

EU-CHILE HORIZONS: CLIMATE JUSTICE FOR A SHARED STRATEGY ON CRITICAL MINERALS

IGNACIO VÁSQUEZ TORREBLANCA*

The European Union has not only raised the need for strategic autonomy, but has also opened itself up to establishing new international relations. One of these relations in the spotlight is Latin America, which has the highest concentration of critical minerals, key, among other things, for the just energy transition of the Union and of Latin America itself. However, the instruments of EU law have become more flexible beyond Mercosur and the prevailing formalism, and a new cycle of relations is being generated. To a large extent, this adaptation can combine new ways of conceptualizing the role of 'strategic for both parties', since EU energy autonomy and the idea of public diplomacy, which has manifested itself in cases such as Chilean business diplomacy, are not mutually exclusive. The Chilean case is paradigmatic of this crossroads, as the country inserts itself in the idea of putting the sovereignty of natural resources at the service of new imaginary of development that raises horizons for various facets of climate justice. It will also give way to new aspirations proposing, among other things, the circular economy as a mechanism of climate justice or transformations in EU law.

1 INTRODUCTION

At a press conference in Buenos Aires in October 2022, Josep Borrell, High Representative of the European Union for Foreign Affairs and Security Policy, declared that 2023 should be the year of Latin America in Europe and Europe in Latin America. This narrative that set a horizon for both the European Union (EU) and Latin America (LATAM) was a space for imagining horizons between the two.¹ However, the High Representative himself pointed out that it would not be easy to rebuild this strategic partnership, so the design of an economic program would be the first step to unlock. This is where the role of critical minerals appears, which can configure a space for interaction between Latin America and Europe.

According to this, it was pointed out that it would be necessary to draw a panorama that concentrates the contemporary needs of the European Union, the emerging needs of Latin America (especially Chile for the purposes of this research), the role of Permanent Sovereignty over Natural Resources in LATAM, and of course, the new commercial, diplomatic and legal strategies that intertwine new horizons on climate justice.

* Researcher and Assistant Professor in International Law at University of Valparaíso, Chile. Executive Director and Associate Researcher of Center for Studies in Law and Climate Change University of Valparaíso. Legal Assistant for the United Nations International Law Commission with Professor Claudio Grossman. E-mail: ignacio.vasqueztorre@gmail.com; ORCID: <https://orcid.org/0000-0003-4814-0339>.

¹ Detlef Nolte 'The European Union and Latin America: Renewing the Partnership after Drifting Apart' (2023) Hamburg: German Institute for Global and Area Studies (GIGA) - Leibniz-Institut für Globale und Regionale Studien, Institut für Lateinamerika-Studien, 1-2 <<https://nbn-resolving.org/urn:nbn:de:0168-ssoar-85384-1>> accessed 01 March 2024.

The needs of the EU are marked by the economic context of the continent, which to a large extent also cannot be decontextualized from the war in Ukraine. As a result, Europe is in a real hurry to seek an open strategic autonomy, considering new networks and alliances. Consequently, Latin America is seen as a strategic partner in these new ties, due to the mutual support between the two sides, support and closeness in international politics. However, it is worth asking why the persistence of relations with EU is still relevant for LATAM, which raises the debate on the strength of the economy in the reality of the continent. That is to say, between 2005 and 2019 trade in services between the EU and LATAM grew an average of 23 percent per year, compared to 5 percent of trade in goods.² In 2020, the EU's share of LATAM's services imports was 31.2 percent and in turn, exports increased to 19.7 percent.³ In this context, another factor of utmost importance in joint trade relations cannot be excluded, namely the EU's 'geo-economic turn in trade policy', which consists of trade expansion based on the use of economic instruments to pursue strategic domestic and foreign trade policy objectives.⁴ Within this strategic orientation, the importance of raw materials as a joint economic structure for Latin America and the EU is highlighted. It is not news to anyone that Europe seeks to lead in technology transfer and, in turn, to ensure the supply of energy for its citizens. Latin America also has the potential to become a major producer and exporter of critical minerals.

As a result of the above, it will be relevant to analyse the emerging needs of Latin America, among which is the ability of governments to freely structure the strategic protection of their national industries in free trade agreements, since one of the central objectives is to obtain a financial capacity as a means to promote public policies in favor of overcoming social inequality and social justice. Thus, in this debate, it is key to focus on factors such as EU financing, understood as strategic financing, since the fight of Latin American countries against climate change is intense, and even more persistent is the fight against poverty and inequality. Likewise, States such as Chile are part of the group of developing countries, which make great efforts in the consumption and production of modern technologies to recognize the long-term balance between GDP growth and environmental concerns thus constituting a new forms of justice.⁵

The Latin American position, in general terms, recognizes that Europe has lost ground as a trading partner to the Asian investment phenomenon. Despite this, European companies continue to be the main investors in the region, and Europe continues to have soft power or power of attraction in Latin America. This soft power has been based and extended in commercial and diplomatic relations, despite the Latin American risk of reproducing a

² Antoni Esteveadeordal, 'Geopolitics and Trade: Future Relations between the European Union and Latin America and the Caribbean' in Patricia García-Durán Huet and Eloi Serrano Robles (eds), *Geopolitics and Trade in Changing Times: A view from Barcelona* (CIDOB 2020) 28.

³ Jon D Haveman, Usha Nair-Reichert and Jerry G Thursby, 'How Effective are Trade Barriers? An Empirical Analysis of Trade Reduction, Diversion, and Compression' (2003) 85(2) *Review of Economics and Statistics* 480.

⁴ Johan Adriaensen and Evgeny Postnikov, 'Geo-economic Motives and the Negotiation of Free Trade Agreements: Introduction' in Johan Adriaensen and Evgeny Postnikov (eds), *A Geo-Economic Turn in Trade Policy? EU Trade Agreements in the Asia-Pacific* (Springer International Publishing 2022) 3-4.

⁵ Muhammad Usman et al, 'Are Mercosur economies going green or going away? An empirical investigation of the association between technological innovations, energy use, natural resources and GHG emissions' (2022) 113 *Gondwana Research* 53, 53-56.

traditional asymmetric relationship.⁶ Therefore, in the face of this fear anchored in the relationship, Borrell has taken giant steps in recognizing the fact that the EU has interiorised an idea of Latin America isolation in recent years under the idea of the divergence of respective interests.⁷

The Chilean case will be a central part of this research because, like other states in the global South, Chile has deepened its search for access to relevant low-carbon technologies in order to integrate them into national value creation systems. This idea is based on the thesis of replacing a fossil-based, path-dependent rentier state with a fundamentally different, low-carbon economic model.⁸ This decision is risky, but it is based on a deep state conviction, which coincides with the EU High Representative's statement that 'there can be common ground between open strategic autonomy and active non-alignment'.⁹ For the purposes of the Chilean experience, and in line with other countries in the world, technology transfer qualifies as an emerging challenge that has meant that 74% of the signatories of the Paris Agreement have committed to quantifiable energy targets and 94% have included renewable energy targets in one way or another in their national plans.¹⁰ In simple terms, energy transition refers to the shift from one energy pattern to a new energy system, including sources, carriers and services.¹¹ The International Renewable Energy Agency has defined this phenomenon as 'the path towards the transformation of the global energy sector from a fossil fuel-based to a carbon-free one during the second half of this century'.¹² The World Economic Forum calls it a 'transition to a more inclusive, sustainable, affordable and secure global energy system, without compromising the energy balance'.¹³

This energy balance cannot be dissociated from the role of critical minerals (rare earths, platinum group elements, nickel, zinc, etc.), as they constitute an essential standard for high-tech products,¹⁴ often undervalued by market dynamics. These minerals exist mainly in the form of co-association, and operate on the current small scale of their market as

⁶ Detlef Nolte 'The European Union and Latin America: Renewing the Partnership after Drifting Apart' (2023) Hamburg: German Institute for Global and Area Studies (GIGA) - Leibniz-Institut für Globale und Regionale Studien, Institut für Lateinamerika-Studien, 5 <<https://nbn-resolving.org/urn:nbn:de:0168-ssoar-85384-1>> accessed 01 March 2024.

⁷ See Josep Borrell's statement in 2022, in his column called 'Why Europe and Latin America Need Each Other' (*The Diplomatic Service of the European Union*, 30 November 2022) <https://www.ecas.europa.eu/ecas/why-europe-and-latin-america-need-each-other_en> accessed 01 March 2024.

