



EU-LAC Foundation

# Opportunities for the bi-regional strategic partnership in shaping a greener recovery

II EU-LAC Essay Contest on the Bi-Regional Partnership



EU-LAC Foundation

# **Opportunities for the bi-regional strategic partnership in shaping a greener recovery**

II EU-LAC Essay Contest on the Bi-Regional Partnership

The European Union – Latin America and Caribbean International Foundation (EU-LAC Foundation) was created in 2010 by the Heads of State and Government of the European Union (EU) and the Community of Latin American and Caribbean States (CELAC) member states. Its Members are the Member states of the EU and CELAC as well as the EU itself. The Foundation is a tool of the EU-LAC partnership and its activities feed into the intergovernmental dialogue, in line with the bi-regional Action Plan.

The EU-LAC Foundation was entrusted with the mission of strengthening and promoting the strategic bi-regional relationship, enhancing its visibility and fostering active participation of the respective civil societies. Based on this mission, the Foundation published

Based on this mission, the Foundation has organised the **II EU-LAC Essay Competition** on global and/or sectoral issues concerning the bi-regional partnership. The main purpose of the EU-LAC Foundation Essay Competition is to receive essays on topics of relevance to the bi-regional partnership, especially academic papers aimed at increasing visibility and promoting mutual knowledge between the two regions.

For this second edition the theme chosen was **“Opportunities of the bi-regional strategic partnership in shaping a greener recovery”**.

The publication of the I EU-LAC Essay Competition is available through the following link:

<https://eulacfoundation.org/en/new-multilateralism-age-covid-19-perspective-european-union-latin-america-and-caribbean-relations>

EU-LAC FOUNDATION, 2021  
Grosse Bleichen 35  
20354 Hamburg, Germany  
[www.eulacfoundation.org](http://www.eulacfoundation.org)

PUBLISHED BY:  
EU-LAC Foundation  
GRAPHIC DESIGN: Juan Barrera  
PRINTING: Scharlau GmbH  
ISBN: 978-3-949142-07-9

This edition was produced by the EU-LAC Foundation. The Foundation is financed by its Members and, in particular for this initiative, by the European Union and the Federal Republic of Germany. The concepts expressed in the presentations compiled in this edition are solely the responsibility of the authors and cannot be considered as the point of view of the EU-LAC Foundation, its Member States or the European Union.

This publication is copyrighted, although it may be freely reproduced by any means for educational purposes or to carry out promotion, advocacy or research activities as long as the source is cited appropriately. The holders of the copyright request to be informed of the mentioned uses in order to evaluate their impact. To contact the Foundation via email: [info@eulacfoundation.org](mailto:info@eulacfoundation.org).



Federal Foreign Office

# INDEX

PRESENTATION	V
1. FAIR BI-REGIONAL COOPERATION FOR A GREEN RECOVERY. CONSIDERATIONS DERIVED FROM THE CASE OF LITHIUM PRODUCTION	1
2. THE NEW CARBON EMISSIONS BORDER ADJUSTMENT MECHANISM OF THE EUROPEAN UNION: WHAT IMPLICATIONS DOES IT CREATE FOR THE BI-REGIONAL ASSOCIATION?	16
3. THE EU-LAC PARTNERSHIP FOR A GREEN RECOVERY: CHALLENGES AND OPPORTUNITIES TO BUILD FORWARD BETTER	33

## PRESENTATION

The EU-LAC Foundation is pleased to present the publication “Opportunities for the bi-regional strategic partnership in shaping a greener recovery” that gathers the three winning essays of the II EU-LAC Essay Competition on the Bi-regional Partnership.

The competition was convened with the objective of identifying the challenges caused by the need to rebuild from the damage caused by the Pandemic, as well as the opportunities and priorities in the bi-regional partnership in terms of environmental sustainability.

The theme selected for the second edition of the competition responds to common priorities identified by high authorities of both regions. In December 2020, at the EU27-LAC Informal Ministerial Meeting, Ministers of Foreign Affairs from the European Union, Latin America and the Caribbean countries recognised that “economic recovery from the socio-economic damage caused by the pandemic cannot be sustainable without addressing the global challenges of climate change and biodiversity loss and moving towards the circular economy”. In addition, the Ministers highlighted their mutual interest in seeking ambitious outcomes at the COP26 to be held in November 2021 in Glasgow.

Senior officials from both regions have frequently stressed the importance of taking action to enable climate resilient low-carbon development. This means that economic recovery must promote sustainable development, aim for carbon neutrality in the second half of this century and meet international commitments.

There are several opportunities for countries in the European Union, Latin America and the Caribbean to incorporate climate-friendly initiatives into their economic recovery plans, with the aim of building a more sustainable and resilient future. And this resonates with public opinion: recent studies show that 71% (seventy-one percent) of the global public believe that climate change is as serious a long-term problem as COVID-19 and support a greener economic recovery (Ipsos Global Advisor, 2020).

Notable among these opportunities is the European Green Deal, a package of legislative measures aimed at achieving the EU’s net zero carbon emissions targets by 2050. Latin American and Caribbean countries have also made substantial progress in meeting the challenges of tackling climate change. Through specific climate change legislation, these countries are developing low-emission strategies and policies.

It is clear, however, that the objectives of these efforts cannot be achieved if countries act alone. Bi-regional partnership is key to successfully overcoming this pandemic and sustainably meeting the challenge of climate change.

