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What Legal and Illegal Mining Tell Us About the Mineral Race in Latin America

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China's Formal and Shadow Position in Peru, Ecuador', & Chile's Mining, and Washington's Uneven Response

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In April 2026, Chilean police dismantled a criminal ring that had spent five years shipping stolen copper to China through the port of Iquique, netting an estimated $917 million before state authorities were able to act. Later that month, Ecuador's government signed a $1.7 billion contract handing development of its largest gold deposit to a Chinese state enterprise, the third such contract in scarcely a year. Nine days later, Washington signed its own bilateral framework with Ecuador, formally designating the country's copper, gold, and rare earth reserves as strategic minerals and opening the door to billions of dollars in Export-Import Bank and corporation financing. While these seemingly seperate occurrences seem distinct, upon investigation they elucidate a heightened contest for sovereign control, and access to critical resources for global powers in Latin America.

Peru, Ecuador, and Chile each run a formal, legally licensed mining sector alongside an illegal or informal one that supplies many of the same buyers. What separates the three countries is how much of the legal vs illegal ledger China occupies, how much room is left for anyone else, and, increasingly, how hard Washington is attempting to regain economic and political influence. China's state enterprises own Ecuador's three largest formal mining projects outright and Peru's largest single mining investment, while Chinese equipment, underground finance, and permissive ports keep the region's illegal gold and copper economies liquid. The United States is now trying to buy back in, through a new architecture of bilateral minerals pacts, stockpile financing, and security cooperation that seemingly resembles the state-backed model it spent years criticizing China for using. On the enforcement side, Washington has built a real sanctions machine for illicit minerals and pointed nearly all of it at Africa, leaving a documented gap in how illegally mined Andean gold and copper reach markets, American and Chinese alike.

Section I: Peru

Peru's mining sector functions as two parallel economies that are legally distinct but operationally difficult to separate. On paper, large-scale copper mining remains one of the country's most important legitimate export industries. However, the informal gold sector has grown large enough that Peru's own former foreign minister, Elmer Schialer, told reporters it now runs seven times the size of the country's cocaine trade, and valued at $11.5 billion. The nonprofit Global Initiative Against Transnational Organized Crime estimates that up to 28 percent of all gold leaving the country is illegally mined, placing the illegal sector above Peru's cocaine trade, a reversal that began as early as 2010.

The mechanism keeping this sector alive is in part Peru's own regulatory design. REINFO, the government's long-running registry for miners seeking to formalize, has become a 'registry of impunity', as more than 84,000 miners are listed, but fewer than three percent have ever completed the formalization process. Operationally, simply being on the list is enough to shield an operator from prosecution while illegally mined gold continues to move through it. Congress has repeatedly extended the registry rather than closing it, as in a 3-year span lawmakers introduced 25 bills addressing informal mining, with only 2 passing.

Peruvian lawyer César Ipenza explains the gap between REINFO registration and verified origin has a live case attached to it. In April 2026 a Trujillo court sentenced two Pataz miners, Orlando Tumbajulca and Sonia Mallqui, to 25 years for laundering gold through a REINFO registration Tumbajulca held, used to sell ore collected from multiple unregistered producers to Paltarumi SAC as though it came solely from his own concession. Paltarumi itself was not charged and says it met every due-diligence requirement, but Peru's Financial Intelligence Unit is separately reviewing more than $544 million the company received from abroad between January 2024 and October 2025, flagged as potentially linked to illegal mining as a predicate offense, and a Chinese-owned firm sharing Paltarumi's registered address was incorporated three months before the Tumbajulca sale. Paltarumi's doré bars are exported to India, Dubai, and the United States for final refining, which means the certification gap this piece describes at the US Mint is not only a downstream American problem; it can start at a formally licensed Peruvian exporter, one whose founder spent 27 years in the US before returning to Peru.

Ipenza sees greater potential in binding US frameworks than multilateral bodies to close that gap. A bill still pending in Congress, the United States Legal Gold and Mining Partnership Act, would direct the State Department to build a Western Hemisphere sourcing-verification strategy in the same spirit as the import due-diligence model the Lacey Act already applies to timber. Until something like it passes, the nearer-term fix sits closer to the ground: the actual enforcement gap is not at large, licensed plants themselves but at the informal collection points and unregistered intermediate processors feeding into them, the kind of sites Peru's own officials admit they cannot fully account for even inside a single industrial park. Bringing those collection points under direct state licensing, paired with the satellite and forensic origin-tracing tools described in Section VI, is a more realistic near-term target than waiting for REINFO to be closed outright.

