The Growing Demand for 'White Gold' to Accommodate the 'Green' Transition: The Role of Discourse in Shaping the Cooperation Between the European Union and Chile on Lithium

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Abstract

Academia and the international political arena consider lithium, also called ‘white gold’, as an essential component in the ‘green’ transition to a carbon-neutral society. However, the socio-environmental challenges linked to the extraction of lithium, as well as other minerals that are labelled as ‘critical’, raise the question of whether this transition can actually be called ‘green’. This thesis critically examines the role of discourse in shaping the geopolitics of lithium, which is based on the post-structuralist notion that social and discursive practices are linked. To research this, a critical discourse analysis is conducted, which analyses how the lithium cooperation between the EU and Chile has been shaped by their respective dominant discourses on critical minerals. The lithium cooperation between the EU and Chile is an important geopolitical topic, as Chile holds the greatest lithium reserves globally and in the EU demand for the mineral is increasing drastically as a result of the initiatives to electrify the European society. Building on the assumptions of critical geopolitics and political ecology on the relationship between discourse, knowledge and power, this thesis not only demonstrates that discourses, narratives and practices on critical minerals within the EU and Chile have shaped their cooperation in this field, but also identifies the underlying elements that are of explanatory value in understanding this process. Overall, it is displayed how the geopolitics of lithium and the balance between increasing lithium extraction and minimising socio-environmental challenges on a local level will be shaped by the ‘criticality’ that is discursively attributed to lithium and the perception of its role in accommodating the ‘green’ transition.

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1. Introduction

Climate change and the impact of its consequences is considered one of the most important societal challenges at present (UN, 2022). As a result, realising a clean energy transition to create a global carbon-neutral society is a widespread objective, which entails reducing the dependency on fossil fuel-based power generation and increasing the integration of sustainable energy sources. Clean energy technologies, including solar panels, wind turbines, electricity networks and storage systems, currently require so-called 'critical minerals' such as lithium, copper, cobalt, nickel and rare earth minerals. Critical minerals can be defined as "metals, non-metals and minerals that are considered vital for the economic well-being of the world's major and emerging economies, yet whose supply may be at risk due to geological scarcity, geopolitical issues, trade policy or other factors" (Australian Trade and Investment Commission, 2021, p. 8). Due to the intensification of global efforts to achieve net-zero carbon emissions by 2050, the demand for these minerals is rising. In the International Energy Agency's report 'The Role of Critical Minerals in Clean Energy Transitions', it has been researched that, if States will adhere to the goals set in the Paris Agreement, the demand for critical minerals will quadruple by 2040 (IEA, 2021, p. 46). In this scenario, the mineral for which the demand will increase the most - and will potentially be 42 times as high in 2040 in comparison to 2020 - is lithium (IEA, 2021, p. 47).

Lithium, also called 'white gold', is one of the lightest and least dense metals and due to its high electrochemical potential a key component in the production of lithium-ion batteries, which are used extensively in electric vehicles and energy storage systems (Goonan, 2012). The world's largest lithium reserves are located in Chile, which holds 35.8% of all proven reserves (Statista, 2023a). More specifically, it can be found in the salt flats in the North of Chile, that together with parts of Northern Argentina and Southern Bolivia make up the Lithium Triangle. Apart from having reserves, Chile is also the second biggest producer of lithium worldwide after Australia (Statista, 2023b). Chile has the ambition to scale up its production of lithium, as well as copper, to meet the demand that is growing significantly in mineral-dependent regions such as the EU (Gobierno de Chile, 2022a). As stated in the European Green Deal, it is the EU's goal to make Europe the first climate-neutral continent, in which the electrification of the European society plays an important role (European Commission, 2019a). As a result, it is expected that lithium consumption in the EU will be almost 60 times as high by 2050 compared to 2020 (European Commission, 2020a). To obtain this lithium, as well as other critical

minerals, the EU wants to increase domestic extraction and production in light of its strategy of open strategic autonomy. However, the EU also recognises the importance of establishing partnerships with mineral-rich countries, as it is still completely dependent on imports for all the minerals it identifies as 'critical' (European Commission, 2020a). In terms of lithium, 78% of the EU's supply comes from Chile (European Commission, 2020b). The EU and Chile have extensive trade relations, which were documented in the EU-Chile Association Agreement in 2002. In 2022, this Agreement was modernised, and the EU-Chile Advanced Framework Agreement now includes guidelines on the cooperation on raw materials. According to the EU, this Agreement is especially crucial due to the access it ensures to Chile's lithium (European Commission, 2023c, p. 9).

Apart from being considered essential in the 'green' transition, the extraction of lithium is also a source of socio-environmental issues on the local level. While in Australia lithium is mined from mineral ores, in the Lithium Triangle it is extracted from brine. Lithium brine recovery is economically attractive, but has consequences in the form of environmental degradation, water scarcity and pollution, disruption of traditional ways of life or forced displacement. Consequently, the expansion of lithium extraction activities has been met with resistance from the location population, for example in Chile's largest salt flat Salar de Atacama (Sherwood, 2019). It has also raised the question in academia and the international political arena whether the transition to a carbon-neutral society can actually be called 'green' if the extraction of the necessary minerals causes socio-environmental risks locally (Hernandez & Newell, 2022). This is a relevant debate, as this thesis will demonstrate that labelling the transition 'green' and treating critical minerals as an indispensable component thereof can shape people's perceptions and justify political actions. Accordingly, the role of discourse and how it shapes the geopolitics of lithium is what is under scrutiny in this thesis. More specifically, it is researched how discourses regarding critical minerals – for instance on their extraction, potential or necessity - within two entities, have the potential to shape the cooperation between these two Parties in this field. Herein, the cooperation between the EU and Chile on lithium is taken as the case study, as the high concentration of lithium in Chile and its high demand in the EU make these Parties important players in the geopolitics of lithium. Moreover, they recently strengthened their cooperation in this field through the modernised EU-Chile Advanced Framework Agreement. Accordingly, the research question is: How is the cooperation on lithium between the EU and Chile shaped by their respective dominant discourses on critical minerals?

The role of discourse in shaping critical mineral partnerships is important to research as cooperation efforts are rising in number and will shape how the global supply chains of these minerals are structured. For instance, the EU also just signed a Memorandum of Understanding with Argentina for the establishment of a partnership on raw materials in June 2023 (European Commission, 2023b). Understanding how the narratives and practices regarding critical minerals differ between a mineral-rich and mineral-dependent entity and how this shapes a critical mineral partnership between them, can provide a deeper understanding of the role that is attributed to critical minerals on an international level and the consequences thereof. An essential element of this is the balance that will be established between the push for the expansion of critical mineral extraction to 'combat' climate change, and the protection of the local population and environment in mineral-rich areas. A balanced approach is important to avoid geopolitical challenges, economic disparities, and the exacerbation of socio-environmental risks. This balance is formed by the interaction between diverging discourses, as well as the power (im)balances that exist between the Global North, which has profited from unequal and unsustainable global resource extraction and distribution for a long time, and the Global South, where most critical mineral reserves are located and resource nationalism is gaining momentum. Consequently, the role that is attributed to critical minerals will shape this balance and subsequently determine how 'green' the transition to a carbon-neutral society will actually be.

Accordingly, the thesis follows the following structure. Firstly, the literature review provides an overview of the academic articles that address the role of critical minerals in the 'green' transition and demonstrates why the impact of discourse should be considered while studying this. Secondly, the theoretical framework is rooted in the assumptions of critical geopolitics and political ecology on the relationship between discourse, knowledge and power. While geopolitics is classically referred to as the impact of geographic spaces on political power and vice-versa, this thesis takes a constructivist perspective and argues geopolitical knowledge is made by a diverse array of elitist and popular practices and discourses. Thirdly, the methodology presents the research design, which is based on the qualitative method of critical discourse analysis. Fourthly, the bipartite analysis first explores how the dominant discourses in the EU and Chile have been constructed, and subsequently how they have influenced the formation of the guidelines for the cooperation between EU and Chile on critical minerals. Fifthly, the discussion uses the results of the analysis to demonstrate how the relationship between discourse and the geopolitics of lithium is shaped on a deeper level by the geopolitical

objectives discourses sustain; the power (im)balances between Parties; and the connotations the discourses creates to inherently linked terms to lithium such as ‘security’ and ‘sustainability’. Moreover, it addresses the implications of the results for the balance between expanding lithium extraction and protecting environmental and community security, which is a topic that deserves a follow-up study as indicated in the conclusion. The conclusion also asserts that the perception of lithium's role in the 'green' transition, as well as the societal understanding of its opportunities and challenges - shaped by the perspectives of the participants of the discourse and their prioritised challenges - can impact the ascribed significance of these minerals' 'criticality' and thereby influence the geopolitics of lithium.