The three prize-winning essays point in this direction. Using the case of lithium in Argentina, Melisa Escosteguy and Walter Fernando Díaz Paz identify possible points and instruments of cooperation in the environmental, social, political, and economic dimensions. In the second essay, Iosu Iribarren López and Fernando de la Cruz Prego outline the possible commercial, political and cooperation implications for the bi-regional association within the new carbon emissions border adjustment mechanism of the EU. Finally, in the third essay, Augusto Heras, analyses the EU-LAC strategic partnership and suggests some paths of cooperation for a green recovery.

The EU-LAC Foundation would like to thank Alonso Brenes, Consultant at the World Bank and Guy Edwards, Senior Consultant at the Inter-American Development Bank for being part of the outstanding international jury committee that evaluated the three winning essays of this second competition.

Enjoy your reading!

Adrián Bonilla  
**Executive Director**

# 1. FAIR BI-REGIONAL COOPERATION FOR A GREEN RECOVERY. CONSIDERATIONS DERIVED FROM THE CASE OF LITHIUM PRODUCTION IN ARGENTINA

Melisa Escosteguy<sup>1</sup>  
Walter Fernando Díaz Paz<sup>2</sup>

## EXECUTIVE SUMMARY

Different policies aimed at decarbonising the energy matrix are being promoted by many countries and regions. In Argentina, these policies translate into the advancement of projects related to the production of lithium and the generation of energy from renewable sources. In this essay we address the possibilities for cooperation between the European Union (EU) and Latin America and the Caribbean (LAC) in the context of the efforts to move towards a greener recovery.

To do this, we look at a particular case – lithium production in Argentina – and we analyse the power asymmetries that exist between countries of the North and the Global South and their possible impacts on the cooperation between regions such as the EU and the LAC. Suggesting a fair energy transition as a horizon, we propose the need for a bi-regional cooperation based on horizontal and equitable principles, and we identify three dimensions that the advancement of the cooperation must be based on. After pointing out some useful interregional tools for a greener recovery, we conclude that these proposals should include the collaborative design of different management instruments that allow for the decarbonisation of the current energy matrix and enable democratic, sustainable and decentralised access to energy.

## INTRODUCTION

Efforts to mitigate climate change have become urgent over the recent years. Different policies aimed at decarbonising the energy matrix are being promoted by large regions such as the European Union<sup>3</sup>, and by influential countries such as the United States and China. Whilst the transition to more sustainable energy sources has already begun, the

1 Anthropologist and CONICET doctoral fellow

2 Engineer in Natural Resources and Environment and CONICET doctoral fellow

3 “2050 long-term strategy”, accessed on 25 August 2021, [https://ec.europa.eu/clima/eu-action/climate-strategies-targets/2050-long-term-strategy\\_en#tab-0-0](https://ec.europa.eu/clima/eu-action/climate-strategies-targets/2050-long-term-strategy_en#tab-0-0)



development of “green” technologies has accelerated. Electric vehicles, together with photovoltaic panels and wind energy, are some of the fastest advancing technologies (Habib, Hansdóttir and Habib 2020; Lee et al. 2020). However, one of the great problems of this transition is its high dependence on some metals and minerals (Voskoboynik and Andreucci 2021; Wang et al. 2020).

Lithium, in particular, is used in the manufacture of batteries for electric mobility and renewable energy storage, which is why it is as a critical element for this period. In 2020 it was incorporated into the lists of critical minerals put forward by the European Union and the United States (Vázquez 2020). Currently, Argentina is the fourth largest lithium producer in the world and the second largest lithium supplier to the European Union<sup>4</sup>. Large automakers such as BMW, Tesla, Volkswagen and Toyota have partnered with lithium-producing companies in Argentina to guarantee their lithium supply and thus compliance with the decarbonisation policies.

In the Puna region of Argentina, lithium is extracted from brine, in the continental salt flats that are located in the north of the country. Evaporitic techniques used for its extraction consist of pumping brine into large evaporation pools where, after months, a concentrated solution is obtained. Although today the Puna region has taken centre stage at the international level for its lithium reserves and for being part of the so-called “Lithium Triangle” (Argentina, Bolivia and Chile), it has been historically inhabited by indigenous and peasant communities. Small-scale agriculture, animal husbandry of goats, llamas, and sheep, along with the production of textiles and handicrafts, have for centuries supported the communities (Dorn and Ruiz Peyré 2020; Göbel 2013). In this context, the concessions granted by provincial governments to lithium-producing companies overlap with grazing lands, indigenous territories, and even protected areas. Various conflicts have for this reason taken place over the use of water and the territory, creating tensions between the mining companies, the State and the communities (Argento and Puente 2019; Dorn 2020).

Some environmental problems have added to the social conflicts that have arisen since the start of the prospecting and exploitation of lithium. Recent studies have shown that there is a correlation between the extraction of lithium from brines and the decrease in vegetation cover and the increase in temperatures in the areas surrounding the projects (Liu and Agusdinata 2020; Liu, Agusdinata and Myint 2019). Changes have also been recorded in the water table levels of the salt flats and, more generally, in the hydrogeological balance (Marazuela et al. 2019a; 2019b). The water consumption derived from the entire production process has also been addressed (Flexer, Baspineiro and Galli 2018) and it has been identified that the availability of groundwater has decreased in the area near the extraction and some solutions have been proposed to optimise the water usage (Baspineiro, Franco and Flexer 2020; Liu and Agusdinata 2021). As with other critical minerals, much of the lithium currently traded is extracted

---

<sup>4</sup> “Carbonates; lithium carbonate imports from Argentina in 2019”, accessed on 25 August 2021, <https://wits.worldbank.org/trade/comtrade/en/country/All/year/2019/tradeflow/Imports/partner/ARG/product/283691>

from developing countries where governments have failed to apply environmental control regulations and policies to take advantage of the income generated by extraction (Wang 2020).

