



A COMPARATIVE PERSPECTIVE OF CHINESE INVESTMENTS AND FINANCINGS IN PAN- AMAZON COUNTRIES BETWEEN 2010 AND 2023



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A COMPARATIVE PERSPECTIVE OF CHINESE INVESTMENTS AND FINANCINGS IN PAN- AMAZON COUNTRIES BETWEEN 2010 AND 2023

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From a comparative perspective, this factsheet aims to analyze the primary projects involving Chinese investment and financing across five countries that share the Amazon biome — Brazil, Bolivia, Colombia, Ecuador, and Peru. It also discusses the bilateral commercial relations between these countries and China, with a special focus on exports, which are often closely linked to some of the projects.

In addition to an analysis covering the entire territory of these five countries, special attention was paid to the Chinese projects located within the **Pan-Amazon boundaries**¹. The goal is to understand whether there is any special interest in China’s actions in this particular biome and what their impacts are.

1. CHINESE INVESTMENTS IN THE PAN-AMAZON

Map 1 - Chinese investments in the Pan-Amazon countries²



Source: Own work.

1. We adopted the boundaries established by the Amazon Network of Georeferenced Socio-Environmental Information (RAISG) for the Pan-Amazon region. Available on: <<https://www3.socioambiental.org/geo/RAISGMapaOnline/>>

2. The numbers within the symbols represent the number of projects, while the figures in gray represent the total investments.

According to the survey conducted by the present study, China carried out **214 investment projects**³ in the countries of the analyzed region between January 2010 and August 2023, totaling **US\$ 113.1 billion** invested⁴.

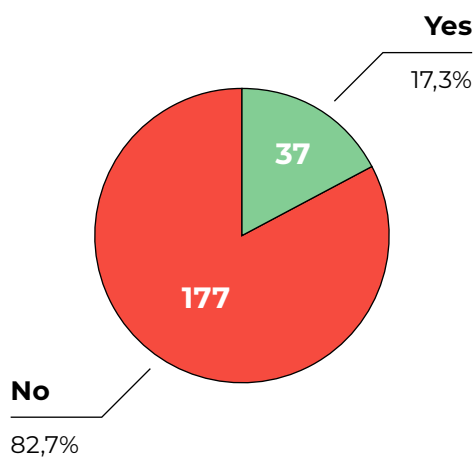
Brazil stands out as the country with the most investments, with 142 projects carried out by Chinese companies, and the largest amount invested as well — around US\$73.3 billion. **Bolivia**, however, is the country that

received the least investments in terms of value invested — only US\$2.4 billion allocated to 12 projects. Meanwhile, **Ecuador** has the lowest number of projects — only 10, with US\$3 billion invested.

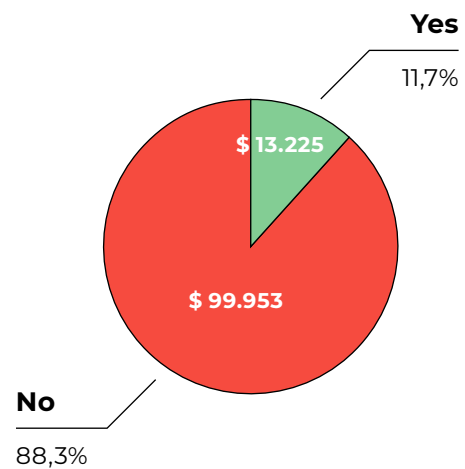
Colombia and Peru received a similar number of projects, 22 and 28 respectively. However, there was a considerable difference in the amount invested. While **Colombia** received US\$8.1 billion in investments, **Peru** received US\$26.2 billion.

Graph 1: Chinese investment in the Amazon biome
(number of projects and values in US\$ millions)

Chinese investment: % directed to the Amazon biome (number of projects)



Chinese investment: % directed to the Amazon biome (in US\$ million)



Source: Own work.

3. This study considered only confirmed projects, as opposed to announced and planned ones, in order to dismiss phantom investments. The data on Chinese companies' investments was gathered from newspapers, government websites, Chinese companies, regulatory agencies, and databases of various institutions. Data on Chinese investments were compiled from databases such as China Investment Tracker and Red ALC. The data analyzed in the present document is systematized on the China Panel Platform, available on <<https://www.bricspolicycenter.org/painelchina/index.php?&lg=en>>

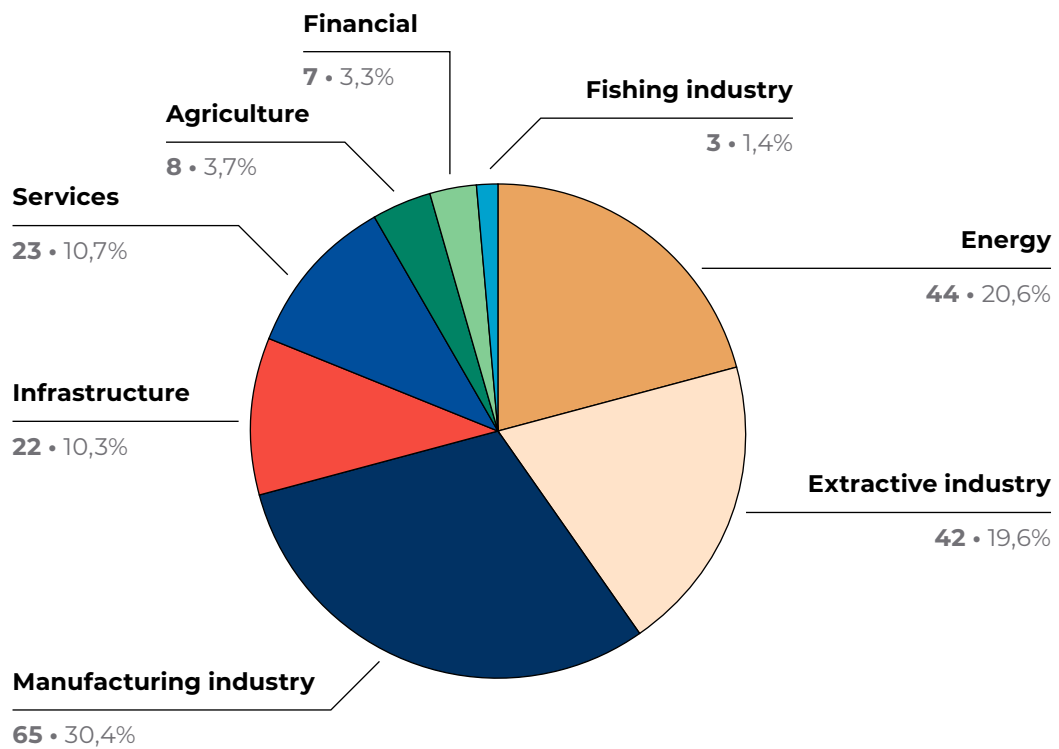
4. It is important to highlight that not all projects have had their value disclosed. Projects with no available information about the value were included solely in the graph for the number of projects.

Regarding the projects directed exclusively to the Pan-Amazon biome in the five countries analyzed, it was found that China invested **US\$ 13.2 billion** in **37 projects**. In

other words, only 11.7% of the total amount invested by China was directed toward the Amazon biome, although it received 17.3% of the total number of projects.