2. Literature review

The increasingly visible consequences of climate change and the accelerated shift to renewable energy systems have led to an expansion of research on the impact of the 'green' transition on geopolitical and security dynamics (Johansson, 2013; Månsson, 2015; Scholten & Bosman, 2016; Paltsev, 2016; Scholten, 2018). This research often addresses the role of critical minerals in this transition. In this literature review, first the meanings of the terms 'critical' and 'strategic' are considered, after which it is analysed how critical minerals are pictured as an essential element of the transition to renewable energy that will create new dependencies, tensions, and partnerships. Subsequently, the increasing consideration of the socio-environmental consequences of lithium extraction and the labelling of the energy transition as 'green' are scrutinised. It is concluded that while the geographical concentration of the reserves of a critical mineral like lithium, as well as the technology to further produce the mineral, leads to partnerships between certain regions, how this cooperation is shaped goes further than these materialistic aspects. The importance of discourse, which is influenced by different actors and factors such as historical experiences and matters of sustainability, should be considered when researching the cooperation on lithium between the EU and Chile.

2.1. 'Critical' and 'strategic' minerals

Critical minerals, critical raw materials (CRM), strategic minerals, or strategically important critical minerals (Sarker et al., 2022) are commonly used terms in academia, while the impact of their utilisation is inadequately addressed. This is important as the implied criticality is a politically loaded attribute instead of an inherent characteristic (Frenzel et al., 2017). According to Foss (2020), the criticality of minerals is linked to their occurrence, quantity and quality, and access to development. Additionally, Frenzel et al. (2019, p. 2) argue it is "a measure of the (economic) risk arising from its utilisation". Generally, criticality is allocated to the economic risks of these minerals (Gleich et al., 2013; Graedel & Nuss, 2014), while the socio-environmental risks are being overlooked. Also, the term 'strategic minerals', defined by Schulz et al. (2017, p. 12) as "a subset of critical minerals and are those that are essential for national security applications", is argued to be analytically flawed as it enforces a political perception that the access to these minerals is permanently and exclusively threatened (Haglund, 1984). Moreover, what aspects are considered essential for national security differs from defence technologies (Bidwell, 1958, p. 32-33) to the renewable energy or electric vehicle industry (Sarker et al., 2022). Lithium, both generally labelled critical and strategic, is also frequently

referred to as ‘oro blanco’, or ‘white gold’. This socially constructed term is not only due to the silverly-white colour and the increasing value of the mineral, but also refers to the destructive, exclusive and unequal nature of the gold extraction by the Spanish colonists in Latin America five centuries ago (Hernandez & Newell, 2022). The consequence of labelling minerals like lithium as critical is that the imperative connotation inherently linked to this term leads to a securitised narrative which has the power to justify extreme and unsustainable policies to secure access to these minerals (Wilson, 2018). It is therefore important to acknowledge that while lithium is regarded as a critical mineral, this is not a neutral term and can be misused for economic or political gain.

2.2. The geopolitics of critical minerals

A considerable part of the literature on critical minerals places it at the intersection of renewable energy and geopolitics. Articles on the geopolitics of renewable energy discuss how the increase of sustainable energy sources will shape geopolitical relations and impact security. On the one hand, scholars claim that higher levels of energy self-dependency will lead to fewer geopolitical disputes and interstate conflicts (Verrastro, Ladislaw & Hyland, 2010; Francés, Marín-Quemada & González, 2013; Johansson, 2013; Hogget, 2014; Palsev, 2016). On the other hand, it is argued that energy politics will remain conflictual due to new dependencies (Rothkopf, 2009; Buijs and Sievers, 2011; Raman, 2011; Capellan-Perez et al., 2017; Umbach, 2018). Regardless, there is a consensus that the critical minerals necessary for the energy transition will create new dynamics that will shape international relations, economic competitiveness, and strategic interests among countries.

While the geopolitics of the energy transition is a widely researched topic, literature on the geopolitics of critical minerals more specifically is less developed. The available research mostly focuses on the geopolitical realignment as a result of the rising demand for critical minerals, their importance in renewable energy technology, and the vulnerabilities of critical mineral supply chains (Shiquan & Deyi, 2022; Nuttall, 2021; Kalantzakos, 2019; Kalantzakos, 2020; Pitron, 2022; Dou et al., 2023; Sarker et al., 2022; Ritoe, 2021; Reisch, 2022; Vakulchuk, Overland & Scholten, 2020; Nygaard, 2022). The most commonly referred to source of vulnerability is the geographical concentration of critical mineral reserves, which are predominantly located in the Global South. Many countries with these reserves have been labelled developing or underdeveloped and subject to corruption, violence and conflict, with heightened risks for distorted supply (Kalantzakos, 2020; Dou et al., 2023; Nygaard, 2022).

Apart from the reserves, also the production of critical minerals is highly concentrated, mainly in China. The global dependence on China and the fear of the international community that China will use its strategic position as a weapon against the West are deemed a source of tension (Pitron, 2022; Kalantzakos, 2019; Nuttall, 2021). Accordingly, these geographical concentrations create vulnerabilities as both unintentional (natural disasters, system failure, political unrest) and intentional (using export and pricing as a political instrument) disruptions can lead to price spikes and increasing dependencies (Buijs & Sievers, 2011). Additionally, while some authors describe the possible scarcity of finite critical minerals as a growing concern (Kalantzakos, 2020; Sarker et al., 2022; Altiparmak, 2022; Nygaard, 2022), others deny that this scarcity exists (Pitron, 2022; Lovins, 2017; Scholten, 2018; Overland, 2019). All in all, it is argued that the 'race' for control over critical mineral supply chains to assure secure and uninterrupted access shapes the current geopolitics of critical minerals (Nuttall, 2021; Kalantzakos, 2019; Reisch, 2022). However, this type of discourse does not only lead to a perceived sense of urgency and hostility, but also problematically indicates a Western perspective as it assumes there is a national deficiency of minerals.

2.2.1. Lithium geopolitics and the role of mineral-dependent and mineral-rich States

Altiparmak (2022) writes specifically about lithium geopolitics and argues it contains features from both the geopolitics of conventional and renewable energy. While the former is based on dependencies due to the limited and geographically concentrated oil, gas and coal reserves, the latter is rather "decentralised, multipolar, technology-led" (Altiparmak, 2022, p. 5). In turn, lithium geopolitics is shaped by the unequal distribution of the mineral, as well as the ambition to acquire technology to reduce vulnerabilities, develop the downstream industry and strengthen economic competitiveness. However, a unique feature of lithium geopolitics is the interdependencies that are established as a result of this hybridity. Even though interdependency is based on a mutual relationship – in this case, minerals versus technology – it is also described as a strategy of consumer states to secure supply (Altiparmak, 2022). An important element in the construction of these interdependencies is the inherent tensions between mineral-dependent and mineral-rich States (Pitron, 2022).

Mineral-dependent countries, predominantly consumer States located in the Global North, want to secure access to cheap critical minerals to sustain growing demand, develop the downstream mineral industry and preserve an economically advantageous position (Jerez, Garcés & Torres, 2021). For a long time, Western States have exploited resource-rich countries and have

benefitted from low mineral prices and labour costs to develop their economies (Dou et al., 2023). According to Jerez, Garcés and Torres (2021), the critical minerals industry is still subject to post-colonial structures as a result of the extractive nature of critical mineral mining and the unbalanced socio-environmental consequences. Similarly, Pitron (2022) argues that Western States offshore extraction practices to avoid affiliated pollution. Despite this, a contemporary trend can be identified in which countries in the Global North are onshoring mining activities to achieve strategic autonomy and supply chain security (Riofrancos, 2023). In light of equivalent objectives, protectionist policies in the form of subsidies and export restrictions to protect industries that might suffer from high mineral prices are rising in these countries (Crawford & Gordon, 2022; Dou et al., 2023). However, while extractivist and capitalist policies have ensured low mineral prices for consumer States for ages, when it comes to critical minerals, the balance of power is turning in favour of the mineral-rich countries (Pitron, 2022).

As the cooperation of mineral-rich States is essential for the energy transition, the geopolitical importance of these countries is increasing, leading to partnerships with great powers and a greater say in mining deal negotiations (Crawford & Gordon, 2022). The ultimate objective of these States is to maximise mineral revenue by developing the downstream industry to export finished or semi-finished products instead of solely raw materials (Jerez, Garcés & Torres, 2021). Yet, many mineral-rich States are still behind in this vertical integration and struggle with fully capturing the proceeds of their mineral reserves as they face challenges in the form of the Dutch disease, the resource curse, price fluctuations and multinational companies capturing the lion's share of the profits (Dou et al., 2023). Another major challenge is the resistance from the local population as a result of the socio-environmental harm linked to the extraction of critical minerals (Kalantzakos, 2020). The mining industry is historically linked to corruption, lacking supervision, human rights violations and nepotism (Dou et al., 2023), and many mineral-rich countries are struggling to effectively invest mineral revenues in sustainable development. Resultingly, neo-extractivism and resource nationalism are surging, which is both perceived as a threat and an opportunity.