Orlando, a resident of Susques, a community in the Argentine Puna, summed up his concerns about the extraction of lithium and the energy transition in Argentina as follows: “I say that God wants an electric car to arrive here one day because I believe that we are benefiting other people, other continents, we are in a place of purity and our benefits are taken from us (...) I do not know if one day we will have electric cars here, probably so, and it is likely that when we finally have those electric cars, then maybe for them it will already be considered garbage”. In addition to pointing out his concerns, Orlando also pointed out some asymmetries between the territories where lithium is extracted and the centres where electric vehicles are manufactured: “Lithium will be that way. They are going to benefit, they are going to stop contaminating their city for several years, there will be a pause in the pollution in their industry, and then they are going to give us back our lithium, which is natural to our land, but lithium that has been industrialised (...) and we will have to keep that.” Orlando’s concern stems from the lack of public policies in Argentina to guide the energy transition in a democratic way, but also from the absence of consultation with communities about lithium production in their territory (Marchegiani, Morgera and Parks 2020).

Bearing these concerns in mind, in this essay we address cooperation between the EU and the LAC region in the context of efforts to mitigate climate change and move towards a greener recovery. For this, we start from a particular case and a premise. Our case is the production of lithium in Argentina and its role in this recovery worldwide. Our premise is that fair bi-regional cooperation is essential, insofar as it questions the ways in which the energy transition is currently developing and provides horizontal tools to generate improvements and open the debate on the subject in the EU and LAC countries.

## **ENERGY TRANSITIONS, LITHIUM AND JUSTICE**

Some studies have indicated that energy transitions generate or may generate winners and losers, deepening on the vulnerability of some countries and communities (Sovacool et al. 2019a; Sovacool et al. 2021) and driving dispossession, environmental degradation and uneven development (Kramarz et al. 2021). To move towards a greener recovery in global terms, the energy transition should guarantee social justice throughout the entire production process. In the case of lithium, fair and sustainable practices should be guaranteed from extraction to use in electric vehicles (Perreault 2020). In fact, however, lithium extraction and the policies that support it have generated injustices that call into question the justice of the entire production process and of the energy transition in general (Marchegiani, Morgera and Parks 2020; Escosteguy in press).

In order to contribute to the mitigation of climate change and to the objectives set out in the 2030 Agenda and in the Paris Agreement, it is essential to reduce CO<sub>2</sub> emissions produced by the transport sector. Although other sectors need to be transformed in parallel (the energy sector, the industrial sector and agriculture, among others), transport is particularly important since it represents approximately 27% of the EU's total emissions (Pichler et al. 2021). Guided by this concern, EU member countries have promoted the manufacture of electric vehicles with financial and non-financial incentives that vary from country to country (ACEA 2020; Fluchs 2020). They have furthermore passed legislation and quality standards for the manufacture of batteries, which are currently being updated to guarantee sustainability throughout the entire life cycle<sup>5</sup>. This last objective is however far from being achieved.

Whilst lithium has allowed to promote the transition towards electromobility in some countries of the so-called “Global North” and is conceived by environmentalists and academics of these countries as a possibility to advance towards a post-carbon future (Perreault 2020), for those who inhabit the territories where the extraction is carried out, lithium has deepened some inequalities. These inequalities are often based on the actions of the companies responsible for the production of lithium and the inadequate policies to regulate the extraction.

Currently, in Argentina only two lithium projects are in production (despite there are more than 60 projects in initial stages). One of them is Fénix, located in Salar del Hombre Muerto and operated by Minera del Altiplano, the Argentine subsidiary of Livent Corporation. The other is the Salar de Olaroz project located in the salt flat under the same name and operated by Sales de Jujuy, a joint venture between Orocobre Limited, Toyota Tsusho Corporation and JEMSE. Although Fénix has been operating since 1997 and Salar de Olaroz since 2015, in neither of the two cases was there a prior, free and informed consultation carried out in the terms established by the National Constitution and ILO Convention 169 (Marchegiani, Morgera and Parks 2020). This has generated some conflicts, linked to mobilisations demanding a consultation in the terms established by law in the case of Olaroz, and mobilisations in the territories surrounding Fénix, rejecting the construction of a new aqueduct to supply water to the project (Escosteguy, in press). In addition to giving rise to conflicts, the absence of consultation leads to the impossibility for communities to decide on their future and to participate in the decision-making that affects their territories, their ways of life and their resources.

In addition to the lack of proper consultation, there have been demonstrations related to the partially informal work that local workers carry out at the plant. The COVID-19 pandemic has even increased these vulnerabilities as many workers have been laid

---

<sup>5</sup> “Questions and Answers on Sustainable Batteries Regulation”, accessed on 25 August 2021, [https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_20\\_2311](https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_2311)

off<sup>6</sup>. Another reason for tension between local communities, mining companies and provincial states arises from the fact that the inhabitants of the territory argue that lithium mining has not brought too many benefits to the place. This is due to the low amount that companies pay in royalties (up to 3% of extraction at the mine head) and the low cost of royalties for mining concessions<sup>7</sup>. Although there have so far been some attempts by national and provincial governments to move towards battery manufacturing in the country, these attempts have not made much progress (Obaya, López and Pascuini 2021).

