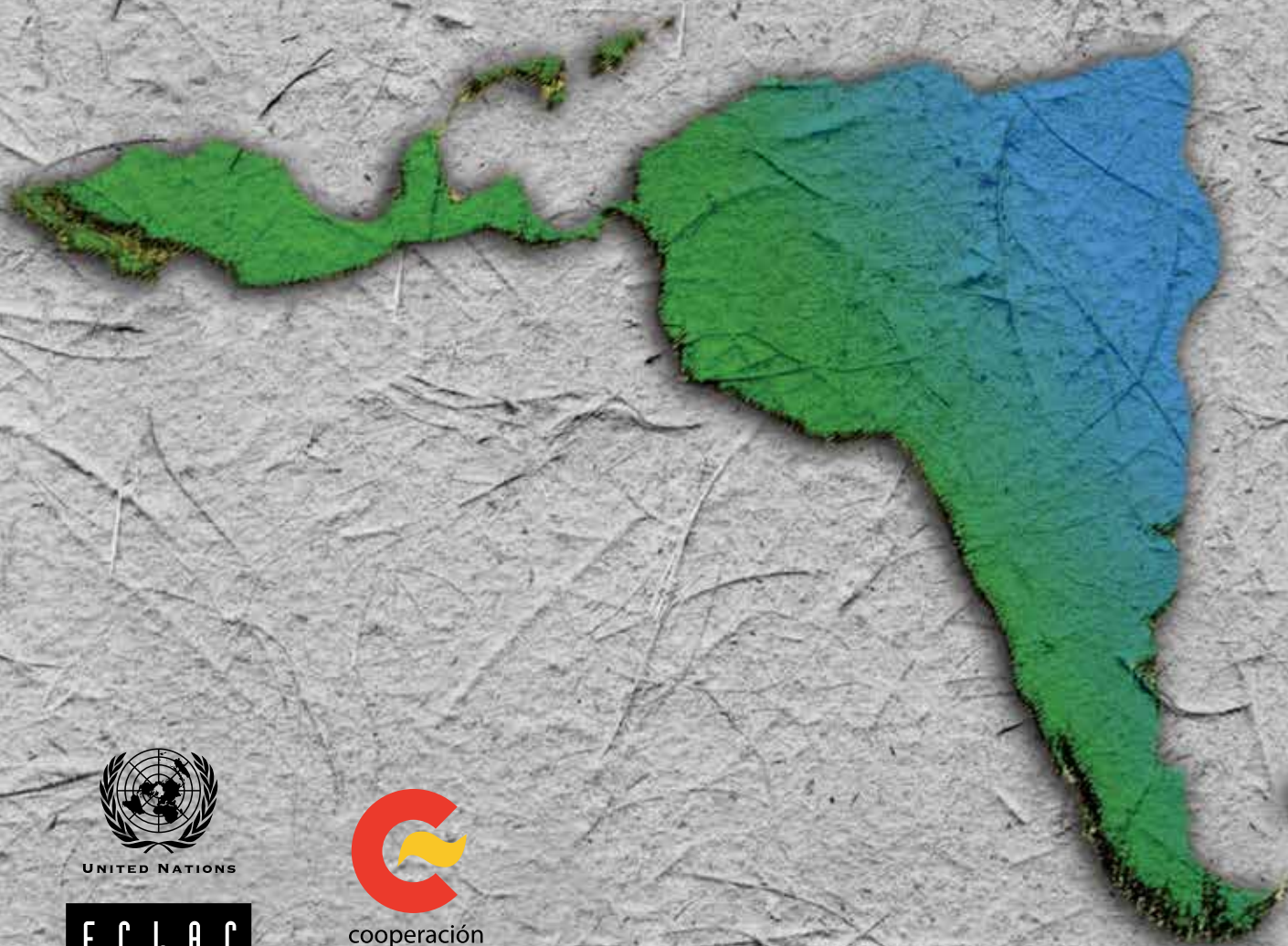


# GOVERNANCE OF STRATEGIC MINERALS IN LATIN AMERICA: THE CASE OF LITHIUM

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# Governance of strategic minerals in Latin America: the case of Lithium

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This document has been prepared by Remco Perotti, Consultant of the Economic Commission for Latin America and the Caribbean (ECLAC) and Manlio F. Coviello, Chief of the Natural Resources and Energy Unit of ECLAC, within the framework of the cooperation programme between ECLAC and the Spanish Agency for International Development Cooperation (AECID).

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## Introduction

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC) annually publishes a study on the economic development in Latin America and the Caribbean. The latest edition of this study (ECLAC, 2015) reveals that there has been a slight growth of fiscal revenues<sup>1</sup> as a percentage of the GDP in Latin-American states. However, the study also shows that this growth is threatened by the weakness in revenue from non-renewable natural resources.