2.2.2. Neo-extractivism and resource nationalism

The rising strategic importance of critical minerals has led to higher levels of neo-extractivism, indicating the state-led extraction and export of raw materials in support of national development (Cervantes & Garduño-Rivera, 2022; Patrahau et al., 2020; Burchardt & Dietz,

2014). Neo-extractivism is closely linked to progressive governments in South America (Gudynas, 2009) and differs from extractivism as it criticises the role of multinational companies and the privatisation of the neoliberal system (Acosta, 2013). However, it is still subject to globalisation, capitalism and post-colonial features as the local communities that bear the consequences of the extraction do not reap the benefits, but have to endure them for the benefit of the total population (Jerez, Garcés & Torres, 2021; Babidge & Bolados, 2018; Acosta, 2013). The expanded role of the State in this resource-based development is realised through resource-nationalist policies, such as the nationalisation of strategic companies, contract revisions, tax policy adjustments and export restrictions (Burchardt & Dietz, 2014). Accordingly, resource nationalism can be defined as "various forms of state involvement in the extraction, processing and sale of natural resources" (Pryke, 2017). While a higher degree of resource nationalism has the potential to stimulate economic, social and environmental development due to an increase in revenue for the State (Ward, 2009), it can also hinder mineral exploration and extraction as a result of lacking foreign investment and expertise (Cervantes & Garduño-Rivera, 2022). Moreover, how effectively the revenues of critical minerals can be collected and spent depends on the accountability and the strength of the State institutions (Perotti & Coviello, 2015). According to Humphreys et al. (2007), resource nationalism in developing States is generally linked with slow growth, inequality and deindustrialisation, and rather hinders sustainable development than boosts it. Accordingly, resource nationalism and neo-extractivism are in the literature often described as geopolitical challenges and threats to international resource trade. Contrastingly, the rise of protectionist policies in the Global North does not have this negative connotation, which, according to Childs (2016), is a result of lingering post-colonial structures and mentalities.

2.3. Sustainability in the critical mineral supply chains

As the social and environmental challenges of expanding critical mineral extraction are becoming increasingly evident, research on the sustainability of this industry has surged. Many articles focus specifically on the socio-environmental challenges of lithium mining in the Lithium Triangle due to the potential for lithium brine recovery in this region, which is an economically viable, yet destructive extraction process (Agusdinata et al., 2018). The environmental, and especially the social, risks of lithium mining are regarded as an under-researched topic (Agusdinata et al., 2018; Voskoboynik & Andreucci, 2022; Anlauf, 2016; Fornillo, 2018). While the research has expanded drastically over the last few years, many

articles remain descriptive and general by approaching sustainability in the broadest sense of the word.

2.3.1. The concept of sustainability

The commonly used definition for sustainability is derived from the Brundtland Report, which defines sustainability as meeting "the needs and aspirations of the present without compromising the ability to meet those of the future" (Brundtland, 1987, p. 39). The mainstream sustainability model consists of the three core pillars of environmental, social and economic sustainability, while the fourth pillar is disputed between cultural, institutional or religious (Bunford et al., 2013). In relation to critical minerals, sustainability is evaluated in different ways. For example, it is assessed through an investigation of the environmental, social and governance (ESG) challenges (Petavratzi et al., 2022); through an evaluation of the impact of the extraction on the implementation of Sustainable Development Goals (SDGs) (Dou et al., 2023); by creating a life cycle analysis of lithium-ion batteries (Peters et al., 2017); or through an assessment of the question of justice in the 'green' transition (Zehner, 2012). Sustainability is closely linked to concepts such as 'green mining', defined by Sousa et al. (2018, pp. 1-2) as "the implementation of technologies and mining processes targeting at reducing any possible environmental footprints associated with the extraction and processing of minerals and metals". This definition is an example of how sustainability in critical mineral supply chains often centres around environmental sustainability. Moreover, the increasing demand for critical minerals will undoubtedly lead to a rise in political, economic, environmental and social challenges, which in turn impedes the sustainability efforts of the extraction of the minerals (Dou et al., 2023). This is part of a broader trade-off between sustainability and security (Graham, Rupp & Brungard, 2021), in which critical minerals play a dual role. While these minerals are essential in the technology necessary to realise the energy transition, they are also the cause of environmental and social negative externalities (Petavratzi et al., 2022).

2.3.2. Water insecurity and additional socio-environmental challenges

Like all mining activities, the extraction of critical minerals directly causes a number of socio-environmental challenges. In the Lithium Triangle, many of these challenges stem from the great amount of water used in the extraction of lithium from brine as the production of 1 ton of lithium requires half a million gallons of water (Giglio, 2021). A high volume of brine water is pumped from below the salt flats for the process of evaporation (Kavanagh et al., 2018), after

which clean water is used to rinse the lithium (Quijano, 2020). As a result, in Chile's biggest salt lake Salar de Atacama, around 65% of the water of the region is used by the mining companies (Morales Balcázar, 2021), which is double as much as the domestic usage (Liu & Agusdinata, 2020). This has led to water shortages and the depletion of aquifers and other water sources (Kaunda 2020; Vikström 2020), resulting in lower availability of water for agriculture and other industries (Graham, Rupp, & Brungard, 2021; Kaunda, 2020). Consequently, this has instigated forced migration in the local and indigenous communities (Agusdinata et al., 2018; Liu et al., 2019), and has increased the risk of social conflict over water availability (Giglio, 2021; Bustos-Gallardo, Bridge & Prieto, 2021). Apart from the quantity, also the quality of the water is threatened due to the pollutants and chemicals used in the lithium extraction process (Wanger, 2011). Apart from the consequences of water insecurity, other environmental impacts are land degradation and soil erosion; disfiguration of landscapes; generation and negligence of waste; and pollution and high carbon emissions (Graham, Rupp & Brungard, 2021; Dou et al., 2023; Liu & Agusdinata, 2020; Agusdinata et al., 2018; Petavratzi et al., 2022; Liu et al., 2019; Giglio, 2021; Voskoboynik & Andreucci, 2022; Agrawal & Sharma, 2021). The latter is specifically linked to critical minerals, as the extraction process is more polluting and energy-intensive than traditional metallic mineral mining as critical minerals are often found in co-associated forms, which means more resources are necessary to separate and purify them (Dou et al., 2023).

Furthermore, as the lithium mines in the Lithium Triangle overlap with indigenous territory and communal lands, social challenges are generated (Voskoboynik & Andreucci, 2022). As mentioned above, water insecurity leads to a higher risk of social conflict and forced migration, which can result in territorial alienation and the abandoning of ancestral sites (Hernandez & Newell, 2022; Agusdinata et al., 2018). Other potential negative consequences are the decline of tourism causing economic insecurity (Quinteros-Condorettya et al., 2020), the restricted access to parts of the land interfering with work or traditional ways of living (Dorn & Peyré, 2020), and the creation of a dependency cycle in which the local population is forced to work in the mining companies as other economic activities are becoming less profitable (Hernandez & Newell, 2022). On the contrary, the growing lithium mining industry also brings job opportunities, improved infrastructure, and growth for the local economy (Hilson and Maconachie, 2020). Yet, to make lithium mining a mutually beneficial activity, the communication between the mining companies and the local population should improve (Quijano, 2020; Petavratzi et al., 2022). While the ILO's Indigenous and Tribal Peoples

Convention (1989) and the UN's Declaration on the Rights of Indigenous Peoples (2007) provide indigenous peoples with the right to consultation and the mechanism of free, prior and informed consent, this is not always complied with (Giglio, 2021). According to Levanda, Behrsin and Disano (2021), this is part of a larger pattern of injustice where local and indigenous communities are disproportionally affected by renewable energy projects. As a result of these socio-environmental challenges, social resistance has risen in the Lithium Triangle (Chen-Glasser & DeCaluwe, 2022). Social unrest has the potential to disrupt the progress of lithium mining projects, which subsequently can cause a decline in the lithium output (Petavratzi et al., 2022; Süsser et al., 2022). Either way, the expansion of lithium mining activities will always strain the local population and environment, which raises the question of whether the transition can actually be called 'green'.