On top of that there are claims to access environmental information and social participation in environmental management processes (Gundermann and Göbel 2018). Concerning lithium there is a strongly centralist behaviour in the administration and management of environmental information (Babidge 2019). Although this information is declared of public interest in Argentina, it is still very difficult to access it, both for local actors and communities and for the researchers themselves. In this regard, Braig, Costa and Göbel (2015) argue that the management of environmental information intentionally responds to the interests of transnational actors, whereby only information that allows to sustain imaginaries of progress in hegemonic discourses is disseminated in an attempt to mask current extractive processes and their negative socio-environmental impacts (Svampa 2018).

Lithium production, understood within global processes, shows how some countries must internalise certain environmental costs related to extraction processes, costs that directly affect local communities (Gudynas 2016; Pragier 2019). Meanwhile, those countries that import lithium carbonate and have the necessary technological package and financial resources to industrialise it, are moving towards a more sustainable energy matrix (Dorn and Huber 2020). In parallel, lithium production has allowed large companies to increase their profits. Given that none of the companies that produce lithium in the Argentine Puna is owned by local or national capital<sup>8</sup>, as is the case for other extractive activities, those who benefit from the lithium production profits are geographically distant from those who suffer socio- environmental impacts (Veltmeyer 2020).

Furthermore, despite the fact that many of the elements and knowledge necessary to move towards a fair energy transition can be found in Argentina, currently around 550 thousand people, who live in isolated rural populations such as the communities of the Puna do not have access to any source of energy in their homes (INDEC 2010). Although the Argentinian government has had an initiative to install photovoltaic

---

6 “Despidieron a 400 obreros de la construcción en Catamarca y lo comunicaron mediante mensajes de texto a sus celulares”, accessed 31 August 2021, <https://www.infobae.com/politica/2020/04/01/despидieron-a-400-obreros-de-la-construccion-en-catamarca-y-lo-comunicaron-mediante-mensajes-de-texto-a-sus-celulares/>

7 “Tercera declaración del Foro Interuniversitario de Especialistas en Litio de la Argentina”, acceded on 25 August 2021, <https://www.cin.edu.ar/litio-2021-en-la-argentina-una-politica-soberana/>

8 With the exception of JEMSE, a government company in Jujuy province, which owns 8.5% of Sales de Jujuy shares. However, the province’s participation in the project was financed by the project, whereby it is expected that Jujuy will only begin to receive profits from the project in the eighth year of operation.

systems for domestic use in many rural families (Messina and Contreras 2019), fairness and equal opportunities around access to energy are pending debts in Argentina. This suggests that there is a correlation between the form of the energy transition and the uneven geographical development that produces energy peripheries (Golubchikov and O'Sullivan 2020). The Argentine Puna can be understood as a periphery where inequalities and geographical injustices are reproduced in line with physical, historical, cultural, economic and political conditions that end up configuring precarious experiences in access to energy.

To overcome these inequalities, it is necessary to start thinking about the transition towards low-carbon energy systems in terms of a fair energy transition that ensures environmental sustainability and access to energy and contributes to the eradication of poverty, generating decent employment and a greater social inclusion. Lithium can play a leading role for a just transition in Argentina and the world, contributing to a greener recovery in the energy and transport sector. In the LAC region, a fair transition would contribute to democratising and decentralising access to a right such as energy. In this context, bi-regional cooperation is extremely important, but we must first ask ourselves what kind of cooperation we need and with what kind of tools we can achieve it.

According to Kramarz et al. (2021), many of the international efforts to promote the advancement of renewable energy seem to be creating new patterns of displacement, increasing inequality between states. These patterns can be clearly identified for the case of lithium in Argentina. According to the authors, these inequalities lead to the exacerbation of the concentration of wealth, reinforce processes of conflict and corruption, and transfer the forms of extraction, processing, and disposal to countries and regions with less capacity to regulate the impacts. In line with these concerns, Kong (2019) argues that there are power asymmetries between the Global North and South that are also reflected in climate change mitigation efforts. Far from being recent, these asymmetries are historical and run the risk of being reproduced over time if the governance of climate change is not discussed based on cooperation in equitable terms.

## **BI-REGIONAL COOPERATION**

Over the last few years, international cooperation has had various nuances and objectives. EU-LAC cooperation on environmental issues has already come a long way (Descamps 2019). In terms of cooperation for a greener global recovery, a central point has been academic collaboration, which has resulted in information exchange, professional training and funding. It should be noted that academic collaboration is essential for researchers from the Global South since we find ourselves limited when it comes to researching and involving participants at different points.

These limits are primarily associated with the lack of adequate financing. Albeit many LAC countries have public agencies dedicated to promoting science and technology,

funds are still very scarce. This entails difficulties to carrying out a prolonged follow-up on the impacts of climate change (or lithium production in our case) at the local and national level. To overcome these obstacles, we have created networks with researchers and universities from various places, even with networks with access to EU funding. However, these networks and the joint effort, as proposed by Belli (2020), have been based more around the common interests of their members and researchers than on specific policies aimed at cooperation. It is also true that there have been cases in which, in pursuit of obtaining funding linked to a cooperation project, researchers from the Global South have lost some academic independence. The fact that the research agenda is designed only from the funding centres is a problem that must be solved. Otherwise, those of us researching from the Global South are relegated to the place of mere collaborators in projects in which we have no influence on the decision-making.

A related problem is that of financing, an aspect that we must address in terms of academic cooperation is the democratisation of access to information. In many cases, access to environmental information is very limited for Southern countries. According to Pfalzgraf (2021), access to climate data is very expensive and requires years of continuous investment. Thus, many countries in the South cannot access these data. These asymmetries configure and are reflected in the fabric of the networks generated in academic settings. Access to environmental, economic and technological information is key for the production of interregional knowledge and for transparent scientific practice. Along these lines, the fact that in many LAC universities' access to scientific publications is not guaranteed is not less due to the high costs of subscribing to international journals. This leaves us relegated in the participation in debates and discussions that take place about research carried out even in our geographical territory.