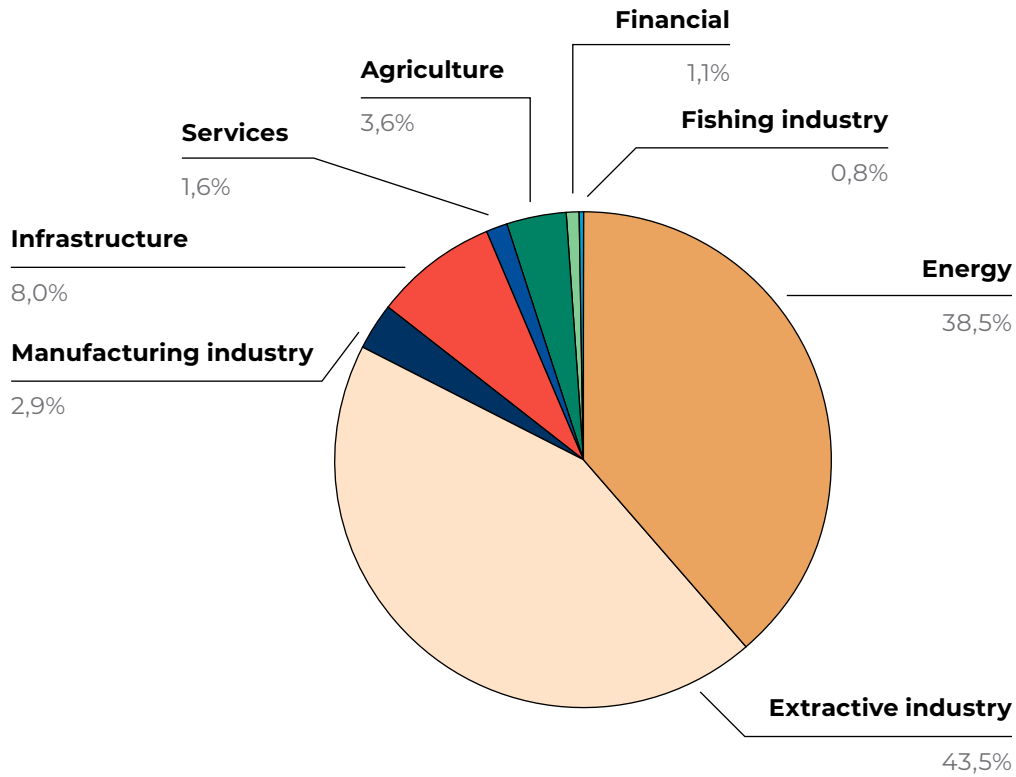
1.2 Investment by Sector

Graph 2: Chinese investments in Pan-Amazon countries by sector
(number of projects)



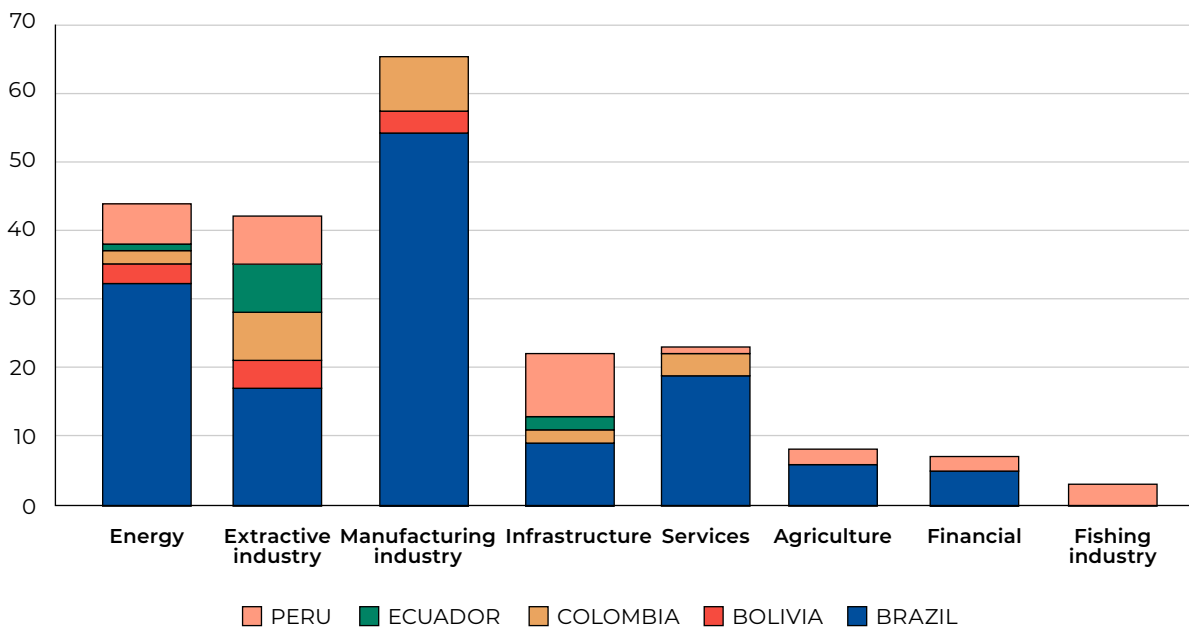
Source: Own work.

Graph 3: Chinese investments in Pan-Amazon countries by sector
(Value – US\$ Million)



Source: Own work.

Graph 4: Chinese investment projects by country and sector
(number of projects)



Source: Own work.

When we analyze investments across various sectors, the manufacturing industry stands out in terms of number of projects, with a total of 65. Brazil leads the way in this sector with 54 projects, 10 of which are situated in the Free Economic Zone of Manaus⁵. The remaining 11 projects in the sector are located in Bolivia and Colombia, with 3 and 8 projects respectively.

Energy was the sector with the second-most Chinese projects, totaling 44, of which 32 were directed to Brazil. The extracti-

ve industry, which includes investments in mining and oil exploration, accounts for a total of 42 projects more evenly distributed among the five countries compared to the energy sector. Meanwhile, the infrastructure sector has 22 projects mostly concentrated in Brazil and Peru, with 9 projects each.

To illustrate, as can be seen in Graph 5, there is a predominance of the extractive (US\$49.2 billion) and energy (US\$43.5 billion) sectors in terms of value invested.

Table 1: Investments by sector: distribution by country

(Value – US\$ Million)

Sectors	BRAZIL	BOLIVIA	COLOMBIA	ECUADOR	PERU
Energy	32.993,47	883,65	280,00	517,00	8.912,00
Extractive industry	26.507,32	1.456,09	3.667,00	2.344,00	15.277,00
Manufacturing industry	3.193,60	9,00	51,00	0	0
Infrastructure	4.021,78	0	3.810,00	200,00	1.045,5
Services	1.438,19	0	326,00	0	6,00
Agriculture	3.979,00	52,00	0	0	0
Financial	1.207,00	0	0	0	81,00
Fishing industry	0	0	0	0	921,16

Source: Own work.