Formal mining sits inside a similar landscape. Las Bambas, Peru's largest single foreign mining investment and the world's ninth-largest copper mine, is owned by a consortium led by MMG, the international arm of China's state-owned Minmetals Corporation, which paid close to $7 billion for it in 2014 and has drawn more than $12 billion in financing from Chinese state banks since. In March 2025, MMG told investors it was tracking a significant increase in illegal mining activity near its own concession, a rare admission from a formal operator that the legal and illegal supply chains in Peru are not just porous but coexist.

Peru signed its own bilateral critical minerals framework with Washington in February 2026, the same week Ecuador did, formally opening access to Export-Import Bank and Development Finance Corporation financing. Unlike Ecuador, Peru has no major undeveloped flagship project left to redirect toward American capital: Las Bambas is already Chinese owned, and Cerro Verde has been American since the 1990s. The practical test of the framework in Peru is narrower and less visible than Ecuador's: whether US-backed financing shows up at the exploration stage, before the next Las Bambas gets built, rather than after.

Key figures

- **$11.5 billion:** estimated 2025 value of Peru's illegal gold economy, per the Peruvian Institute of Economics
- **60% / $9 billion:** share and dollar value of Peru's total laundered assets, 2014–2024, tied to illicit gold
- **Under 3%:** share of the 84,000-plus REINFO-registered miners who have completed formalization

- **$12.3 billion:** Chinese state-bank lending to the MMG-operated Las Bambas mine, 2014–2023

Section II: Ecuador

Ecuador reveals China's intentional position on both ends of the legal and illegal mining markets. On the illegal side, Los Lobos, a gang tied to Mexico's Jalisco New Generation cartel, has spent the past several years taking over, not merely taxing, Ecuador's artisanal gold sector. In the canton of Camilo Ponce Enríquez alone, the group is estimated to run 20 mines directly, extort 30 formal companies, and control 40 groups of informal miners, generating roughly $3.6 million a month from that canton by itself. Nationally, organized crime is estimated to have earned $1.2 billion from mining in 2023 against $800 million captured by the Ecuadorian state over the same period, and more than a third of the country's small-scale gold exports show sourcing irregularities consistent with gold that was never legally mined, according to a Mongabay and Código Vidrio investigation of export records.

The gold itself follows a well-documented laundering path. Illegally mined ore moves to processing hubs in Zaruma and Portovelo, in El Oro province, where a 2015 national mercury ban is openly ignored, before being blended with legally sourced material and exported behind falsified concession paperwork, a pattern documented in a 2025 field investigation by the Global Initiative Against Transnational Organized Crime. Trade data shows the United Arab Emirates and India, and China, as the largest recorded destinations for this gold.

In roughly a year, Chinese state-linked companies have taken direct control of Ecuador's three largest formal mining projects.

- **Mirador,** Ecuador's first industrial-scale copper mine, has been owned and operated since 2010 by CRCC-Tongguan, a consortium of two Chinese state-owned enterprises, Tongling Nonferrous Metals and China Railway Construction Corporation. The consortium has invested roughly $1.4 billion and holds a 30-year concession.
- **Cascabel,** home to the Alpala deposit and one of the largest undeveloped copper-gold-silver resources in the world, became fully Chinese-owned in March 2026, when Jiangxi Copper completed an £867 million (roughly $1.16 billion) takeover of SolGold, the project's former independent owner. SolGold no longer exists as a standalone company; it is now a wholly owned subsidiary inside Jiangxi's corporate structure, with construction targeted for 2027 and first production for 2031.
- **Cangrejos,** Ecuador's largest primary gold deposit, is being developed under a $1.7 billion mining contract signed in April 2026 between the government and ODIN Mining del Ecuador, the local arm of China's CMOC Group, which acquired the project through its 2025 purchase of Canada's Lumina Gold. Ecuador negotiated real leverage into this deal, retaining a 50 percent share of the project's value and roughly $4.4 billion in projected lifetime state revenue, but day-to-day operational control still sits with CMOC.

CRCC-Tongguan also holds the neighboring Panantza-San Carlos project, meaning four of Ecuador's most significant copper and gold deposits, developed and undeveloped, now run through Chinese state capital. Chinese firms are simultaneously the primary formal investors building Ecuador's legal mining sector from the ground up and, indirectly, an enabler of the illegal supply chain operating alongside it. President Daniel Noboa has continued deepening the relationship regardless, confirming a second state visit to Beijing for August 2026.

