European Policy Brief

Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
No. 08 / 2018

China's engagement in the mineral sector in Latin America: Lessons learned and opportunities for international cooperation

November 2018
Patricia I. Vasquez with David Humphreys and Ana Elizabeth Bastida
CEPMLP, University of Dundee

Funded by the Horizon 2020 Programme of the European Union

STRADE is an EU-funded research project focusing on the development of dialogue-based, innovative policy recommendations for a European strategy on future raw materials supplies. In a series of policy briefs and reports, the project will offer critical analysis and recommendations on EU raw materials policy.

This policy brief reviews China's engagement with Latin America in trade and investment and key areas of cooperation in mining and minerals. It also identifies a few of the challenges encountered by China, in advancing the transformation of mineral wealth into sustainable outcomes in the region. The ultimate objective is to explore opportunities for broader international cooperation including with the EU.

1. Introduction

This Policy Brief starts by reviewing trade and investment patterns in mining and minerals between China and Latin American countries (LACs). It then identifies some of the challenges encountered by the Sino-Latin American mining relationship in transforming mineral wealth into sustainable outcomes for the region, taking into consideration the characteristics of Chinese engagement. The brief summarizes existing cooperation mechanisms between China and LACs in the mining sector. The last section explores the potential for multilateral cooperation that includes LACs, China and the EU on the basis of the findings of Policy Brief No 08/2017 Aligning EU cooperation with resource-rich developing and emerging countries' needs – key elements for creating win-win partnerships and a strategy for sustainable mineral supply and Policy Brief No 05/2018 Latin America's Policy Priorities on Mining and Sustainable Development, and Opportunities for EU Cooperation. The report borrows from the Authors' extensive field work and research in the extractive sector of LACs.

2. A Thriving Relationship: The Dynamics of China-LACs Minerals Engagement

As the largest consumer of mineral raw materials in the world, China's strategic and commercial interest in LACs is self-evident: these countries are among the largest world producers of iron ore and copper. China needs copper to sustain growth in its power and construction sectors, and, as the world's largest producer of steel, it also needs iron ore. More generally, as China's economy becomes increasingly sophisticated, it needs a wider range of mineral products. South America, and to a lesser extent Mexico, have those products in abundance.

China has become an increasingly important destination for LACs exports, particularly in the mining and hydrocarbons sectors where Chinese purchases have more than quadrupled in the past decade (Ray & Gallagher, 2017). LACs mineral exports to China increased from 19% of total exports in 2006 to 45% in 2016. Likewise, metal exports from LACs to China increased from just 6% of total exports in 2006 to 20% in 2015 (WITS, 2018).

As an investor in LACs' mining sector, China's presence is long standing and has been increasing in the past decade, although it still remains relatively modest. During that time, Chinese investor interest in LACs' minerals reached its highest point in 2011, when commodity prices were at their highest levels. Even when mineral prices experienced a significant drop after 2011, Chinese mining investments continued to be strong, at

a time when others pulled back. In dollar terms, between 2011-2017, Chinese companies invested around USD$4.5 billion in mergers & acquisitions in the mining and metals sector of LACs, compared to just USD$1.3 billion in the 2004-2010 period. Mining continues to be the most attractive investment sector for Chinese companies in LACs, although in recent years they have started to diversify to other areas. That diversification explains why metals accounted for only 20% of total Chinese investments in the region between 2011-2017, down from 42% between 2004-2010 (ECLAC, 2018). Other sectors, such as manufacturing and services experienced increased Chinese investments (Avendaño, 2017).

China consumes around 75% of the world's traded iron ore supply and it obtains some 60% of its copper ore and concentrates and 44% of its refined copper supply from Latin America, mainly from countries in the Southern cone (Casanova et.al.; 2015). The latter also furnish some 24% of China's iron ore imports. Peru is the preferred destination for Chinese mining investors and lately, Chile and Argentina started to attract the attention of lithium investors from China. The growing Sino-LAC mining relationship offers great opportunities for growth in LACs. At the same time, it also raises several challenges that could negatively affect the relationship in the medium term.

2.1 China-LAC Trade in Mining and Metals

Five commodities dominate general exports from LACs to China, and three of them are metals. The largest exports are soybeans, followed by iron ore. The third largest LACs' export to China is petroleum, and in fourth and fifth places are copper ores and concentrates, and refined copper respectively. China also imports lesser volumes of unrefined copper, zinc and lead ores, and copper waste and scrap from LACs.

The United States (US) remains the top destination for export products in general from LACs: some 47% of total exports, compared to only 9% that went to China in 2016. But China is expected to displace the European Union (EU) as the second largest buyer of goods in general, according to some estimates (ECLAC, 2018). Almost 23% of LACs total exports went to Europe in 2016 (Atlas of Economic Complexity, 2018).

China's appetite for minerals largely endured the 2008 global economic crisis and subsequent commodity price plunge, while LACs trade with the US has been shrinking. Chart 1 shows trade flows for key mineral exports from five South America countries: Peru, Chile, Argentina, Brazil, and Bolivia. Compared to the US and the World, China shows a constant upward export trend over the past decade.

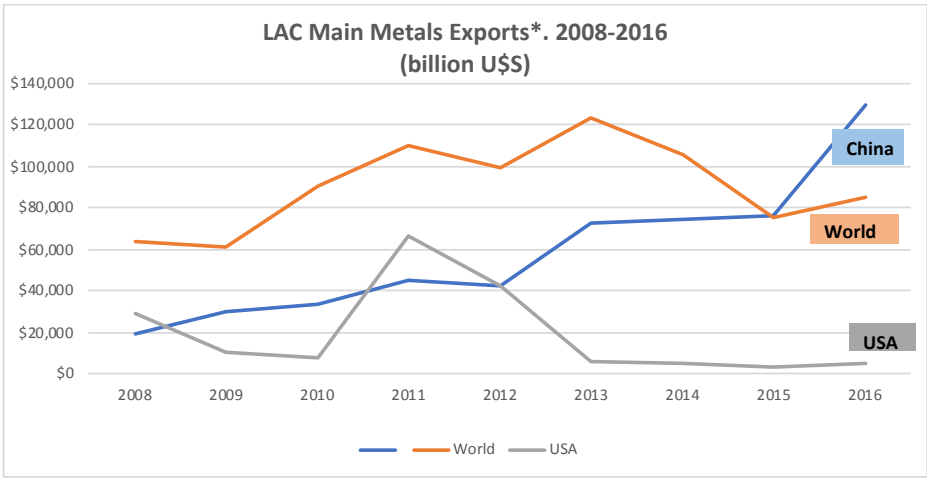

Chart 1 - Source: Author calculations based on UN-COMTRADE data base.
*Includes: Copper Ore & Concentrates; Refined and Unrefined Copper; Iron Ore & Concentrates; Copper Waste; Lead Ores & Concentrates; Zinc Ores; gold Compounds; Metals, gold, non-monetary unwrought (but not powder).

Particularly important to the China-LACs' mineral trade are iron ore and copper ore, two commodities for which China lacks resources. Chart 2 shows China's imports of iron ore in recent years. Brazil is the second largest exporter of iron ore to China (after Australia) accounting for over 20% of China's total iron ore imports. Chile and Peru contribute additional, smaller, tonnages. China is the main importer of Peru's iron ore. In 2017, 97% of Peru's iron ore production and almost 60% of its total output of copper -- its main export product -- went to China (MEM, 2018, pp. 37-98).