2.4. A 'green' or green*er* transition?

The greenwashing of products is becoming a bad habit, yet the greenwashing of the whole energy transition is straight-out dangerous. In the name of the 'green' transition or 'green' economy, unsustainable practices are justified through discourse supporting 'green' capitalism and 'green' extractivism. 'Green' extractivism, also called eco-extractivism, is not only delineated as being in harmony with the energy transition, but necessary for its accomplishment (Voskoboynik & Andreucci, 2022; Núñez, Benwell, and Aliste, 2021). Similarly, 'green' capitalism perceives the (neo)liberal market economy as the solution to climate change (Tienhaara, 2014; Zysman & Huberty, 2014). This type of discourse is supported by mining companies and governments, as the acceptance of negative externalities of mining equals the legitimisation of their practices (Himley, 2010; Kirsch, 2010; Onn & Woodley, 2014). This makes the discourse around critical mineral extraction distinctive from other types of resource extraction (Voskoboynik & Andreucci, 2022). According to Hernandez and Newell (2022), "ecologising" the energy transition should mean taking accountability for the damage it causes as there is no such thing as 'green' mining: "There is just clean*er* energy and green*er* mining" (Hernandez & Newell, 2022, p. 962).

Many researchers try to answer the question of how to make lithium mining in the Lithium Triangle more sustainable. That there is no apparent solution becomes clear from the relatively vague language used to outline the need to "address problems" (Heffron, 2020, p. 862), "minimize the impacts of mining" (Hernandez & Peter Newell, 2022, p. 962), or "deal with substantial uncertainties" (Quinteros-Condoretty et al., 2020, p. 1745). Nevertheless, there are

recurring recommendations that can be identified in the literature. First and foremost is the call for a more inclusive mining process, in which local and indigenous communities, social movements and local governments are continuously involved and empowered (Dou et al., 2023; Quinteros-Condoretty et al., 2020; Dorn & Peyré, 2020; Petavratzi et al., 2022). This would promote the establishment of a local framework in which mining projects fit and benefit the local environment (Giglio, 2021). Second is the recommendation that the mining companies strengthen their ESG governance, promote R&D and become more transparent (Petavratzi et al., 2022; Quinteros-Condorettya et al., 2020; Chen-Glasser & DeCaluwe, 2022). Third, the implementation of an international governance system supervising the critical mineral supply chains is said to provide a cooperative mechanism and support equal distribution of the global critical minerals revenue, which is an important element in securing sustainability globally (Dou et al., 2023). Fourth, promoting and investing in a circular economy, recycling and technological innovations to substitute minerals like lithium are important to boost sustainability and limit dependencies and supply chain disruption risks (Czerwinski, 2022; Ambrose & Kendall, 2020; Quinteros-Condoretty et al., 2020). Besides recirculating the minerals, this also entails the reduction of waste from the moment of extraction to the process of recycling (Czerwinski, 2022). Unfortunately, recycling critical minerals is still a complicated, expensive and energy-consuming process (Penke, 2021; Kalantzakos, 2019; Golroudbary, 2019). Currently, only 1% of all lithium-ion batteries are recycled globally, yet, with improved technology, this can increase to 50% by 2045 (Simas et al., 2022). While the critical mineral supply chains can never be fully sustainable, it is important to implement these recommendations to minimise the risks associated with the expansion of lithium extraction both in the Lithium Triangle as well as worldwide.

To conclude, the academic literature on critical minerals centres around the geopolitical impact of the minerals' growing demand and the sustainability risks posed by their extraction. Herein, the geographical concentration, the associated supply chain risks and environmental degradation are repeatedly recognised as crucial features of these minerals and the way they shape geopolitics. However, apart from these more materialistic aspects, the literature review also shows the importance of discourse, both overt and covert, in shaping the geopolitics of critical minerals. By treating the acquisition of critical minerals as a 'race', or by utilising the terms 'critical' and 'strategic' minerals, a perceived sense of scarcity and hostility is created. In addition to labelling the extraction or the energy transition 'green', this can lead to the justification of unsustainable mining practices. Additionally problematic is the Western

perspective that can be identified in the literature, for instance when the focus lies on securing a stable supply of critical minerals or when resource nationalism in developing countries, unlike protectionist policies in the Global North, is described as a geopolitical challenge. According to Altiparmak (2022), more research should focus on the internal factors that shape lithium strategies and foreign policy. This coincides with the aim of this thesis, which is to understand how the cooperation on lithium between the EU and Chile is shaped by the narratives and practices present in their societies. Moreover, while the majority of the outlined literature centres around the objectives and interests of States, the roles and narratives of the different stakeholders are important to include. All in all, analysing the role of discourse in shaping the cooperation on lithium between two Parties is unprecedented and thereby adds to the existing literature on the geopolitics of critical minerals and their role in the renewable energy transition.

3. Theoretical framework

The literature review demonstrates how the geopolitical framework dominates the literature on critical minerals. While it is recognised that geographical factors such as the concentration of minerals influence which States enter into partnerships, it is rejected that solely geographical factors shape how this relationship is constructed. Therefore, this thesis is based on the assumptions of critical geopolitics and assumes it is rather discourses, power dynamics, and ideologies that shape the geopolitics of critical minerals. No previous research has approached lithium, or any critical mineral, from a critical geopolitics perspective, which adds to the uniqueness of this thesis. As sustainability matters are closely connected to critical minerals, also the political ecology approach – focussing on the part of the field that analyses the role of discourse - is included in the theoretical framework. This broadens the understanding of how environmental challenges contribute to shaping the discourse around critical minerals. The theoretical framework first outlines the critical geopolitics approach in detail, followed by a short overview of the relevant aspects of political ecology. Lastly, it is explained how these approaches provide a lens through which the results of the analysis can be interpreted.

3.1. Critical geopolitics

While the ideas behind critical geopolitics can be traced back to the works of Foucault (1980) and Said (1978), the term 'critical geopolitics' was used for the first time in the dissertation of Ó Tuathail and Agnew in 1989. Critical geopolitics originates from post-structuralism, which denies that the world can be studied objectively. Post-structuralists argue that social and discursive practices are linked and that knowledge and power should be studied in the social and cultural background in which they are produced (Edkinds, 2007). Critical geopolitics emerged as a criticism towards classical geopolitics, which studies how geographical variables impact and shape international relations and vice-versa. Classical geopolitics is a problem-solving theory and had been widely used to explain international relations during the Cold War. However, according to critical geopolitics, the narrow and Eurocentric view and the construction of 'us-vs-them' dichotomies have resulted in the marginalisation of certain groups (Ó Tuathail, 1999). Therefore, critical geopolitics does not only reject that solely geographical divisions shape foreign policy and its popular legitimation (Agnew, 2006), it fundamentally questions the system of power and knowledge that classical geopolitics is based on. It criticises the assumption that geography is a fixed and predetermined context in which States construct politics (Ó Tuathail, 1999; Dalby, 1991). Instead, it argues that geopolitics is a broad social and

cultural phenomenon that is made up of spatial practices, both material and representational, and is shaped by human perceptions, interpretations and public discourses (Ó Tuathail, 1999; Dalby, 2013; Dodds, 2019).

The ontology of critical geopolitics is based on subjectivity and social construction, as claims about security are by definition selective since truth is based on perceptions (Dalby, 1991; O' Tuathail & Agnew, 1992). Accordingly, there is no single approach to conducting research based on a critical geopolitics framework. However, the central role of discourse is evident in all studies, making this an important term to unpack. Ó Tuathail and Agnew (1992, pp. 192-193) define discourse as "sets of socio-cultural resources used by people in the construction of meaning about their world and their activities". Correspondingly, studying the discourse of geopolitics means analysing "the socio-cultural resources and rules by which geographies of international politics get written" (Ó Tuathail & Agnew, 1992, p. 193). According to critical geopolitics, these geographies of international politics get written by the intellectuals of statecraft, which refers to "a whole community of state bureaucrats, leaders, foreign-policy experts and advisors throughout the world who comment upon, influence and conduct the activities of statecraft" (Ó Tuathail & Agnew, 1992, p. 193). These political elites project their perceptions on society, thereby shaping, sustaining and legitimising the dominant discourse. The dominant discourse concerns the prevailing, institutionally reinforced and widely accepted way of thinking, speaking and behaving regarding a certain topic, thereby shaping the social narrative (Hepple, 1992, p. 139). Accordingly, epistemologically, it is important to understand how the intellectuals of statecraft "spatialise" international relations through discursive practices, and how their views shape the dominant discourse and can subsequently influence political decisions (Ó Tuathail & Agnew, 1992, p. 192).