Nine days after the Cangrejos contract was signed, Washington and Quito signed a bilateral critical minerals framework formally designating Ecuador's copper, gold, and rare earth deposits as strategic minerals. Consequently, this opened the country to Export-Import Bank loans and Development Finance Corporation investment guarantees, alongside a separate security pillar covering expanded military cooperation, surveillance drones, and port monitoring aimed at the same illegal mining networks described above. It is a real commitment and the first time the financial and security sides of this problem have been paired in a single US framework anywhere in the region. It also arrived late. Ecuador Brief, a research outlet that tracks the country's mining sector, has called the timing a paradox. The framework covers a combined resource base worth an estimated $50 billion or more, and Chinese state-linked firms already control essentially all of the developed portion of it. The test case analysts are now watching is ENAMI's Llurimagua, a state-owned copper project not yet allocated to any single buyer, where American financing would be competing against a Chinese offer on equal footing.

Section III: Chile, Where the Institutions Actually Hold

Chile can be viewed as a control case, demonstrating what happens when a country's legal architecture is strong enough to contest Chinese capital while also utilizing it.

This reality is illustrated by the state's new joint venture with Codelco. Chinese minority shareholder Tianqi Lithium fought it through Chile's courts for nearly two years and lost, clearing the way for the state to take effective control over its largest shareholder's objections. Pragmatically, China remains the buyer that matters most, as it is the end destination of roughly a third to two-fifths of Chile's copper and lithium exports, and Chinese demand for batteries and processing capacity, not just Chinese equity, is what gives Chilean lithium its price. Taking back SQM's board did not reduce that dependency; it moved the negotiating table to Santiago. Meanwhile, Chilean copper shipments to the United States rose roughly 28 percent in 2025 as traders positioned ahead of possible US tariffs on refined copper, even as shipments to China and Europe fell, and Chile's lithium sector already has a genuine American anchor in Albemarle, the country's second major lithium producer, while British, Japanese, and Australian capital in copper also remains prevalent. None of this makes Chile neutral, and financing under Washington's new critical minerals framework arrives with its own governance and security expectations. What Chile has managed to do is stay exposed to both centers of powers without sacrificing sovereignty and maintaining competition, and it is Chile's institutional economic structure that makes this plausible.

Where Chile diverges from its northern neighbors is that it is not, in any meaningful sense, a source of illegally mined gold. Its exposure runs through a different channel: organized copper theft, laundered back into its own legitimate export infrastructure as described in the introduction. Operation High Voltage, as the $917 million in stolen copper case became known, recovered only about $2.2 million worth of metal at the point of seizure, and prosecutors have said plainly that Chinese ports apply markedly less scrutiny to shipments declared as scrap than most Western buyers do. The investigation, prosecution, and asset recovery were entirely Chilean; no US agency was involved, despite the metal's final destination being the same Chinese buyers Washington spent 2025 and 2026 sanctioning by the dozen in an entirely different part of the world.

Chile's own courtship by Washington moved more slowly than Ecuador's or Peru's, while also exhibiting weaker binding frameworks surrounding critical minerals than Argentina, Peru, Paraguay, and Ecuador. It took Kast's inauguration and a March 2026 meeting with Deputy Secretary of State Christopher Landau to upgrade the nonbinding declaration of intent on critical minerals into a formal declaration establishing technical consultations on financing mechanisms. Chile did not need Washington's help to claw back control of SQM from Tianqi; though it would continue to benefit from the investment of American capital.

Chile's newer alignment adds a final layer worth watching. President José Antonio Kast and Argentina's Javier Milei have begun formalizing a binational mining cluster along the shared Andean copper belt, anchored by the cross-border Vicuña district and its Los Azules, Altar, and Taca Taca projects, with a stated ambition of jointly producing more than a million tonnes of copper a year, a meaningful dent in the roughly 10-million-tonne global supply deficit projected for 2040. It is, in effect, an emerging Western-aligned counterweight built from two governments rather than one company, and it is taking shape on Chile's terms rather than Beijing's.

Section IV: Washington's Return, and Where It Still Isn't Showing Up

Laid side by side, Peru, Ecuador, and Chile describe a China that has positioned itself on both sides of the legal line at once, and a United States that has meaningful presence on neither over the past two years.