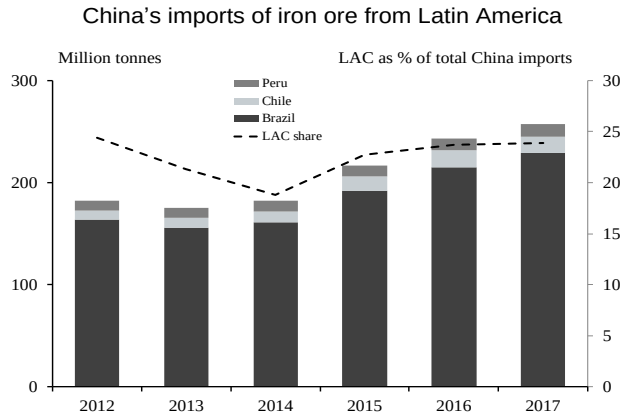

Chart 2
Source: industry sources and UN-COMTRADE

The role of LACs in China's imports of copper is even more pronounced. As Charts 3 and 4 reveal, Chile and Peru are dominant suppliers of both copper concentrates and refined copper metal to China – supplying over 40% of China's imports in both cases - with Mexico and Brazil contributing small additional tonnages. China is the main buyer of Chile's copper production. Chile, the world's largest producer of copper, signed a strategic alliance with China in 2005, by which Santiago awarded a 15-year copper supply contract to Beijing in exchange for guaranteed loans from China's National Development Bank (CDB) for state owned *Corporación Nacional del Cobre de Chile* (Codelco) (Xu, 2017, pp. 33-34).

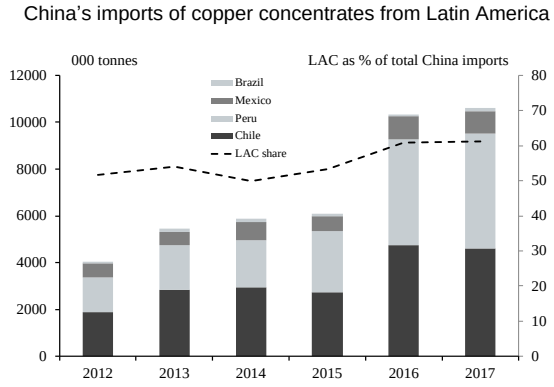

Chart 3
Source: industry sources and COMTRADE

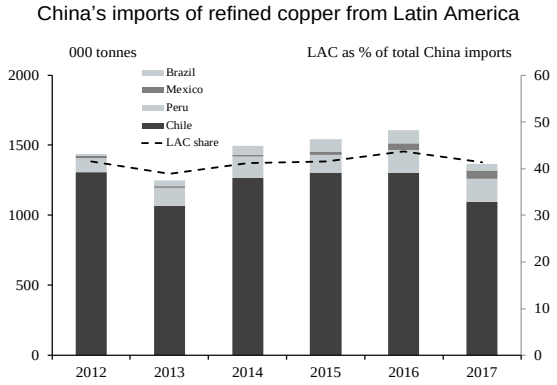

Chart 4
Source: industry sources and COMTRADE

2.2 Chinese Mining FDI in LACs

Beijing has a policy of promoting overseas investments for its companies. Motivated by this policy, Chinese investors have entered some of the most significant exploration and production projects in LACs, and received strong economic and political support from their government to do so. Around 60% of all Chinese investments in LACs went into oil, gas, and mining between 2003-2016[1]. The mining sector received some USD$27 billion in 48 projects during that time, the largest sectoral investment in dollar terms and the second largest in terms of number of contracts after the automotive sector (Avendaño, Melguizo, & Miner, 2017). There are indications that China's FDI to LACs will continue to grow at a steady pace in the near future (ECLAC, 2018).

[1] For more details on Chinese investments in oil and gas in LAC see (Vasquez, 2018)

China's interest in Latin America's minerals is not new. The first Chinese mining investment in the region can be traced back to 1992, when state-owned Shougang Group bought *Empresa Minera de Hierro de Peru (Hierro Peru*), Peru's largest iron ore mine. But it was not until the 2000 decade that Beijing began to focus on Latin America's natural resource wealth on a much larger scale, in order to sustain China's rapidly expanding economy.

Peru continues to be the favourite destination of Chinese mining FDI due not only to its mineral wealth but also as a result of investment friendly regulations and long term cultural, economic, and political ties between the two countries (Sanborn & Chonn, 2015-8). Peru's 2018 mining portfolio has China as its main investor with USD$11.7 billion distributed in six projects, which represents 20% of total investments in the sector (MEM, 2018).

As shown in Table 1, the largest investment so far by a Chinese mining company in LACs was in Peru back in 2014, when China Minmetals Group (MMG) paid Glencore USD$7 billion to acquire Las Bambas, the country's second largest copper mine. Glencore had been forced to divest the mine as a condition of its merger with Xstrata in 2013. Las Bambas was responsible for 18.5% of Peru's total copper output in 2017 (Avendaño, Melguizo, & Miner, 2017) (MEM, 2018). Another Chinese company, Chinalco, is developing the large Toromocho copper mine, which according to Chinese press reports, is China´s largest overseas copper project. (China Daily, July 2014).

CHINESE MINING INVESTMENTS IN LACs (selected)

Country	Year	Chinese Company	Million USD	Project Name/Location	Product
PERU	2007	Shougang	2,500	Marcona / Ica	Iron
		Zijin Consortium(45%); Tongling Non-Ferrous Metals Group Holding (35%); Xiamen C&D (20%)	186	Rio Blanco/Piura	Copper
		Jinzhao Mining Perú (subsidiary of Zhongrong Xinda Group	100	Pampa de Pongo/Arequipa	Iron
	2008	Chinalco (Aluminum Corp of China)	2,200	Toromocho/Junin	Copper
		MMG-Jiangxi	1,840	El Galeno/Cajamarca	Copper-Gold
	2014	MMG	7,000	Las Bambas/Apurimac	Copper
	2016	Shougang	1,300	Marcona/Ica	Iron
BRAZIL	2009	Wuhan Steel	400	MMX Metals	Iron
	2016	China Molybdenum Co. Ltd.	1,700	Acquisition of Anglo-American	Niobium/Phosphates
CHILE	2018	Tianqi Lithium Corp/SQM	4,100	Acquisition of a stake in SQM (pending)	Lithium
ARGENTINA	2017	Shandong Gold Mining Co.Ltd.	1,000	Veladero	Gold
		Mariana Lithium (subsidiary Ganfeng Lithium)-International Lithium Corp (Canada)	N/A	Mariana project	Lithium
BOLIVIA	2010	Jungie Mining (CH)-Alto Canutillos (Bolivian)	N/A	Tacobamba	Tin
	2016	Sinosteel	450	El Mutun	Iron-Steel
ECUADOR	2012	China Railway Construction Corporation (CRCC) -Tongguan Nonferrous Metals Group Holding Company	100	Mirador Copper Mine	Copper

Table *1*- Source: Compiled by Author with data from (Avendaño, Melguizo, & Miner, 2017), (Ludueña, 2017); (MEM, 2018); (Ray, Gallagher, Lopez, & Sanborn, 2017) and Roskill (August 24, 2018).

