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ENERGY TRANSITION UNDER *THE NEW NAFTA*: CHALLENGES IN THE CRITICAL MINERALS SUPPLY CHAIN

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EXECUTIVE SUMMARY

Demand for critical minerals, battery metals, and the nearshoring of electric vehicle (EV) manufacturing have implications for all trading partners of the updated North American Free Trade Agreement, now called the United States-Mexico-Canada Agreement (USMCA). North American EV manufacturing is driven by initiatives such as the battery belt in the US and Canada's commitment to clean technology. Mexico, as a major auto-component manufacturer and producer of critical minerals, holds a significant role in supporting the regional supply chain. However, recent developments in Mexican natural resource policy, including the nationalization of lithium deposits and exploration moratoriums, present challenges for foreign miners operating in Mexico, including the risk of future limited participation in the mining sector.

Canadian miners hold a dominant role in Mexican mineral exploration, and Mexico is Canada's third-largest trading partner. The political landscape in Mexico, with the ruling Morena party controlling both the national government and majority of state governments, further complicates the situation. Policy changes in 2023 to the mining sector's regulatory requirements are the most significant reforms to the sector since the early 1990s. The reforms are in response to prominent, long-standing grievances from various non-industry stakeholders and seek to mitigate against future negative social and environmental impacts of mining. The reforms include shorter mining concession permits, stricter environmental impact assessments, and new permitting procedures on water use.

Considering these dynamics, this paper presents three policy considerations for Canadian mining sectors engagement in the USMCA:

1. Re-evaluate the approach to commodity market integration under the USMCA. Given the act's protectionist tendencies, Canada and Mexico should leverage the scaling-up of battery-metals production to improve their trade positions. This could involve wider exemptions from "Buy American" provisions and negotiations beyond the mining sector.
2. Emphasize royalty opportunities at the negotiating table. Despite limited public support for mining, state control of mining operations is more favourably viewed by Mexican voters. Canada would work with the Mexican government to explore fiscal negotiations that contribute to equitable arrangements and support Mexico's social development agenda.

3. Strengthen Canadian diplomacy and responsible mining practices. Canadian mining operators should prioritize good governance and responsible practices in their operations in Mexico. This includes building stronger relationships with local communities, municipal governments, and authorities, while implementing free, prior, and informed consent principles. Community engagement and collaborative governance will be essential to rebuilding trust and ensuring a more equitable future.

Overall, the successful integration of the North American vehicle production supply chain depends on navigating the relationship between the Canadian and Mexican mining sectors. By addressing the challenges and opportunities presented, Canadian miners can contribute to the development of sustainable and mutually beneficial North American EV manufacturing.

INTRODUCTION

In October 2022, US President Biden announced billions in funding for the ‘battery belt’ — a web of electric vehicle plants in Midwestern US states often associated with the ‘rust belt’ — as a central driver in the reinvigoration of domestic manufacturing. The passing of the Inflation Reduction Act, with \$370 billion USD in federal government subsidies for clean energy transition efforts (Chen 2022), seeks, in part, to reinvigorate decades of auto-manufacturing decline. Yet, for the past three decades in Mexico, auto-component manufacturing plants have expanded dramatically in northern and central regions of the country following the inception of NAFTA in the 1990s, with Mexico effectively absorbing the manufacturing market from its neighbours. Automotive companies continue to flock there, taking advantage of cheaper labour and labour law flexibility. In 2022, Mexico produced a record-breaking \$106 billion USD in auto parts, taking advantage of highway infrastructure connecting all three countries (Parrish Flannery 2023).

Canada, a mineral rich nation, is also betting on the benefits of EV manufacturing. Deputy Prime Minister and Minister of Finance, Chrystia Freeland, has committed to a two-fold increase to the mineral exploration tax credit for minerals considered essential to the development of clean technology. The budget announcement, in April 2022, included \$3.8 Billion in grants for mineral surveying, processing, and recycling, as well as tax credits for digging new mines and subsidies for infrastructure, with indications that regulatory oversight would not be reduced (Government of Canada 2022; Scheyder and Scherer 2022). Plants have been announced by Ford, GM, and Volkswagen throughout Ontario, and in July 2022, Prime Minister Justin Trudeau announced a deal with Umicore, a Belgian metals refiner, to build a \$1.5 Billion factory for battery production (Panetta 2022; Tasker 2022).