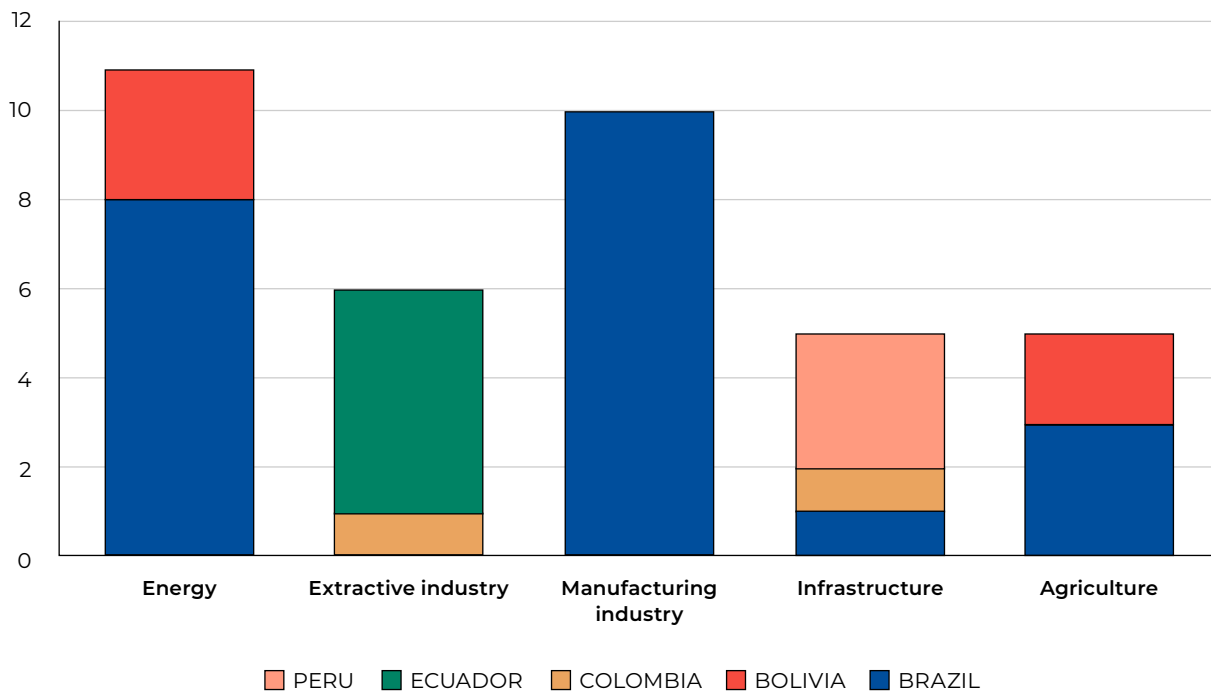
5. This includes factories for household appliances, electric and fuel motorcycles, and lithium batteries for electric buses (BYD).

In the extractive industry, Brazil and Peru stand out with respective totals of US\$26.5 billion and US\$ 15.2 billion in Chinese investment. In Brazil, most of this sector's investments are directed toward oil projects, whereas in Peru the focus is on mining, particularly copper — we can point to the *Las Bambas* project.

Brazil and Peru also stand out in the energy sector as the largest recipients of Chinese

investments, with US\$32.9 billion and US\$ 8.9 billion, respectively. In both countries, investments in the electricity generation subsector were directed to renewable energy sources, with an emphasis on hydroelectric power stations. In the energy sector, there are notable investments in electric power transmission, such as the two lines connecting the Belo Monte hydroelectric dam to the Southeast region of Brazil.

Graph 5: Investments directed to the Pan-Amazon biome by sector
(number of projects)



Source: Own work.

The investments in the energy sector are notable within the boundaries of Pan-Amazon, both in terms of the number of projects and value invested. Six hydropower plants that received Chinese investment were mapped. Three in Brazil (*São Manoel*, *Santo Antônio do Jari*, and *Cachoeira Caldeirão*) — all the result of investments from *China Three Gorges* — and 3 in Bolivia (*Misicuni*, *San José*, and *Ivirizú*) — the first hydropower plant built by China CAMC Engineering and the other two by Sinohydro. In addition to the investments in the generation segment mentioned above, we mapped 6 projects in the Brazilian Amazon directed to the energy transmission segment, including two transmission lines⁶ that enable the transportation of energy produced at the Belo Monte hydropower plant.

Agriculture holds a significant weight in the value of investments due to three major acquisitions in Brazil by *Cofco*, *CITIC Agri Fund*, and *Hunan Dakang Pasture Farming*, which involved assets that span across both the Amazon biome and the Cerrado biome.⁷ Meanwhile, the 10 projects in the manufacturing industry were specifically directed to the Free Economic Zone of Manaus, in the Brazilian Amazon.

The investments in the extractive industry within the boundaries of the Pan-Amazon were directed to 6 projects, 1 in Colombia (the acquisition of *Emerald* by *Sinochem* in 2010⁸) and 5 in Ecuador. Among the projects located in the Ecuadorian Amazon, 3 are aimed at oil exploration and 2 at mining. These two mining projects refer to the acquisition of the Canadian company *Corriente Resources* by the Chinese companies *China Railway Construction Corporation* and *Tongling Nonferrous Metals Group Holdings Company*, and the construction of the copper mine *El Mirador* by *China Railway Construction Corporation* after the bidding process.

The acquisition of *Corriente Resources* was especially relevant as it allowed the two Chinese companies to control the companies ***Ecuacorriente*** and ***Explorcobres*** — **subsidiaries of the Canadian company** —, which have operations in copper, silver, gold, and molybdenum mines in the south of Ecuador and led other projects such as *Condor Mirador* and *San Carlos Panantza*.

Meanwhile, the infrastructure sector accounts for 5 projects allocated in the biome, 3 in Peru (construction of the Amazon waterway by the *Sinohydro* and Casa

6. Long-distance transmission lines using Ultra-high-voltage (UHV) technology.

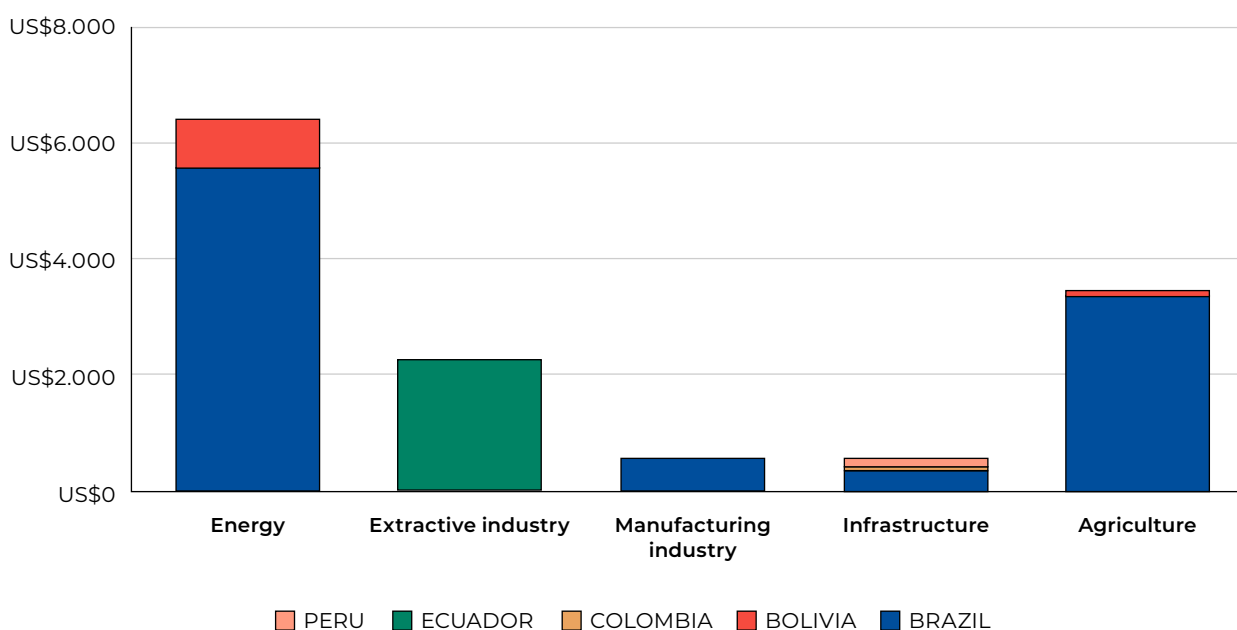
7. As it is not possible to divide the value of the assets by biome, the total value of the three acquisitions was incorporated.

