

MIRACLE OR MIRAGE? LITHIUM GOVERNANCE AND PROSPECTS IN BOLIVIA

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DIEGO VON VACANO¹

High atop the Bolivian Andes, 12,000 feet above sea level, lies one of the hidden wonders of the world: the Uyuni Salt Lake. At first glance, its luminescence, which expands as far as the eye can see until it becomes one with the sky, makes for a unique tourist destination. But beneath it, thousands of years of geological processes have produced what is now a potential solution to the world's climate change crisis.

The *Altiplano*, an expansive, high-altitude plateau that surrounds Uyuni, is a desert with few populated areas. There, Bolivia possesses 21 million metric tonnes of lithium, not just in Uyuni, but in surrounding deposits such as Pastos Grandes and Coipasa. It is the world's largest resource of the mineral that is crucial for the world's energy transition. After almost twenty years of failed attempts at developing an industrial production of the lightest of metals, the country seems finally poised to take a major leap forward. Various windows of opportunity have opened up in the last two years that seem to suggest a real take-off of the sector and, with it, of the Bolivian economy. However, the windows could close at any time.

Bolivia exported a modest amount of about 600 tonnes of lithium carbonate equivalent (LCE) in 2022, for close to USD\$40 million in revenue. That is about four times more than the previous year. (La Razón 2022). Still, Bolivia lags far behind lithium exports by neighboring Chile or Argentina, the other two members of the so-called Lithium Triangle, a vast expanse of land across the Andes that holds dozens of lithium-rich salt flats.

In the 1990s, Bolivia became the region's natural gas hub, with exports to Argentina and Brazil. National oil company YPFB (*Yacimientos Petrolíferos Fiscales Bolivianos*) implemented a well thought out strategy towards the end of the 2000s decade, that succeeded in fueling public spending and in generating jobs in the oil and gas sector.

Will the latest attempts at developing the country's lithium industry mirror its natural gas success, and generate a miracle for Bolivia? Or is lithium merely a mirage that will delude observers?

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FROM GAS TO LITHIUM: POLARIZATION, AND CORRUPTION

Since April 2021, there have been important advances in the country's lithium industry, but there remain multiple challenges ahead that could hinder its full development. While some of the problems are technical, economic, and even cultural, the bulk of the obstacles are political in nature. In the end, these challenges are part of Bolivia's traditionally complex political puzzle.

Bolivia's political culture has been polarized for decades, mainly around management of its natural resources, and the lithium industry has not been immune to that reality. This can be traced back to "The Gas Wars" of 2003, when then-president Gonzalo Sánchez de Lozada's attempt at exporting land-locked Bolivia's natural gas through neighboring Chile was generated strong popular resistance. Deadly confrontations resulted in the resignation of the president and vice president, in a conflict that in truth, had deep historical roots. Bolivians hold an old grudge against their neighboring country since losing their exit to the sea to Chile, more than a century ago. The Gas Wars ultimately ended in the election of left-wing president Evo Morales in 2005.

Years later, new confrontations ensued, although this time connected to a different natural resource: lithium. The natural resource conflicts that have historically pitted mineral-rich Potosí against the central government are now centered around lithium. Even when the lithium industry is years away from generating rents, Potosí citizens have already been extremely mobilized in their claims for an equitable share of future lithium revenues.

After 14 years in power, Morales had to resign in 2019, amidst violent popular revolts in relation to alleged fraud during presidential elections. In truth, popular discontent had started simmering prior to the elections, when the central government and Potosí clashed over future lithium royalties. Potosí, Bolivia's poorest region, has a history of well-organized social mobilization in demand of improved natural resource revenues. The Uyuni salt flat, which holds the world's largest lithium resources is located in Potosí.

The former President fled the country and denounced he had been ousted by a coup supported by the United States, as part of Washington's attempt at grasping his country's lithium resources. (Cruz 2023) An interim government called for elections and Morales' former finance minister, Luis Arce, became president in 2020. Arce was one of the key architects of Bolivia's eco-

LATIN AMERICA PROGRAM

conomic miracle during the Morales administration that has been praised for raising the living standards of the poor (Sarmiento 2019).

