

Bolivia: A World Power in Lithium, the Coup d'état and the Dispute for Technological Supremacy Between the USA and China¹

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This article explores the relations among the coup d'état in Bolivia, the 2019 new discovery of lithium reserves in that country, and the dispute between the United States and China for technological superiority and dominance of world market shares in the electric vehicles' industry.

As one of the three countries with significant lithium resources in South America, together with Argentina and Chile, Bolivia was the only one seeking national industrialization with a significant role for the State; and active participation in local value-added chains producing electric vehicles. Analysis is based on United States Geological Survey data.

Keywords: lithium, coup d'état in Bolivia, electric vehicles, sovereignty of natural resources, local value-added chains

INTRODUCTION

Resources and Reserves - A World Power in Lithium

Lithium is a strategic mineral that has become a priority for USA and Chinese technology companies. It is obtained from brine or mine based sources and it has multiple applications (aerospace, energy, telecommunications, electronics, and transportation).

Of the 80 million metric tons (MT) of this resource in the world, the USA has 6.8 MT (USGS, 2020: 99).² According to data from the *United States Geological Survey* (USGS), the USA classifies lithium as a critical mineral for its national security (with a net import dependency exceeding 50%).

The South American countries are strong lithium producers and have the largest mineral resources, as it is considered that Argentina, Chile and Bolivia (called the Lithium Saudi Arabia or the Lithium Triangle) combined have over 50% of the world's available lithium.

In 2019, there was a new discovery of lithium reserves belonging to Bolivia and this seems to be associated with triggering the coup d'état. The USGS had estimated in 2017, that the Salar de Uyuni in Bolivia had 9 million metric tons of lithium. But **"on January 19, 2019, the Bolivian government announced that, based on a new study by the USA consulting firm SKR covering 64% of the Salar de Uyuni, the geological reserves of lithium reached 21 million metric tons."**³ This discovery turned Bolivia into the world's largest potential reserve of this mineral.⁴ In its 2020 Report, USGS confirms Bolivia's resources at 21 million tons (USGS, 2020: 99).⁵

With this discovery, Bolivia was consolidated as a key player in the lithium industry and market, and was in the sights of those who dispute technological superiority. **"I am confident that we are a world power," said President Evo Morales.**⁶

The Technological Supremacy Dispute Between the USA and China: Technological Superiority and International Market for Electric Vehicles

China has set a goal of becoming the world's largest producer of electric vehicles, and is prioritizing the development of lithium battery materials in the 2016-2020 Five-Year Plan.

Rechargeable lithium batteries are used extensively in the growing market for electric vehicles, rapidly modifying the vehicle fleet from being fossil fuel dependent to electricity dependent.

Chinese entities control almost half of the world's lithium production and 60 percent of electric battery production capacity.⁷ China will need about 800,000 tons of lithium carbonate per year from 2025 onward to meet the growing demand for electric vehicles; it can supply 60 percent of this world market soon.⁸

The global battle between the United States and China to control the battery and electric vehicle market includes counteracting China's control over key strategic lithium reserves, as lithium is a defining element.⁹

Resource Nationalization¹⁰

Lithium production in Chile and Argentina is located upstream in the value chain of batteries and electric vehicles. The respective states do not directly participate, since the exploitation of the brines is licensed to private companies. In this way, lithium is considered a *commodity* and not a strategic mineral. As a result, South American countries cannot take advantage of the technological development and industrialization of lithium in the context of the electric vehicle *boom*.

South American countries could impose as a requirement the industrialization of lithium, and the creation of strategic alliances with companies that possess the technology. This would bring them to advance along the global value chains (GVC) of lithium-ion batteries and electric vehicles.

This is precisely what the Plurinational State of Bolivia has done. With the approval of the National Development Plan in 2006 and through Supreme Decree No. 29,117 of 2007, the entire national territory was declared a mining fiscal reserve; the concessionary mining system was definitively eliminated; and the recovery of the productive powers of the Bolivian Mining Corporation (COMIBOL) was promoted. Meanwhile, the Mining and Metallurgy Law No. 3,720 of the same year established that COMIBOL will participate directly in the entire production chain: prospecting and exploration; exploitation; concentration; smelting and refining; marketing of minerals and metals; and administration of the fiscal areas. In 2008, the government declared the exploitation of the Salar de Uyuni's evaporative resources a national priority.