8. The transaction was a global acquisition in which the value of the assets acquired in Colombia was not disclosed, hence not being included in the following graph.

consortium, and two fiber optic and broadband installation projects), 1 in Colombia (construction of a 283-mile road between the cities of Neiva and Mocoa by the *Chi-*

na State Construction Engineering Corporation), and 1 in Brazil (construction of the São Luis port by *China Communications Construction Company*)⁹.

Graph 6: Investments directed to the Pan-Amazon biome by sector
(US\$ Million)



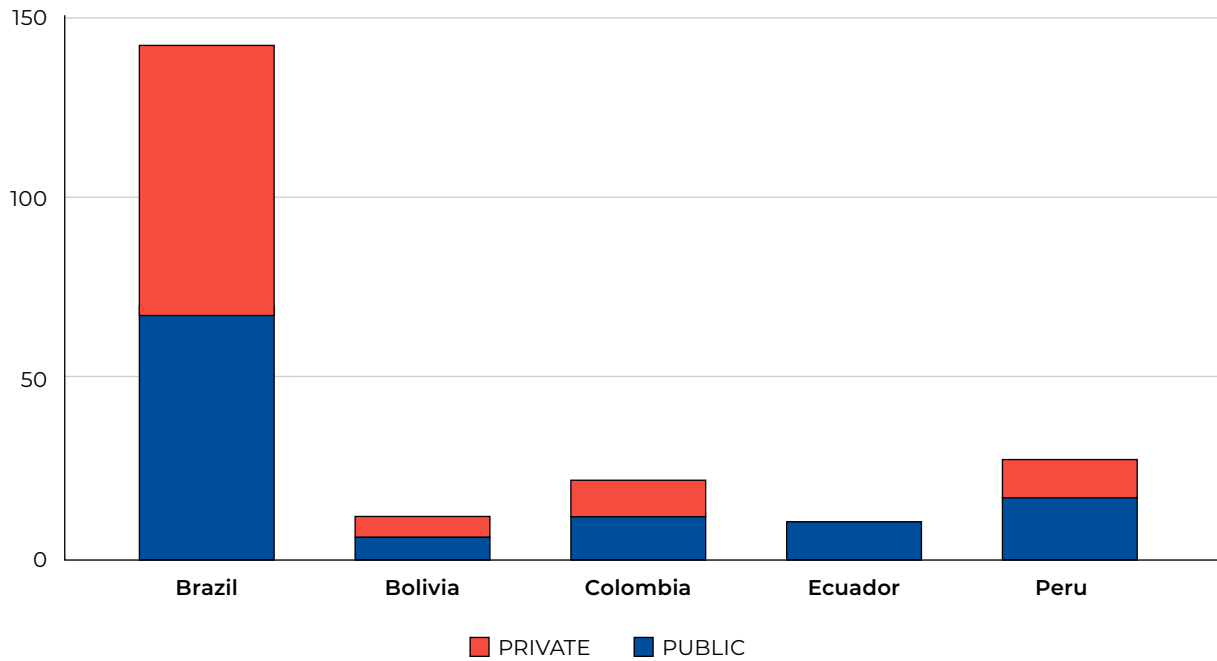
Source: Own work.

In terms of monetary value, investments exclusively directed to the Pan-Amazon biome are predominantly concentrated in the energy sector, with a total of around US\$6.5 billion invested between 2010 and 2023. The transmission segment is particularly relevant in terms of value, with a total of approximately US\$ 4.85 billion. This includes the two lines connecting the Belo Monte hydropower plant to the Southeast of Brazil.

Additionally, there are four other notable transmission projects, including the three transmission lines that make up the “Paraná Ribeirãozinho Transmissora de Energia” project. This project allows the transportation of energy produced by a group of hydropower plants in the Teles Pires river basin, including the São Manoel plant. All these transmission projects received investments from the Chinese *State Grid*.

9. The project, which impacted the Cajueiro Community, was abandoned by the Chinese company and sold to the Brazilian company COSAN.

Graph 7: Type of company: Public vs. Private
(Number of projects)



Source: Own work.

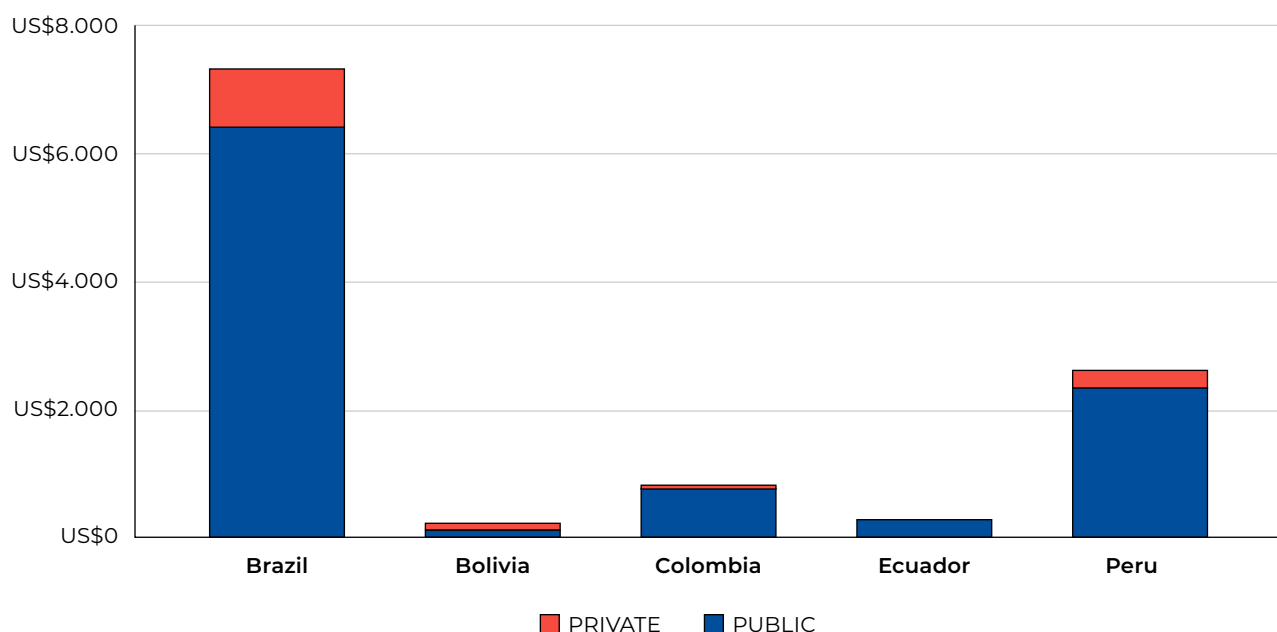
Except for Brazil and Bolivia, public Chinese companies dominate investments in all countries in number of projects. In terms of invested amounts, public companies are predominant in all countries, except for

Bolivia, which received large-scale investment from the private company *Contemporary Amperex Technology (CATL)* directed toward the mining and construction of lithium carbonate plants in 2023.¹⁰

10. Establishment of a Joint Venture between the Chinese consortium CBC, comprised of Contemporary Amperex Technology (CATL), China Molybdenum Company (CMOC), Guangdong Brunp Recycling Technology Co Ltd (BRUNP), and the Bolivian Yacimientos de Litio Bolivianos (YLB) for mining and construction of lithium carbonate plants in the Coipasa salt flat (Oruro) and Pastos Grandes (Potosí).