Morales eventually returned to Bolivia and is the head of the governing party, *Movimiento al Socialismo* (MAS). While there have been accusations that Arce is merely a puppet of Morales', this is far from the truth. Arce has resisted changes to his cabinet demanded by Morales, he has shaped his own political and economic agenda, and he adopted a style of governing that is different from Morales'. (Vacano 2020) Arce presented himself as a more technocratic leader in contrast to Morales' populist appeal. In practice however, this has not been necessarily the case.

Morales still maintains significant sway in the party—and in the administrative apparatus of the state—through civil servants associated with his political views. His charisma also draws loyal followers in agrarian, lower-class, indigenous sectors of society, although he has lost much support amongst urban *mestizo*, educated groups.

The former president persistently refers to lithium as one of the reasons for foreign intervention in Bolivia, in particular the 2019 movement that resulted in his ouster.

Electric car manufacturer Tesla's CEO, Elon Musk, unwittingly gave Morales ammunition for expanding his anti-U.S. rhetoric in social media. In response to Morales' 2019 removal from government (Vorotnikova 2022), Musk wrote an inflammatory tweet hinting that the U.S. can overthrow whomever it pleases. His facetious comment was badly received by many Bolivians, especially Morales followers, who alluded to it as proof of US and UK intervention in the 2019 events and of their intent to grab hold of their country's lithium (Rozsa 202).

Bolivia's lithium sector is at the core of the country's current political disputes. The head of *Creemos*, one of the major opposition parties, is thought to be contemplating forming an alliance with a Potosí-based opposition against the ruling MAS. Luis Fernando Camacho is currently in prison for his alleged participation in the 2019 coup against Morales.

Also endemic to Bolivia's internal democratic workings is corruption, which has already directly impacted the lithium industry. In 2022, former-president Carlos Mesa's opposition party, *Comunidad Ciudadana*, accused state-owned lithium company Yacimientos de Litio Bolivianos (YLB) of influence peddling in relation to a contract the company signed with Chinese construction firm CAMC Engineering back in 2016. The US\$500 million contract

was granted by Morales' government for building a water treatment plant in the Uyuni salt flat. (Economy 2022) Other, similar corruption claims, some with evidence, have resurfaced over the last two years. The Arce government has responded largely by ignoring them.

Noteworthy is the general stir caused last year by the replacement of YLB technical experts with less knowledgeable workers with political ties to the government. (Cota 2022) Also, the Morales wing of the MAS party laid strong accusations of nepotism and corruption against President Arce's son, Luis Marcelo Arce Mosqueira. He was accused of allegedly favoring certain companies that presented proposals to a government call for introducing Direct Lithium Extraction (DLE) techniques to develop Bolivia's lithium (Emol.com 2023). These tensions threaten to divide the MAS party from within and raise questions about the future of Bolivia's lithium industry.

YLB was established in 2017 as the government institution responsible for the development of the lithium sector in Bolivia (Montenegro Bravo, 2018). The company is the current iteration of the institution that oversees lithium and related metals that had originally been part of state mining company COMIBOL (*Corporación Minera de Bolivia*) (Tsolakis 2008) (Hopper 2009). Lithium was initially described as an

important resource in the 1970s, under the military regime of President Hugo Banzer. But it was only in 2008, under the presidency of Evo Morales, that it was labeled a strategic mineral, which means that only the Bolivian state has the right to develop it.

COMPETITION FOR BOLIVIA'S LITHIUM

In 2021, President Arce launched a new, promising phase for Bolivia's lithium industry. In a public event, the president announced that YLB would partner with private companies, in an effort to focus on seeking appropriate technologies to develop Bolivia's lithium from the country's three major salt flats –Uyuni, Coipasa, and Pastos Grandes. There is lack of transparency around YLB's major decisions: including in relation to the selection of its partners, and the designing of its technical and business-models.

The government is seeking private companies to introduce technologies that can address two main challenges of Bolivia's lithium deposits: a) the complexities of Bolivia's salt flats, which have a high magnesium content, and rainfall; and b) heavy reliance on large water evaporation ponds typically used in traditional lithium extraction from brines, such as those in



Photo Credit: Ausfilms/Shutterstock

place in neighboring Chile and Argentina. The ponds use a lot of water, which can be detrimental to the environment and to local communities. Before Arce's term, Bolivia had already invested almost \$1 billion to build 20 lines of ponds that have since remained largely idle.