This is cause for concern because of the relative importance of the natural resources sector to the region; Latin American states still rely heavily on the exports of natural resources for successful integration in the global economy (Singh, 2013; ECLAC, 2015). The appropriation and efficient investment of resource rents from natural resources is an important determinant of development in these countries, where the resource extraction industry (REI) is of such importance.

Important international organizations such as the Organization for Economic Co-operation and Development (OECD), G20 and International Monetary Fund (IMF) are advising developing countries to increase their tax collection (Von Haldenwang, 2011).

The relatively low international mining prices during the 1992s<sup>2</sup> led Latin American governments to believe that mining would not be a significant source of fiscal revenue. Mining was generally seen as an instrument to bring variety to the types of Foreign Direct Investment (FDI, and to achieve a more geographically balanced growth-pattern. This led to governments in the region establishing very attractive fiscal regimes,<sup>3</sup> or fiscal agreements with private firms, in order to incentivize FDI. However attractive for private firms, the lenient fiscal regimes led to an imbalance in the division of the resource rents between host-governments and private firms.

Mineral commodities prices have risen significantly in the past decade —mineral prices grew by over 300% since 2003 (NSI, 2013)— which led to growth in the mining sector of the region of Latin America and the Caribbean (LAC). However, host-governments have not been able to benefit equally from the rise in mineral prices. Old regressive fiscal regimes in the region partially explain why host-

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<sup>1</sup> Fiscal revenue is the total state-income through taxation.

<sup>2</sup> For example: gold and silver were approximately US\$ 10,500 and US\$ 175 per kilogram during the 1990s, while in 2012 they were respectively US\$ 41,200 and US\$ 1,100 (NSI, 2013).

<sup>3</sup> A fiscal regime, in this document, refers to a broad variety of tax and contractual arrangements, including signature bonus payments, royalties, income tax, production-sharing, resource-rent taxes, and state participation, among others (IMF, 2012b).

governments—in large part— were not able to capture the revenues from the increasing commodity prices. Another explanation is that the fiscal administration is often difficult and badly executed.

The IMF (2012) comments that the, often excessive, variety and complexity of REI fiscal regimes have often posed serious challenges to developing states; important tax rules have often been complex, unclear, or open to abuse. This has led to inefficient taxation, which is reasserted by the ECLAC's research as indicated earlier, showing weakness in revenue from renewable resource sectors.

Developing a successful national policy for the development of a strategic mineral involves many considerations. When it comes to public policies there is more to consider than just the national economy; there are often environmental issues related to mineral-exploitation, and local communities affected by the mining industry. A measurement of success thus depends on the definition thereof. Success might be measured in the sustainable growth of an industry, exports, contribution to the national GDP, or it might include socio-economic development, collected revenue, or locally adding value to the industry.

With regard to the national economy, there are long-term policies and short-term policies, respectively focusing on industry development and maximal rent extraction, for example. Long-term policies might also benefit intergeneration-equality.

Either way, it is important to develop a policy that is broadly supported by a country's citizens, and fairly shares in the economic resource rent. A country can chose to develop its own resource extraction companies, but this often involves a high level of expertise, and high levels of investment. Another way is through taxing private firms that extract minerals or resources. A solid fiscal regime, for a great deal, depends on effective institutions.

These issues are explored in this report, with analyses of public policies that stimulate, or facilitate, national economic growth, through sharing the economic resource rent. The public policies regarding issues of environmental damage, or local communities affected by mining projects—although equally important—are not emphasized in this report. They will however be briefly addressed in this document, with regard to the policy proposal of the Chilean National Lithium Commission.

## I. The lithium industry

States in the LAC region are home to some of the world's most extensive mineral reserves, with great reserves of copper, iron, silver, and tin. Another non-renewable resource that is gaining salience is lithium. The lithium-industry has a significant growth-potential, due to the application of lithium in Li-ion batteries. Li-ion batteries are widely used for various forms of energy-storage, from smart-grid systems to batteries for electronic vehicles.

The furthering of the non-fossil fuel-dependent automotive industry would be welcome in highly urbanized Latin America, where air pollution is a critical issue, and where motor vehicle density is escalating (ECLAC, 2014). The LAC region contains approximately 65% of the global lithium resources (COCHILCO, 2014; SERNAGEOMIN, 2014b; ECLAC, 2014).

The three states with the highest amount of available lithium resources are Bolivia, Chile, and Argentina, see Appendix 1 for a representation of what is known as the lithium triangle. Of the three, only Chile and Argentina are significant lithium producers. Bolivia is in the process of developing its lithium-industry.

Chile, one of the biggest lithium producers in the world, is the only state that has classified lithium as a non-concessible strategic mineral of national interest. This means that lithium is linked to the national interest, and can therefore only be exploited by the state (COCHILCO, 2014). There are, however, two mining firms that were granted lithium-concessions either before the metal was declared strategic, or through a Chilean state institution. These two mining firms are the only lithium producers

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