Graph 8: Type of company: Public vs. Private

(US\$ million)



Source: Own work.

In terms of value, public companies lead with a sizable advantage due to their greater capacity to leverage resources both for new projects and for large acquisitions. The major acquisitions by Chinese public companies account for some of the largest projects mapped in terms of value. Examples include the acquisition of *CPFL* by *State Grid* in 2017, and the acquisition of the assets of *Repsol* by *SINOPEC* in 2010 in Brazil. Additionally, we can mention the purchase of the distribution company *Luz del Sur* by *China Southern Power Grid* in Peru in 2019. In Ecuador, only investments

made by state-owned Chinese companies were mapped.

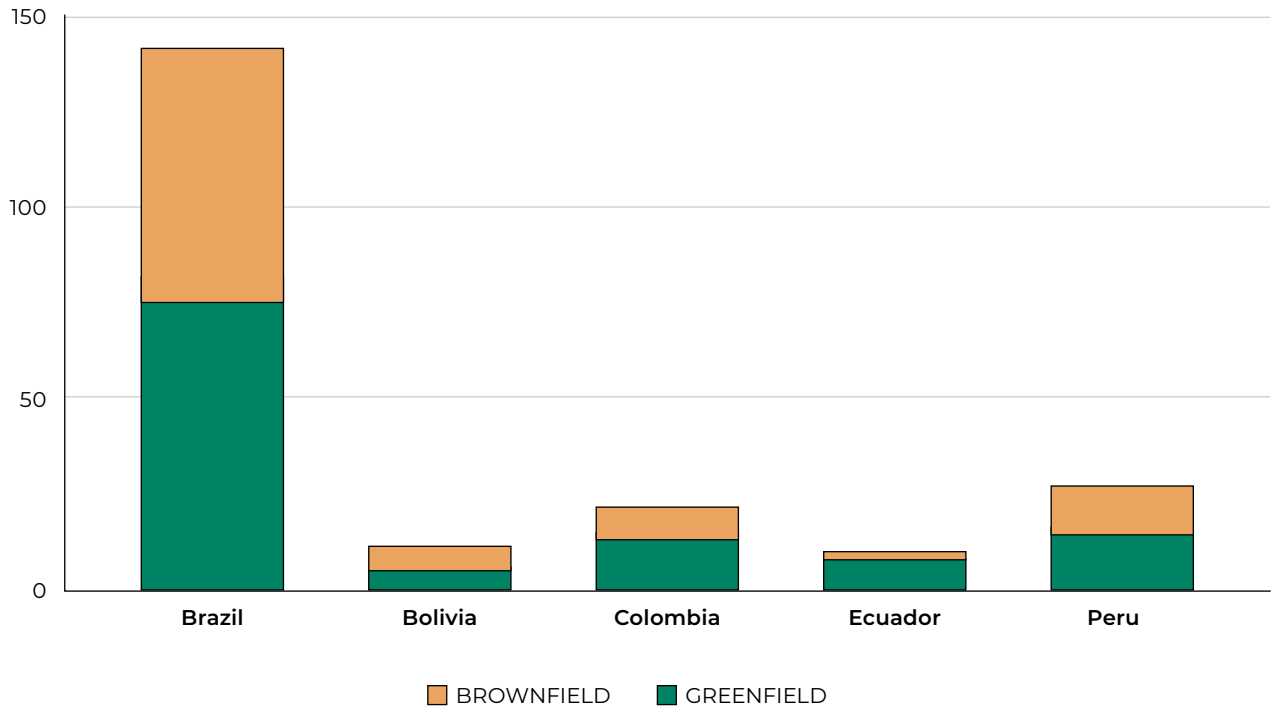
Meanwhile, public companies were responsible for new large-scale projects (Greenfield)¹¹, such as the two lines of *Belo Monte* (Brazil) and the *Las Bambas* mining project (Peru).

Regarding project mobility, investments can be categorized as *greenfield* or *brownfield*¹². The type of investment is relevant to understanding whether companies are investing in new developments (greenfield) or replacing actors and acquiring existing brownfield projects.

11. Greenfield projects are those in which a new structure is built, such as factories, power plants, roads, and others.

12. Brownfield projects are characterized by mergers and acquisitions. In general, greenfield investments tend to generate more jobs, although they have larger socioenvironmental impacts.

Graph 9: Type of investment: Greenfield X Brownfield
(number of projects)



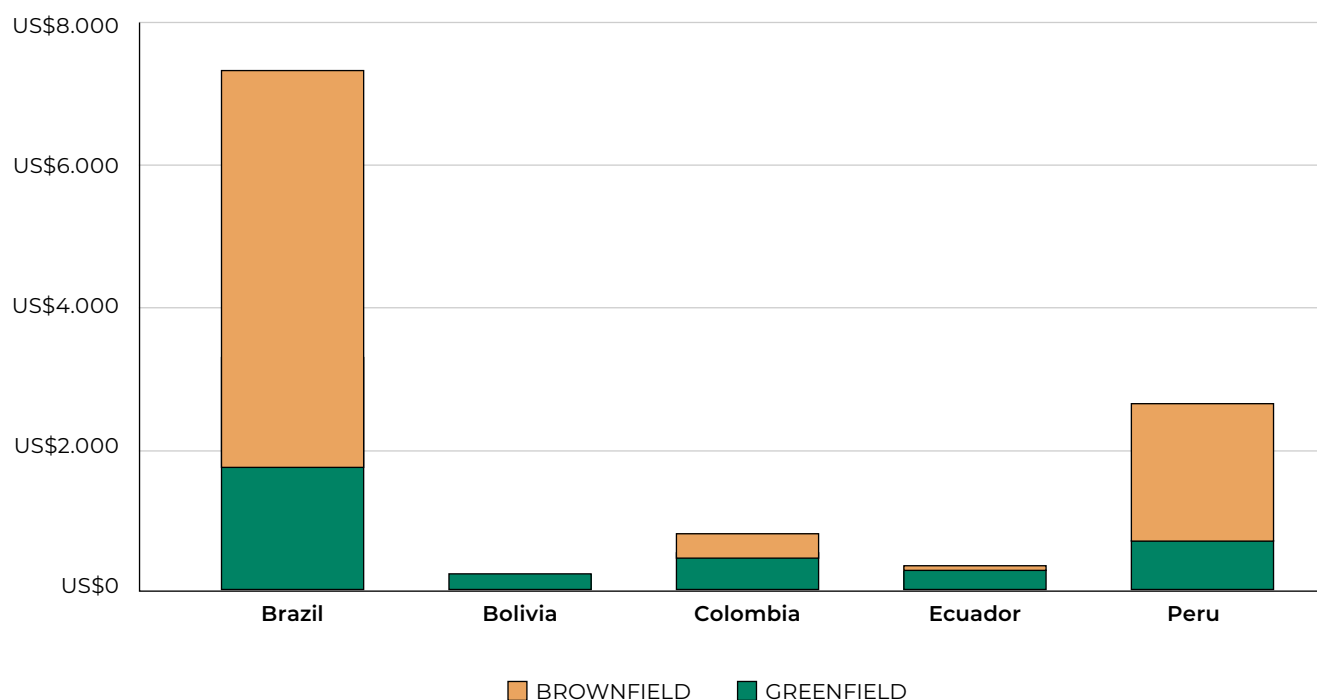
Source: Own work.