As a result of Arce's initiative, twenty foreign firms submitted proposals, to implement DLE technologies in Bolivia, in lieu of evaporation ponds. (Rochabrun 2022) There are a variety of DLE technologies, all of which are better alternatives to the large evaporation ponds because they do not deplete local aquifers and they minimize environmental impacts. DLE technologies are a good choice for Bolivia because they could contribute to addressing the high-magnesium content present in the country's brines, which reduces the purity of the extracted lithium. High-quality lithium-ion batteries are manufactured with lithium that contains very low impurities, such as that produced by Chile and Argentina.

By August 2021, the government had narrowed down to nine the number of private foreign companies eligible to develop Bolivia's lithium. It remains unclear why the other eleven firms had been eliminated, because YLB did not make it a transparent process: it was neither an open tender nor a bid. It was simply a 'call for proposals,' which means there is no public record of it. In spite of YLB's frequent public events and pronouncements about the choice of private investors, no specific technical details were made public as to why one company was picked over another. By June 2022, two more firms were removed from the shortlist, leaving a final count of six companies: four Chinese, one Russian, and one from the USA. None of the six finalist companies signed definite contracts with YLB yet.

The two firms removed from the shortlist were Argentine company Tecpetrol— a member of the large international conglomerate Techint— and Texas startup EnergyX. The latter was the only firm to have developed a pilot plant in Uyuni to

test its production method there for five months, with excellent results of over 94% lithium recovery rate (Krauss 2021). Both firms were eliminated for not having met the deadline for presenting the required paperwork to be considered as candidates. EnergyX, which missed the final deadline by just ten minutes, took responsibility for the delay and reiterated its interest in working in Bolivia in the future. Lithium experts within YLB believe EnergyX's technology could not only be good for Uyuni, but also for Bolivia's other lithium deposits.

The four Chinese companies among the six remaining finalists, include CATL, the world's largest battery maker; Fusion Enertech, the only Chinese firm with proven DLE technology in two plants in Western China; and CITIC and TBEA, two state-owned firms with some lithium-sector experience. The Chinese firms presented strong proposals that go beyond mere extraction, with plans to assemble battery materials in Bolivia, and eventually manufacture batteries proper. This is not surprising, given China's strength in the lithium downstream sector.

Russia's state-owned firm Uranium One, part of Rosatom, does not have a background in lithium mining. The company tried hard to get established in Bolivia, where it set up its Lithium One affiliate and

has a strong legal team in La Paz. In the case of US-based Lilac Solutions, the company has been testing its DLE technology in Argentina, where it faced a few setbacks in the process (Reuters 2022).

There are advantages and drawbacks to each of the four Chinese companies. CATL, owing to its size, may very well be able to build an entire supply chain in Bolivia leading to battery manufacture. Fusion Enertech, besides proven DLE experience has strong ties to sources capital outside of China. Given recent hardline developments in China's government, CITIC and TBEA may have less flexibility. Furthermore, the working standards of Chinese firms across the world have been frequently questioned, especially in terms of Environmental and Social Governance (ESG) standards. It remains to be seen whether these Chinese firms will show commitment to workers' rights, protecting the environment, and developing local industry.

The case of Uranium One, the Russian firm, has taken an unexpected turn since Russia's invasion of Ukraine in February 2022. For the last few years, Russia and Bolivia have enjoyed good relations. Some of Bolivia's top energy officials, including Energy Minister Franklin Molina, have strong educational and policy ties with Russia. But the attack on Ukraine has created

LATIN AMERICA PROGRAM

uncertainty and political risk. While many countries have shunned Russia, Bolivia has shown to be a loyal ally, both at the UN and in its commercial deals. Bolivia has a nuclear medicine agreement with Russia, received Russian vaccines for Covid-19, and has advanced talks with Lithium One, a new subsidiary of Uranium One. At the moment, Russia is the biggest purchaser of Bolivia's small lithium production, by outbidding others when YLB offers its product on the market. Owing to this, the lithium development deal with Uranium One that was signed on December 13, 2023 was a natural progression.