Industrialization of National Resources and International Companies

In April 2017, Law No. 928 was passed, creating the national public company Yacimientos de Litio Bolivianos (YLB). In this way, Bolivia became the only South American country that invested in the industrialization of lithium; forecasting "the construction of 41 lithium plants - 14 of them intended to produce batteries and energy, 20 for consumables and 7 for by-products - estimating revenues of 4450 million Euros from 2030, after an investment of 3900 million Euros."¹¹

YLB explored alternatives with different strategic partners. In 2018, Bolivia signed an agreement with the German company ACI Systems that made it possible to exploit the Salar de Uyuni. Afterwards, it negotiated with a Chinese consortium, Xinjiang Tbea Group-Baocheng; which agreed to obtain a 49% participation in the project. In 2019, Bolivia and China signed an agreement to build a lithium carbonate plant, with an investment of more than 1 billion dollars. Evo Morales pointed out that "there is a guaranteed market in China for the production of batteries"¹²; and announced that the construction of an industrial plant in China was planned.

In 2019, the first 100% electric car manufactured in Bolivia is launched. YLB signed a contract with the electric vehicle manufacturer Quantum. Evo Morales celebrated the news as part of the new cycle of industrialization that the Bolivian economic model is experiencing. Few states undertake this process, which of course gives enormous advantages to whoever assumes control, since the manufacture of electric cars is at the center of the dispute for control of technological change between the USA and China.¹³ **The Evo Morales government launched its first electric vehicle on October 3rd 2019 and on November 10th the coup d'état against him took place.**¹⁴

Alerts Related to the Coup d'état Dated November 10th, 2019: Ivanka Trump's Visit and Lithium Road Announcement

While the country was building bridges with China for the exploitation of the mineral, in September 2019, Ivanka Trump arrived in Jujuy, an Argentine province bordering Bolivia, together with USA government officials to announce "an investment of 400 million dollars, destined for road works, the layout of which should include an itinerary along the so-called lithium route".¹⁵

The Rejection of the Transnationals' Involvement

Currently, the company BYD (China) is the largest producer of electric vehicles, displacing TESLA (USA) from this position.¹⁶ TESLA and *Pure Energy Minerals* (Canada) showed great interest in having a direct participation in Bolivian lithium. "But they could not reach an agreement that took into consideration the parameters set by the government. Morales himself was a direct impediment to the takeover of the lithium fields by non-Chinese transnationals."¹⁷ After the coup, the value of Tesla's shares increased.

*The Rejection of the 3% Royalty in Potosi*¹⁸

The German company ACI Systems had signed a contract with the Morales government to produce lithium hydroxide from the mineral extracted in the salt flats and to manufacture lithium ion batteries for the European market. *Xinjiang Tbea Group-Baocheng* would do the same for Asia. Both companies would participate in joint ventures in which the State-owned company YLB would be the majority shareholder. The Potosi region would charge a 3% royalty to complete the state-driven national supply chain. The Potosi Civic Committee and its leader, Marco Pumari, lashed out at the government because the 3% royalty was an insult. The civic committee organized roadblocks and demonstrations throughout the city. Finally, President Morales relented. He broke the contract with the German company. He pledged to invest in a battery factory in Potosi and to move the YLB headquarters from La Paz to Uyuni. Even the royalties might be negotiable.

CONCLUSION

In Bolivia, there are many dead people and injustice prevails. The coup d'état is an example of the return of the Condor Plan and the Monroe Doctrine, which combine new threats to countries in the region that aspire to sovereignty over strategic natural resources.

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ENDNOTES

1. Updated version of article first published in Spanish by América Latina en Movimiento, <https://www.alainet.org/es/articulo/203497>, on November 26, 2019.
2. U.S. Geological Survey, 2020, Mineral commodity summaries 2020: U.S. Geological Survey, 200 p., <https://doi.org/10.3133/mcs2020>.
3. <https://www.cepal.org/es/publicaciones/44776-estudio-caso-la-gobernanza-litio-estado-plurinacional-bolivia>
4. This announcement coincides with the new discovery of a "natural gas sea" at Ñiguazú that significantly increases Bolivia's potential gas reserves by approximately 2.0 trillion cubic feet. https://elpotosi.net/nacional/20190323_confirman-existencia-de-un-reservorio-gigante-de-gas-en-el-pozo-boyuy-x2.html
5. The USGS distinguishes between reserves and resources. Reserves are defined as production + imports – exports. Resources are defined as tons of lithium found in a given country (see USGS, 2020: 99). <<https://doi.org/10.3133/pp1802K>>.
6. <https://dirigentesdigital.com/mercados/latam/bolivia-prepara-nueva-revolucion-de-gas-y-litio-JK851685>
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17. <https://www.asiatimes.com/2019/11/opinion/chinas-links-with-morales-figure-in-bolivia-coup/>
18. Based on <https://www.lavanguardia.com/internacional/20191118/471704959499/bolivia-evo-morales-litio.html>