Based on the mapping, we identified a similar number of projects for both types of investments. Greenfield projects are more prevalent, accounting for 115, in contrast to 99 brownfield. However, as can be seen

in Graph 10, brownfield projects stand out with regard to invested values, totaling US\$80.3 billion. In comparison, greenfield projects account for US\$32.8 billion.

Graph 10: Type of investment: Greenfield vs. Brownfield

(US\$ million)



Source: Own work.

Tabela 2 – Principais empresas e projetos de investimento chinês nos países Pan-amazônicos

COUNTRY	PUBLIC INVESTMENT	PRIVATE INVESTMENT	COMPANY WITH THE MOST PROJECTS	HIGHEST VALUE PROJECT
Bolivia	06 projects US\$ 939 million	06 projects US\$ 1.46 billion	03 projects US\$ 56 million Yunnan Chihong Zinc & Germanium Co Ltd	Lithium carbonate plants Extractive sector Contemporary Amperex Technology (CATL) and Yacimientos de Litio Bolivianos (YLB) Joint Venture US\$ 1.4 billion
Brazil	67 projects US\$ 64 billion	75 projects US\$ 9.21 billion	16 projects US\$ 20.38 billion State Grid Corporation of China (SGCC)	Acquisition of the CPFL Group (83.7%) Energy sector State Grid Corporation of China (SGCC) US\$ 12.50 billion

COUNTRY	PUBLIC INVESTMENT	PRIVATE INVESTMENT	COMPANY WITH THE MOST PROJECTS	HIGHEST VALUE PROJECT
Colombia	12 projects US\$ 7,7 billion	10 projects US\$ 364 million	02 projects Zijin Mining Group 02 projects Sinopec 02 projects Sinochem 02 projects PowerChina	Bogotá metro line Infrastructure sector China Harbour Engineering Company Limited, XiAn Metro Company Limited & China Communications Construction Company (Consortium) US\$ 3.7 billion
Ecuador	10 projects US\$ 3 billion	Nenhum projeto	03 projects US\$ 682 million consortium formed by China National Petroleum Corporation (CNPC) and China Petrochemical Corporation (SINOPEC)	Projects associated with the development of Condor Mirador: Acquisition of Corriente Resources Ltd. Extractive sector China Railway Construction Corp. and Tongling Nonferrous Metals Group Holdings Co. US\$ 652 million Engineering of the El Mirador mine Extractive sector China Railway Construction Corp. US\$ 920 million
Peru	17 projects US\$ 23.40 billion	11 projects US\$ 2.70 billion	06 projects US\$ 339 million Yangtze Optical FC (YOFC)	Las Bambas mine Extractive industry China Minmetals (MMG) US\$ 7 billion

Source: Own work.

2. CHINESE FINANCING IN THE PAN-AMAZON¹³

Map 2: Chinese financing in the Pan-Amazon



Source: Own work.

A total of 32 projects with Chinese financing were mapped in the five countries analyzed, totaling US\$ 11.73 billion from 2010 to August 2023. Out of this total, 12 projects were directed to the Amazon biome, amounting to US\$ 7.25 billion — around 58.6% of the total financing volume. It is important to highlight that South America did not receive any contribution in the last few

years, following a general downward trend in Chinese investments abroad.

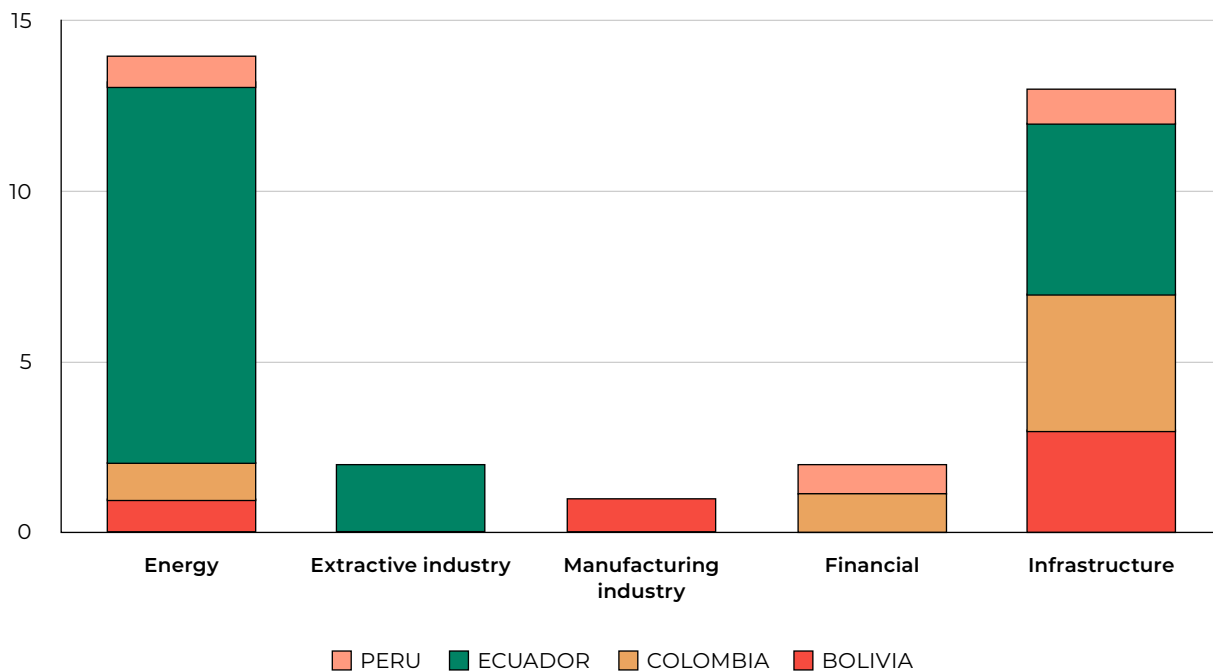
Ecuador stands out in terms of financing, with 18 projects financed by China, totaling US\$ 7.86 billion. Out of this total, 10 were directed to the Amazon biome — amounting to US\$ 6.62 billion — making the country the largest recipient of financing for projects in the biome.

13. This section only considers financing by Chinese public banks for specific projects, such as road construction, installing hydropower plants, and implementing mining projects, among others. The data on financing was gathered from newspapers, government websites, Chinese companies, regulatory agencies, and databases of various institutions. Data on Chinese investments were compiled from databases such as Boston University.