The government's call for DLE proposals left an important landmark: a framework agreement signed in January 2023 between CATL and YLB to develop Bolivia's lithium sector. A CATL-led consortium will invest \$1 billion to build two lithium production plants, each with a maximum capacity of up to 25,000 tonnes per year of high purity --99.5 percent—lithium carbonate equivalent (LCE), according to the government (Estado Plurinacional de Bolivia 2023). CATL proffered a solid proposal and has been given six months to show results in Bolivia, before it is offered a formal contract. If it performs well, and provided Bolivia's lithium legislation is amended to allow for joint ventures between YLB and foreign companies, the

Chinese giant might get established in Bolivia. CATL could initially enter Bolivia's lithium extraction, and subsequently develop supply-chain components and perhaps a battery manufacturing industry in the Andean nation in the long run.

For the moment, and given the generalized lack of transparency, it is hard to pin down the actual status of the process of picking YLB's partners. One possible reason for the opacity within YLB is that "there are too many cooks in the kitchen," according to business representatives.² There seem to be differences of opinion and also tensions among government officials and institutions involved in the process.

YLB's lack of technical expertise is also a source of tension. YPFB personnel have been encroaching on YLB in spite of industry experts' warnings against this, arguing that there is a vast technical difference between the production of hydrocarbons versus lithium. They say YLB should concentrate on improving its human capital from within, rather than hiring oil or gas technicians. This is particularly true given that producing high quality lithium from brines involves a specific chemistry expertise that may not necessarily match that needed for developing oil and gas. Also, there have been cases of cor-

² Author interviews with company representatives in Bolivia.

ruption and cliques within YPFB over the years (Seefeldt 2020), that lithium experts fear could emerge within YLB if the former ‘takes over’ the latter.

Unlike the gas industry, lithium in Bolivia is almost entirely an unexploited sector. There are few Bolivian lithium technical experts; the technologies best suited for developing the country’s lithium remain largely untested around the world; and there is an absence of large multinational firms, which are the ones that have the know-how and easy access to funding. Currently, foreign firms are not allowed to extract or industrialize lithium, as only the Bolivian state, through YLB, is legally permitted to do so.

Germany’s ACI Systems signed a deal in 2018, to develop a lithium hydroxide plant in the Uyuni Salar and a factory for electric vehicle batteries, but then President Morales cancelled the deal, citing environmental concerns and the need for a more equitable distribution of profits. However, given the lack of technical expertise in Bolivia, foreign firms are necessary.

But for the moment, Bolivia lacks a law that allows for joint ventures between YLB and private lithium investors. Existing legislation requires that lithium companies process the resource within Bolivia, rather

than exporting the raw material, a policy aimed at promoting value-added processing within the country and creating local jobs.³ (Tockman and Cameron 2014) (López 2019). A new lithium law that allows for the participation of private companies is thus crucially important to actually activate the sector in real practice.

As opposed to lithium, Bolivia’s natural gas industry has been touted as a success story in large part because of the existence of in-country expertise. Following Morales’s nationalization of Bolivia’s gas industry in 2006, the state retained only 51 percent control of natural gas assets and revenues, while foreign firms kept the remaining 49 percent. In practice, this model was a partial nationalization, that allowed for the co-existence of private-public partnerships, and of investments by foreign companies in the likes of Repsol, Total, and Pan American Energy (PAE).

There are several proposals for a lithium law, but it may take some time to pass one, given strong opposition from social and community groups (discussed in the next session). Some proposals emulate the 51-49 percentage model of the natural gas sector, while others give the state as much as 80 percent of revenues.