Brazil used to be the second largest recipient of Chinese mining investments in LAC, after Peru. In 2016, China Molybdenum acquired from Anglo American its niobium and phosphates businesses in Brazil - Nióbio Brasil Limitada and Fosfatos Brasil Limitada - making the company the world's second largest producer of niobium[2] and Brazil's second largest supplier of phosphates. But in 2018, Chile surpassed Brazil as second highest recipient of Chinese mining investment after the USD$4.1 billion purchase by Tianqi of a 25% share of Chile's SQM, the world's largest producer of lithium. More recently, lithium reserves in Argentina also took front stage with China's Ganfeng's purchase of SQM's 37.5% share in that country's Minera Exar lithium brine project.

[2] Niobium is a rare mineral used in steel alloys. Brazil is the largest source in the world.

For raw material producing countries in LACs, China's demand for minerals and metals offers a steady source of export revenue, and much-needed funds for developing the industry (Ray, Gallagher, Lopez, & Sanborn, 2017). At the same time, the development of specific mining projects can contribute to the local economy through backward linkages with other sectors (Vasquez, 2016) (Lippert, 2014). China's thirst for mining products not only boosted export volumes for LAC mineral producing countries during the 2000-decade, it was also key in contributing to the commodities price boom of those years.

The evidence suggests that Chinese investments in minerals in LACs are concentrated on the extraction of raw materials and not in mineral processing or other developments along the value chain. There isn't a unique strategy in Latin America for engaging with China; each country in the region has its own engagement rules. The economies of some countries like Venezuela, are very dependent on Chinese investments and aid (particularly in the hydrocarbons sector), while others like Argentina, have more diversified economies. There is no evidence in LACs of China adopting the 'infrastructure for minerals' approach it used in African countries.

3 Challenges of the Sino-LAC Mining Relationship

The Sino-Latin American trade and investment cooperation offers great opportunities for mutual growth. The Cooperation Plan 2015-2019 adopted during the first meeting of China and the 2015 Community of Latin America and Caribbean States (CELAC), focused on expanding Sino-LAC trade to USD$500 billion by 2025, from a record high of USD$268 billion in 2013. As with trade, the China-CELAC meeting set a target of a reciprocal FDI stock of at least USD$250 billion by 2025, from roughly USD$25 billion in 2017 (ECLAC, 2018). As discussed earlier, minerals and metals constitute a key focus of the Sino-LAC mining trade and FDI exchanges.

This section gives an overview of the challenges faced in achieving successful China-LACs mining cooperation. Some of those challenges are unique to Chinese miners but most are shared by all companies operating in LACs. Among the first is a generalized belief that LACs' exports have become unhealthily dependent on natural resources, primarily as a consequence of China's high demand for the latter in recent years (Ocampo, 2017). This is because LACs' export basket to China is more heavily concentrated in raw materials than its exports to other markets. In 2016, 72% of LACs exports to China were concentrated in five raw products -- soybeans, copper ore and concentrates, iron ore and concentrates, refined copper, and oil--, compared to just 27% to the rest of the world (ECLAC, 2018). By contrast, LACs countries imported mainly manufactured goods from China during that period.

China's demand for mainly raw products from LACs serves to delay the region's diversification of production and exports, a process believed to be a requirement to to ensure long-term sustainable development (ECLAC, 2018). To be fair, China's trade profile was not the main trigger of LACs deindustrialization, which started in the 1980s. Rather, China's increased intake of raw minerals - as opposed to processed products - further deepened that trend in LACs (Guajardo, Molano, & Sica, 2016). A growing body of literature is trying to assess Chinese demand effects on the mineral value chain of LACs, by looking at issues such as technology gap, employment effect, and value added of mineral extraction. Some conclude that during the China-led commodity boom, LACs failed to appropriate the full value-added benefits of developing their natural resources in general, and of mining in particular (Ocampo, 2017). Others differentiate exploration from extraction and argue that during the former the mere discovery and quantification of minerals should in itself be considered asset creation. (IPE, Junio 2017).

Another challenge affecting mining companies in general in LACs, which also affects Chinese miners, is related to weak governance practices in the host country. Political patronage, corruption, or disregard for the rule of law are not uncommon in LACs, and sometimes mining companies try to take advantage of institutional loopholes to advance their business interests. In Bolivia, for example, Chinese company Jungie Mining developed the Tacobamba mine for four years without obtaining an environmental license, as required by law. This could be taken as lack of capacity or unwillingness on the part of the Bolivian government to enforce the law (López & Quiroga, 2015). It could also signify nonchalance on the part of the Chinese operator, which may have taken advantage of local authorities' poor monitoring capacity to neglect the regulations. Jungie is partners with a Bolivian mining cooperative, Altos Canutillos. for the development of Tacobamba. According to some reports, a large number of mining cooperatives in Bolivia fail to adopt legally required environmental remediation practices or simply do not have environmental licenses and operate on the fringes of the law.

Studies have found that Chinese companies have shown they are capable of high performance and social and environmental standards, but that when governance is poor, they typically do not try to set an example (Economy & Levi, 2014, pp. 191-193). Peru's adherence to the Extractive Industries Transparency Initiative (EITI) is a case in point. The EITI is a global standard for fighting corruption in the mining and hydrocarbons sectors through increased transparency and corporate reporting of payments. Mining companies operating in Peru have been gradually adhering to EITI requirements, including four Chinese miners: MMG, Chinalco, Minera Las Bambas, and Shougang (Ministerio de Energia y Minas, 2018). It was Peru's EITI membership that prompted Chinese miners there to incorporate the higher international standards supported by that membership, even in a country with a history of governance weakness.

Some scholars argue that the performance of Chinese investors in LACs is more influenced by the local political context than by their own corporate background (Vines, Wong, Weimer, & Campos, 2009). Mining projects in general can be directly affected by the political and economic agendas of the different actors that are present in the producing area (Bebbington, 2012).

This brings us to a third challenge for Chinese miners in LACs: they are not immune to the conflicts experienced by mining companies in general, often in relation to social or environmental issues. All Chinese mining projects listed on Table 1 experienced conflictive situations with local communities at some stage during their development. In some cases, projects come to a halt due to the intensity of the protests, as was the case with Bolivia's Sinosteel-operated El Mutún iron mine (Bolivia.com, 2009). In Peru, the industry is plagued with conflicts and Chinese companies operating there are not immune to them. For example, in February 2018, Peru registered a total of 124 socio-environmental conflicts, down from 144 registered in February, 2017. Of the total 124 socio-environmental conflicts, 65.3% (81 cases) were related to mining activities (Defensoría del Pueblo, February, 2018).

Shougang, Peru's largest operating Chinese mining company, has faced innumerable conflicts during its decades-long operation. Its dealings in Peru were branded opaque, suspected of corruption, and its labour, environmental, and safety performance classified as poor (Vicente, 2012) (Irwin & Gallagher, 2013). Shougang was fined successively for environmental non-compliance and had some of the worst labour conflicts, often ending up in strikes and work interruptions (ECLAC, 2010). A typical source of conflict among mining companies in general and Chinese miners in particular, is the relationship with local Indigenous communities. In recent years, LACs' large Indigenous population living in producing areas succeeded in consolidating key prerogatives, among them the right to be consulted prior to the development of projects that directly affect them. In practice, the consultation process is constantly challenged by governments and private sector actors, for fear it might delay mining investments, and this leads to conflicts (Sanborn, Hurtado, & Ramirez, 2016). Similarly, LACs sometimes adopt relatively lax social or environmental standards to facilitate much-needed investments, as was the case with Peru's decision to cut back its Environmental Ministry's oversight of the extractive sector (Ray, Gallagher, Lopez, & Sanborn, 2017).