The financings directed to Ecuador are highly concentrated in the energy sector, which accounts for 11 out of 18 financed projects. The energy sector projects include 6 hydropower plants¹⁴, 1 wind farm, 3 projects in the transmission segment, and

a thermal power plant powered by fuel oil. Five of these hydropower plants were installed in the Ecuadorian Amazon and contributed to changes in the electricity matrix of the country, which has become less dependent on fossil fuels¹⁵.

Graph 11: Chinese financings in Pan-Amazon countries
(number of projects)

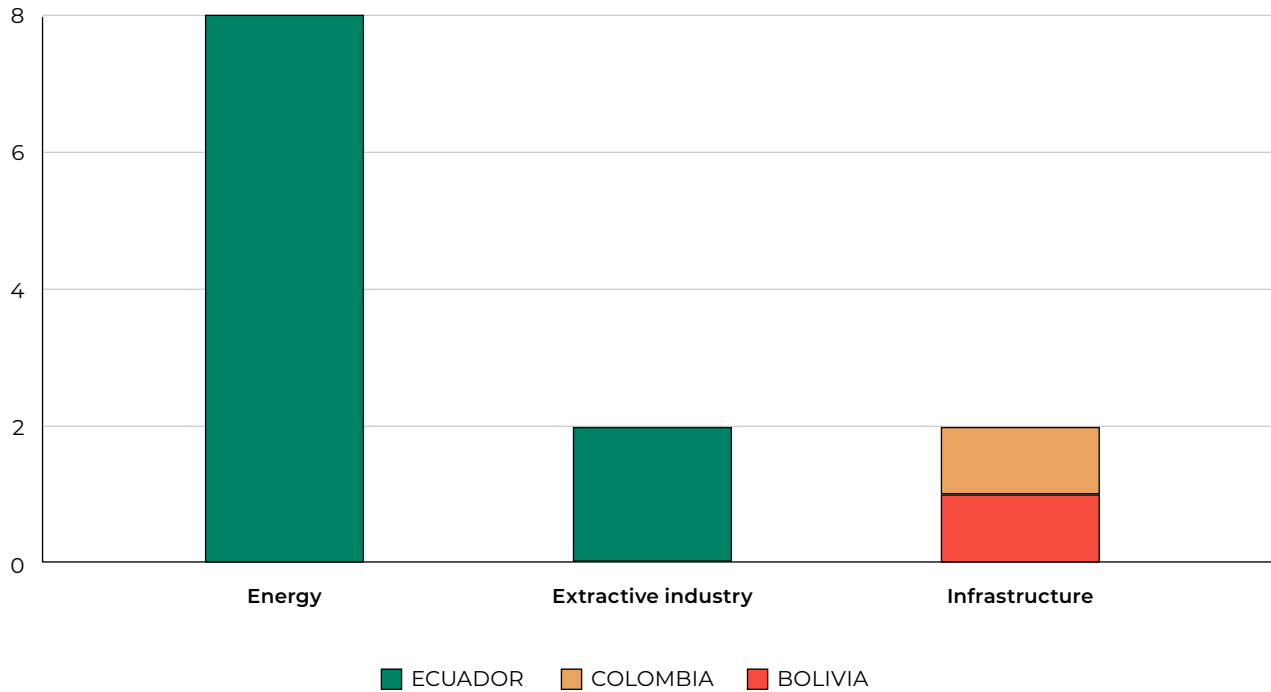


Source: Own work.

14. Coca Codo Sinclair (1500 MW), La Sopladora (487 MW), Delsintanisagua Hydropower Plant (180 MW), Mazar - Dudas (21 MW) and Quijos (50 MW).

15. CASTRO, D.; GARZÓN, P. CHINA-ECUADOR RELATIONS AND THE DEVELOPMENT OF THE HYDRO SECTOR: A Look at the Coca Codo Sinclair and Sopladora Hydroelectric Projects. In: ARMONY, A. C.; CUI, S.; PETERS, E. D. (Ed.) BUILDING DEVELOPMENT FOR A NEW ERA: China's infrastructure projects in Latin America and the Caribbean. University of Pittsburgh and Red Académica de América Latina y el Caribe sobre China, 2018. p. 33

Graph 12: Financings in the Pan-Amazon biome by country
(number of projects)



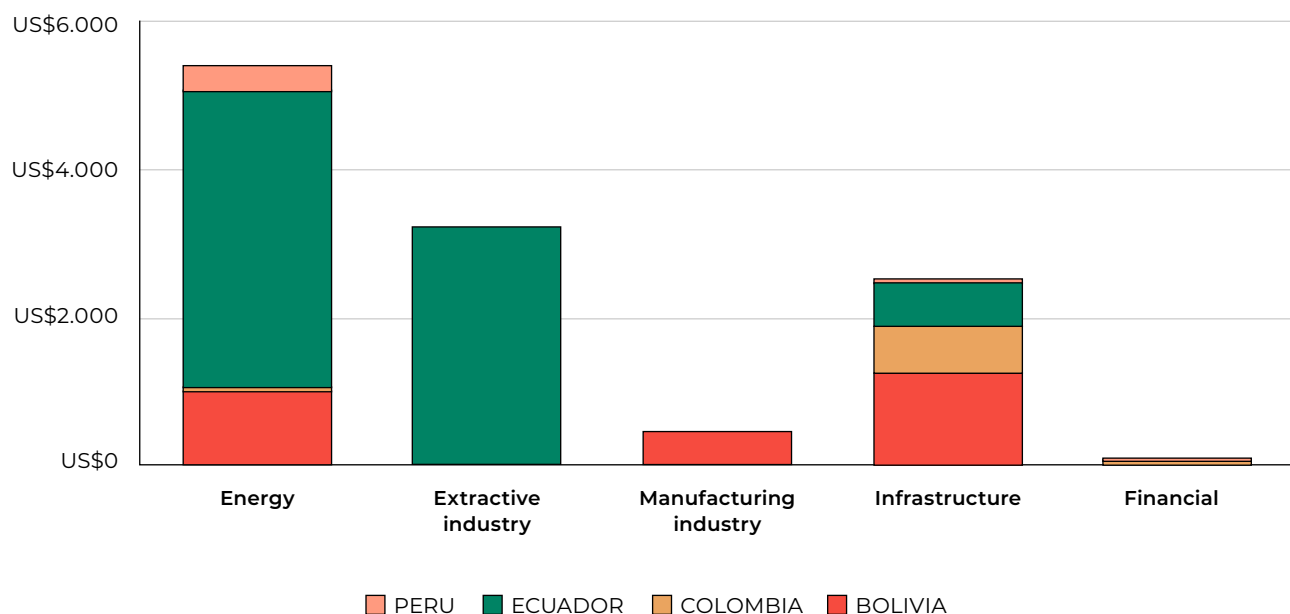
Source: Own work.

Alongside the energy sector, the infrastructure sector also stands out in the region of the Pan-Amazon biome with 5 financings, as illustrated by Graph 12. Out of these, 4 were directed to the construction of 13 roads, and one to the construction of

the Posorja port¹⁶, in Ecuador. The extractive industry comes next, with a total of US\$ 3.2 billion and 2 projects: the *Condor Mirador* copper, gold, and silver mining project, and the San Carlos Panantza copper mining project.