Continuing with this idea, Saric et al. (2019) argue that transnational collaboration that can jointly address particular national challenges and broader global challenges is key to a more sustainable future. The authors however also identify that North-South power asymmetries represent an obstacle to cooperation. Among the recommendations that the authors suggest advancing cooperation, we find three that are significant for our analysis: (i) the development of research aimed at solving specific problems; (ii) the involvement of civil society as a central actor in cooperation for the mitigation of climate change; and (iii) the inclusion in the discussion of all the actors involved (in a project or public policy, for example). Regarding the first point, it is important to note that LAC faces great challenges when it comes to mitigating climate change and that it has great potential for the advancement of renewable energies and electromobility. Unfortunately, the LAC countries are not in a financial position to develop this potential. Castro Pereira (2017) identifies this as a key area for bi-regional cooperation: the EU could contribute to this development with investment.

Given that frequently among the cooperation possibilities, a reference is made to the transfer and adaptation of technology, the transfer of knowledge and financial support, but some elementary parts such as citizen participation are left out, points (ii) and (iii) mentioned by Saric deserve to be considered. To think about a greener recovery,

in the context of a transition and fair cooperation, it is important to consider that decisions and participation occur on two scales. According to O’Faircheallaigh (2021), a global scale can be identified where transnational actors mainly intervene, establish agreements regarding the place, form and time in which negotiations and investments must take place. These actors can also promote the elaboration of agreements, treaties and plans to promote sustainability and good practices in the use of natural resources. The local scale, on the other hand, involves and affects, either positively or negatively, a smaller nucleus of actors. Unlike global actors, the latter tend to lack the capacity for negotiation and decision-making, being in some way at a disadvantage and vulnerable with regards to decisions on what, how and where interventions will be carried out in their geographical territory (Cascadden, Gunton and Rutherford 2021; O’Faircheallaigh 2021). If we return to the case of lithium, we can see that many decisions are made globally, not only guided by the price and demand of lithium, but also by the decarbonisation policies that are applied in other continents. Meanwhile, local communities have little influence on the making of the decisions about the future of their territories.

Understanding that the needs are not the same on a global scale as on a local scale, and that the realities of the Northern countries are different from those of the Andean communities (Babidge 2019), a bi-regional cooperation that points to a more sustainable and democratic future should encourage participation and debate on both scales. Some studies have shown that the capacity for participation and negotiation of local communities increases as they fight for the recognition of their rights (O’Faircheallaigh 2021). Bi-regional cooperation could collaborate with these local processes either by guaranteeing access to information or by promoting the improvement of the living conditions of local communities. The latter can be achieved through investment in infrastructure, through protocols that support the regulation of work in sectors such as mining, and / or through programmes that assist communities in continuing traditional activities. The importance of traditional activities throughout the LAC is linked not only to their low environmental impact and their role in mitigating climate change, but also to the possibility of recognising other ways of being and inhabiting the territory. To make these other forms possible, at a global level, cooperation must aim at regulating investments and breaking with the extractivist logic that, according to some authors, is still present in the form of green extractivism (Voskoboynik and Andreucci 2021).

In order to move towards a greener recovery and a fair bi-regional cooperation, we must collectively discuss some questions: Do LAC and the EU share the same goals in mitigating climate change? Can the proposals put forward by and for the EU be adapted to the Latin American context? How to prevent green recovery from taking a completely extractivist form and, on the contrary, promote access to clean energy? How to go from a transition that generates injustice in many LAC territories to one that is truly sustainable and inclusive? How to involve civil society in these debates?

## POSSIBLE IDEAS TO DRAFT A FAIR BI-REGIONAL COOPERATION

In response to these questions, the way in which lithium production is being carried out in Argentina allows us to identify three central dimensions from which a fair bi-regional cooperation must be drafted. The first corresponds to the environmental dimension. Given the environmental injustices generated by lithium production in areas close to the extraction, cooperation should be directed towards the Research and Development (R&D). New research to identify in depth the impacts of lithium production in the Argentine Puna and how to mitigate them are necessary, as well as the development of technology that guarantees a more sustainable production. Cooperation should promote financing possibilities that allow developing the R&D agenda of the countries of the South. Financing could be included within existing programmes such as Euroclima +, Horizon Europe, MSC, among others, but it is essential that the LAC members participate in decisions on financing. Furthermore, for lithium production to contribute to a fair transition that does not replicate the logic of business-as-usual, it is necessary to study how much lithium is necessary to drive decarbonisation. Similar research regarding metals and minerals critical to green recovery should be conducted following the circular economy approach. Here, research efforts are no longer concentrated in the territories where extraction takes place but also in those places where batteries are produced, consumed and disposed of. The participation of local researchers in this process should not be left aside as it increases the credibility, transparency and legitimacy of the results obtained.

The second dimension to consider corresponds to the social and political aspects and starts from analysing role of the countries and inhabitants of the territories where lithium is produced in the decision-making. In this essay we have shown some injustices linked to the lack of consultation with local communities, job insecurity of many people hired and inequalities in access to energy. As proposed by Saric et al (2019), from local communities to users of electric vehicles, all actors should have the possibility to discuss on equal terms the form and scope of this transition. This includes discussing where lithium is produced, what technologies are used, how costs and benefits should be distributed, and how much lithium is produced considering the aforementioned studies.