3.1.1. Foucault's power/knowledge nexus

Critical geopolitics has been heavily influenced by Foucault and his ideas on the relationship between discourse, knowledge and power. Foucault's definition of discourse is "a group of statements that provide a language for talking about a particular topic in a particular way" (Foucault, 1972, p. 49). He argues that discourse shapes knowledge by establishing the boundaries of what is believed to be convincing and what is not. It regulates peoples' thoughts and beliefs, which ultimately guides their actions. It follows the assumption that discourse is subjective and shaped by the historical, social and political context. Consequently, discourse and the way it shapes knowledge is an important instrument of power. While the dominant

discourse is usually framed by the prevailing power structure, it remains a force in society and can be used as a mechanism in the resistance and opposition of this dominant power (Foucault, 1972; Foucault, 1980). The relationship between discourse, knowledge and power is referred to as the power/knowledge nexus, which is a central concept in critical geopolitics. The nexus has been used to explore how knowledge is constructed in the geopolitical realm, and how it is utilised in international politics by shaping the social perception of States, identities and borders (Dalby, 1991; Campbell, 1992). Ó Tuathail and Agnew (1992, p. 198) even claim that "geography is a form of power/knowledge itself". Other ideas of Foucault that have influenced critical geopolitics, yet are less relevant in this thesis, revolve around subjectivity (how discourse reinforces particular ways of thinking); biopolitics (how power is exercised through controlling the population and its application to geopolitical practices); and governmentality (how power is executed through practices and techniques). Foucault's arguments, together with Said's (1978) ideas on the significance of representational practices in the construction of discourse, challenge the assumptions of classical geopolitics and provide a lens for critical geopolitics to critically analyse the relation between knowledge, power and space.

3.1.2. Theoretical gaps

The critical geopolitics approach is not without its theoretical gaps. Firstly, the excessive focus on discourse has been considered problematic as it does not address the consequences of dominant discourses representing the views of the political elites. Kelly (2006, p. 49) argues that "the reliance upon discourse as a major emphasis of critical review encourages a "so what is next" argument after we learn that most discourse reveals taint". Moreover, the overemphasis on discourse neglects the material side of geopolitics (Dodds & Sidaway, 1994), which is an acknowledged weakness by critical geopolitics scholars (Ó Tuathail, 1992). Theories such as geopolitical economy have tried to fill this gap by understanding how discourse and the creation of identities that shape geopolitics can impact the world economy and the other way around (Dodds & Sidaway, 1994). Secondly, Kelly (2006) claims that critical geopolitics is degrading the importance of traditional theory and lacks the strength of generalisation. Likewise, Kelly argues that critical geopolitics inadequately addresses the impact of geographical factors in shaping international relations and suggests that both the assumptions of the classical and critical approach should be taken into consideration when studying geopolitics. Thirdly, the focus on the political elites in shaping the dominant discourse is incomplete. While Ó Tuathail and Agnew (1992) argue that the intellectuals of statecraft have the power to construct and sustain the dominant geopolitical discourse, they do recognise this is subject to change as a

result of human practices. Kelly (2006, p. 49) even questions whether the political elites are as united and in control as claimed. Moreover, Routledge (1993) localises the role of social movements in shaping geopolitical discourses through their resistance against the State-centred geopolitical narrative. Additionally, Sharp (1993) has researched how popular sources of knowledge can shape geopolitics through education or media. Similarly, dell'Agnese (2021) explores the role of popular culture in shaping discourses on the environment, calling her approach 'ecocritical geopolitics'. Overall, the environment is increasingly considered a force shaping discourse, and due to the inherent link between sustainability and critical minerals, it is worth looking more closely at the relationship between discourse and the environment as studied by political ecology.

3.2. Political ecology

Political ecology studies the relationship between humans and the environment and their mutual impact. This is a very broad field covering all aspects of this relationship, with many political ecologists focusing on the material struggles of environmental issues such as the impact of environmental degradation on conflict and violence (Church & Crawford, 2018; Allen, 2017; Williams & Le Billon, 2017; Andrews & McCarthy, 2014). However, there are also scholars such as Dove (2005) who focus on the social construction of environmental knowledge and how this impacts political negotiations on resource practices. The role of discourse in shaping environmental politics is an important focus of study in the second generation of political ecology (Jones, 2008). For instance, Peets and Watts (2004, p. 6) describe environmental politics as "a process of cultural mobilization", in which different actors discuss and negotiate cultural practices defining the environment. This follows the post-structuralist approach and the knowledge/power nexus and is based on the assumption that people's understanding of environmental issues is shaped by discourse. In turn, these perceptions and interpretations have the power to influence the actions taken to resolve them (Dryzek, 1997). Consequently, discourse can legitimate and normalise certain behaviour and environmental policies while excluding others (Valdivia, 2015), which can significantly harm environmental security. As described in the literature review, this can be the consequence of continuously using terms like the 'green' transition, capitalism or extractivism. Dove (2005) considers the social construction of the environment a 'struggle' between different interpretations of the causes and solutions to environmental issues, which should be analysed to understand how discourses and subsequently environmental policies are impacted. Herein, it is necessary to analyse the contrasting interpretations, for instance from political elites and social movements, not independently but

in relation to each other, as their views have emerged as a result of interactions with one another (Zimmerer, 1993). Additionally, their views and struggles need to be studied in light of the historical and cultural context (Newell & Bumpus, 2012), as well as in the broader structure of power in society (Hernandez & Newell, 2022). Critical geopolitics and the second generation of political ecology agree on the critical role of discourse in shaping people's perceptions and understandings of geopolitical and environmental issues. Furthermore, both fields focus on questions of justice and how geopolitical discourse or socio-environmental challenges disproportionally affect marginalised groups. Yet, for this thesis, the most relevant point of synergy is the focus on how dominant discourses are constructed and how these discourses have the power to influence international relations.

To sum up, the theoretical framework of this thesis is based on the shared assumptions of critical geopolitics and political ecology regarding the relationship between discourse, knowledge, and power. Central is the recognition of the post-structuralist notion that social and discursive practices are interconnected. Furthermore, the thesis embraces the idea of performativity and posits that geopolitical knowledge is constructed through a variety of practices and discourses, encompassing both elite and popular perspectives. In regards to the research question, this framework serves as a lens through which it is researched how the guidelines for the cooperation on lithium between the EU and Chile have been shaped by their respective dominant discourses on critical minerals. Herein, it is important to both consider the internal factors, such as the actors and contextual factors shaping the dominant discourses, as well as external factors like the power (im)balances between the EU and Chile. By analysing the link between discourse and the content and depth of the lithium cooperation between the EU and Chile this thesis adopts a material-discursive approach. Moreover, the constructivist perspective on geopolitics enables an analysis of how different narratives can support and legitimise distinct geopolitical objectives. Accordingly, the objective of this thesis extends beyond merely identifying the dominant discourses; it seeks to comprehend their construction as well as their implications.

4. Methodology

The literature review and theoretical framework have demonstrated that discourses, narratives and practices are important to consider when researching the geopolitics of lithium. These chapters constitute an important basis for answering the research question of the thesis, which is:

How is the cooperation on lithium between the EU and Chile shaped by their respective dominant discourses on critical minerals?

To answer this question, two sub-questions are drafted:

1: How are the dominant discourses regarding critical minerals constructed in the EU and Chile?

2: How have the dominant discourses influenced the formation of the guidelines for the cooperation between the EU and Chile on critical minerals?

The research question discloses the expectation that the lithium partnership between the EU and Chile is of a cooperative nature instead of a collaborative one, meaning the Parties work together to achieve their respective objectives. This is based on the literature on the inherent tensions between mineral-rich and mineral-dependent countries. Based on the same literature and the theoretical framework that assumes discourse – shaped by the participants of the discourse and contextual factors - has the power to influence political actions and accordingly international relations, it is hypothesised that the dominant discourses on critical minerals in the EU and Chile will be diverging, leading to a cooperation based on compromises. The sub-questions are addressed in a bipartite critical discourse analysis (CDA) where, first, the institutionally embedded dominant discourses are examined through a critical analysis of the (critical) minerals strategies of the EU and Chile. Subsequently, the formation process for the guidelines for the cooperation on critical minerals between the EU and Chile is analysed by studying the negotiation round reports of this process, as well as the EU textual proposal and the final text of the Energy and Raw Materials chapter in the EU-Chile Advanced Framework Agreement. In this methodology section, first, the research design is explained, after which the methodological limitations and justifications are outlined.

4.1. Research design

4.1.1. Research philosophy and type

The research philosophy of this thesis follows interpretivism, as it is believed that reality is socially constructed and can only be studied subjectively. This belief is grounded in critical geopolitics, which criticises classical geopolitics for treating geography as a fixed and predetermined context. Additionally, it is based on the broader post-structuralist approach, which argues that the world cannot be studied objectively due to the intrinsic subjective character of knowledge production and the positionality of the researcher who is always historically, socially, and geographically embedded. The analysis adopts a qualitative research method as textual documents are critically analysed to examine the dominant discourses and the guidelines forming the cooperation on critical minerals. Furthermore, the research is inductive and explanatory as the results of the CDA are used to explain how the cooperation between the EU and Chile concerning lithium is shaped.