⁸ Andreas Goldthau, Laima Eicke, and Silvia Weko, 'The Global Energy Transition and the Global South' in Manfred Hafner and Simone Tagliapietra (eds), *The Geopolitics of the Global Energy Transition* (Springer International Publishing 2020) 322.

⁹ See Josep Borrell's statement in 2022 (n 7).

¹⁰ International Renewable Energy Agency (IRENA), 'NDCs and renewable energy targets in 2021: Are we on the right path to a climate-safe future?' (2022) International Renewable Energy Agency, Abu Dhabi <https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jan/IRENA_NDCs_RE_Targets_2022.pdf> accessed 01 March 2024.

¹¹ Peter O'Connor 'Energy Transitions' (2010) The Pardee Papers Series No.12 <<https://www.bu.edu/pardee/files/2010/11/12-PP-Nov2010.pdf>> accessed 01 March 2024.

¹² IRENA, 'Energy Transition' (2020) International Renewable Energy Agency, Abu Dhabi.

¹³ World Economic Forum, 'Fostering Effective Energy Transition' (2018) A Fact-Based Framework to Support Decision-Making, vol. 40, McKinsey Co. <https://www3.weforum.org/docs/WEF_Fostering_Effective_Energy_Transition_report_2018.pdf> accessed 01 March 2024.

¹⁴ Benjamin Ballinger et al, 'The vulnerability of electric vehicle deployment to critical mineral supply' (2019) 255 *Applied Energy* 113844.

a by-product of the extraction of other bulk minerals. The overview of critical minerals often shows that they are hidden in indirect and integrated trade, which leads to neglecting the analysis of their reserves when assessing mineral production and import/export trade.¹⁵ Although within the supply of critical minerals, the environmental and social impacts of their products are often overlooked when assessing the transition from fossil energy economies, critical minerals remain the only way to create the cycle necessary for a smooth transition to renewable energy systems.

According to a November 2021 assessment, 140 countries had already announced their own net zero emissions targets.¹⁶ The path to net zero will depend heavily on renewable energy sources, electricity and access to critical minerals. Now, renewables-based electricity harnesses the energy potential of the sun or wind or water, but relies on other raw materials to do so, making these energy generation and storage activities extremely intensive in photovoltaic minerals such as crystalline silicon, which is used for grid-scale technology. Undoubtedly, the availability of technological advances and substitutable materials can influence their importance in economic activity. This may explain why the list of critical materials continues to change over time.¹⁷ In the same way, global strategic objectives are born, which are anchored in responsible sourcing, responsible supply and accessibility to critical minerals, integration of national and European perspectives of equity, global monitoring of mineral potential, markets, supply chains and fair global trade.¹⁸

Faced with the challenge of developing a strategy oriented towards technology transfer, we find that the interaction between sovereign states inevitably produces diplomatic dialogues, i.e. states talking to states about the affairs of states, creating an 'infrastructure of world politics'.¹⁹ From here appears the desire for a public diplomacy that primarily addresses the challenges of climate change, which is why one of the first approaches in this area is linked to the idea of public diplomacy as a 'social practice'²⁰ that is oriented towards climate justice, and which will later manifest itself in phenomena such as entrepreneurial diplomacy. Consequently, we speak of the shaping of a form of interaction between social actors that is structured by rules, norms and habits, and which is productive of social resources. These rules define and constrain the practice of diplomacy and, in turn, are reproduced and modified as they are used. The new literature on practice in international relations unifies around the idea that there is a sociality that always interconnects, constrains and enables the 'particles' of social life throughout its movement.

In this permanent movement of international relations, globalization brings people around the world closer together and has the potential to create transnational legal problems

¹⁵ Stevan Fortier et al, 'USGS critical minerals review' (2022) 71 *Mining Engineering* 35 <<https://apps.usgs.gov/minerals-information-archives/articles/usgs-critical-minerals-review-2021.pdf>> accessed 01 March 2024.

¹⁶ Climate Action Tracker 'CAT net zero target evaluations' (2022) <<https://climateactiontracker.org/global/cat-net-zero-target-evaluations/>> accessed 01 March 2024.

¹⁷ Nidhi Srivastava and Atul Kumar, 'Minerals and energy interface in energy transition pathways: A systematic and comprehensive review' (2022) 376 *Journal of Cleaner Production* 134354, 2.

¹⁸ Ralph Watzel, 'Minerals for future technologies – How Germany copes with challenges' (2022) 526 *Geological Society, London, Special Publications* 13, 13-14.

¹⁹ Ian Hurd, 'Law and the Practice of Diplomacy' (2011) *International Journal* 581, 582-583.

²⁰ *ibid.*

and issues.²¹ Indeed, it is distressing for legal communities to find intersecting interests in the climate emergency. Therefore, the importance of understanding the phenomenon that intertwines diplomacy and normative factors will be raised to provide better analysis or solutions to large-scale climate problems. It is also worth mentioning that solutions to global legal and judicial problems may be easier and better if collaborative efforts are made between legal communities around the world.²² In particular to what underlies the further development of this work, it will be a challenge to raise a horizon immersed in the Chilean diplomatic strategy from the idea of business diplomacy, open to flexible but resolute legal methods in the face of critical mineral market interaction, especially in accordance with the sustainability of the EU climate diplomacy model.²³

The method to be carried out in this research will be based on a qualitative analysis on the linkage between law (normative plane) and Chilean and European Union diplomacy, with the objective of seeking horizons that link critical factors of the debate, such as the Renaissance of Permanent Sovereignty of Natural Resources in the countries of the Global South, the National Strategies of Critical Minerals such as the Chilean one, and climate justice. To this end, a generic question is posed that asks the following question: what is the strategy and the normative and diplomatic path that intertwines the need for the use of critical minerals? For the purposes of this question, the normative analysis will focus on the elements contained in EU and transnational law versus binding phenomena such as diplomatic strategies on raw materials.

This research will be divided into a first item that will deepen the position of the European Union and Latin America in the geopolitical chessboard, with the objective of installing in the debate the positions and needs of both parties, mainly extending towards critical minerals. The second part is related to the revival of the idea of Permanent Sovereignty of Natural Resources in Chile and Latin America, which will be key to outline the legal and political position of the EU and Chile. There will be a third item, which will deal with the understanding of Chile's Diplomatic Cycle, guiding it through an understanding of the dynamics of Chilean entrepreneurial diplomacy. Finally, it will give way to a key item on the normative dimension of climate justice and critical minerals, to finally raise additional challenges for the European Union connected to Chilean entrepreneurial policy.

2 THE EU AND LATAM ON THE GEOPOLITICAL CHESSBOARD

To understand the basis of the political meeting between the EU and LATAM, it is necessary to place ourselves on the geopolitical chessboard of both zones, that is, what elements are on the negotiating table and focus of both structures.

The first focal factor of the EU Green Deal has been the macro idea that has guided the challenge of ensuring a flexible and adequate energy source for use in energy-intensive sectors on the continent, both for heavy industry (cement and steel) and transport (freight, shipping and aviation). The second central factor of the Green Deal is the decarbonization

²¹ Niedja Santos, 'Public diplomacy, collaborative power & law community' (2022) 2 *Undecidabilities and Law* 39, 50-51.

²² *ibid.*

²³ Marc Pallemmaerts and Sebastian Oberthür, *New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy* (Academic & Scientific Publishers 2010).

of the global economy, a process necessary to address the climate crisis and the new wave of technological evolution characterized by artificial intelligence (AI) and 5G networks. The EU's perspective in the latter focus, is to position itself as a propellant in the race to ensure uninterrupted access to critical mineral commodities (critical raw materials, CRM), i.e. those minerals that are part of the production of high-tech applications.²⁴ For both focuses, the European position has been shaken by the effects of the Russian invasion of Ukraine, as it has caused the continent to rethink a different plan, in legal and geopolitical terms, especially with regard to the creation of a structure with Latin America, which considers the latter as a strategic-horizontal partner. The question that arises in this matter is whether the deepening of this agreement will continue to be based on the Mercosur treaty.

