cooperation is imperative, and this requires representation of many different faces and voices around the table. The trick will be in supporting the national security and economic interests of countries around the world, while maintaining the vibrancy of international partnerships and trade. Whether we like it or not, the future of mining is deeply intertwined with the wicked problems of climate change and social inequity. As we seek a responsible path forward, dialogue addressing these complex geopolitical and intersectional issues must continue, even if it is in a warm and crowded room.

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