4.1.2. Research strategy: a case study

The research strategy is based on a single-case study design, which is useful for gaining a comprehensive and in-depth understanding of the phenomena under scrutiny (Crowe et al., 2011). It fits well with the explanatory nature of the analysis as it has the ability to answer 'how' questions. While it is an interpretative case study, the analysis also includes a critical perspective as the aim is not only to identify the discourses, but critically analyse their construction and implications as well. The case study is on the lithium cooperation between the EU and Chile and has been chosen for its criticality and current relevance. On the one hand, the EU constitutes an important lithium importer due to its ambitious electrification plans for reaching its 2030 and 2050 climate goals. On the other hand, Chile is the second biggest lithium producer and supplies 78% of the EU's lithium (European Commission, 2020b, p. 20). The guidelines for the cooperation on critical minerals between the EU and Chile have been documented only recently in chapter 8 on Energy and Raw Materials of the EU-Chile Advanced Framework Agreement. This Agreement has been concluded in December 2022, yet still needs to be signed to be legally binding. Furthermore, Chile's (critical) minerals strategy was agreed upon in January 2022 and the EU's newest strategy was proposed only in March 2023. The unique context in which the EU-Chile lithium cooperation is set makes, based on Stake's (1995) categorisation, for an intrinsic case study. Moreover, it is a cross-sectional study as the analysis delineates the situation based on the present circumstances. This means there will be no space to examine changes in the discourses and relations between the EU and Chile, which would

make an interesting follow-up study. As the case is selected for its own merit and is not representative, the potential for generalisation is limited. Nevertheless, this thesis provides a deeper insight into what actors and factors might impede or facilitate a smooth cooperation on lithium between mineral-rich and mineral-dependent regions, which is essential to meet its increasing global demand.

4.1.3. Data collection method

The analysis is conducted using primary sources, yet secondary sources are intermittently utilised for contextualisation purposes. The first part of the analysis critically analyses the (critical) minerals strategies of the EU and Chile. A critical minerals strategy can be defined as "a strategic plan designed to improve access to reliable, secure and resilient supplies of critical minerals" (IEA, 2022a). The EU's strategy is documented in the European Critical Raw Materials Act. This Act includes a Regulation, which "sets a regulatory framework to support the development of domestic capacities and strengthen sustainability and circularity of the critical raw material supply chains in the EU", and a Communication, which "proposes measures to support the diversification of supply chains through new international mutually supportive partnerships" (European Commission, 2023a, p. 2). Solely the Communication document is analysed as it is the most relevant regarding the lithium cooperation with Chile. While the Act still needs to be approved by the European Parliament and the Council of the European Union, it has already been adopted by the European Commission. While there are also other EU documents outlining plans for critical minerals, such as European Action Plan on Critical Raw Materials (European Commission, 2020b), European Innovation Partnership on Raw Materials (European Commission, 2010), and European Raw Materials Initiative (European Commission, 2008), the Communication of European Critical Raw Materials Act is chosen for its recentness and comprehensiveness.

For Chile, the most recent strategy addressing critical minerals is the National Mining Policy 2050 (Política Nacional Minera 2050). While it is a strategy for the complete mining industry in Chile, there is a special focus on the critical minerals lithium and copper. Moreover, the Critical Minerals Policy Tracker of the International Energy Agency confirms that this document outlines Chile's most recent strategic plans regarding critical minerals (IEA, 2022b). The National Mining Policy 2050 is represented in two documents: a 152-dia pages document available in English with pictures and graphs (Gobierno de Chile, 2022a), and a 16-page document containing the text of the strategy in Spanish that has gotten the approval of the

Supreme Court (Gobierno de Chile, 2022b). While both have the same content, the language slightly differs, which is why both are analysed to fully comprehend the dominant discourse in Chile.

As explained below, the first part of the analysis includes the evaluation of the production and interpretation of the (critical) minerals strategies, for which reports on the public consultations of these strategies are analysed. In Chile, the drafting of the strategy went through multiple consultation phases, yet due to feasibility constraints, the analysis focuses on the report of the Virtual Phase as this involved approximately 1000 Chilean citizens that gave their opinion on 9 thematic axes that have been identified in previous phases. In the case of the EU, two public consultations - a call for evidence and a questionnaire - were running in parallel on the 'Have your say' portal. As both are relevant and summarised in the stakeholder consultation synopsis report in Appendix 2 of the Impact Assessment of the European Critical Raw Materials Act, both are considered.

The second part of the analysis examines the agreement between the EU and Chile that includes the guidelines for their cooperation on critical minerals. This is documented in chapter 8 on Energy and Raw Materials of the Interim Trade Agreement component of the EU-Chile Advanced Framework Agreement. In the analysis, the final text of this chapter is compared to the textual proposal that was submitted by the EU in 2018, to identify where changes have been made and provisions have been added or removed. In contrast to other chapters, the Energy and Raw Materials chapter lacks a Chilean textual proposal as it was a new matter proposed by the EU. Additionally, the reports on negotiation rounds 2 to 10, published by both the EU and Chile, are analysed to discover which provisions in chapter 8 needed more mediation than others during the negotiation process.

4.1.4. Data analysis method

The documents are analysed using discourse analysis, as this method examines the meaning of the text behind the language. More specifically, a critical discourse analysis (CDA) is conducted for its emphasis on how language use has social and political implications. It considers language a social practice that is ingrained in power relations, which should be studied using a methodologically pluralistic approach (Hoepfner, 2006). In this study, a CDA is performed to explore how the dominant discourses in the EU and Chile are constructed and have shaped their cooperation on critical minerals. For the first part of the analysis, Fairclough's (1989; 1992;

1995) CDA model is utilised, which outlines a three-step analysis to study discourse, focusing not only on language but the entire social interaction process. The first step of this model entails a text analysis, also called the description level. It analyses the actual text of documents, including the vocabulary, grammar and structure, to identify themes and patterns (Fairclough, 1989, pp. 112-138). It examines, among other things, specific word choices; negative or positive expressions; repeated topics; used metaphors; allegations, stated assumptions or implications; the mentioning of cause-effect relationships; how differences are indicated; and how words and sentences are connected (Gölbaşı, 2017, p. 9). As the analysed documents contain the institutionally embedded dominant discourse, the goal of the text analysis is not only to study this discourse, but to discover its intention and underlying meaning as well. The extensive text analyses of the (critical) minerals strategies can be found in Appendix 1 and 2.

The second step of the model, the processing analysis or interpretation level, studies the relation between the text and the social structure, by considering how the text is produced and interpreted (Fairclough, 1989, pp. 140-149). An important aspect of this level is the role of the actors; who are the participants of the discourse (the actors shaping discourses) and who are the subjects (the receivers of the discourse's effects) (Gölbaşı, 2017, p. 11)? While both (critical) minerals strategies went through a public consultation phase, which voices and the extent to which they have been incorporated into the actual strategy are under scrutiny here. This should be viewed in relation to the text of the strategy, along with the existing power structures between the relevant stakeholders (Fairclough, 1989, p. 151).

Step three is the social analysis, or explanation level, which aims to analyse how the dominant discourses shape, and are shaped by, institutional and societal power relations and struggles (Gölbaşı, 2017, p. 13). Discourse can only be understood in consideration of its context, while contextualising can also reveal which societal challenges are represented in the discourse. Following Gölbaşı's (2017) definition of the social analysis, the contextualisation starts with an overview of the relevant institutional context to link the (critical) minerals strategy to related domestic policies. Subsequently, an overview of the relevant aspects of the historical, geopolitical and socio-environmental situation is given, as the literature review demonstrated that these are significant factors in relation to critical minerals. After having conducted Fairclough's three-step analysis, the inherently interrelated levels are analysed in relation to each other to determine which factors and actors have been meaningful in the construction of the dominant discourse on critical minerals in the EU and Chile.

As the CDA method argues that language is ingrained in social practice, and the theoretical framework assumes that social practice shapes discourse and has the power to initiate political action, the second part of the analysis focuses on the latter part of this process. Accordingly, the negotiation process for drafting the guidelines for the Energy and Raw Materials chapter is analysed, firstly, by studying the EU's and Chile's negotiation round reports of the EU-Chile Advanced Framework Agreement for statements made about the formation process of chapter 8. The results of this can be found in Appendix 3. Secondly, the EU textual proposal of chapter 8 is compared through the Compare Documents function on Word with the final text of this chapter. How the text of relevant provisions, meaning those focusing on raw materials, have been changed and which provisions have been added or deleted, is depicted in Appendix 4. By comparing statements made in the negotiation round reports on the sources of disagreement to the changes made in the text of the chapter, it is possible to make interpretative interferences about the extent to which the dominant discourses on critical minerals are reflected in and have shaped the cooperation between the EU and Chile on lithium.