Mercosur will not be the main object of this analysis, but it will be necessary to mention some context, since to date this agreement has enjoyed inconsistencies between the Mercosur-EU Agreement itself and the European Green Deal in its current state. Some theorists have argued that this incoherence is mainly due to the lack of complementarity, since the EU has concentrated much of the environmental focus on the European geographical area, and has not put forward a strong external legal and geopolitical strategy. However, according to other authors such as Sanahuja and Rodríguez, the solution is by no means to abandon this agreement, but rather to integrate it into the EU's environmental policy.²⁵

The European Green Deal is in a state of rectification with respect to Mercosur, which makes it necessary to consider the need to add an environmental strategy to any global trade agreement, just as the Association Agreements do, which strictly speaking are manifested as a binding commitment to the effective application of the Paris Agreement. Thus, the environmental clause of the Green Deal should be applied in a manner analogous to the well-known democratic clause that since the 1990s the EU has made mandatory in its agreements. Authors such as González suggest that an additional protocol could be added to the agreement that includes binding obligations for both parties in line with what is agreed in the Paris Agreement and includes the obligation to implement policies that can effectively and efficiently mitigate climate change. However, there is little chance of safeguarding the EU-Mercosur agreement, as the very idea of promoting a joint declaration clarifying the commitments of the 'Trade and Sustainable Development' (TSD) chapter suffers to date from excessive 'associated formalism'.²⁶ This refers to two dimensions. The first relates to the factor that involves Mercosur with respect to the inter-state imbalance due to political and institutional control. The second dimension lies in the excessive legalism associated with the resolution of controversies and the dynamics of cooperation. In Mecham's words, Mercosur opted for the latter approach, thus the very ethos of Mercosur differs substantially

²⁴ Sophia Kalantzakos, 'The Geopolitics of Critical Minerals' (2022) 19 Instituto Affari Internazionali (IAI) papers, 2 <<http://www.jstor.org/stable/resrep23660>> accessed 01 March 2024.

²⁵ José Antonio Sanahuja and Jorge Damián Rodríguez, *El acuerdo Mercosur - Unión Europea: Escenarios y opciones para la autonomía estratégica, la transformación productiva y la transición social y ecológica* (Fundación Carolina 2021).

²⁶ See at Andrés Malamud, 'Assessing the political dialogue and cooperation pillar of the EU-Mercosur Association Agreement: towards a bi-regional strategic partnership?' (2022) In-Depth Analysis Requested by the AFET committee (European Parliament's Committee on Foreign Affairs), 14 <[https://www.europarl.europa.eu/thinktank/en/document/EXPO_IDA\(2022\)653652](https://www.europarl.europa.eu/thinktank/en/document/EXPO_IDA(2022)653652)> accessed 01 March 2024.

from that of the EU system.²⁷ Also, the sustainability commitments in the EU-Mercosur agreement require a *quid pro quo* in terms of public procurement and protection (for example, by extending the transition period) for certain industries, thus further expressing the slowing down of strategic objectives.

Mercosur's inconsistencies have materialized in precautions for Latin America, as a result of the history of the relationship between the two.²⁸ Faced with this, the EU has placed new strategies of enlargement on trade defense aiming to re-establish a level playing field between EU producers and their external competitors. There have been elucidated, among other elements, the Foreign Subsidies Regulation (FSR), the updated Trade Enforcement Regulation (TER), the International Procurement Instrument (IPI), the Investment Control Mechanism (FISM), the Anti-Coercion Instrument (ACI) and the Carbon Border Adjustment Mechanism (CBAM).²⁹ Within all of these external EU instruments, the European Commission has described these measures as an ambitious, open, sustainable trade policy that will require action at all levels to effect climate justice mechanisms.³⁰ For this reason, Latin America has the great challenge of making a deliberative and reflective process of how the countries of the continent negotiate with the European Union, articulating the different types of foreign policy (e.g. Chile's turquoise foreign policy or the entrepreneurial foreign policy) with the sovereign strategies on critical minerals and the urgencies arising from the climate crisis.

3 THE ROLE OF PERMANENT SOVEREIGNTY OVER NATURAL RESOURCES

Thomas Wälde portrayed the period from 1965 to 1980 as a historical epoch marked by 'the exercise of permanent sovereignty over natural resources by developing countries, mainly through the large-scale nationalization of mineral extraction facilities, the renegotiation of existing agreements and the creation of state-owned enterprises'.³¹ The restructuring of the meaning of sovereignty remains to this day, but has found a strong foundation and consensus in the idea of self-determination, which extends to all nations empowered to choose their own political, economic, social and cultural destinies. Thus, Permanent Sovereignty over Natural Resources (PSNR) is in fact 'an extrapolation of the right to self-determination'.³² The United Nations has so far adopted several resolutions in which the freedom of people

²⁷ Michael Meham, 'Mercosur: A Failing Development Project?' (2003) 79(2) *International Affairs* 369, 382.

²⁸ One of the strongest precautions is the reproduction of colonial dynamics which are described in the texts of Diana Vela Almeida et al, 'The "Greening" of Empire: The European Green Deal as the EU first agenda' (2023) 105 *Political Geography* 102925, 1-2. The other is Sabelo Ndlovu-Gatsheni, 'The cognitive empire, politics of knowledge and African intellectual productions: reflections on struggles for epistemic freedom and resurgence of decolonization in the twenty-first century' (2019) 42(5) *Third World Quarterly* 882.

²⁹ Harri Kalimo, Ferdi De Ville, and Simon Happersberger, 'The Unilateral Turn in EU Trade Policy? The Origins and Characteristics of the EU's New Trade Instruments' (2023) 28(Special Issue) *European Foreign Affairs Review* 15, 16.

³⁰ *ibid* 21.

³¹ Thomas Wälde, 'Permanent Sovereignty over Natural Resources Recent Developments in the Mineral Sector' (1983) 7(3) *Natural Resources Forum* 239.

³² Ian Brownlie, 'Legal Status of Natural Resources in International Law (Some Aspects)' (1979) 162 *Collected Courses of the Hague Academy of International Law* <http://dx.doi.org/10.1163/1875-8096_pplrdc_A9789028605305_02> accessed 01 March 2024.

to pursue their general development and, in particular, their economic development has been confirmed.³³

Currently, the resurgence of Permanent Sovereignty over Natural Resources (PSNR) is highlighted, understanding that this idea is largely based on a position of political rethinking. In this way, the political rethinking goes through solving the problems facing the sustainable supply of critical minerals, highlighting the break with a single, linear mentality on the subject. Sovereignty is not only a matter of resource security, but also a matter of development and justice, thus the establishment of a sustainable critical mineral supply network must fully respect the interests of all participating parties, especially those nations that have been excluded. Under the old international order, there were many unreasonable linkages in the critical minerals supply area, but the contemporary world needs a new system of global governance of critical minerals to maintain supply chain stability and promote climate justice, where all parties accept the concept of equitable development of the SDGs.³⁴

This reformulation has accelerated since the Paris Agreement, where the establishment of energy transition objectives with a dominant role for renewable energy technologies has led to the opportunity to redefine the position of States on economic development models, where for example in the case of Latin American States, a door is opened not only for the export of raw materials, but also for the configuration of an economy based on value-added products.

In the face of climate change, authors such as Werner Scholtz have argued that while the developing world is plagued by the environmental problems of poverty and the developed world by the environmental problems of its excess wealth. Revoking permanent sovereignty or making it obsolete means that the developing world will not be able to address its environmental problems. This means that permanent sovereignty still has an important role to play in accordance with its intended purpose as a component of achieving development. However, to address the environmental problems of poverty, developing states must follow a sustainable development path. Now, the importance of sustainable development in international environmental law must be taken into account when interpreting permanent sovereignty and its relationship to common concern. From this, it is imperative to 'green' the economic aspect of sovereignty rather than declare it obsolete.³⁵ Consequently, the question would rather be how the concern for the right of states to freely dispose of their natural resources to respond to the challenges of global environmental degradation, such as climate change, changes beyond the prototypical idea of protectionism but rather, the sovereignty approach is directly intertwined with the developmentalism of states.

Developmentalism allows the placement of special emphasis on the national level, since under the paradigm of sovereignty this will have a strategic and territorial extension, a reflection of this is demonstrated in the new frontiers of 'green' resources, particularly what

³³ Yogesh Tyagi, 'Permanent Sovereignty over Natural Resources' (2015) 4(3) Cambridge Journal of International and Comparative Law 588, 588-590.

³⁴ Shiquan Dou et al, 'Critical mineral sustainable supply: Challenges and governance' (2023) 146 Futures 103101, 2-3.