³ This was regulated under the Law of Strategic Resources for Industrial Development, which was passed in 2014

LATIN AMERICA PROGRAM

The lack of legislation means that investors willing to enter Bolivia's lithium today must be ready to accept demanding conditions imposed by YLB, at least until a new lithium law is adopted. Among those conditions, investors have the sole responsibility of building the lithium extraction and production plants. After two years, both plants become the property of the state. During negotiations, YLB has reportedly asked for an 85 percent share of profits from potential investors, a scheme that seems to be drawn from the YPFB playbook and is unrealistic for the lithium sector, given there is little infrastructure in place in Bolivia for the sectors to be comparable.⁴

YLB is reportedly expecting that lithium firms accept less than 30 percent profits, a proposal that has been received with trepidation by potential investors. Firms that are willing to engage with Bolivia are doing so under the expectation that a new lithium law would eventually introduce more balanced investment terms, such as 51 percent ownership for the Bolivian state and 49 percent for the private investor; clear property rights; and a well-spelled out industrialization, and commercial scheme that will allow for significant profits for the private firm.⁵

Bolivia has a progressive tax policy on the export of lithium that incentivizes domestic production of higher-grade products: the more developed the lithium product, the lower the export tariff (Fabricant y Gustafson 2019). In 2020, the government introduced a new export tax of three percent of the value of the lithium carbonate sold on the international market, and an additional 15 percent tax on the profits of lithium production companies (Zolfani, et al. 2022). Lithium carbonate is Bolivia's main lithium export product, albeit in very small quantities (Seefeldt 2020).

SOCIAL INTRICACIES OF BOLIVIA'S LITHIUM DEVELOPMENT

Bolivia is a democratic, multicultural and pluri-national country, which means that multiple ethnic groups are recognized by the state. Many still see the central government, located in La Paz, as willfully neglecting peripheral, poorer regions, mostly inhabited by Indigenous populations. Major opposition to lithium development comes from Potosí, home to the Uyuni salt flat.

There has been a decades-long resistance to centralized power over mining led by the *Comité Cívico Potosinista* (COMCIPO), which is based in the department

⁴ Author interviews with private sector representatives in Bolivia.

⁵ Author discussion with private sector representatives in La Paz.

of Potosí. COMCIPO has been an active player in lithium politics since the 1990s. The organization defends the interests and rights of Potosí citizens, who claim a share of royalties accrued from natural resources developed there. Their claim is legitimate in the case of lithium given the location of Uyuni. Their demands are also valid because the region has historically failed to enjoy the benefits of natural resources developed there. It is likely that COMCIPO will play an active role in shaping a new lithium law. The organization has met with President Arce to discuss the terms of a new law, although relations remain cool at best.

Another social organization, FRUCTAS, has been at odds with COMCIPO in the past. Both institutions will be fractious when the Lithium Law finally takes shape and calls for *socialization*, the term YLB uses to define public discussion with community organizations and citizens to draw up a more democratic lithium plan (Upstream Journal 2018). The various versions of the lithium law spell out: a) the extent to which local communities have a say in lithium governance; b) how royalties will be divided; and c) the participation of foreign companies in the sector.

Another component of the social divisions that afflicts Bolivia and could impact the lithium industry is regionalism. During the

2019 crisis, Potosí social leaders formed alliances with counterparts in other parts of the country, specifically with the *Comité Cívico of Santa Cruz*, a bastion of conservative politics and home to Bolivia's natural gas resources. The Eastern department of Santa Cruz has always claimed to be Bolivia's real economic engine and has been constantly at odds with the leftist MAS. Ethnic differences also play a role, with the *camba* population from the East feeling threatened by the government, which is controlled by *collas*, from the West. As lithium projects begin to take off in Potosí, it would not be surprising if *camba* leaders lend their support to Potosí opposition groups seeking greater decentralization and a higher share of royalties.

PITFALLS AND PROSPECTS

There is a sense of 'the good, the bad, and the ugly' within Bolivia's most recent attempt to launch its lithium sector. Calls for companies to present proposals for the introduction of DLE technology to develop Bolivia's lithium industry is a very good idea. It is also good that among the six companies that were finally picked, not just one country or one firm are represented, but that major powers like China, the US, and Russia are among them.

For a small country like Bolivia, it makes sense to play the game of Realpolitik and seek to leverage natural resources that are now of global strategic importance. Global demand for lithium continues to surge (Benchmark Minerals Intelligence 2022). Bolivia's lithium resources, particularly in the giant Uyuni, seem to be the pot at the end of the rainbow, particularly given high lithium prices.