While the US and Canada have both pledged public funding to support broad efforts at economic integration through accelerated automotive production, Mexico’s federal government has not joined in with public funding commitments. Rather, the Federal government is cautiously watching on as foreign investment is courted by state-level politicians. The Governor of Nuevo León, Samuel García, for example, has demonstrated that state governments are willing to work apart from federal powers, proactively engaging with international investment in the auto sector.

Further, in April 2022, the Mexican government announced plans to nationalize lithium deposits, followed by a presidential decree this February on the part of Andres Manuel Lopez Obrador to centralize lithium management in Mexico’s Ministry of Energy. Like other critical minerals, lithium is essential to produce clean technologies and electric batteries. The national policy includes exploration moratoriums on other minerals and carries with it uncertainty in the mineral sector, with impacts for the larger trilateral trade evolution of the US-Canada-Mexico Trade Agreement (USMCA), or “New NAFTA.”

CANADIAN MINING AND MEXICO

Despite its rising mineral output over the past thirty years, Mexico’s standing in the future continental integration of battery manufacturing remains to be seen. What is clear is that nearshoring North American supplies of battery metals will require minerals from its allies. Mexico is a producer of three critical minerals in battery production: copper, lithium, and zinc, and is the fourth-largest destination of foreign investment in mineral exploration in the world (Harp Iturribarría 2020; SGM 2021).

Copper Production, By State | Mexico



Map: Extractive Resource Governance Program • Source: Sistema Integral sobre Economía Minera, 2018 • Map data: © OSM • Created with Datawrapper

Zinc Production, By State | Mexico



Map: Extractive Resource Governance Program • Source: Sistema Integral sobre Economía Minera, 2018 • Map data: © OSM • Created with Datawrapper

Mexico is also among the top ten producers of nineteen major minerals (Abogados 2018). It is the world’s number one producer of silver, fourth-largest producer of zinc, eighth-largest producer of gold, and ninth-largest producer of copper (SGM 2021). Geographically, its proximity and infrastructural connectivity with the US and Canada saves three weeks of transit time for materials compared to shipping across the Pacific Ocean, making the battery metals supply chain yet another economic opportunity (Parish Flannery 2023).

Yet Canadian miners are the long-established, prevailing players in Mexican mineral exploration, where Vancouver and Toronto-based companies dominate the landscape with dozens of subsidiary and joint-venture domestic companies within their portfolios.¹ Mexico is Canada’s third-largest trading partner and seventh-largest source of critical mineral imports, and it hosts \$8.9 billion worth of Canadian mining assets abroad (SGM 2019). As the most significant foreign player in the Mexican mining sector, owning 66 percent of all listed projects (SGM 2019), Canadian companies lead in minerals production alongside

¹ Examples include Grupo México, Peñoles, and Fresnillo.

domestic firms. Nationalization of lithium and restrictions on critical minerals exploration will complicate the capacity of Canadian and joint-venture operators to participate fully in the future of Mexican battery metal production.

Localities with Lithium, By State | Mexico



Map: Extractive Resource Governance Program • Source: Servicio Geológico Mexicano, 2021 • Map data: © OSM • Created with Datawrapper

Recent moratoriums and exploration restrictions pose a unique challenge that Canada and its private miners have not faced in their existing relationship with Mexico, to date. Advancement toward clean energy vehicle supply chains in North America depends on changes within the mining industry and within the USMCA, which includes a protectionist element within its trilateral relationship.

In a letter to President Biden on August 2, 2022, about future prospects of energy market integration, Mexican President Andrés Manuel López Obrador (AMLO) asserted that in the new USMCA, Mexico will not be “. . . treated like a colony and there must be equal treatment” on establishing future agreements in specific sectors of interest to all three partners (Animal Político 2022).