³⁵ Werner Scholtz, 'Greening Permanent Sovereignty through the Common Concern in the Climate Change Regime: Awake Custodial Sovereignty!' in Oliver C Ruppel, Christian Roschmann, and Katharina Ruppel-Schlichting (eds), *Climate Change: International Law and Global Governance. Volume II: Policy, Diplomacy and Governance in a Changing Environment* (Nomos 2013) 208.

have been the cases in Latin America.³⁶ One of the emblematic cases is lithium mining in Argentina, Bolivia and Chile, a geopolitical and economic phenomenon which several studies have analysed and documented, understanding the frontier as an association between minerals, land, people, ecosystems, means and lifestyles in these areas.³⁷ This wave of sovereignty is situated in an expansionist dynamic of climate justice, i.e. various governments, regardless of their resource reserves and dependence on mineral resources, have initiated an expansion of the regulation of critical minerals in pursuit of this justice factor. Such is the case, for example in the U.S., where the U.S. Department of Energy published a Critical Materials Strategy in 2011 and, similarly, the U.S. Geological Survey (USGS) published a strategic list of 50 minerals.³⁸ At the same time, the European Commission (EC) had published a list of 14 critical raw materials in 2011 as a priority action in the raw materials initiative.³⁹ The list has since been revised and currently includes 30 minerals following the 2020 Communication on Critical Raw Materials.⁴⁰ In conclusion, we are facing a regulatory consensus on critical minerals, which involves geopolitical power, of which we will later analyse the legal factors which interact therewith.

For the purposes of this research, special emphasis will be placed on the case of Europe, since, faced with the supply of raw materials and the effect triggered by the metal price hikes in 2003-2008, the European Commission developed the famous Raw Materials Initiative (RMI).⁴¹ This initiative established an integrated strategy to respond to the various challenges related to access to non-energy and non-agricultural raw materials. The initiative was based on three pillars⁴²:

- 1) Fair and sustainable supply of raw materials from global markets, ensuring access to resources in third countries;
- 2) Promoting the sustainable supply of raw materials of European origin;
- 3) Promoting resource efficiency and the supply of secondary raw materials through recycling.

There have been attempts to unify an EU mining policy, and the case described above is part of such attempts. However, these types of experiences have not been consolidated. A reflection of this is that neither objective 1 nor 2 of the 2008 mineral policy has been covered to date, and they have only managed to comply with the circular economy plan

³⁶ Marie Forget and Vincent Bos, 'Harvesting lithium and sun in the Andes: Exploring energy justice and the new materialities of energy transitions' (2022) 87 *Energy Research & Social Science* 102477.

³⁷ Felix M Dorn and Fernando Ruiz Peyré, 'Lithium as a Strategic Resource: Geopolitics, Industrialization, and Mining in Argentina' (2020) 19(4) *Journal of Latin American Geography* 68, 68-72.

³⁸ See at US Geological Survey, '2022 Final List of Critical Minerals' (*U.S. Federal Register*, 22 February 2022) <<https://www.usgs.gov/news/national-news-release/us-geological-survey-releases-2022-list-critical-minerals>> accessed 01 March November 2024.

³⁹ See at Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Tackling the challenges in commodity markets and on raw materials' COM (2011) 25 final.

⁴⁰ See at Marco Keersemaker, *Suriname Revisited: Economic Potential of its Mineral Resources* (Springer International Publishing 2020) 69-82.

⁴¹ See at Commission, 'Communication from the Commission to the European Parliament and the Council. The raw materials initiative – meeting our critical needs for growth and jobs in Europe' COM (2008) 0699 final.

⁴² *Ibíd.*

corresponding to point 3.⁴³ Part of the failure or inadequacy of the 2008 project has also extended to other initiatives, as is the case of the Horizon 2020⁴⁴ and the Seventh Framework Program, which although they have financed more than 2 500 projects on raw materials, covering technical, social, political or governance aspects of mining, they have neglected to form long-term partnerships with the Global South or agreements that consider a win-win strategy with Latin America.⁴⁵

In the absence of results from the previous proposals, the possibility of establishing an EU Mining Agency has been examined, which has the potential to structure a strategy for the potential mineral resources to be exploited, understanding the whole mining cycle from exploration to foreclosure.⁴⁶ Another idea that has been fostered on the European continent, was the systematisation of the 2012 proposals for a regional mining strategy for the two northernmost regions in Sweden (Norrbotten and Västerbotten)⁴⁷, the 2013 Northern Engineering project and the MIN-GUIDE project.⁴⁸ With this idea what has been sought is to channel the immense variety of interests involved and serve the purposes of the Green Deal but it has not yet borne much fruit.

Despite the above, the EU continues to obtain a regulatory expansion of critical minerals in the Global South, mainly in the case of Chile.⁴⁹ The Chilean dynamics of sovereignty try to survive the times of globalization through development strategies which lie in the diversification of the export matrix, and also in the added value that materials such as lithium could have. In this last topic, a political debate has begun on a bill that seeks to strengthen the fiscal regime in order to increase revenues from minerals, in line with what has been done by Brazil, Zambia and the Philippines.⁵⁰ Likewise, the country has also designed a network of mechanisms for greater control over its own natural resources that considers new technological responses and greater development.

⁴³ Commission, 'Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Circular Economy Action Plan' COM (2019) 190 final.

⁴⁴ See Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013 [2021] OJ L170/1.

⁴⁵ Manuel Regueiro and Antonio Alonso-Jimenez, 'Minerals in the future of Europe' (2021) 34(2) *Mineral Economics* 209, 215.

⁴⁶ Magnus Ericsson, 'Mining industry corporate actors analysis' (2012) POLINARES working paper n.16 2012 <<https://goxi.org/sites/default/files/2019-06/Mining%20industry%20corporate%20actors%20analysis.pdf>> accessed 01 March 2024.

⁴⁷ Both cases can be visualized and analyzed in the text by Eva Johnson and Magnus Ericsson, 'State ownership and control of minerals and mines in Sweden and Finland' (2015) 28 *Miner Econ.* 23.

⁴⁸ See the project at Commission, 'Minerals Policy Guidance for Europe' (*CORDIS EU research results*, last update 10 March 2023) <<https://cordis.europa.eu/project/id/689527>> accessed 01 March 2024.

⁴⁹ Alejandra Bernal, Joerg Husar, and Johan Bracht, 'Latin America's opportunity in critical minerals for the clean energy transition' (*IEA*, 07 April 2023) <<https://www.iea.org/commentaries/latin-america-s-opportunity-in-critical-minerals-for-the-clean-energy-transition>> accessed 01 March 2024.

⁵⁰ Damian Nyer and Silvia Marchili, 'A new wave of resource nationalism in the mining & metals industry' (*White & Case*, 15 September 2021) <<https://www.whitecase.com/insight-our-thinking/new-wave-resource-nationalism-mining-metals-industry>> accessed 01 March 2024.

Much of Chile's political orientation has been guided by the comparative experiences carried out by international agencies,⁵¹ such as the International Energy Agency, the International Renewable Energy Agency, and the World Bank, among others.⁵² For the purposes of the extension of the Chilean case, it is necessary to understand Chilean foreign policy (based on the idea of entrepreneurial diplomacy) and particularly, to observe how this type of orientation is inserted in EU law.

4 UNDERSTANDING THE CHILEAN CYCLE: A LOOK AT ENTREPRENEURIAL DIPLOMACY FOR CLIMATE JUSTICE

The Chilean case is based on the idea of the concentration of lithium resources, which are highly concentrated in the country and in other neighboring areas of South America, referring especially to the case of Argentina, which has about 14.8 million tons of lithium, Bolivia which has 9 million tons of estimated untapped lithium and Chile itself, with more than 8.5 million tons of lithium available. This accumulation of resources is extrapolated to a dominant position of these three states, which have come to be recognized as the 'lithium triangle', precisely because they have in their hands the possibility of using this resource for their interests.⁵³

Bolivia,⁵⁴ Argentina,⁵⁵ and Chile⁵⁶ have been discussing and implementing policies to redefine their roles in the Lithium production networks. Likewise, authors such as Barandiarán⁵⁷ have argued that the position projected by Bolivia, Argentina and Chile, in each case, has portrayed a collective project of national construction through the concept of development imaginaries deployed in the lithium industry. Two positions stand out in the imagination of these countries of the Global South. The first position is related to the consideration of lithium as a banal product in which the State must facilitate its extraction and rapid export. The second point refers to lithium as a strategic product, and it is there where the thesis of this research will be focused, since from the strategic element a new position of the State is configured, as it controls the supply of the mineral and, in turn, takes advantage of its strategic position to generate geopolitical power aimed at greater climate justice.