4.2. Methodological limitations and justifications

A CDA fits within the framework of the thesis as, in accordance with the theoretical framework, it focuses on the role of discourse and its political implications. However, the research design experiences some weaknesses that need to be addressed. Firstly, the CDA is a subjective method that relies on the interpretation of the researcher as, according to interpretivism, reality cannot be studied objectively. Therefore, it is acknowledged that the researcher, in this case a European national with a critical mindset, might be subject to observer bias as she is part of European society. While a subjective interpretation is unavoidable, the transparency of the analysis is maximised by the creation of extensive tables which outline how the researcher has interpreted the texts, enabling the reader to follow and check the argumentation. These tables can be found in the Appendixes. Secondly, there is no standardised methodology for conducting a CDA and the structure of the analysis is specifically altered to the case study under scrutiny, making it hard to replicate or validate the study. In relation to this, as the research is an intrinsic case study, the possibility for generalisation is limited. Nevertheless, the lithium cooperation between the EU and Chile is an important case in itself and can give insights into how the cooperation between a critical mineral-rich and dependent entity is shaped, which is of wider importance.

Besides the limitations linked to the research design, the analysis is limited in other regards as well. For instance, to gain a complete understanding of the discourse on critical minerals, it is valuable to look beyond the dominant discourses entrenched in the (critical) minerals strategies and study more sources, such as civil society and NGO reports, media publications, press releases or speeches. Due to feasibility constraints, only the institutionally embedded dominant discourses are deconstructed, yet further research should study how different societal narratives stand in relation to this dominant discourse. Moreover, the EU's critical minerals strategy focuses on the EU's position in the global critical mineral supply chains, while the Chilean strategy concentrates on domestic matters. The diverging focal points of the strategies can question the ability for comparison. Nevertheless, as the text analysis not only studies the content but also the meaning of the text, in parallel to the way it is processed and situated in the context, both documents still give substantial insight into the dominant discourses on critical minerals and thus can be compared. Additionally, when studying the negotiation process of chapter 8 of the EU-Chile Advanced Framework Agreement, some assumptions are made about its proceedings and the reasons behind made alterations. While these assumptions are based on the literature, theory or results of the analysis, it is not possible to say with full certainty how the negotiation process progressed and to which Party changes in the chapter can be attributed. The certainty of these assumptions would increase if other external policies on critical minerals of the Parties would be studied as well, however, this is not possible due to feasibility constraints. Lastly, in the contextualisation of the (critical) minerals strategies, the context that has been elaborated upon has been chosen by the researcher based on relevancy and the literature. Nevertheless, the absence of selection bias cannot be ruled out. On the other hand, the data collection method is not subject to selection bias as the documents are chosen for the information they contain. Besides, as the research question is a 'how' question, confirmation bias is avoided as the conclusion is based on a detailed analysis.

5. Critical Discourse Analysis

The analysis consists of two parts. In the first part, Fairclough's CDA model is applied to the (critical) minerals strategy documents of the EU and Chile to examine how the dominant discourses on critical minerals are constructed. It includes a text, processing and social analysis, in which special emphasis is placed on how the Parties position themselves in the global critical mineral supply chains. The detailed text analyses of the strategy documents can be found in Appendix 1 (EU) and 2 (Chile). The second part studies the formation process of the guidelines for the cooperation on critical minerals between the EU and Chile. The detailed analysis of the negotiation round reports can be found in Appendix 3, and the comparison between the EU textual proposal and the final text of the chapter on Energy and Raw Materials in Appendix 4. The analysis provides answers to the sub-questions, while its implications and the main research question are addressed in the discussion.

5.1. Part 1: The dominant discourses in the (critical) minerals strategies

5.1.1. The Communication of the Critical Raw Materials Act of the European Union

5.1.1.1. Text analysis

In the text analysis, the vocabulary, grammar and structure of the text are analysed to discover themes, patterns and underlying meanings. What stands out in the Communication document of the EU's Critical Raw Materials Act is the direct link between the need for a '*sustainable, affordable and diversified*'[1] critical minerals supply and the success of the green and digital transition. Moreover, the importance of accessing critical minerals is connected to achieving long-term competitiveness, open strategic autonomy, environmental goals and EU security more broadly[2]. An outstanding pattern in the vocabulary of the text is the way the EU conveys the seriousness of this matter. Firstly, words indicating imperativeness such as '*essential', 'must',' should', 'need'* and *'urgency'* are widely used. Secondly, many amplifying adjectives are utilised, including '*an unprecedented increase'*, '*key materials'*, '*heavy dependence'*, '*very limited number of suppliers'*, '*major deterrent*', '*heavily concentrated'*, '*excessive dependencies'*, and '*highly concentrated supplies'*. Thirdly, words that indicate a securitised narrative are recurring, examples being: '*supply is confronted with … challenges'*, '*global*

[1] EU Communication of the European Critical Raw Materials Act, p. 19. [These footnotes refer to the analysed primary documents. The titles given to these documents in the footnotes have been the initiative of the researcher to make it more understandable for the reader which document is referred to. The proper citations of the documents are listed at the bottom of the bibliography in a separate section].
[2] Ibid., p. 1.

competition', '*to counter market dominance'*, '*the challenge of sustainability'*, '*threaten security of supply'*, and '*tackle the growing challenges'*.

The EU's critical minerals strategy is centred around three main objectives: *'(1) developing the critical raw materials (CRMs) value chain in the EU', '(2) boosting the diversification of supply and partnering in a mutually beneficial manner in support of global production'*, and *'(3) fostering sustainable sourcing and promoting circularity'*[3]. While describing these goals, one of the themes that can be identified is the way the EU frames itself in relation to third countries. While the EU acknowledges that critical mineral partnerships are essential and should be mutually beneficial, which includes supporting producing states in developing their processing capacities, a critical reading suggests that the EU wants these partnerships to be based on their principles. Examples illustrating this are, firstly, the final sentence of the document that claims the EU strategy '*is the only way*'[4]. Secondly, the paragraph on the development of '*European standards for the exploration, extraction, refining and recycling of CRMs'* also states that '*European experts and national standardisation bodies … should assume an even more active role in related international standards setting work in order to ensure that EU principles and values underlying relevant EU legislation … are reflected in international technical standards on CRMs'*[5]. This reveals that the EU wants international standards to reflect European principles and values. Thirdly, the document affirms that the '*competitiveness, sustainability, and security*' of '*targeted partner countries'* can be enhanced when they are provided with a '*high-quality and scaled-up EU offer, aligning partners' interests with EU interests*'[6]. This implies that '*targeted countries'* - which already suggests a privileged position - should accommodate EU projects for their own benefit. The same part of the text discloses the objective of creating a CRM Club that is open to '*like-minded parties*' and would '*foster sustainable investment in producing countries and allowing them to move up the value chain*'[7]. This does not only create the impression that being part of the Club is a privilege, but using terms like *like-minded*, *reliable* or *interested partners* also creates a dichotomy that marginalises certain countries. This may be the EU's intention, as it has a strong message for countries imposing unfair trade practices. This message is that trade restrictions and other '*distortive policies'*[8] are not tolerated

[3] Ibid., p. 3.
[4] Ibid., p. 19.
[5] Ibid., p. 6.
[6] Ibid., p. 12.
[7] Ibid., p. 8.
[8] Ibid., p. 14.

and will be dealt with in a '*resolute manner'*[9]. Fourthly, the document labels all resource-rich countries as '*developing and emerging'*[10] and asserts that *'[g]iven the known sensitivities and challenges in extractive industries, the EU will pay particular attention in providing the necessary support to the authorities of third countries hosting CRM projects in order to reinforce the good governance capacity and transparent business practices in this sector*'[11]. This sentence fails to acknowledge that these challenges are a colonial legacy and reinforces a post-colonial narrative that it is the EU's duty to help these countries reinforce good governance practices. This narrative is also visible in sentences that state the need to '*develop measures to achieve' 'investor friendly, predictable and stable*'[12] environments in resource-rich countries, or create '*secure, resilient, affordable and sufficiently diversified value chains for the EU'* so the EU can '*mitigate global supply challenges'*[13]. What these sentences have in common are the positive aspects that are attributed to greater involvement of the EU in mineral-rich countries.