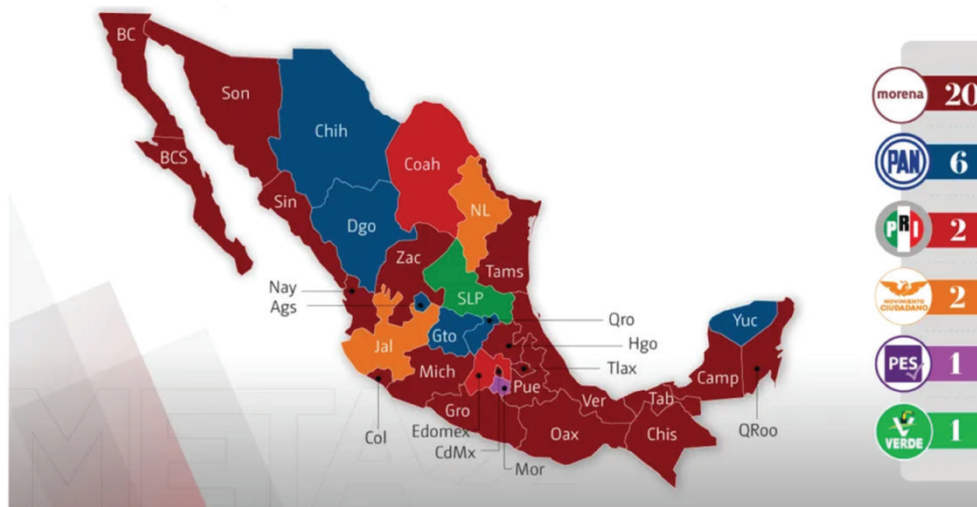
Mexico’s comparative advantage in the mineral sector has been leveraged by administrations of various political stripes. Beginning a decade ago, the federal government under President Felipe Calderón expanded funding to modernize geological mapping and data collection to realize the full potential of national reserves. State agencies of Mexico, such as the Mexican Geological Survey (SGM), along with industry via the Mexican Mining Chamber (CAMIMEX), have identified not only more deposits of precious metals like silver and gold, but have realized that there is an abundance of proven critical mineral deposits that are used in battery production and other renewable energies. Given the well-known

current global need to secure critical battery metals such as lithium, in August 2022 AMLO issued a decree that a state-run lithium company has been formed, called Lithium for Mexico.² The decree is a continuation of the lithium nationalization announcement from earlier that year.

MEXICAN POLITICAL INFLUENCE

Political dynamics within Mexico are poised to play a crucial role in the coming years given the opposing approaches of national and subnational institutions, and the current dominance of AMLO's *Morena* party. Morena controls national congress and is only a few seats shy of the two-thirds super majority needed for constitutional amendments. The party has a favourable relationship with the judiciary and has been courting the army through extensions of its powers and uses in daily society. At the state-level, as the map below shows, Morena controls 60 percent of governorships and will continue to be popular for the foreseeable future. According to polls, supporters, and opponents alike, it is widely accepted that Morena has all but locked down the presidency for 2024.

Results of the 2021 Midterm Gubernatorial Elections (*El Milenio 2022*).



POLICY CHANGES IN 2023

The favourable policy landscape for the mining industry will continue to be a target for Morena. Elected officials will continue to legislate a hostile policy environment for foreign miners in two main ways. First, by making it difficult for foreign companies to achieve licencing for future concessions; and second, through the ongoing spectre of nationalization of certain mineral commodities.

These possibilities come on the heels of recent legislation passed at the end of April 2023, which ushered in the most significant changes to the national mining law in thirty years. Now, mining concession permits will be thirty years, down from the previous fifty-year entitlement, and permissions will be carried out with stricter enforcement than other environmental laws, water management regulations, and social impact assessments.

² In Spanish: *Litio Para Mexico* or *LitioMx*

A factor not to be overlooked in the arguments toward greater control over industry is the Mexican public's legitimate grievance about the proliferation and consequences of mining production in the twenty-first century. There are ongoing social and environmental fallouts from mining that negatively impact Mexican communities, especially in rural municipalities and Indigenous farming areas reliant on land access and groundwater supplies. With the reforms in late April 2023, water permits and environmental impact studies will now be placed under tighter scrutiny, reforms that many Mexican political and civil society entities, including representatives of the centre-left Party of the Democratic Revolution, have been calling for since at least 2013. With the dominance of Canada in the foreign and joint-ownership space of the mining sector, there is a clear responsibility to acknowledge and improve damaging industry practices that contribute to Mexico's reputation for some of the highest rates of mining-related social conflicts in the Western hemisphere.