⁵¹ These institutions often publish detailed reports on the status and role of minerals and metals in the global energy transition. Likewise, the literature stimulated by these agencies linked to this topic has also grown exponentially, especially on issues of governance, geopolitics and foreign trade.

⁵² Kirsten Hund et al, *Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition* (Washington, DC: World Bank 2023).

⁵³ See at United States Geological Survey, 'Mineral commodity summaries 2019: U.S. Geological Survey' (U.S. Govt. Print. Off. 2019), 98-99 <https://d9-wret.s3.us-west-2.amazonaws.com/assets/palladium/production/atoms/files/mcs2019_all.pdf> accessed 01 March 2024.

⁵⁴ For the Bolivian case, see the text by Vincent Bos and Marie Forget, 'Global Production Networks and the lithium industry: A Bolivian perspective' (2021) 125 *Geoforum* 168.

⁵⁵ See for the Argentine case the text by Felix Malte Dorn and Hans Gundermann, 'Mining companies, indigenous communities, and the state: The political ecology of lithium in Chile (Salar de Atacama) and Argentina (Salar de Olaroz-Cauchari)' (2022) 29(1) *Journal of Political Ecology* 341.

⁵⁶ For the Chilean case, see the report by Rafael Poveda, *Estudio de caso sobre la gobernanza del litio en Chile* (Santiago de Chile, ECLAC 2020) <<https://repositorio.cepal.org/items/df6e2-1e1c-40ee-94c1-21d48fb430e6>> accessed 01 March 2024.

⁵⁷ Javiera Barandiarán, 'Lithium and development imaginaries in Chile, Argentina and Bolivia' (2019) 113 *World Development* 381.

The Chilean case is dual, as it considers new dynamics of foreign policy and development imaginary, all this from the strategic conduction for greater climate justice by the State in terms of critical minerals. In my opinion, this intertwining that Chile presents results from two facets, the first is at the internal level, since the country is currently proposing signs of an economic opening with mechanisms that allow both a reduction of the external vulnerability of the national economy and a fairer and more sustainable development model. Likewise, political agreements on national sustainability are part of the viability, legitimacy and projection equation of the political decisions of the current Chilean State. With respect to the second facet, the focus is foreign policy, where the deployment of turquoise diplomacy and the so-called business diplomacy has been characterized by the capacity for innovation and diplomatic initiative and the building of ad hoc regional and global strategic coalitions.

The state of Chilean foreign policy has also been recognized by new approaches during the administration of President Boric, among them is the so-called entrepreneurial policy, where authors such as Bywaters, Soto and Gertner, have described it as a new cycle of Chilean foreign policy. Having said this, it will be pertinent to analyse the elements of this new cycle, in the first place this new cycle ‘must be distinguished from the point of view of the general strategic approach by its intensity’.⁵⁸ The latter, in the words of the same authors, means that ‘the expansion of diplomatic ties will continue to be an important task, an intensive strategy that must focus on the quality and density of the presence in the world’.⁵⁹ A second element of entrepreneurial diplomacy is the maximization of the country’s diplomatic room for maneuver, which means that the country ‘instead of promoting rigid partnership schemes and/or inconsistency with a multipolar system, should establish flexible partnership schemes with the entire spectrum of actors in the system (state, non-state, international organizations, civil society, etc.)’.⁶⁰ The third element to consider is ‘the deployment of a niche diplomacy, capable of concentrating and strengthening the country’s external efforts in areas where it already has comparative advantages’.⁶¹ A clear example of this last case is the country’s proactivity in the defense of the environment, as well as the prolongation that the State has had in the economy of critical minerals. The fourth element is related to ‘the development of specialized human capacities in the diplomatic niches selected by the country’.⁶²

Now, it is worth asking on what level all these elements of entrepreneurial diplomacy are deepened with the idea of development based on lithium. We would say that the rationale behind the idea of entrepreneurial diplomacy lies in considering that the lack of hard power capabilities that distinguishes great powers gives small and medium-sized countries the possibility to exert influence on their external environment by concentrating their diplomatic activities in alternative fields of action that contribute to the good governance of international society.⁶³ This process of good governance and alternative action should also consider a legal

⁵⁸ Cristóbal Bywaters, Daniela Sepúlveda, and Andrés Villar, ‘Chile y el orden multipolar: autonomía estratégica y diplomacia emprendedora en el nuevo ciclo de la política exterior’ (2021) 9 *Análisis Carolina*, 7 <http://dx.doi.org/10.33960/ac_09.2021> accessed 01 March 2024.

⁵⁹ *ibid.*

⁶⁰ *ibid.*

⁶¹ *ibid.*

⁶² *ibid.* 8.

⁶³ Bywaters et al (n 58) 8.

extension manifested in different elements of environmental justice, which will be discussed in later items.⁶⁴

Consequently, Chile faces a challenge of magnitude, i.e. to design and perfect its resource targeting mechanisms in specific areas that will allow it to compensate for its weaknesses in other areas. Continuing with this argument, we would say that far from condemning Chile to irrelevance, it should be said that Chile's status as a small or medium-sized country offers possibilities that, if addressed with the appropriate vision and instruments, will contribute to the creation of conditions for greater strategic autonomy, the expansion of external agency capacity and the improvement of the country's international status.⁶⁵ The targeting of critical minerals is part of the Chilean strategy, consistently linked to the recent trajectory of lithium policies in Argentina and Bolivia. This point is key, as absolute free market arguments are losing influence in favor of a convergence around the idea that lithium can provide opportunities for a form of development that, according to its proponents, breaks with past patterns of cyclical or highly unequal growth, extrapolating lithium development to the industrialization of critical minerals with 'value added' for greater wealth and justice.⁶⁶

5 THE NORMATIVE DIMENSION OF CRITICAL MINERALS AND CLIMATE JUSTICE

Market power often allows the EU to be a potential regulatory leader, i.e., its rules have an expansive effect on third (non-member) states that must comply with EU requirements to access the EU market. This regulatory power is also based on the assumption that the EU is able to regulate non-state actors, such as mining companies, within and outside its own territory. This number of actors involved accelerates their participation in the relationship between the economy and critical minerals, as it is evident that non-state actors, such as companies and civil society organizations, take a leading role in the implementation of many projects. Consequently, the legal culture on minerals is experiencing a shift of power towards the private sector through new forms of self-regulation, co-regulation and the rise of 'private authority', which has manifested itself in the idea called by Vogel as 'upward trade'.⁶⁷

This idea of trade must recognize the role of just energy transition and environmental justice. However, for key Latin American and European horizons, it is worth raising the need for coordination that mitigates private authority through an intersection between climate justice, entrepreneurial diplomatic development and the new regulatory horizons implied by the transition. Thus, given the broad role that critical minerals play in the development of the low-carbon economy that most countries have committed to achieve through the COP21 Paris Agreement, there is a need for a broad vision of justice that can encapsulate this global

⁶⁴ Cedric Ryngaert and Sven Sobrie, 'Recognition of States: International Law or Realpolitik? The Practice of Recognition in the Wake of Kosovo, South Ossetia, and Abkhazia' (2011) 24(2) *Leiden Journal of International Law* 467, 467-470.

⁶⁵ Alex Weisiger and Keren Yarhi-Milo, 'Revisiting Reputation: How Past Actions Matter in International Politics' (2015) 69(2) *International Organization* 473.

⁶⁶ Barandiarán (n 57) 389.

⁶⁷ Shannon K Mitchell and David Vogel, 'Trading up: Consumer and Environmental Regulation in a Global Economy' (1996) 63(1) *Southern Economic Journal* 271.

industry. In this context, this research raises components of climate, environmental and energy justice, which are derived from the JUST Framework⁶⁸, which are:

- a) Distributive justice
- b) Procedural justice
- c) Recognition justice
- d) Cosmopolitan justice
- e) Restorative justice

a) Distributive justice: the first perspectives of justice is related to the distribution of the benefits of the energy sector and also of the negative effects. This gives rise to debates such as those on the form of revenue sharing between states or factors such as liability for environmental damage. This extension of justice has been intertwined in the EU, in some OECD-led initiatives, which have proposed reforms related to energy taxation and resource extraction.⁶⁹ In addition, this OECD initiative represents more than 60 countries, for which the extraction of energy and mineral resources represents an important opportunity to increase revenues for many governments, of which the Global South and Latin America are part.