A tool that could contribute to the prior consultation is the incorporation as a requirement of the quality standards required by the EU for the manufacture of batteries. The states where the extraction is carried out must also undertake to carry out consultations within the framework of the ILO Convention 169 and the constitutional requirements. This is essential for guaranteeing human rights of local communities. However, for these discussions to be carried out within a horizontal framework, in addition to prior, free and informed consultation, it is essential that the information be accessible to all parties. Environmental information is a key aspect to making the decision in the territory transparent. It must thus be understandable, updated and developed by professionals without conflicts of interest to prevent corporate or state interests from clouding the accuracy of the data.



With regards to the workplace, it is urgent to move towards a stabilisation of jobs. Both workers employed in the automotive and electronics industry and those employed in mining (linked to strategic elements) must have all their labour rights guaranteed, including health coverage and retirement contributions. It is very likely that, in general terms, the energy transition implies transformations in jobs at a global level (Pichler et al. 2021): as some industries and ways of producing become obsolete, they will need to be replaced. It is thus necessary to plan actions that ensure that those people who previously performed work in the different stages of manufacturing of internal combustion vehicles, or energy sectors such as oil refining, distribution of liquefied gas and packaging, technical service and maintenance, among others, can be favourably inserted in other productive areas. Bi-regional cooperation can for this purpose advance training of workers in the sectors to be replaced in new areas and the development of a plan that allows relocated workers not to lose their income. In the first transition period, the support of many workers will depend on the state's ability to subsidise these transformations. Bi-regional cooperation can be used to discuss what measures to adopt and how to finance this stage.

The last dimension is linked to the economic aspects and involves transforming the way in which costs and benefits are currently distributed. In conjunction with the need to mitigate the negative environmental and social impacts of lithium mining, it is urgent to use economic management tools that allow the communities directly affected by these projects to increase their economic benefits. Among them can be considered economic-environmental management tools or instruments such as environmental taxes and fees or carbon credits, among others, which do not prevent environmental deterioration, but enable the victims to reduce economic losses. Once again, the decision to apply these tools and instruments should be discussed collectively. The development of projects that plan and implement a sustained use of water is also essential as, in economic terms, the availability of water will depend on the mining activity itself and the permanence of different ways of life, cultural patterns, and biological diversity.

Finally, one should not neglect that Argentina, similarly to the rest of the LAC countries, requires programmes that make it possible to substitute the use of fossil energy for renewable sources at the same time that they allow energy access in regions that do not yet have this indispensable resource. Thus, the challenge in the LAC appears to be even greater.

## CONCLUSIONS

In this essay we have briefly outlined the case of lithium production in Argentina to discuss the kind of bi-regional cooperation that may be necessary to move towards a greener recovery. We have also problematised the power asymmetries that exist between countries of the North and the Global South and their possible impacts on cooperation between regions as different as the EU and the LAC. Taking these matters into account, we consider that cooperation should be based on horizontal principles and should not follow the same extractivist logic for the exploitation of natural resources.

In other words, a greener recovery and a fair energy transition require fair bi-regional cooperation that overcomes the barriers imposed by the social, cultural, economic and environmental differences of both regions. For this to happen, we must understand that climate change mitigation transcends environmental and economic aspects and that the ideas of equity and justice are key in policies aimed at such mitigation. Some ideas and approaches on economic growth have resulted in the episodes of dispossession, environmental degradation and appropriation of community territories in pursuit of a green recovery. These approaches and ideas must be questioned even within the framework of bi-regional cooperation in order to effectively promote the application of fair policies and instruments for adapting to climate change.

To exemplify the lines that cooperation should follow, we use the case of lithium and identify possible points and tools for cooperation in the environmental, social and political, and economic dimensions. Generalising these proposals, we conclude that a fair bi-regional cooperation implies collaboratively designing: (a) a research agenda that establishes which problems are a priority and with what approach they will be addressed; (b) policies that promote the development and financing of the R&D; (c) tools and instruments that contribute to the incorporation of all the actors involved in the decision-making; (d) democratic mechanisms for access to information; (e) public policies that allow the decarbonisation of the energy matrix and ensure access to energy for all citizens of both regions. For the design of these points to be truly collaborative, we insist, it is necessary that the objectives and scope of cooperation projects be established considering the perspectives, contexts and needs of the developing countries. Otherwise, there is a risk of perpetuating the already asymmetric power relations, and the tensions and conflicts in the affected territories.

The challenges that arise when designing EU-LAC bi-regional cooperation policies for a green recovery are still many and diverse. In this essay we have tried to argue that the social participation of the multiplicity of actors affected by the green recovery applies to all the cooperation strategies indicated. The instances of dialogue, consensus and reflection at different scales will be the pillar of the journey towards a more sustainable future.