There is not enough evidence for the moment, to determine the extent to which Chinese mining companies are affected by LACs' governance weaknesses or are part of the problem. As mentioned, there are also many examples of questionable behaviour in LACs by Western extractive industries, especially smaller ones whose performance is less scrutinized by shareholders than their larger peers (Vasquez, 2014). Ultimately, the responsibility lies with the host country to ensure respect for the rule of law and adherence to the highest standards. At the same time, a sustainable Sino-LAC mining cooperation could be of great benefit if China's mining companies operating in LACs upgraded their investment strategy, and their environmental and social performance, and became more transparent about their overseas operations (Gallagher & Ray, 2016).

In recent years, Chinese mining companies have gradually started to internalize the importance of ensuring good communications with local residents and more transparent operations, as a guarantee of smooth project development. This conforms with a growing tendency in the mining industry as a whole to see investing in sound community relations as a comparative advantage, and an important management skill to have to avoid unnecessary costs and delays (Humphreys, 2000). In recent years, the government of China incorporated voluntary environmental and social safeguards for its companies operating overseas, although in practice these are regarded as soft policies (Hogenboom, 2017) because of Beijing's limited ability for international monitoring and enforcement (Economy & Levi, 2014, pp. 100-116). For more details on China's recent developments in responsible mining see STRADE Policy Brief No 03/2018 China's approach towards responsible sourcing.

The tendency towards improved standards is slowly permeating Chinese mining operations in LACs. A good example is Chinalco's Toromocho copper mine in Peru. The company took it upon itself to respond to unfulfilled commitments with the local population by the Peruvian government, the previous mine owner. Chinalco built a new town known as New Morococha and relocated Old Morococha residents to much improved living conditions. Even Shougang tried to solve old land disputes with the local population by giving a portion of its Marcona mine concession land to the local district for urban development (Diario Gestion, 2014).

The following sections will explore how increased mining cooperation could contribute to long term sustainable and responsible mining through, for example, ideas for addressing these challenges. Section 5 offers an overview of existing China-LACs mining cooperation platforms and Section 6 explores possible multilateral cooperation in the mining sector that include LACs, China and the EU.

4 China-LACs Regional Cooperation on Mining and Minerals

In 2009, China launched its first China Policy Paper on Latin America and the Caribbean which, for the first time, established a framework for the development of trade, investment and cooperation with the region. In that paper, the Chinese government committed to supporting Chinese companies to invest in various economic sectors of LACs, including mineral resources. In 2014, mutual cooperation entered a new level of engagement, with frequent high-level meetings and political dialogues, and more emphasis on the development of trade and investments. A second China Policy Paper on Latin America and the Caribbean in 2016 emphasized the need to expand energy and resource cooperation throughout the production value chain.

Cooperation really gained momentum in early 2015, with the first ministerial meeting of the China- CELAC[3] (Community of Latin American and Caribbean States) Forum that was held in Beijing in January, 2015. The China-CELAC Forum – an annual gathering of high-level Chinese and Latin American officials -- is the most important mechanism for cooperation between China and LACs at a regional level. The establishment of the Forum was announced in the *Joint Statement on China-Latin America and the Caribbean Summit* released upon the meeting held in Brasilia on 17 July 2014.

At its first meeting, the Forum adopted the Beijing Declaration, a "Plan of Cooperation between China and the Latin American and Caribbean Countries (2015-2019)", which identified key areas of cooperation, and the "Institutional Arrangements and Operating Rules of the CELAC–China Forum", targeted at building a common framework for dialogue and cooperation. The Plan includes a section on cooperation on energy and natural resources which anticipates the possibility of establishing a specific China-LAC Energy and Mineral Resources Forum in the future. It also foresees enhanced collaboration in areas that include "technological research and development, and sustainable use of natural resources, based on equality, overall reciprocity and mutual benefit, with close observance of applicable laws, regulations and best international practices, while respecting the full sovereignty over their natural resources", and promoting the industrialization of value-added goods in CELACs.

The latest meeting of the China-CELAC Forum, which brought together the Ministries of Foreign Affairs and took place in Santiago de Chile in January 2018, reaffirmed commitments for closer cooperation and mutual opportunities for further engagement around the Belt and Road Initiative. The document '*China Policy towards Latin America and the Caribbean*' (2016) envisages expanding cooperation in the field of energy and resources "based on the principle of win-win cooperation and sustainable development" both upstream and downstream to support industries such as smelting, processing, logistics and trade to add value to these products. It also expressly states that China is willing to explore with countries in the region the possibility of establishing mechanisms for the long-term supply of energy and resources and the use of local currency to mitigate external economic and financial risks. Countries have also entered into framework agreements on economic and investment cooperation with China, e.g. Chile, Peru and Costa Rica (PB 05/2018; García Herrero et al, 2018).

Additional cooperation mechanisms between China and LACs include bilateral free trade agreements (FTAs) with specific countries, alliances with regional trade blocs, and Strategic Partnerships (SPs). Among the first, China has signed three bilateral FTAs with LACs: with Chile, Peru, and Costa Rica. Regionally, LACs have

[3] The Community of Latin American and Caribbean States (CELAC) is a regional organization of 33 member states founded in 2010 to strengthen the political, social, and cultural integration of the region, and for stimulating its economic growth. (See PB 05/2018)

attempted to create regional alliances on many occasions throughout history. The latest such regional effort is the Pacific Alliance (PA) between Peru, Chile, Colombia, and Mexico. Since its creation in 2012, the PA has promoted the free movement of goods and capital between its member countries. More recently, the PA started to promote investments from outside the region, particularly with China and Asia Pacific countries in general. However, besides high-level meetings between China and PA members and declarations of intentions, trade and FDI with PA member countries have not increased significantly compared to countries outside of the group. Some scholars believe that the PA is neither politically nor economically strategic for China (Creutzfeldt, July 2018).

Another regional platform for cooperation is the Asia-Pacific Economic Cooperation Forum (APEC in Spanish), of which Peru, Chile, and also China are member countries. APEC was created in 1989 to promote trade, cooperation, regional economic development, and ultimately an economic community among 21 economies. Other members include Australia, Canada, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zeeland, Papua New Guinea, Philippines, Russia, Singapore, Thailand, US, and Vietnam. APEC hosts annual meetings of member countries' ministers responsible for mining, and it also has a Mining Task Force that meets every year.

A third mechanism for cooperation between China and LACs has been through the creation of Strategic Partnerships (SPs). China's SPs are rather imprecise. Some scholars understand them as long-term commitments to bilateral relations, meaning that those bilateral obligations are not threatened by occasional tensions between partners (Medeiros, 2009). China has signed SPs with eight LACs, including Brazil (1993), Venezuela (2001), Mexico (2003), Argentina (2004), Peru (2008), Chile (2012), Costa Rica (2015), and Ecuador (2015) (Xu Yanran, 2017).

5 Implications of China-LACs cooperation for the EU

The considerable effort that is going into the development of China-LACs cooperation with respect to mining raises the question as to whether there are any lessons here for the EU, or indeed whether it poses any threats.

Although China and the EU are large mineral consuming and importing regions, their objective circumstances with regards to mineral supply from LACs are markedly different. For one thing, China's demand for mineral materials such as iron ore and copper have been growing fast in recent years while the EU's has not. Second, China has many more mining companies seeking out opportunities for, and actively engaging in, developing mineral resources in the LACs than does the EU. Accordingly, both China and the governments of LACs have stronger motives than does the EU for seeking to promote cooperation in the sector and for establishing processes and protocols for the mutually beneficial development of the sector.