On the Chilean and Latin American side, there is room for maneuver with respect to EU guidance on the use of trade regimes that act as a distributive engine to foster a just global energy transition. An example of this is carbon border adjustments, which impose a levy on carbon-intensive imports on a more horizontal basis. The big challenge here is to find a balance between the interests of both parties. Even if the conjunction of interests is key, the EU may need to focus on material incentives and informal networks. This would present a challenging stance to the Mercosur idea, attempting to overcome the futility of declaratory regionalism⁷⁰ and precocious institutionalization, which have been part of the frustrating equation to date.

Regarding the use of trade regimes by the EU and Chile, it is worth focusing on the EU's association agreement with Chile, as this agreement contains a number of indirect innovations that place climate change as a relevant element of the treaty relationship.⁷¹ Instead of reopening the legal text, the parties decided from the outset that the new EU-Chile Advanced Framework Agreement will not contain a treaty provision declaring climate change as an essential element, even though the new Chilean government and the EU share a strong commitment to climate action, but both committed to review within 12 months the

⁶⁸ Raphael J Heffron, 'The role of justice in developing critical minerals' (2020) 7(3) *The Extractive Industries and Society* 855, 857.

⁶⁹ Dan Devlin, 'Limiting the Impact of Excessive Interest Deductions on Mining Revenues' (*Policy Commons*, 28 May 2018) <<https://policycommons.net/artifacts/3815155/limiting-the-impact-of-excessive-interest-deductions-on-mining-revenues/4621071/>> accessed 01 March 2024.

⁷⁰ This idea can be understood in greater detail in the text of Nicole Jenne, Luis Leandro Schenoni, and Francisco Urdinez, 'Of words and deeds: Latin American declaratory regionalism, 1994–2014' (2017) 30(2-3) *Cambridge Review of International Affairs* 195-215.

⁷¹ Markus Gehring, 'EU Constitutional Aims and External Relations - Legal Consequences of Climate Provisions in EU Trade Accords' (2023) University of Cambridge Faculty of Law Research Paper No. 2/2023, 15 <<https://ssrn.com/abstract=4387594>> accessed 01 March 2024.

trade and sustainable development obligations of the treaty text after the entry into force of the interim tariff trade agreement.⁷²

The parties have committed to intensify cooperation, especially in the mining industry, on the basis of their complementarity, common objectives and shared values. Complementarity also extends to the commitments of the EU-Latin America Mining Development Network Platform (MDNP), which includes various actors such as companies, the State and all entities linked to the economic dynamics.⁷³ But, even more strongly in this agreement, bridges connecting climate justice and complementarity (a key feature of sustainable trade), since both dimensions recognize the strategies for the development of sustainable trade. This multifaceted strategy mentioned above also encompasses the establishment of a national lithium corporation and a private technological institute, ensuring greater state participation, a comprehensive assessment of available wages and the establishment of a protective network for these components.

b) Procedural justice: this second perspective of justice relates to the focus here on the legal process and the complete legal steps necessary to be observed in order to intertwine the interests between the EU and Chile, particularly for Latin America. Here, procedural justice focuses specifically on the legal process of taking a project from start to finish, from planning and construction to operation and end use, with special emphasis on stakeholders having a legitimate opportunity to participate. Therefore, in this matter the key issue for the development of the mining industry critical to procedural justice is the Environmental Impact Assessment process.

There are two points that intersect between the normative factor, climate justice and critical minerals between the EU and Chilean regimes in particular. The first is linked to the Equator Principles, which have played an important role in the critical minerals industry, as they cover the majority of international project finance debt within developed and emerging markets and, in particular, essentially require that the project has gone through assessment processes prior to releasing project finance.⁷⁴ Following the extension of the principles, we find the coordination of Extractive Industries Transparency Initiatives, such as the United Nations (UN) Fowler Report or the Extractive Industries Transparency Initiative (EITI) in 2002 led by the British Government. The latter was the first time that a EU government took action to prevent the mineral trade from financing conflict.

In the same way, we can see that in the field of transparency and evaluation processes, international law has played a coordinating role in this area and, at the same time, has tended to respect the sovereignty of EU and non-EU states. The concept of sovereignty reappears in Latin American states and the EU has understood that it is part of the 'basic constitutional doctrine of the law of nations'.⁷⁵ In the current interconnected world order, critical minerals

⁷² See EU-Chile Advanced Framework Agreement, 'Joint Statement on Trade and Sustainable Development' (2022) <<https://circabc.europa.eu/rest/download/96cafa19-80fe-4455-b63b-ea36adf2635a>> accessed 01 March 2024.

⁷³ Joanna Kulczycka, Ewa Dziobek, and Michał Nowosielski, 'Promotion and implementation of Polish mining investments in foreign markets on the example of Latin America' (2023) 2(4) *Energy Storage and Saving* 608, 610.

⁷⁴ The Equator Principles, 'Equator Principles' (2020) <<https://equator-principles.com/about-the-equator-principles/>> accessed 01 March 2024.

⁷⁵ Clare Church and Alec Crawford, 'Minerals and the Metals for the Energy Transition: Exploring the Conflict Implications for Mineral-Rich, Fragile States' in Manfred Hafner and Simone Tagliapietra (eds), *The Geopolitics of the Global Energy Transition* (Springer International Publishing 2020).

have an internal and external dimension, for the latter is key to horizons that conform to equality between sovereign states that enter into agreements with Latin America and Europe.

c) *Recognition justice*: this dimension of justice is linked to the idea of human rights and business as an important area of legal research and practice, particularly in terms of the distribution of tax revenues and their relationship to human rights.⁷⁶ In this regard, the recent report of the UN Committee on Economic, Social and Cultural Rights highlights the role of states and also of companies in determining the realization of economic, social and cultural rights.⁷⁷ For typologies such as the Chilean one, this issue is linked to the factor of private actors, since for the challenges faced by the lithium industry.

Currently, responsibility for lithium extraction rests with two dominant companies, SQM and Albemarle, which are primarily engaged in the export of raw lithium. Over the years, the State, acting through CORFO, has assumed management of the minerals and overseen the complex interaction with these companies, albeit marked by intermittent conflicts related to tax remittances and contract compliance. Since 2010, under the auspices of the center-right administration of Sebastián Piñera and driven by growing global demand, concerted efforts have been made to push the lithium enterprise towards greater exploitation.⁷⁸ Subsequently, during the Bachelet administration (from 2014 to 2018), a national lithium policy was formulated that envisaged further industrialization and market regulation through a series of instruments, albeit with relatively marginal implementation.⁷⁹ More recently, in May 2023, the Chilean government unveiled its national lithium strategy, outlining a course of action aimed at mobilizing capital, technology, sustainability and value enhancement within the lithium production sector, in order to set out a joint strategy between private and state actors for Chilean economic development under the guidance of respect for human rights.⁸⁰

d) *Cosmopolitan justice*: this fourth sub-section refers to the effects beyond our borders and from a global context, that is, from a transnational justice perspective. For this, the deepening of the multilateral trade regime is key, since it is a vital space for the European Union. At the same time, it is a space where Latin America, and especially Chile, has much room for its developmental strategies.

Import and export restrictions serve different purposes and pose different challenges in the face of climate change. Certainly, import restrictions have been discussed extensively

⁷⁶ Stéphane Brabant and Elsa Savourey, 'From Global Toolbox to Local Implementation: The IBA Practical Guide on Business and Human Rights for Business Lawyers' (2017) 2(2) *Business and Human Rights Journal* 343, 343-345.

⁷⁷ United Nations Economic and Social Council (UNESCO), 'Committee On Economic and Social and Cultural Rights – General comment No. 24 (2017) On State Obligations Under the International Covenant On Economic, Social and Cultural Rights in the Context of Business Activities' (2017) <<http://docstore.ohchr.org/SelfServices/FilesHandler.ashx?enc=4slQ6QSmIBEDzFEovLCuW1a0Szab0oXUdImnsJZZVQcIMOUuG4TpS9jwIhCjCxiuZ1yrkMD%2FSj8YF%2BSXo4mYx7Y%2F3L3zvM2zSubw6ujlnCawQrJx3hIK8Odk6DUwG3Y>> accessed 01 March 2024.