## REFERENCES

- ACEA. «Electric vehicles: tax benefits & purchase incentives», acceso 25 de agosto de 2021. [https://www.acea.auto/files/Electric\\_vehiclesTax\\_benefits\\_purchase\\_incentives\\_European\\_Union\\_2020.pdf](https://www.acea.auto/files/Electric_vehiclesTax_benefits_purchase_incentives_European_Union_2020.pdf)
- Argento, Melisa y Puente, Florencia. «Entre el boom del litio y la defensa de la vida: salares, agua, territorios y comunidades en la región atacameña». En Litio en Sudamérica, editado por Bruno Fornillo (2019), 173-220. *Buenos Aires, Argentina*.
- Babidge, Sally. «Sustaining ignorance: the uncertainties of groundwater and its extraction in the Salar de Atacama, northern Chile». *Journal of the Royal Anthropological Institute*, n°25 (1) (2019): 83-102. <https://doi.org/10.1111/1467-9655.12965>
- Baspineiro, Celso Fernando, Franco, Judith y Flexer, Victoria. «Potential water recovery during lithium mining from high salinity brines». *Science of The Total Environment*, n°720 (2020), 137523. <https://doi.org/10.1016/j.scitotenv.2020.137523>
- Belli, Simone. «Revisión bibliográfica de colaboraciones birregionales en Ciencia, Tecnología e Innovación entre Europa, América Latina y el Caribe». *Revista Lasallista de Investigación*, 17(1) (2020).
- Braig, Marianne, Costa, Sérgio y Göbel, Barbara. «Desigualdades sociales e interdependencias globales en América Latina: una valoración provisional». *Revista mexicana de ciencias políticas y sociales*, n°60 (223) (2015): 209-236.
- Cascadden, Maggie, Gunton, Thomas. y Murray, Rutherford. «Best practices for Impact Benefit Agreements». *Resources Policy*, n°70 (2021), 101921. <https://doi.org/10.1016/j.resourpol.2020.101921>
- Castro Pereira, Joana. «Green energy in Latin America: opportunities for the EU-LAC cooperation». *Fundación EU-LAC* (2017).
- Descamps, Clara. «EU-LAC interregional cooperation on climate mitigation. Case study of EUROCLIMA». *Master of Arts Thesis, Euroculture*.
- Dorn, Felix M. y Huber, Christoph. «Global production networks and natural resource extraction: adding a political ecology perspective». *Geographica Helvetica*, n°75(2) (2020), 183-193. <https://doi.org/10.5194/gh-75-183-2020>
- Dorn, Félix M. y Ruiz Peyré, Fernando. «Lithium as a Strategic Resource: Geopolitics, Industrialization, and Mining in Argentina». *Journal of Latin American Geography* 19(4) (2020): 68-90. *doi: 10.1353/lag.2020.0101*.
- Escosteguy, Melisa, Díaz Paz, Walter Fernando, Iribarnegaray, Martín Alejandro, Clavijo, Araceli, et al. «Will electro-mobility encourage injustices? The case of lithium production in the Argentine Puna». En: *Democratizing energy: imaginaries, transitions, risks*, ed por Majia Nadesan, Martin J. Pasqualetti y Jennifer Keahey (en prensa), Elsevier.
- Flexer, Victoria, Baspineiro, Celso Fernando y Galli, Claudia Inés. «Lithium recovery from brines: A vital raw material for green energies with a potential environmental impact in its mining and processing». *Science of the Total Environment*, n°639 (2018), 1188-1204. <https://doi.org/10.1016/j.scitotenv.2018.05.223>

- FluchsDr. rer. pol., Sarah.** «The diffusion of electric mobility in the European Union and beyond». *Transportation Research Part D: Transport and Environment*, 86 (2020), 102462. <https://doi.org/10.1016/j.trd.2020.102462>
- Gudynas, Eduardo.** «Beyond varieties of development: disputes and alternatives». *Third World Quarterly*, n°37(4) (2016), 721-732. <https://doi.org/10.1080/01436597.2015.1126504>
- Göbel, Barbara.** «La minería del litio en la Puna de Atacama: interdependencias transregionales y disputas locales». *IBEROAMERICANA*. n° 13(49) (2013), 135-149. <https://doi.org/10.18441/ibam.13.2013.49.135-149>
- Golubchikov, Oleg y O'Sullivan, Kate.** «Energy periphery: Uneven development and the precarious geographies of low-carbon transition». *Energy & Buildings*, n° 211 (2020), 109818. <https://doi.org/10.1016/j.enbuild.2020.109818>
- Gundermann, Hans y Göbel, Barbara.** 2018. «Comunidades indígenas, empresas del litio y sus relaciones en el Salar de Atacama». *Chungará (Arica)*, n°50(3): 471-486. <http://dx.doi.org/10.4067/S0717-73562018005001602>
- Habib, Komal, Hansdóttir, Snjólaug Tinna y Habib, Hina.** 2020. «Critical metals for electromobility: Global demand scenarios for passenger vehicles, 2015–2050». *Resources, Conservation and Recycling*, n° 154 (2020), 104603. <https://doi.org/10.1016/j.resconrec.2019.104603>
- Kong, Qingyin.** «Justice of Climate Change Governance in the Changing World--Discussion Based on the North-South Relations». *Ekoloji*, 28(107) (2019), 105-113.
- Kramarz, Teresa, Park, Susan, Johnson, Craig.** «Governing the dark side of renewable energy: A typology of global displacements». *Energy Research & Social Science*, n° 74 (2021), 101902. <https://doi.org/10.1016/j.erss.2020.101902>
- Lee, J., Bazilian, M., Sovacool, B., Hund, K., et al.** «Reviewing the material and metal security of low-carbon energy transitions». *Renewable and Sustainable Energy Reviews*, n°124 (2020), 109789. <https://doi.org/10.1016/j.rser.2020.109789>
- Liu, Wenjuan y Agusdinata, Datu B.** «Dynamics of local impacts in low-carbon transition: Agent-based modeling of lithium mining-community-aquifer interactions in Salar de Atacama, Chile». *The Extractive Industries and Society*, 8(3) (2021), 100927. <https://doi.org/10.1016/j.exis.2021.100927>
- Liu, Wenjuan, Agusdinata, Datu B. y Myint, Soe W.** «Spatiotemporal patterns of lithium mining and environmental degradation in the Atacama Salt Flat, Chile». *International Journal of Applied Earth Observation and Geoinformation*, n° 80 (2019), 145-156. <https://doi.org/10.1016/j.jag.2019.04.016>
- Liu, Wenjuan y Agusdinata, Datu B.** «Interdependencies of lithium mining and communities sustainability in Salar de Atacama, Chile». *Journal of Cleaner Production*, n°260 (2020), 120838. <https://doi.org/10.1016/j.jclepro.2020.120838>
- Marazuela, M. A., Vázquez-Suñé, E., Ayora, C. García-Gil, A. y Pal,a. T.** «Hydrodynamics of salt flat basins: The Salar de Atacama example». *Science of the Total Environment*, n° 651 (2019a): 668-683. <https://doi.org/10.1016/j.scitotenv.2018.09.190>
- Marazuela, M. A., Vázquez-Suñé, E. Ayora, C., García-Gil, A. y Palma, T.** «The effect of brine pumping on the natural hydrodynamics of the Salar de Atacama: The damping