That said, the EU, as a major participant in the global mineral sector, retains a strong vested interest in the healthy and balanced development of the resources of LACs and might have something to learn from the proactive stance China has adopted with respect to its engagement with LACs in the sector. For example, it could use the EU-CELAC ministerial meetings to open up a focused dialogue on the development of the natural resources sector in LACs in a manner similar to that which has been done by China (see Section 4 above).

At the same time, the EU needs to be alert to the consequences of deepening China-LAC cooperation for its own supply position and corporate relationships. Historically, LACs have been an important supplier of raw materials to smelters, refineries and manufacturing plants in the EU. For reasons related to geography and to transport costs, Brazil was traditionally the primary supplier of iron ore to Europe whilst Australia was the primary supplier to the Asian market. Over time this has changed and Brazil's primary export market is now China.

In itself this need not be a problem. China's promotion of mining investment in the LACs should in principle boost the global supply of mineral products and work to the benefit of all mineral consuming regions. However, there is the possibility that China could use its strong position in LAC markets and its cooperative relations with governments in the region to tie up exclusive supply arrangements - either through long term contracts or through the use of fully integrated (mine to metal) supply chains - with LAC suppliers which exclude EU businesses or reduce the market supply available to them. This could prove problematic. There is, of course, also the more positive possibility that the increasing dependence of LACs on China for its export of

mined products will make the region more eager to strike and build cooperative agreements with other regions, including the EU, to serve as a counterweight to China.

6 Options for multilateral cooperation

The EU and China share common interests in access to resources and in the free flow of goods and investments and have, in varying degrees, started processes to incentivise responsible sourcing. LACs, in turn, are generally interested in transforming mineral wealth into sustainable outcomes. This entails overcoming major challenges to strengthening governance, including the enforcement of optimal operational standards, and adding value from minerals extraction. Multilateral cooperation to achieve common objectives embedded in dialogue processes are the thrust of STRADE's recommendations for EU engagement with partner countries and appears as the sensible way forward to channel collective action.

Multilateral cooperation could enhance sustainable mining in LACs in a more subtle way. In Africa, the historical legacy of the colonial-era European engagement necessarily informs today's EU-Africa relations (see Policy Brief No 04/2018 Africa & the European Union – Renewing Sustainable Partnerships in the Extractives Sector). Similarly, LACs' past exchanges with the US, in particular that country's interventionist policies of the 1960s and 1970s, weigh in the region's decision-making today. As China grows as a global power and its mining -- and other -- interests expand in Latin America, it is only reasonable to expect parallels to be drawn with the region's past hegemonic disputes with the US. This is in spite of the fact that China increasingly shows a commitment to playing by the international rules of the game in order to avoid possible charges of colonialism and interference (Haass, 2017). The EU's historical experience in Africa and LACs' history of exchanges with the US could perhaps explore common ground in allowing history to contribute positively to responsible and long term sustainable mining in LACs.

Multilateral cooperation involving LACs, the EU and China among others could aim at jointly developing an international non-binding standard for responsible mining. This could serve as a reference document for bilateral trade and cooperation agreements and as an initial benchmark of performance of mining companies and others along the value chain.[4] For LACs, as for other mineral-exporting regions, it would be crucial that this sets high standards that do not detract, but support, efforts to improve performance. The process of standard-setting, as a foundation for long-term international cooperation, could be steered by existing units in United Nations (e.g. UNEP) or by the Intergovernmental Forum for Mining, Minerals and Sustainable Development (IGF), and involve a wide range of partners.

Multilateral cooperation could also build around value-chains for specific minerals, such as lithium, with the objective of mobilising and sharing knowledge on data and knowledge information systems for mining, trade and related environmental and socio-economic issues, and establishing guidance for 'best available techniques', thus providing an avenue for effectively internalising natural capital value (Policy Brief No 05/2018 Latin America's Policy Priorities on Mining and Sustainable Development, and Opportunities for EU Cooperation and Policy Brief No 06/2018 Social, economic and environmental challenges in primary lithium and cobalt sourcing for the rapidly increasing electric mobility sector). Alliances around lithium, copper or tin could additionally serve as hubs to facilitate responsible business and transnational partnerships between firms and foster synergies to promote joint research for technological innovation to provide solutions to methods of extraction minimizing impact on the environment, particularly on water quality, and engage national research councils (see Policy Brief No 05/2018 Latin America's Policy Priorities on Mining and Sustainable Development, and Opportunities for EU Cooperation). Depending on the mineral, international metal study groups and the ICA (International Copper Association) could have a role in steering these processes.

Last, multilateral cooperation could also aim at mobilising knowledge and resources to find solutions to intractable problems in the sector, which are global in character and are in dire need of global collective action (see further Policy Brief No 07/2017 Platforms for strategic dialogue: a possible way forward). Again, the process should eventually be steered by an inter-governmental organisation such as a unit of United Nations, or otherwise the IGF.

[4] Socio-economic and environmental challenges in EU mineral supply: Status quo and fields of EU action. Synthesis from the STRADE project, Schueler, Doris et al, October 2018

7 Summary

China's domestic shortage of certain minerals is a perfect match for Latin America's large mineral wealth, particularly among South American countries. China is already the main importer of Chile's and Peru's copper and of Peru's and Brazil's iron ore output. Chinese companies are the main iron ore investors in Peru and are strong in that country's and Chile's copper industry. More recently, Chinese miners bought lithium assets in Chile and Argentina, and also entered the niobium and phosphates businesses in Brazil.
The Sino-LAC mining relationship is expected to continue to expand in coming years. The latest meeting of China with the Community of Latin American and Caribbean States (CELAC) identified mining among the key areas for cooperation expansion. The mining sector will be key in shaping future trade and investment cooperation between China and Latin America. The China-CELAC Forum is the main platform for discussing mining cooperation between China and Latin America.

This Brief discussed some of the challenges surrounding the China-LACs mining engagement. Among them is a generalized worry that China's high demand for raw materials is delaying the diversification of LACs' production and exports, a key condition to ensuring long-term sustainable development. Also challenging for the growing Sino-LAC relationship is the poor governance that generally characterizes the region. Chinese miners seem to perform better in countries that require high governance standards and have the capacity to enforce them. Lastly, the large number of conflicts related to mining operations in Latin America also affect Chinese companies operating there.

The Brief suggests that increased cooperation could contribute to long term sustainable and responsible mining. Section four gives a summary of Sino-LACs cooperation initiatives while section five explores implications of increasing Sino-LACs engagement for the EU (and lessons to be learnt from it). Finally, section six explores avenues for multilateral cooperation involving the LACs and the EU and China among others. Options could include jointly developing an international non-binding standard for responsible mining, collaboration around value chains for specific minerals, and knowledge-sharing and research to find solutions to persistent problems in the sector.

Bibliography

André, R., Berger, R., Escarfuller, W., Hayman, M., Ramirez, C., Sabatini, C., & Tummino, A. (2014, February 20). *Las Mejores (y peores) Practicas para la Extraccion de Recursos Naturales en América Latina. Tres países, 12 casos de estudio.* Retrieved August 2018, from Americas Quarterly: https://www.as-coa.org/articles/las-mejores-y-peores-prácticas-para-la-extracción-de-recursos-naturales-en-américa-latina

Aquino, M., & Velez, P. (2009, November 2). *Two die in attack on Chinese mine in Peru.* Retrieved August 2018, from Reuters: https://www.reuters.com/article/idUSN02440594

Atlas of Economic Complexity. Center for International Development at Harvard University. Retrieved November 2018, from http://www.atlas.cid.harvard.edu

Avendaño, R., Melguizo, A., & Miner, S. (2017). *Chinese FDI in Latin America: New Trends with Global Implications.* Washington, DC: The Atlantic Council. OECD Development Center.