⁷⁸ Mauricio León, Cristina Muñoz, and Jeannette Sánchez, 'La gobernanza del litio y el cobre en los países andinos' (Comisión Económica para América Latina y el Caribe, 2020) <<https://repositorio.cepal.org/server/api/core/bitstreams/61e6dc94-90fe-4ce4-afd4-c52f424f6c74/content>> accessed 01 March 2024.

⁷⁹ Sebastián Carrasco and Aldo Madariaga, 'The Resource Curse Returns?' (2022) 54(4) *NACLA Report on the Americas* 445, 445-452.

⁸⁰ José Aylwin Oyarzún, 'La Estrategia Nacional de Litio y los derechos humanos' (Observatorio Ciudadano, 2023) <<https://observatorio.cl/la-estrategia-nacional-de-litio-y-los-derechos-humanos/>> accessed 01 March 2024.

in trade negotiations and in the literature,⁸¹ but export barriers have not received the same level of attention until now, when the issue of critical minerals is submerged.⁸² For the purposes of access to the latter, export restrictions imposed by resource-rich countries are of vital importance.

Both at the WTO level and in the EU's global energy plan, the presence of corporations and non-state actors is playing a key role in foreign policy. Bilateral investment treaties (BITs) are also another example of cooperation agreements that have increased since the mid-1990s and have been inserted into the new dynamics of critical minerals policy alongside all actors. From this perspective, Free Trade Agreements (FTAs) and Preferential Trade Agreements (PTAs) can become important tools, provided they go beyond the traditional rhetoric of tariff reduction and/or elimination and extend to areas such as mineral processing, value addition and the supply chain of critical minerals used in renewable energy technologies'.⁸³ Finally, in order to achieve a correct equation with LATAM, the EU must understand that its regulatory power depends on the various actors it has with influence and power at the table. This has already been defined in ideas explained by authors such as Muller and others, who define 'Intelligent Combination rather than regulatory heterogeneity',⁸⁴ as a space of opportunity for the linkage of heterogeneity of initiatives, instruments and standards, involving the global South and North in equal opportunities.

It is also relevant to highlight the WTO-plus commitments, which are negotiated on a country-by-country basis, and there is great variation in the language and levels of the agreements. The difference in the requirements contained in members' accession protocols creates vagueness and inconsistency for the Union. In fact, additional WTO obligations with respect to export restrictions have not prevented countries from introducing trade restrictive measures on minerals. A look at recent critical mineral export restrictions shows that the countries imposing such measures are also those that have committed to additional WTO obligations in their accession protocols. This point is important to note, because these states have a negotiating space with Latin American states, such as Chile.

e) Restorative justice: this last perspective of justice is posed under a key parameter, which relates to the energy sector's moral duty to rectify itself and focus on the need to enforce particular laws (i.e. energy sites should be returned to their previous use, therefore waste management policy and decommissioning should be done properly). This could be in the form of project revenue distribution (but that is mainly covered by distributive justice, already discussed above). The key issue for the critical minerals industry would be that these energy sites should be returned to their former use. Therefore, waste management policy and decommissioning should be completed and properly calculated within a project and

⁸¹ Haveman, Nair-Reichert, and Thursby (n 3).

⁸² Mark Wu, 'Export Restrictions' in Aaditya Mattoo, Nadia Rocha, and Michele Ruta, *Handbook of Deep Trade Agreements* (The World Bank 2020).

⁸³ Srivastava and Kumar (n 17) 8; Nidhi Srivastava, 'Trade in Critical Minerals: Revisiting the Legal Regime in Times of Energy Transition' (2022) SSRN Electronic Journal <<http://dx.doi.org/10.2139/ssrn.4255549>> accessed 01 December 2023.

⁸⁴ Melanie Muller et al, 'From Competition to a Sustainable Raw Materials Diplomacy' (2023) Stiftung Wissenschaft und Politik (SWP) Research Paper 2023/RP 01 <www.swp-berlin.org/publikation/from-competition-to-a-sustainable-raw-materials-diplomacy/#hd-d31874e3767> accessed 01 March 2024.

according to the standards set out in legislation. In addition, restorative justice can help identify where prevention should take place.⁸⁵

6 ADDITIONAL CHALLENGES FOR THE EUROPEAN UNION IN CONNECTION WITH CHILEAN ENTREPRENEURSHIP POLICY AND CLIMATE JUSTICE

The European Union has established a clear regulation of critical minerals in the CRM Act⁸⁶, with particular emphasis on the International Energy Agency's Critical Minerals Market Review 2023 report⁸⁷, which detailed that there are two ongoing concerns: limited progress in terms of diversification of the global supply chain and current environmental and social concerns linked to increased mining exploration.⁸⁸ There, countries such as Chile are in the right place to respond to how they fit into the dynamics of progress in supply chains, new methods of interaction with local communities and above all climate justice. There are many examples of the need for a foreign policy consistent with dynamics of global climate change, but one that clearly shows this interaction between the EU and Chile is the duplication in the extraction of water from natural sources for use during industrial processes, which has evidently become a challenge or phenomenon necessary to achieve the goal of zero net emissions by 2050 and, in turn, is configured as a strategy to finance the energy transition of both parties.⁸⁹ With this, we could say that the EU has the challenge and the capacity to articulate an economic, legal and diplomatic strategy to improve monitoring, risk management and governance of critical minerals.⁹⁰

One of the topics that the EU should consider as a objective for the Green Deal and the extension of Chile's foreign policy is the possibility of creating a CRM industry based in the EU, but at the same time rethinking the value chain for countries in cooperation, such as Chile. Therefore, it is key to be able to advance sustainability governance in the more diversified copper supply chain from the Andes to the EU, hand in hand with Chile's state-owned CODELCO⁹¹ and a handful of multinationals that are decisive players in lithium management.⁹² Mainly vertically integrated companies involved in multiple stages of the supply chain exert great influence.

⁸⁵ Raphael J Heffron, 'The role of justice in developing critical minerals' (2020) 7(3) *The Extractive Industries and Society* 855, 859.

⁸⁶ See the development of the EU Commission initiative called 'European Critical Raw Materials Act' (2022) <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13597-European-Critical-Raw-Materials-Act_en> accessed 01 March 2024.

⁸⁷ See the International Energy Agency, 'Key market trends – Critical Minerals Market Review 2023 – Analysis - IEA' (2023) <www.iea.org/reports/critical-minerals-market-review-2023/key-market-trends> accessed 27 March 2024.

⁸⁸ Peter Leon et al, 'EU Critical Raw Minerals Act Highlights Intensifying Competition in Race to Net Zero' (2023) 4(1-2) *Global Energy Law and Sustainability* 138, 138-139.

⁸⁹ *ibid* 139.

⁹⁰ Alessandra Hool, Christoph Helbig, and Gijsbert Wierink, 'Challenges and opportunities of the European Critical Raw Materials Act' [2023] *Mineral Economics* 5 <<https://link.springer.com/article/10.1007/s13563-023-00394-y>> accessed 01 March 2024.

⁹¹ In Spanish it is called 'Corporación Nacional del Cobre de Chile'.

⁹² The International Copper Study Group (ICSG), 'The World Copper Factbook 2020' (2020) <https://copperalliance.org/wp-content/uploads/2021/01/2020_10_13_ICSG_Factbook_2020.pdf> accessed 01 March 2024.

This certainly applies to CODELCO, whose state-owned status and dominance of mining and processing give it a dual role in implementation and enforcement. Commodity traders such as Glencore and metals exchanges such as the LME also have great influence over sustainability governance in the copper supply chain. They are just beginning to introduce standards for sustainability and transparency, so scope and enforcement still leave room for improvement. On the other hand, there have been cases where business managers have mentioned their interest in developing the value chain in Chile and building the largest value-added chain in Latin America based in the country. In this aspect, not implementing an accumulation strategy that attracts more advanced stages of the value chain to Chile means a significant loss of time in a highly innovative production network.⁹³ However, European law itself through the Green Deal will have to address sustainability issues such as responsible sourcing, ethics and geopolitics as a matter of urgency.⁹⁴

The European Union must succeed in interlinking a value chain of critical raw materials for mining, refining, processing and recycling activities. This could be achieved by identifying strategic projects with strict EU environmental and social standards. Therefore, it would be essential to provide the Chilean state with better access to financing for environmental projects and collaboration to provide simplified legislation. The latter is no coincidence, as these various elements are part of the package of fair and sustainable conditions for both parties. In the same line, one should not forget many of the challenges posed by the EU Global Gateway Strategy,⁹⁵ which considered cooperation in research and innovation along commodity value chains, including: mineral knowledge and minimization of the environmental and climate footprint; cooperation to bring environmental, social and governance (ESG) criteria into line with international standards; the implementation of infrastructure, both physical and intangible, for the development of projects, while minimizing their environmental and climate impact; and capacity building, vocational education and training, and skills development along sustainable commodity value chains in accordance with international labor standards.