Chinese state-owned enterprises arrive with below-market policy-bank financing, a higher risk tolerance for politically unstable jurisdictions, and a government-to-government relationship already in place before the first drill rig lands. American private capital, answering to shareholders and, until recently, backed by no comparable state financing arm, was never built to compete for that specific kind of asset. The underlying picture is more encouraging: American firms still hold roughly 16 percent of critical mineral mines across Latin America, second only to Canada, and Freeport-McMoRan's roughly 55 percent stake in Peru's Cerro Verde, dating to the 1990s privatization, remains one of the largest copper and molybdenum complexes in the hemisphere. Yet, the US still lacks a presence in the newest wave of flagship projects.

What has changed is that Washington is now trying to build the missing half of that model. The February 2026 Critical Minerals Ministerial produced bilateral frameworks with eleven countries in a single day, including Ecuador, Peru, Argentina, and Paraguay, under FORGE, the coordinating body that succeeded the Biden-era Minerals Security Partnership. The most concrete piece is Project Vault, a planned US strategic stockpile of copper, cobalt, lithium, and other minerals backed by a $10 billion Export-Import Bank loan and roughly $2 billion in private financing, alongside a private-sector coordinating vehicle called Pax Silica meant to pull commercial capital in behind government-backed deals. It amounts to an attempt to build, on a compressed timeline, the state-backed financing arm not readily accessible to American private capital.

On the illegal side, the picture is more one-sided. The U.S. Treasury's illicit-minerals enforcement is aimed almost entirely at eastern Congo, not the Latin America, and Dodd-Frank's Section 1502 conflict-minerals audit requirement covers only the DRC and its neighbors. Chinese-manufactured excavators remain the dominant machinery at illegal sites across the Ecuadorian and Peruvian Amazon, and Chinese underground banking networks, which FinCEN says helped move roughly $312 billion in suspicious transactions linked to Mexican cartels between 2020 and 2024, offer the same laundering mechanics to anyone moving illicit proceeds out of Latin America.

Who would enforce this?

Formal operators have the clearest incentive; illegal competitors depress prices and invite exactly the kind of Amazon-wide reputational risk MMG flagged at its own concession. Host governments have genuine but conflicted interest. REINFO's repeated extension, and the political cost of cutting off tens of thousands of informal miners who are also voters, suggests Lima and Quito would rather manage the ambiguity than resolve it, and neither has shown real appetite for the short-term pain formalization would require. Beijing has little reason to press the issue; its state enterprises already operate profitably in jurisdictions with weak enforcement, and a crackdown would mostly hand an advantage to Western competitors trying to differentiate governance. Washington has the incentive but not yet the instruments in this specific region. The honest answer is that no outside actor is positioned to enforce this line unless Peru and Ecuador choose to focus more resources and energy on the issue.

Ultimately, China's advantage is its capacity and presence with both the legal and illicit mining sectors, while the US is only now building capacity on one side, and the two governments in the middle have had little reason to force the question themselves.

Section V: Business Implications

The commercial opening this creates is in positioning inside the specific mechanisms Washington has just built to try to catch up, which are real and funded, and, as of mid-2026, still largely looking for bankable projects and credible operating partners to attach themselves to.

Get in front of the live financing

- Project Vault's $10 billion Export-Import Bank loan and Pax Silica's private-capital coordination role exist specifically to crowd in commercial partners behind government-backed deals

- ENAMI's Llurimagua copper-molybdenum project in Ecuador is the concrete, case analysts, deciding if that financing can compete with a Chinese offer on a live project rather than simply a framework

    - Firms with Andean mining, engineering, or project finance experience have a narrow but real window to position themselves before the financing architecture hardens around first movers.

Supply chain due diligence and certification

As the EU's Critical Raw Materials Act and comparable US and UK sourcing rules tighten, and as pressure builds in Congress to extend something like Dodd-Frank's conflict-minerals logic beyond Central Africa, buyers will need documented, auditable proof of origin rather than the falsifiable paperwork

- Firms building responsible-sourcing audit and certification programs for industrial buyers (the model RCS Global has already built around cobalt in the DRC), are directly transferable to Andean copper and gold, and would be first in line if that legal gap closes.

Security and risk advisory, now with a government customer

Every formal miner in Peru and Ecuador, Chinese-owned or otherwise, now operates adjacent to armed groups contesting the same ground, and Ecuador's new framework with Washington explicitly adds a security pillar of drones and port monitoring that will need contractors to build and run it. That is a second, more direct line of demand beyond the compliance and community-relations advisory Western consultancies already provide.