Bastida, A. E. (July 2018). Policy Brief No 05/2018 Latin America's Policy Priorities on Mining and Sustainable Development, and Opportunities for EU Cooperation. STRADE.

Bebbington, A. (2012). Social Conflict and Emergent Institutions. Hypothesis from Piura, Peru. In A. E. Bebbington, *Social Conflict, Economic Development, and Extractive Industry. Evidence from South America* (pp. 67-88). London-New York: Routledge, Taylor and Francis.

Beech, H. (2018, August 20). We Cannot Afford This': Malaysia Pushes Back Against China's Vision. *The New York Times*.

Bolivia.com. (2009, March 5). *Un conflicto de tierras, frena el proyecto siderúrgico del Mutún.* Retrieved from Bolivia.com: https://www.bolivia.com/noticias/autonoticias/detallenoticia40264.asp

Brautigam, D. (2011). Chinese Development Aid in Africa. In J. Golley, & D. S. (eds), *Rising China: Global Challenges and Opportunities* (pp. 203-222). Canberra: Australian National University Press.

Brautigam, D., & Hwang, J. (2016). *Eastern Promises, New Data on Chinese Loans in Africa, 2000 to 2014.* SAIS China-Africa Research Initiative. Washington, DC: Johns Hopkins University.

Cambero, F., & Sherwood, D. (2018, January 22). *China invites Latin America to take part in One Belt, One Road.* Retrieved August 2018, from Reuters: https://www.reuters.com/article/us-chile-china/china-invites-latin-america-to-take-part-in-one-belt-one-road-idUSKBN1FB2CN

Carstens, J., Lozano, V., Runge, J. and Nguepjouo, D. (October 2017). Policy Brief No 08/2017 Aligning EU cooperation with resource-rich developing and emerging countries' needs – key elements for creating win-win partnerships and a strategy for sustainable mineral supply. STRADE.

Casanova, C., Xia, L., Ferreira, R (August 2015). Measuring Latin America's Export dependency on China. BBVA Research. Working Paper No.15/26. Hong Kong.

CNOOC. (2005). *Social Responsibility.* Retrieved March 2018, from CNOOC Limited: http://www.cnoocltd.com/csr/en/index.html

CNPC. (2018). *CNPC.* Retrieved from CSR Report: http://www.cnpc.com.cn/en/cr2016/AnnualReport_list.shtml

Creutzfeldt. B. (July, 2018). *China's Engagement with Regional Actors: The Pacific Alliance*. Wilson Center. Latin American Program
China Daily (July, 2014). *Chinalco to partly halt Peru copper project*. Available at: http://usa.chinadaily.com.cn/epaper/2014-04/07/content_17412058.htm.

China - Department of Latin American and Caribbean Affairs Ministry of Foreign Affairs of China, Basic Information about China-CELAC Forum, April, 2016. Retrieved from http://www.chinacelacforum.org/eng/ltjj_1/P020161207421177845816.pdf

China CELAC Forum, Beijing Declaration, 23 January 2015. Retrieved from http://www.chinacelacforum.org/eng/zywj_3/t1230938.htm

China CELAC Forum, Cooperation Plan (2015-2019), 23 January 2015. Retrieved from http://www.chinacelacforum.org/eng/zywj_3/t1230944.htm

China CELAC, Documento sobre la Política de China Hacia América Latina y el Caribe [Document on Chinese Policy towards Latin America and the Caribbean], 25 November 2016. Available at: <http://www.chinacelacforum.org/esp/zywj_4/t1418613.htm>.

Defensoría del Pueblo. (February, 2018). Reporte de Conflictos Sociales No.168, Adjuntía para la Prevensión de Conflictos Sociales y Gobernabilidad.

Diario Gestión. (2014, 24 October). Shougang Hierro Peru cederá 82.04 hectáreas de su concesión para fines urbanos en Marcona. *Diario Gestión*.

Dolega, P. and Schűler, D. (January 2018). Policy Brief No 03/2018 China's approach towards responsible sourcing. STRADE.

Dollar, D. (January, 2017). *China's Investment in Latin America.* Brookings Institution, Geoeconomics and Global Issues. Washington, DC: Brookings Institution.

Downs, E. (2014). *Investment Abroad. What ever became of China Inc.?* Gavekal Economics.

ECLAC. (2010). *Foreign Direct Investment in Latin America and the Caribbean.* Santiago: Economic Commission for Latin America (ECLAC).

ECLAC. (2016). *Foreign Direct Investment in LAC.* Santiago: Economic Comission for Latin America.

ECLAC. (2018). *Exploring new forms of cooperation between China and Latin America and the Caribbean.* Economic Comission for Latin America and Caribbean. Santiago: UN ECLAC.

Economy, E., & Levi, M. (2014). *By All Means Necessary: How China's Resource Quest is Changing the World.* Oxford: Oxford University Press.

EIA. (2017, January 5). *Annual Energy Outlook Projections 2017, with projections to 2050.* Retrieved from US Energy Information Administration: https://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf

EITI. (2016, February). *Chinese Companies Reporting in EITI Countries Review of the Engagement of Chinese Firms in Countries Implementing the EITI.* Retrieved August 2018, from Extractives Industry Transparency Initiative: https://eiti.org/document/eiti-brief-chinese-companies-reporting-in-eiti-implementing-countries#DownloadPDF

Ellis, R. E. (2009). *China in Latin America. The Whats & Wherefores.* Boulder: Lynne Rienner.

Ellis, R. E. (2014). A Hard Look at China's Soft Power in Latin America. In A. Scobell, & E. Marylena Mantas, *China's Great Leap Outward: Hard and Soft Dimensions of a Rising Power* (pp. 175-194). New York: New York Academy of Political Science.

Farooki, M., Cramphorn, L., & Malden, A. (June 2016). Policy Brief No 01/2016. European Union's Approach to Raw Materials Engagements: A Review of Engagements with Third Countries. STRADE.

Farooki, M. and Jourdan, P. (March 2018). Policy Brief No 04/2018 Africa & the European Union – Renewing Sustainable Partnerships in the Extractives Sector. STRADE.

Gallagher, K. P. (2016). *The China Triangle: Latin America's China Boom and the Fate of the Washington Consensus.* New York: Oxforg University Press. .

Gallagher, K. P., & Ray, R. (2016). Latin America's China Decade: Managing Bnefits and Risks. In R. Roett, & G. P. (Eds.), *Lain America and the Asian Giants. Evolving Ties with China and India* (p. 57). Washington, DC: Brookings Institution.

García Herrero, Alicia; Marbach, Thibault and Xu, Jianwei, European and Chinese Trade Competition in Third Markets: The Case of Latin America, Bruegel Working Paper, Issue 06, 7 June 2018. Retrieved from http://bruegel.org/wp-content/uploads/2018/06/WP-2018-06_-060618.pdf

Gervasoni, C. (2010). A Rentier Theory of Subnational Regimes: Fiscal Federalism, Democracy, and Authoritarism in the Argentina Provinces. *World Politics, 62*, 302-340.

Giraudy., A. (2010). The Politics of Subnational Undemocratic Regime Reproduction in Argentina and Mexico. *Journal of Politics in Latin America, 2*(2), 53-84.