Now we witness a clear challenge for the European Union in the governance framework that underpins the permitting process, i.e. this is an element that may affect the ultimate success of the Critical Minerals Act. According to the Organisation for Economic Co-operation and Development (OECD), the main elements of good governance are accountability, transparency, efficiency, effectiveness, responsiveness and the rule of law.⁹⁶ In my opinion, these principles are the basis of the EU rule of law, which can be part of the conversation between EU law and Chilean law, since they are shared democratic and normative structures. Another of the key normative elements that the EU should raise for a better approach to the targeting of minerals promoted by Chilean foreign policy, is to

⁹³ Felipe Irarrazaval and Sebastian Carrasco, 'One step forward, two steps back? Shifting accumulation strategies in the lithium production network in Chile' (2023) 15 *The Extractive Industries and Society* 101327, 8.

⁹⁴ Manuel Regueiro and Antonio Alonso-Jimenez, 'Minerals in the future of Europe' (2021) 34(2) *Mineral Economics* 209, 219.

⁹⁵ Commission, 'Global Gateway' (*European Commission*, 1 March 2023) <https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/global-gateway_es> accessed 01 March 2024.

⁹⁶ See OECD, '2015 Pocket edition: Policy Framework For Investment' (2015) 6-7, 53 <<https://web.archive.org/2017-06-28/368675-PFI-Pocket-Edition-2015.pdf>> accessed 01 March 2024.

elaborate a list of strategic objectives that consider criteria including economic importance, concentration of supply and demand, substitution, strategic applications and expected supply gaps. Likewise, to avoid conflicts with local communities, EU law should guide a network of early warning mechanisms that conduct stress tests on critical supply chains, that can map strategic mineral resources and provide a list of strategic projects by zone.

Another key issue for EU directives relates to the promotion of the circular economy sector. This can be done through new updated rules for the design of products containing raw materials with the aim of increasing their ease of dismantling and recycling and the duration of the product's useful life, as has been done in the Waste from Electrical and Electronic Equipment Directive (WEEE).⁹⁷ The circular objective is not exclusive to the Chilean experience, since there are several projects that stand out in the Latin American and Chilean market for circular innovation and its approach to strategic recycling.⁹⁸ Therefore, both at the regulatory level and in the extension of the foreign policy of both parties, the promotion of general eco-design programs, design for sustainability and design for circularity should be focused, following guidelines based on criteria such as durability, reusability, repairability and recyclability. There is an additional objective in increasing the collection rates of waste containing critical raw materials, for which it would be useful to introduce shared legislation that makes producers responsible for recycling the products they manufacture.⁹⁹

The thematic clusters of Horizon Europe are a good start on how to elaborate an orientation towards a just transition based on R&I through the critical minerals industry. Going forward, most of the actions on mineral raw materials will be located in the 'Digital, Industry and Space' cluster, thus there is a mission in climate justice on critical minerals, entrepreneurial diplomacy and new regulatory dynamics, which implies having a shared democratic culture to address climate change. In other words, for the sake of technology transfer, one cannot make the mistake of lacking transparency, deliberation and citizen participation. An example of this, involving concealment from, and hence ignorance of, the public, is the case of the Memorandum of Understanding of 30 January 2023 between the German company Aurubis AG and CODELCO, which was part of the circular economy cooperation agreements,¹⁰⁰ around smelting operations and projects of the Chilean-German Association of Raw Materials.¹⁰¹

⁹⁷ Directive of the European Parliament and of the Council 2012/19/EU of 4 July 2012 on waste electrical and electronic equipment (WEEE) [2012] OJ L 197/38.

⁹⁸ Concept deepened in the text by Raphael Danino-Perraud, 'Face au défi des métaux critiques, une approche stratégique du recyclage s'impose' (2018) Éditoriaux de L'Ifri - Édito Énergie <https://www.ifri.org/sites/default/files/atoms/files/danino-perraud_métaux_critiques_recyclage_2018.pdf> accessed 01 March 2024.

⁹⁹ Alessandra Zanoletti, Antonella Cornelio, and Elza Bontempi, 'A post-pandemic sustainable scenario: What actions can be pursued to increase the raw materials availability?' (2021) 202 Environmental Research 111681, 9.

¹⁰⁰ See at Aurubis Bulgaria, 'Aurubis and Codelco Sign an Agreement to Cooperate on a More Sustainable and Responsible Copper Value Chain' (*Aurubis Bulgaria press release*, 30 January 2023) <<https://www.aurubis.com/en/bulgaria/media/press-releases/aurubis-and-codelco-sign-an-agreement-to-cooperate-on-a-more-sustainable-and-responsible-copper-value-chain>> accessed 01 March 2024.

¹⁰¹ See at Deanne Toto, 'Aurubis, Codelco Sign an MoU as Part of a Wider German-Chilean Raw Materials Partnership' (*Recycling Today*, 30 January 2023) <<https://www.recyclingtoday.com/news/codelco-aurubis-sign-mou-german-chilean-raw-materials-partnership/>> accessed 01 March 2024.

Germany stated that the cooperation agreement signed on 29 January 2023 between the Federal Ministry for Economic Affairs and Climate Action and the Chilean Ministry of Mines on the German-Chilean partnership for mining, raw materials and the Circular Economy ‘strongly supports the rapid entry into force of the modernized EU-Chile trade agreement’, but did not elaborate further on what ‘modernized’ means in practice.¹⁰² This fact categorically reflects that the relationship between extrapolating the idea of democracy to clean, low-carbon industry in conjunction with the direction of new manufacturing technologies, advanced materials, circular industries or emerging enabling technologies is inseparable.¹⁰³

7 CONCLUSIONS

At the same time, Chile and the rest of Latin America need to meet emerging needs of the continent, among which is the ability of governments to freely structure strategic protection to overcome inequality in the population. Therefore, the first objective is to internalize the strategic element derived from considering raw materials as a joint economic structure for Latin America and the EU, extending this idea in that both parties seek to guarantee the supply of energy to their citizens. Likewise, the base construction of a new position of the Chilean State must consider the control of the mineral supply and, in turn, the recognition of the strategic position to promote climate justice, in its different variants, that is to say, in the restorative, cosmopolitan, recognition, procedural and distributive levels.

In the first instance, EU law should provide a rapprochement with Chilean foreign policy by elaborating a list of strategic objectives that considers criteria including economic importance, concentration of supply and demand, substitution, strategic applications and expected supply gaps. Therefore, the European Union has the immense challenge of coordinating the governance framework that intertwines the Critical Minerals Act, where the main elements to be promoted should be accountability, transparency, efficiency, effectiveness and the rule of law. Along with this, both at the regulatory level and in the extension of the foreign policy of both parties, the promotion of general eco-design, design for sustainability and design for circularity programs should be focused, following guidelines based on criteria such as durability, reusability, reparability and recyclability. At the same time, it should not be forgotten that the mission of anchoring the critical minerals industry, entrepreneurial diplomacy and new regulatory dynamics also implies a shared democratic culture for greater climate justice. Similarly, it is essential that EU policy and law be oriented towards a shared R&I strategy across the critical minerals industry.

Despite all these elements of relevance, EU law must overcome the formalism that has been anchored to Mercosur, and must prolong the Green Deal with the idea of rethinking the value chain focused on the strategic partnership with Chile. Likewise, the EU should continue to shape its directives in favor of promoting the circular economy sector. However, it must always remain cautious of what regulatory adaptation means in Chile and Latin America.

¹⁰² Sophia Pickles, ‘Value Addition in the Context of Mineral Processing’ (2023) Study, publication commissioned by the Heinrich Böll Foundation, 60 <https://www.boell.de/sites/default/files/2023-11/e-paper_value_addition_in_the_context_of_mineral_processing.pdf> accessed 01 March 2024.

¹⁰³ Regueiro and Alonso-Jimenez (n 94) 220.

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