Section VI: The AI and Traceability

The technology layer underneath all three of these opportunities is maturing quickly, and it is one of the few parts of this story where Western firms are setting the pace.

- Amazon Mining Watch (built by the nonprofit Earth Genome with the Pulitzer Center and Amazon Conservation) uses machine learning trained on Sentinel-2 satellite imagery to flag new mining scars across all nine Amazonian countries every quarter, reported accuracy above 99 percent, identified roughly 6,000 hectares of new illegal mining damage in protected and Indigenous territories in the final quarter of 2025.

- Peru's own RAMI platform, developed with NASA and USAID, layers radar imagery on top of optical data to catch mining activity under cloud cover that optical-only systems miss. Commercial versions of the same approach, such as Swift Geospatial's change-detection tools built on Planet Labs' daily satellite feed, are being sold directly to mining operators and governments as a monitoring service, a genuine US-headquartered software business built around this problem.

- On traceability, Circulor and RCS Global, both UK-founded, have already proven the model in cobalt and are actively extending it to copper, including a project tracking copper from mine sites in Chile through six supply chain tiers to European wind turbine manufacturers. Brazil's parallel effort to build a forensic gold DNA database, matching the trace-element signature of refined gold back to its mine of origin, points toward a future where even blended, refined metal can be traced retroactively, closing the exact loophole the US Mint case exposed.

Blockchain and satellite tools still depend on accurate data entering the system in the first place, and a falsified permit at the mine site defeats a perfectly good tracking platform downstream. However, it is the one part of the mineral supply chain where American and British firms currently hold a real technical lead over Chinese competitors, and it is also the fastest way to close the gap Section IV describes: a private verification standard can exist and be required by contract long before Congress ever extends anything like Dodd-Frank's conflict-minerals logic to the Andes.

Ultimately, Peru, Ecuador, and Chile are not being pulled toward China because Chinese capital happens to be more available. Rather, Chinese capital has spent a decade sitting on both sides of the legal line at once, financing the mines meant to replace the illegal economy while, in copper, remaining among the least discriminating buyers for what that illegal economy still produces, and in gold, supplying the equipment and laundering channels that keep it running even when the metal itself moves elsewhere. In response, the U.S. has built a state-backed financing and security architecture to compete for the next wave of formal investment, and it may yet win pieces. Yet it has not built anything comparable for the illegal side of the ledger in this specific region. For Western firms willing to build the verification infrastructure nobody else wants to build, and willing to move now while Washington's new financing is still looking for partners; that gap is not just a policy problem, but also a market opening.

Sources:

Awasthi, Shashwat. "SolGold Agrees to $1.2 Billion Takeover by Top Investor Jiangxi Copper." *Reuters*, 24 Dec. 2025, www.reuters.com/world/asia-pacific/solgold-agrees-12-billion-takeover-by-top-investor-jiangxi-copper-2025-12-24/. Accessed 23 July 2026.

de Bernier, Paul C., et al. "Critical Minerals: 'Project Vault' and the New US Critical Minerals Playbook." *Mayer Brown*, 12 Mar. 2026, www.mayerbrown.com/en/insights/publications/2026/03/critical-minerals-project-vault-and-the-new-us-critical-minerals-playbook. Accessed 23 July 2026.

Looker, Rachel. "US Signs 11 Critical Mineral Frameworks, MOUs to Strengthen Supply Chain." *S&P Global*, 5 Feb. 2026, www.spglobal.com/energy/en/news-research/latest-news/metals/020526-us-signs-11-critical-mineral-frameworks-mous-to-strengthen-supply-chain. Accessed 23 July 2026.

Moreno, Chip. "US Formally Designates Ecuador's Rare Earth, Copper, and Gold Reserves as Strategic Minerals at 54-Nation Critical Minerals Ministerial." *Ecuador Brief*, 16 Feb. 2026, www.ecuadorbrief.com/articles/us-recognizes-ecuador-rare-earth-copper-gold-strategic-minerals-china-supply-2026. Accessed 23 July 2026.

"SolGold Completes £867 Million Takeover by Jiangxi Copper Company Limited." *Fasken*, Apr. 2026, www.fasken.com/en/experience/2026/04/solgold-completes-867-million-takeover-by-jiangxi-copper-company-limited. Accessed 23 July 2026.

Entrevista, August 15, César Ipenza