- capacity of salt flats». *Science of the Total Environment*, n° 654 (2019b), 1118-1131. <https://doi.org/10.1016/j.scitotenv.2018.11.196>
- Marchegiani, Pia, Morgera, Elisa y Parks, Louisa.** «Indigenous peoples' rights to natural resources in Argentina: the challenges of impact assessment, consent and fair and equitable benefit-sharing in cases of lithium mining». *The International Journal of Human Rights*, n°24(2-3) (2020): 224-240. <https://doi.org/10.1080/13642987.2019.1677617>
- Messina, Diego y Contreras Lisperguer, Rubén.** 2019. «Sostenibilidad energética en América Latina y el Caribe: reporte de los indicadores del Objetivo de Desarrollo Sostenible 7». *Documentos de Proyectos*, (LC/TS.2019/47), Santiago, Comisión Económica para América Latina y el Caribe (CEPAL), acceso el 31 de agosto de 2021, [https://repositorio.cepal.org/bitstream/handle/11362/44686/1/S1900478\\_es.pdf](https://repositorio.cepal.org/bitstream/handle/11362/44686/1/S1900478_es.pdf).
- Obaya, Martin, López, Andrés y Pascuini, Paulo.** «Curb your enthusiasm. Challenges to the development of lithium-based linkages in Argentina». *Resources Policy*, n°70 (2021), 101912. <https://doi.org/10.1016/j.resourpol.2020.101912>
- O'Faircheallaigh, Ciaran.** «Explaining outcomes from negotiated agreements in Australia and Canada». *Resources Policy*, n°70 (2021) 101922. <https://doi.org/10.1016/j.resourpol.2020.101922>
- Perreault, Tom.** (2020). «*Bolivia's High Stakes Lithium Gamble*». *NACLA Report on the Americas*, n° 52 (2) (2020) 165-172. <https://doi.org/10.1080/10714839.2020.1768739>
- Pfalzgraf, Foley.** «From colonial science to climate capacity building: Analyzing uneven access to climate knowledge in Vanuatu». *Geoforum*, n°124 (2021), 165-174. <https://doi.org/10.1016/j.geoforum.2021.05.020>
- Pichler, Melanie, Krenmayr, Nora, Schneider, Etienne, Brand, Ulrich.** «EU industrial policy: Between modernization and transformation of the automotive industry». *Environmental Innovation and Societal Transitions*, n° 38 (2021), 140-152. <https://doi.org/10.1016/j.eist.2020.12.002>
- Pragier, Deborah.** «Comunidades indígenas frente a la explotación de litio en sus territorios: contextos similares, respuestas distintas». *Polis. Revista Latinoamericana*, (52) (2019).
- Saric, Jasmina, Blaettler, Dominic, Bonfoh, Bassirou, Hostettler, Silvia, et al.** «Leveraging research partnerships to achieve the 2030 Agenda Experiences from North-South cooperation». *Sustainability*, 13(17) (2019), 9626. <https://doi.org/10.3390/su13179626>
- Sovacool, Benjamin K., Hook, Andrew, Martiskainen, Mari y Baker, Lucy.** «The whole systems energy injustice of four European low-carbon transitions». *Global Environmental Change*, n°58 (2019) , 101-958. <https://doi.org/10.1016/j.gloenvcha.2019.101958>
- Sovacool, Benjamin, K.** Who are the victims of low-carbon transitions? Towards a political ecology of climate change mitigation. *Energy Research & Social Science*, n°73 (2021), 101916. <https://doi.org/10.1016/j.erss.2021.101916>
- Svampa, Maristella.** «Continuidad y radicalización del neextractivismo en Argentina». *Perfiles Económicos*, (3) (2018).
- Vásquez, Patricia I.** 2020. «The Lithium Triangle: The Case for Post-Pandemic Optimism». *Wilson Center, Latin American Program. Working Paper.*

- Veltmeyer, Henry.** «Latin America in the vortex of social change: Development and social movement dynamics». *World Development*, n°130 (2020): 104916. <https://doi.org/10.1016/j.worlddev.2020.104916>
- Voskoboynik, Daniel M. y Andreucci, Diego.** «Greening extractivism: Environmental discourses and resource governance in the 'Lithium Triangle'». *Environment and Planning E: Nature and Space*, n°0(0) (2021): 1-23. <https://doi.org/10.1177/25148486211006345>
- Wang, Peng, Nan, Li, JiaShuo, Li y Wei-Qiang, Chen.** «Metal-energy nexus in the global energy transition calls for cooperative actions». In *The Material Basis of Energy Transitions*, ed. por Alena Bleicher y Alexandra Pehlken (2020): 27-47. *Academic Press*. <https://doi.org/10.1016/B978-0-12-819534-5.00003-9>