GIZ. (n.d.). *Chile.* Retrieved August 2018, from GIZ: https://www.giz.de/en/worldwide/388.html

Gonzalez Vicente, R. (2013). Development Dynamics of Chinese Resource-Based Investment in Peru and Ecuador. *Latin American Politics and Society, 55*(1), 46-72.

Government Offices of Sweden. (2016, May). *Joint statement on the occasion of the State Visit by President Michelle Bachelet to Sweden, 10-12 May 2016.* Retrieved August 2018, from https://www.regeringen.se/uttalanden/2016/05/joint-statement-on-the-occasion-of-the-state-visit-by-president-michelle-bachelet-to-sweden-10-12-may-2016/

Grimm, S. (August, 2011). *Transparency of Chinese Aid An analysis of the published information on Chinese external financial flows.* Stellenbosch: Publish What you Fund. Center for Chinese Studies. Stellenbosch University.

Guajardo, o., Molano, M., & Sica, D. (2016). *Industrial Development in Latin America. What is China's Role?* Washington, DC: The Atlantic Council .

Haass, R. (2017). *A World in Disarray. American Foreign Policy and the Crisisw of the Old Order.* New York: Penguin.

Hausman, R., Hidalgo, C., Bustos, S., Coscia, M., Simoes, A., & Yildirim, M. A. (2013). *Atlas of Economic Complexity, Mapping Paths to Prosperity*. Retrieved from Center for International Development at Harvard University: http://atlas.cid.harvard.edu

Hogenboom, B. (2017). Chinese Influences and the Governmance of OII in Latin America the Cases of Venezuela, Brazil and Ecuador. In M. P. Amineh, & Y. Guang, *Geopolitical Economy of Energy and the Environment. China and the European Union* (pp. 172-211). Boston: Leiden.

Humphreys, D. (2000). A Business Perspective on Community Relations in Mining. *Resources Policy, 26*, 127-131.

Humphreys, D., Bastida, A. E. and Hermann, A. (July 2017), Policy Brief No 07/2017 Platforms for strategic dialogue: a possible way forward, STRADE.

Hwang, J. (2017, September 27). *Guest Post: Stretching the Data.* Retrieved from The China-Africa Research Initiative Blog: http://www.chinaafricarealstory.com/2017/09/stretching-data_27.html

IPE. (2018, April 19). *Aporte de la Minería al PBI.* Retrieved August 2018, from Instituto Peruano de Economía: http://www.ipe.org.pe/portal/aporte-de-la-mineria-al-pbi/

IPE. (Junio 2017). *El Valor Agregado de la Minería en el Perú.* Surquillo: Instituto Peruano de Economía.

Irwin, A., & Gallagher, K. P. (2013). Chinese Mining in Latin America: A Comparative Perspective. *The Journal of Environment Development, 22*, 207.

Jordan, P., & Farías, M. (2008, September 23). *Chile Codelco suspends Minmetals Gaby stake option.* Retrieved from Reuters: https://www.reuters.com/article/codelco-minmetals-gaby/update-3-chile-codelco-suspends-minmetals-gaby-stake-option-idUSN2338712620080923

Kotschwar, B., Moran, T. H., & Muir, J. (2012). *Chinese Investment in Latin American Resources: The Good, the Bad, and the Ugly.* Washington, DC: Peterson Institute for International Economics.

Lippert, A. (2014). Spill-Overs of a Resource Boom: Evidence from Zambian Copper Mines. *OxCarre Working Papers 131*.

Ludueña, M. P. (2017). *Chinese Investments in Latin America. Opportunities for growth and diversification.* Ecomonic Commission for Latin America and the Caribbean (ECLAC). Santiago: ECLAC.

López, A. S., & Quiroga, A. R. (2015). *An Assessment of the Environmental and Social Impacts of Chinese Trade and FDI in Bolivia.* Boston University, Global Economic Governance Initiative. Boston University-Global Development and Environmental Institute.

Manhart, A., Gsell, M., Hay, D. and Schuler, D., (February 2017), Policy Brief No 01/2017, Minerals and metals from non-EU countries – Europe's role and responsibility *for positive change in industry supply chains.* STRADE.

MDNP. (2018). *EU-Latin America Mineral Development Platform.* Retrieved from https://www.mineralplatform.eu/about/the-platform/background

Medeiros, E.S. (2009). *China's International Behaviour: Activism, Opportunism, and Diversification*. Santa Monica. Rand Corporation. 82. Available at: https://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG850.pdf.

MEM. (2018). *Peru. Anuario Minero 2017.* Lima: Ministerio de Energia y Minas.

MEM. (2018, March). *Peru: Cartera de Proyectos de Construccion de Mina. 2018. Edicion 01.* Retrieved from Ministerio de Energia y Minas: http://mineria.minem.gob.pe/proyectos_mineros/proyectos-de-construccion-de-mina/

Metal Bulletin. (2018, May 29). *Brazilian steel industry continues to face production, logistics problems due to truckers' strike .* Retrieved from MetalBulletin: https://www.metalbulletin.com/Article/3809878/Brazilian-steel-industry-continues-to-face-production-logistics-problems-due-to-truckers-strike.html

MEM. (2018). *Sexto Informe Nacional de Transparencia de las Industrias Extractivas (Sexto Estudio de Conciliación Nacional – EITI Perú) Períodos 2015 y 2016. Consultoría para la Comisión Multisectorial Permanente del EITI Perú.* Lima: EITI.

Myers, M. (2015). Shaping Chinese Engagement in Latin America. In J. Dominguez, & A. E. Covarrubias, *Routledge Handbook of Latin America in the World.* New York: Routledge.

Natural Resource Governance Institute. (2017). *Chile. Mining*. Retrieved from Natural Resource Governance Institute: http://resourcegovernanceindex.org/country-profiles/CHL/mining

Natural Resource Governance Institute. (2017). *2017 Resource Governance Index.* Retrieved from Natural Resource Governance Institute (NRGI): http://resourcegovernanceindex.org

Ocampo, J. A. (2017). Commodity-Led Development in Latin America. *International Development Policy | Revue internationale de politique de développement [Online], 9*, pp. 51-76.

OEFA. (2014, May 2013). *Organismo de Evaluación y Fiscalización Ambiental.* Retrieved August 2018, from Organismo de Evaluación y Fiscalización Ambiental: https://www.oefa.gob.pe/?s=toromocho

Patey, L. (2018, August 26). The Chinese Model is Failing Africa. *Financial Times*.

Ray, R., & Gallagher, K. (2017). *China-Latin America Economic Bulletin 2017 Editon.* Boston University, Global Economic Governance Initiative. Boston: Boston University.

Ray, R., Gallagher, K., Lopez, A., & Sanborn, C. (2017). *China and Sustainable Development in Latin America: The Social and Enviromental Dimension.* London-New York: Anthem Press. Kindle Edition. [Kindle Locations 4895-4898].

Reuters. (2017, February 8). *Protests in Peru block roads to MMG's Las Bambas copper mine*. Retrieved July 2018, from Reuters: https://www.reuters.com/article/us-peru-copper-mmg-idUSKBN15N2UZ

Rodrik, A. (2016). Premature Deindustrialization. *Journal of Economic Growth*(21), 1-33.

Roskill (2018, August 24). Lithium: Ganfeng Lithium purchases SQM's stake holding in Cauchari-Olaroz Lithium project. Posted in *General News.*

Sanborn, C., & Ching, V. C. (2017). Chinese Investments in Peru's Mining Industry: Blessing or Curse? In R. Ray, K. Gallagher, A. Lopez, & C. S. Eds., *China and Sustainable Development in Latin America: The Social and Environmental Dimension* (pp. Location 4187-5131). London, New York: Anthem Press-Kindle Edition.