One caveat to the government rhetoric signalling a new era in Mexican resource nationalism is that it does not necessarily match the reality of the day-to-day operations within the mining bureaucracy. The mining sector's regulatory institutions remain staffed with both industry experts and technical practitioners who have built careers in an open market commodity sector. Many of these practitioners are committed to cross-border investment, training, capacity development, and best practices. The embeddedness of market-friendly bureaucrats, combined with a heavy reliance on China's cooling import market, a US dollar rally, and price fluctuations due to the COVID-19 pandemic supply-chain disruptions, means that the Mexican federal government might face economic headwinds, leading to a softening of their new stance on mining.

POLICY CONSIDERATIONS

The push to nearshore North American vehicle production under the USMCA rests, in part, on Mexico's mining and minerals policy. Whether the US battery belt, Canada's investment in domestic manufacturing, international mining operators in Mexico, or the establishment of production throughout the region, we consider the following three policy ideas.

- 1. Reevaluate the approach to USMCA commodity market integration, given the protectionism of all partners.** NAFTA became the USMCA largely based on American protectionism. Scaling up battery metals production to meet US demand is a bargaining chip within the free trade agreement for Canada and Mexico, which could widen exemptions from "Buy American" provisions baked into USMCA clauses. This would apply to import sectors beyond mining. Apart from the demand for raw materials, Mexico and Canada have extensive manufacturing and logistical capacities in the downstream automotive supply chain in Central and Northern Mexico. Inflationary pressures driving down Chinese demand for metals means it is an opportune moment for the 'smaller' two partners — Canada and Mexico — to make demands to improve their trade positions. However, given the existing tensions in trade, due mostly to piecemeal disputes in key sectors, such as AMLO's nullification of pipeline contracts underwritten by foreign investors, and a narrowly avoided reversal of energy reform, it is understood that there are obvious barriers to USMCA negotiations currently. For Mexico's mining sector, particularly with the state-run Lithium company, Litio para México, the outlook for future integration remains difficult, but the underlying mineral deposits are undeniably attractive for EV manufacturing.

2. Emphasize royalty opportunities at the negotiating table. Mexican public opinion does not generally support mining. However, *Regeneración*, the official party newsletter of the governing Morena party, shows that rank-and-file party voters are more supportive of mining when it is under state control. Canada, as the dominant player in the mining sector, must work with the federal government of Mexico to determine what policy tools may contribute to equitable arrangements within the USCMA. Fiscal negotiations are a logical starting point, because enhanced rents on mining operations will help the federal government fulfill an ambitious social development agenda. While surrendering higher revenues to Mexico seems counterintuitive, highlighting that demand for battery metals is due to expand faster than supply will show that there are obvious upsides for Mexico's medium to long term fiscal planning. This is particularly important for Mexico, given that decarbonization means rents from the state-owned Mexican petroleum company, Pemex, are potentially overexposed to price shocks and shrinking export markets.

3. Canadian diplomacy and Canadian mining interests are inextricably linked in Mexico. The Canadian government must, through enforced legislation at home, establish good governance and responsible practice mechanisms across all Canadian operators. Mine operators, both parent companies and their in-country subsidiaries, must build into their front-end costs longer-term and more contextually intensive free, prior, and informed consent (FPIC) with communities and the authorities. This also means more contact with municipal governments in mining areas, who ultimately have the most information about the needs of communities, can relay their interests, and hold authority on approving key operational permits and licensing. Common issues include water depletion, contamination, and property rights disagreements, all of which have led to data suggesting high rates of violence at Canadian mines between communities opposed to mining projects, police, and private security working for mining companies (Imai et al 2017). In addition to existing environmental management and remediation as standardized practice within project planning, operators will benefit from additional capacity-building in community engagement principles and collaborative governance. Canada needs to rebuild trust through its mining operators and in so doing, create a solid foundation for a more equitable future.

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