16. Through the China Co-financing Fund for the Americas.

Graph 13: Chinese financings in Pan-Amazon countries
(US\$ million)



Source: Own work.

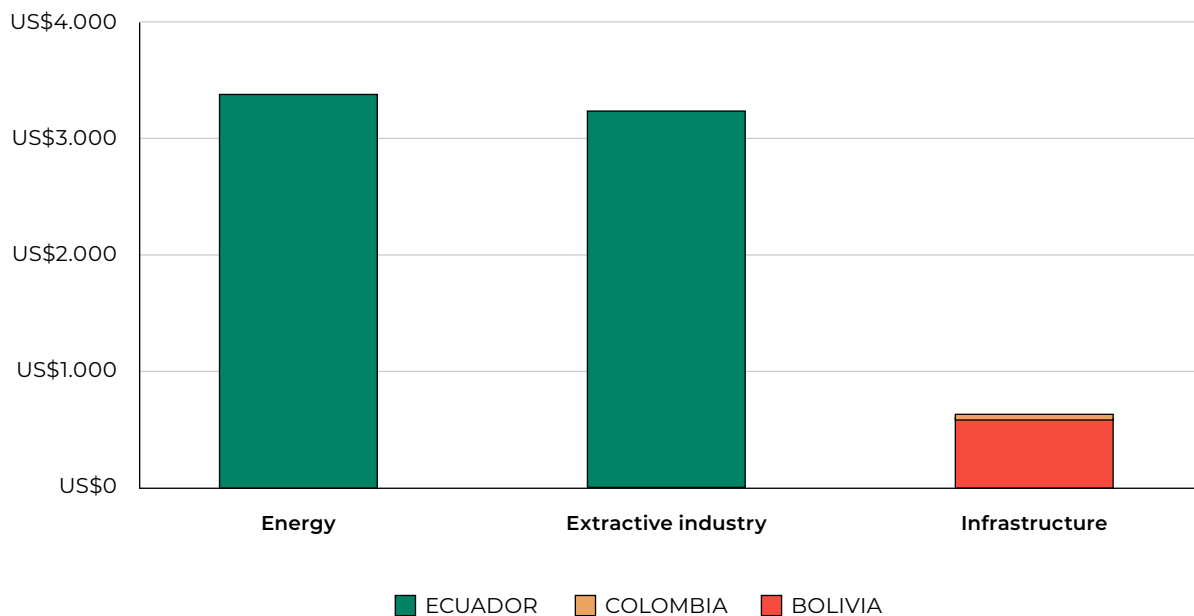
Meanwhile, Bolivia is the country with the second-most Chinese financings in terms of value, totaling US\$ 2.7 billion directed to 5 projects, of which only one is located in the Amazon biome. The financings were allocated to the *Rositas* hydropower plant, the construction of the *El Mutún* steel-making complex (manufacturing industry), and three highways.¹⁷

Colombia had 6 projects with Chinese financing, totaling US\$ 723 million. These

projects include the *Hidroituango* hydro-power plant (through *People's Bank of China* under China's co-financing fund for Latin America and the Caribbean), one project to support Colombia's national financial system, and 4 projects in the infrastructure sector — one for an airport expansion and three for roads. One of these roads is the only financing directed toward the Colombian Amazon.

17. Of these, we might mention the Rurrenabaque-Riberalta highway, which is located in the Amazon biome and received financing of US\$600 million from China Eximbank in 2015.

Graph 14: Financings in the Pan-Amazon biome by country
(US\$ million)



Source: Own work.

Peru, in turn, accumulated only US\$ 450 million in financings from public Chinese banks. They were directed to 3 projects, but none were allocated to the Amazon. It is important to highlight that Brazil has not received any financing from Chinese public banks directed to specific projects

from 2010 to 2023. Although the country received a series of loans from Chinese banks in the period analyzed, they were not linked to any projects and were therefore not considered in the scope of the present study.¹⁸

18. In total, seven loans were granted to Petrobrás to finance pre-salt exploration and the purchase of Chinese equipment. Six loans came from the China Development Bank and one from China Exim Bank, all allocated between 2009 and 2018.

3. TRADE BETWEEN CHINA AND THE PAN-AMAZON COUNTRIES

Trade between China and Latin America has grown considerably in the last two decades. This trend is evident when we analyze the bilateral trade relations between the Asian country and Brazil, Boli-

via, Colombia, Ecuador, and Peru. China is one of the major trade partners of these five countries, and the largest business partner for Brazil and Peru.

Table 3: Bilateral trade between select countries and China

Country (Year)	Export Volume (Millions USD)	% of China in the country's total exports	Import Volume (Millions USD)	% of China in the country's total imports	Main exported product (% of exports to China)
Bolivia (2022)	785	5,8%	2.530	19%	Precious metals (28.9%), zinc products (25.5%), beef (12.9%)
Brazil (2022)	89.427	26,8%	60.744	22,3%	Raw soybeans (35%), Crude oil (20%), Iron ore (19%)
Colombia (2021)	3.660	9%	14.800	25%	Crude oil (73%), iron alloys (7.0%), copper filaments (2.5%)
Ecuador (2021)	4.070	15%	6.040	24%	Crustaceans and fish (56.5%), Copper products (20.9%), Crude oil 11(%)
Peru (2021)	17.990	32%	14.600	29%	Copper products (67.5%), Iron ore (9.4%), Industrial waste (8.1%)
TOTAL	115,932 (Millions USD)	17,72% (Mean)	98.714 (Millions USD)	23,8% (Mean)	

Source: Original work based on the COMEXSTAT and Trading Economics databases

The trade relations between China and the countries in question show a significant asymmetry. These countries' exports to China are mainly made up of a limited variety of low-value-added primary products from the extractive industry (copper, iron ore, crude oil, zinc), agribusiness (soy and animal protein), and fishing resources (crustaceans) as well. Conversely, imports from China are much more diverse and based on manufactured products with varying degrees of added value, from less complex products, such as iron and steel goods, to electrical machinery and sophisticated telecom equipment.

In addition to its low diversity and focus on primary goods, the exports from these five Pan-Amazon countries to China are based on products whose production and exploration dynamics cause a series of socio-environmental impacts, such as: 1) the expansion of the agricultural frontier in Brazil into the Amazon biome, especially through the

territorial expansion of soybean monoculture; 2) the disruption of local communities' way of life caused by large mining and oil exploration projects that support these exports; 3) the challenges imposed for the maintenance and cultural reproduction of indigenous people's way of life in the Copataza and Pastaza river basins caused by the exploration of balsa timber¹⁹ in Ecuador.

It's important to highlight that some products exported by the Pan-Amazon countries to China are closely linked to energy transition — a process in which China has consolidated its position as a global leader. Furthermore, copper and its derivatives, which are exported on a large scale by Peru and on a lesser scale by Ecuador and Colombia, are widely used in electrical systems and are vital for the electrification needed for the energy transition. Meanwhile, balsa timber is used as raw material for building wind turbine blades on a large scale.

19. CAZAR, Diego, B. Alerta Roja: *La fiebre de la madera balsa en Ecuador ya es detectada por los satélites.* Mongabay, July 2021. Available on: <<https://es.mongabay.com/2021/07/madera-balsa-ecuador-deforestacion-amazonia/>>. Accessed on January 10, 2024.