The U.S., a latecomer to the electric vehicle (EV) revolution, has finally jumped on board with the introduction of the Inflation Reduction Act (IRA), which offers credits for the domestic development of EVs. However, there seems to be no U.S. plan towards Bolivia.⁶ It is not so much that the U.S. is not interested in Bolivia's lithium riches. Rather, few in U.S. policy circles fully understand Bolivia's complex political and cultural landscape, leaving trepidation and ignorance to shape any attempt at approaching the country.

By contrast, China is keen to enter the Bolivian lithium space, and as mentioned above, Chinese firms already have a dominant presence in the sector. (Katwala 2022) In this scenario, many within the ruling MAS believe "an enemy of my enemy is my friend." For that reason, they support Russia in the war against Ukraine, a fact that may prevent Bolivia's lithium from en-

tering European markets in the future.

Given the mire in which Bolivia's lithium projects were for nearly two decades, the intense interest shown in Bolivia's lithium sector by major international companies bodes well. To be sure, the infrastructure to extract, transport, and export Bolivia's lithium is now close to non-existent (e.g., roads, electricity, water), although Chinese and Russian firms interested in developing the sector may be able to provide them once agreements are signed.

Bolivia is poised to be able to show a small but significant level of industrial production of lithium carbonate by the end of 2024. The amount will depend on which and how many firms are allowed to operate. If three major firms—such as CATL, Uranium One and perhaps a Western company—begin operations by the end of 2023, one could anticipate at least 15,000 metric tonnes of lithium carbonate by late 2024.

By 2025, Bolivia's Bicentenary, this figure could double, given more investment in infrastructure and commercialization. Still, all this hinges on the lithium law and the negotiation by YLB with each firm over profit sharing percentages, plant ownership, and technology transfer. After 2025, plans for large-scale—ideally a Gigafactory—in-country produced battery materials

⁶ Author meetings with U.S. embassy officials in La Paz.

and batteries are not unrealistic. For this to occur, President Arce should stamp out corruption and finally make lithium *the* main priority on his agenda. If this does not occur, the return of Morales is not impossible.

REFERENCES

Benchmark Minerals Intelligence. 2022. "Lithium prices touch record high in China as EV sales momentum remains." *Benchmark Minerals Intelligence*. October 13. Accessed June 24, 2023. <https://source.benchmark-minerals.com/article/lithium-prices-touch-record-high-in-china-as-ev-sales-momentum-remains>.

Cota, Isabella. 2022. "Despidos y sospechas: el proceso de selección de las empresas que explotarán el litio en Bolivia." *El País*, June 7.

Cruz, Eva. 2023. "Bolivia enfrenta protestas contra multimillonario plan de industrializar el litio." *Rumbo Minero Internacional*, March 15.

Economy. 2022. "Ministro de Hidrocarburos deslinda responsabilidades sobre adjudicación cuestionada en YLB." *Economy*. August 3. Accessed June 22, 2023. <https://www.economy.com.bo/articulo/economia/ministro-hidrocarburos-deslinda-responsabilidades-adjudicacion-cuestionada-ylb/20220803155129006936.html>.

Emol.com. 2023. "Tensión en el oficialismo boliviano: Acusan a hijo del Presidente Arce de hacer "negocios en la oscuridad" con proyecto del litio Fuente: Emol.com - <https://www.emol.com/noticias/Internacional/2023/02/16/1086911/bolivia-acusaciones-hijo-arce-litio.html>." *Emol*. February 16. Accessed June 24, 2023. <https://www.emol.com/noticias/Internacional/2023/02/16/1086911/bolivia-acusaciones-hijo-arce-litio.html>.

Estado Plurinacional de Bolivia. 2023. "Bolivia dio un salto hacia la transición energética, la industria del litio, y la energía nuclear". *Ministerio de Hidrocarburos y Energía*. February 25. Accessed June 24, 2023. <https://www.mhe.gob.bo/2023/02/25/bolivia-dio-un-salto-hacia-la-transicion-energetica-la-industria-del-litio-y-la-medicina-nuclear/>.

Fabricant, Nicole, and Bret Gustafson. 2019. "The Political Economy of Gas, Soy and Lithium in Morales' Bolivia." *Bolivian Studies Journal* 25: 45-59.