Sanborn, C., & Ching, V. C. (2017). Chinese Peruvian Relations in the Mining Sector: Learning Step by Step. In M. Myers, & E. Carol Wise, *The Political Economy of China-Latin American Relations in the New Millenium* (pp. 115-140). New York-Oxon: Routledge-Taylor and Francis.

Sanborn, C., & Paredes, A. (2015). *Getting it Right? Challenges to Prior Consultation in Peru*. Retrieved July 2018, from The University of Queensland. Center for Social Responsibility in Mining: https://www.csrm.uq.edu.au/publications/getting-it-right-challenges-to-prior-consultation-in-peru

Sanborn, C., & Torres., V. C. (2009). *La economía china y las industrias extractivas: desafíos para el Perú.* Lima: Universidad del Pacífico.

Sanborn, C., Hurtado, V., & Ramirez, T. (2016). *La consulta previa en el Perú: avances y retos.* Lima: Universidad del Pacífico.

Sanderson, H. (2018, April 26). China warns Chile against blocking $5bn SQM lithium deal.

Sanderson, H., & Forsythe, M. (2013). *China's Superbank. Debt, Oil and Influence-How China Development Bank is Rewriting the Rules of Finance.* Singapore: Bloomberg Press.

Saravia López, A., and Quiroga Rúa, A. *An Assessment of the Environmental and Social Impacts of Chinese Trade and FDI in Bolivia.* In Ray. R. et. al. China and Sustainable Development in Latin America: The Social and Environmental Dimension. (Kindle Locations 3444-3446). Anthem Press.Kindle Edition.

Schűler, D., Dolega, P. and Degreif, S. (July 2018). Policy Brief No 06/2018 Social, economic and environmental challenges in primary lithium and cobalt sourcing for the rapidly increasing electric mobility sector. STRADE.

Sinopec. (2014). *Social Responsibility.* Retrieved from Sinopec: http://www.sinopecgroup.com/group/en/socialresponsibility/

Swamynathan, Y., & Nicholson, M. (2018, May 17). *China's Tianqui Lithium to buy a quarter of Chile's SWM for $4.1bilion.* Retrieved from Reuters: Reuters.com

The World Bank Group. (2017). *Worldwide Governance Indicators*. Retrieved from The World Bank Group: http://info.worldbank.org/governance/wgi/index.aspx#home

Ticci, E. (2011). *Extractive Industries and Local Development in the Peruvian Highlands: Socioeconomic Impacts of the Mid-1990s Mining Boom.* European University Institute, Robert Schuman Centre for Advanced Studies. Badia Fiesolana: European University Institute.

Transparency International. (2017). *2017 Corruption Perceptions Index*. Retrieved from Transparency International: http://www.transparency.org/cpi

Vasquez, P. I. (2014). *Oil Sparks in the Amazon. Local Conflicts, Indigenous Populations, and Natural Resources.* Athens, Georgia: University of Georgia Press.

Vasquez, P. I. (2016). Four Policy Actions to Improve Local Governance of the Oil and Gas Sector. *International Development Policy. Revue internationale de politique de developpement [Online], 7.2*.

Vasquez, P. I. (2018). *China, Oil, and Latin America. Myth vs Reality.* Adrienne Arsht Latin America Center. Washington, DC: The Atlantic Council.

Vasquez, P. I. (Forthcoming 2018). China's Oil and Gas Footprint in Latin America and Africa. *International Development Policy. Revue internationale de politique de developpement [Online]*.

Vasquez, P. I. (May, 2016). *Argentina's Oil and Gas Sector: Coordinated Federalism and the Rule of Law.* Wilson Center, Latin America Program. Washington, DC: Wilson Center.

Vicente, R. G. (2012). The Political Economy of Sino--Peruvian Relations: A New Dependency? *Journal of Current Chinese Affairs, 41*(1), 97-131.

Vicente, R. G. (2013). Development Dynamics of Chinese Resource-Based Investment in Peru and Ecuador. *Latin American POlitics and Society, 55*, 46-72.

Vines, A., Wong, L., Weimer, M., & Campos, I. (2009). *Thirst for African Oil Asian National Oil Companies in Nigeria and Angola.* London: Chatham House.

White, B. (2005, August 3). Chinese Drop Bid To Buy U.S. Oil Firm . *The Washington Post*.

WITS. (2018, August 22). *World Integrated Trade Solution.* Retrieved from https://wits.worldbank.org/CountrySnapshot/en/LCN/textview

Xu, Y. (2017). *China's Strategic Partnerships in Latin America. Case Studies of China's OIl Diplomacy in Argentina, Brazil, Mexico, and Venezuela, 1991-2015.* Lanham-Boulder-New York-London: Lexington Books.

Yanguas, J. A. (2011). *2011 ¿Minería sin fronteras? Conflicto y desarrollo en regiones mineras del Perú.* Lima: Instituto de Estudios Peruanos - Pontificia Universidad Católica del Perú.

Yanguas, J. A. (2018). Extractive industries and regional development: Lessons from Peru on the limitations of revenue devolution to producing regions. *Regional and Federal Studies*.

Project Background

The Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE) addresses the long-term security and sustainability of the European raw material supply from European and non-European countries.

Using a dialogue-based approach in a seven-member consortium, the project brings together governments, industry and civil society to deliver policy recommendations for an innovative European strategy on future EU mineral raw-material supplies.

The project holds environmental and social sustainability as its foundation in its approach to increasing the security of European Union mineral raw-material supply and enhancing competitiveness of the EU mining industry.

Over a three-year period (2016-2018), STRADE will bring together research, practical experience, legislation, best practice technologies and know-how in the following areas:

1. a European cooperation strategy with resource-rich countries;
2. internationally sustainable raw-material production and supply; and
3. strengthening the European raw-materials sector.

Project Identity

Project Name	Strategic Dialogue on Sustainable Raw Materials for Europe (STRADE)
Coordinator	Oeko-Institut; Doris Schueler, Project Coordinator, d.schueler@oeko.de
Consortium	OEKO-INSTITUT E.V. – INSTITUT FUER ANGEWANDTE OEKOLOGIE (Oeko-Institut) Merzhauser Strasse 173, Freiburg 79100, Germany
	SNL Financial (AB) Olof Palmes gata 13, Se -111 37, Stockholm, Sweden
	PROJEKT-CONSULT BERATUNG IN ENTWICKLUNGS-LAENDERN GMBH (Projekt-Consult) Eulenkrugstraße 82, 22359 Hamburg, Germany
	UNIVERSITY OF DUNDEE (UNIVDUN) Nethergate, DD1 4HN Dundee, United Kingdom
	GEORANGE IDEELLA FORENING (GEORANGE) Box 43, Mala 93070, Sweden
	UNIVERSITY OF WITWATERSRAND JOHANNESBURG (WITS) Jan Smuts Avenue 1, Johannesburg 2001, South Africa
	DMT-KAI BATLA (PTY) LTD (DMT) P.O Box 41955, Craighall, 2024, South Africa
Funding Scheme	Horizon 2020 Programme, Grant Agreement number 689364
Duration	1.12.2015 – 30.11.2018
Budget	EU funding: €1 977 508.75
Website	www.STRADEproject.eu

Funded by the Horizon 2020 Programme of the European Union