Hopper, Anna. 2009. "Recharging Bolivia: Evo Morales' Lithium Dilemma." *Harvard International Review* 31 (2): 9.

Katwala, Amit. 2022. "The World Can't Wean Itself Off Chinese Lithium." *Wired*. June 30. Accessed June 24, 2023. <https://www.wired.com/story/china-lithium-mining-production/>.

Krauss, Clifford. 2021. "Green-Energy Race Draws an American Underdog to Bolivia's Lithium." *The New York Times*, December 16.

La Razón. 2022. "YLB cuadruplicó las ventas de carbonato de litio en 2022." *La Razón*, December 22.

López, Daniela Sánchez. 2019. "Sustainable Governance of Strategic Minerals: Post-Neoliberalism and Lithium in Bolivia." *Environment: Science and Policy for Sustainable Development* 61 (6): 18-30.

Reuters. 2022. "Lake Resources in dispute with Lilac Solutions over stake in Argentina lithium project."

Reuters. September 13. Accessed June 25, 2023. <https://www.reuters.com/markets/asia/lake-resources-dispute-with-lilac-solutions-over-stake-argentina-lithium-project-2022-09-14/>.

Rochabrun, Marcelo. 2022. "Bolivia still evaluating six firms for lithium mining partnerships." *Reuters*. June 7. Accessed June 26, 2023. <https://www.reuters.com/markets/deals/bolivia-still-evaluating-six-firms-lithium-mining-partnerships-2022-06-07/>.

Rozsa, Matthew. 2020. "Elon Musk becomes Twitter laughingstock after Bolivian socialist movement returns to power ." *Salon*. October 20. Accessed June 26, 2023. <https://www.salon.com/2020/10/20/elon-musk-becomes-twitter-laughingstock-after-bolivian-socialist-movement-returns-to-power/>.

Sarmiento, Isabella Gómez. 2019. *How Evo Morales Made Bolivia A Better Place ... Before He Fled The Country*. November 26. Accessed June 26, 2023. <https://www.npr.org/sections/goatsandso-da/2019/11/26/781199250/how-evo-morales-made-bolivia-a-better-place-before-he-was-forced-to-flee>.

Seefeldt, Jennapher Lunde. 2020. "Lessons from the lithium triangle: considering policy explanations for the variation in lithium industry development in the Lithium Triangle countries of Chile, Argentina, and Bolivia." (Wiley Online Library) 48 (4): 571-797.

Tockman, Jason, and John Cameron. 2014. "Indigenous Autonomy and the Contradictions of Plurinationalism in Bolivia." *Latin American Politics and Society* (Cambridge University Press) 56 (3): 46-69.

Tsolakis, Andreas. 2008. "Crisis in Bolivia: Evo Morales, MAS and Elite Resistance to Change." *Global Dialogue* 10: 23.

Upstream Journal. 2018. "Bolivia's massive supply of lithium, and the implications for the local community of Potosi." *Upstream Journal*. May. Accessed June 26, 2023. <https://plataformaenergetica.org/mineria/mineria-en-bolivia/bolivias-massive-supply-of-lithium-and-the-implications-for-the-local-community-of-potosi-upstream-journal/>.

Vacano, Diego von. 2020. "The Best Answer to Chaos in Bolivia is Socialism." *The New York Times*, September 9.

Vorotnikova, Tatiana A. 2022. "Ideology and Pragmatism in the Bilateral Relations with the United States: Brazil and Bolivia." *Vestnik Volgogradskogo gosudarstvennogo universiteta. Seriya 4. Istorija. Regionovedenie. Mezhdunarodnye otnosheniya [Science Journal of Volgograd State University. History. Area Studies. International Relations]* (Institute of Latin American Studies of the Russian Academy of Sciences) 27 (2).

Zolfani, Sarfaraz Hashemkhani, Ramin Bazrafshan, Fatih Ecer, and Çağlar Karamaşa. 2022. "The Suitability-Feasibility-Acceptability Strategy Integrated with Bayesian BWM-MARCOS Methods to Determine the Optimal Lithium Battery Plant Located in South America." *Mathematics* 10 (14): 2401.



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