Another perceived theme revolves around the topic of sustainability, as the objective of a sustainable supply of critical minerals is repeated frequently. Apart from the supply, sustainability is also linked to '*investments'*; '*the economy'*; '*development'*; '*growth'*; '*exploration'*; '*job creation'*; '*transition'*; '*sourcing'*; and '*mining'*. The desire is clear, yet using the term 64 times in a 19-page document without giving a definition of sustainability or considering if exploration, sourcing and mining can ever be sustainable, leads to the term losing its meaning. In the conclusion of the document, it is argued that securing critical minerals '*go hand in hand with just transition'*[14]. Again, it is not specified what a just transition signifies to the EU and whether it is meant on an individual or State level. To sum up, the Communication document uses language that frames a sustainable, affordable and diversified critical minerals supply as a matter of security that is critical to address instantly. This entails both the increase of domestic 'green' mining, as well as entering into partnerships with mineral-rich countries based on EU principles.

[9] Ibid., pp. 13-14.
[10] Ibid., p. 2.
[11] Ibid., p. 12.
[12] Ibid., p. 9.
[13] Ibid., p. 3.
[14] Ibid., p. 19.

5.1.1.2. Processing analysis

The processing analysis considers how the text is produced and interpreted by the participants and subjects of the discourse. Accordingly, the public consultation phases organised by the EU are studied, as they aimed to '*collect evidence and views from a broad range of stakeholders, giving them an opportunity to provide relevant data and information on the problems and potential solutions to secure the supply of critical raw materials in the EU'*[15]. The open call for evidence received 310 responses and the questionnaire 263, of which 46.5% and 62.4% represented private companies. The main concern of the business sector is the '*barriers to the development of CRM projects in Europe*'[16], including permitting procedures. The respondents representing NGOs and citizens are most concerned about environmental and social standards, transparent government processes and addressing the demand for critical minerals consumption[17]. These diverging priorities cumulate in that *'[w]hile non-governmental organisations call for environmental protection and community consultation, several business associations and companies call for financial or additional support from the EU to promote local exploration activities'*[18].

In the Communication document, both sides are represented, as 470 million euros is dedicated to projects on critical mineral '*exploration, extraction, processing and reuse, recycling and recovery'*[19], yet they require '*a high level of environmental and social protection'*[20]. However, while 72% of the questionnaire participants (strongly) agreed that '*CRM should be accompanied with information on the environmental footprint of producing those materials*', this message is not strongly conveyed in the Communication document, which states that '*[f]or CRMs that have a significant environmental footprint, the Regulation foresees the possibility to introduce in the future requirements on transparency of the environmental footprinting of specific raw materials, if these are necessary to achieve the EU's environmental goals'*[21]. Additionally, NGO respondents raise the '*need for increased engagement with local communities, workers and other stakeholders in exploration and production processes*'[22]. Nevertheless, this is a neglected topic in the Communication document as it solely includes the

[15] EU Stakeholder Consultation Synopsis Report, p. 87.
[16] Ibid., p. 88.
[17] Ibid., p. 88.
[18] Ibid., p. 94.
[19] EU Communication of the European Critical Raw Materials Act, p. 7.
[20] Ibid., p. 11.
[21] Ibid., p. 17.
[22] EU Stakeholder Consultation Synopsis Report, p. 94.

need for '*high social standards*'[23] and '*socially responsible practices'*[24], without outlining what this means and how this involves local communities in decision-making processes. Moreover, while the Communication document delineates a strong opinion on unfair trade practices, the '*majority of respondents (36–49%) did not know/had no opinion on trade barriers'* and only '*a limited number of stakeholders were calling for strong trade defence instruments to tackle unfair trade practises'*[25]. Lastly, while in the consultation '*many respondents suggest an exchange programme with countries that have the knowledge of mining and refining certain CRM (e.g. battery-grade lithium) in order to slowly build up knowledge within the EU'*[26], skills transformation in the Communication document is only linked to supporting education and training for reskilling and upskilling the European population[27].

The public consultations demonstrate that there are two main narratives present in the EU. However, the production of the critical minerals strategy is rather shaped by the interests of conventionally powerful actors such as private companies and statesmen. This can be demonstrated by the selective inclusion of the issues raised in the public consultation and the text of the Communication that focuses on '*industrial as well as geopolitical objectives'*[28] and the development of partnerships by '*Member States and their industry and institutions'*[29]. Consequently, the European citizens that will be impacted by an expansion of mineral extraction, the subjects of the discourse, are marginalised.

5.1.1.3. Social analysis

The social analysis positions the text in the broader context to increase the understanding of the content and to analyse what challenges are represented more than others. The institutional context of the Critical Raw Materials Act of the EU is that it is a reaction to the Versailles Declaration of 2022, wherein the European Council delineated the significance of critical minerals for EU strategic autonomy (European Commission, 2023a, p. 2). Moreover, the resolution of the European Parliament of November 2021, called 'A European strategy for critical raw materials', voiced the need for a documented strategy, which was also one of the outcomes of the 'Conference on the Future of Europe' that ran from April 2021 to May 2022

[23] EU Communication of the European Critical Raw Materials Act, p. 2.
[24] Ibid., p. 8.
[25] EU Stakeholder Consultation Synopsis Report, p. 99.
[26] Ibid., p. 98.
[27] EU Communication of the European Critical Raw Materials Act, p. 6.
[28] Ibid., p. 13.
[29] Ibid., p. 11.

(European Commission, 2023a, pp. 2-3). Furthermore, the Critical Raw Materials Act is introduced alongside the Net Zero Industry Act, which outlines the ambition to increase the production of important carbon-neutral technologies within the EU (European Commission, 2023a, pp. 2-3). It is also in accordance with the European Green Deal, which strives for Europe to become the first climate-neutral continent (European Commission, 2019a). Historically, the critical minerals strategy is set in the context of global resource extraction, as critical minerals were already among the natural resources extracted by colonisers without regard to human rights, the local environment and community security. The legacy of colonialism and imperialism is argued to still be present in today's critical mineral supply chains as, for instance, the extraction and export of these minerals are often controlled by multinational corporations that have their headquarters in the Global North (Jerez, Garcés & Torres, 2021; Childs, 2016). Consequently, this leads to the perpetuating pattern of economic and political dependence and to a narrative in European society that their values and principles are superior and should be reflected on an international level.

The '*fast changing and increasingly challenging geo-political environment*'[30] is often labelled as a challenge in the Communication document, wherein the EU regards its dependency on other countries for critical minerals as a vulnerability. The goal of '*strengthening our cooperation with reliable trading partners globally to reduce the EU's current dependencies on just one or a few countries'* (European Commission, 2023a, p. 1) mainly refers to the growing role of China in the production and processing of critical minerals. China refines 59% of the world's lithium, 73% of cobalt, 68% of nickel and 40% of copper, and holds around 75% of the lithium-ion battery mega factories globally (Castillo & Purdy, 2022). Moreover, it is progressively investing in securing access to these minerals through overseas acquisitions and bilateral agreements. China's rare earth minerals export blockage to Japan over a diplomatic dispute in 2010 and the subsequent rise in prices is often used as an example to demonstrate how China is willing to use its market dominance as a political and economic tool (Schmid, 2019). Besides, the supply chain risks of the EU's general dependency on the Chinese market became evident when the COVID pandemic hit and reduced imports led to great market shortages in Europe. Additionally, the energy crisis in Europe following the cutback of gas and oil exports from Russia in 2022 is also mentioned by the EU as a reason to mitigate dependencies (European Commission, 2023a, p. 2). Accordingly, it is the EU's goal that '*by*

[30] Ibid., p. 19.

2030, not more than 65% of the Union's annual consumption of each strategic raw material at any relevant stage of processing is from a single third country'[31]. While the Communication document includes a special text box highlighting the modernisation of the EU-Chile Advanced Framework Agreement and the '*better access to sustainable investment in critical raw materials such as lithium*'[32], a stronger relationship with Chile will have to go hand in hand with diversification strategies as 78% of the EU's lithium currently originates from Chile (European Commission, 2020b, p. 20).

Becoming less dependent in strategically important policy areas is part of the EU's open strategic autonomy objective (European Parliament, 2022a, p. 1). This includes the EU's desire to increase domestic mining and extraction of critical minerals, expand the processing and refining industry and stimulate recycling[33]. However, this objective needs to be understood in light of the socio-environmental context, as increasing domestic mining activities are inevitably linked to greater social and environmental risks. The European Parliament published a report on the socio-environmental challenges of mining in Europe, acknowledging the impact it has on local communities. The report argues that *'[p]ast negative experiences, injustices and the consequentially formed perceptions can also easily lead to preventive measures and resistance movements'* (European Parliament, 2022b, p. 43). This is related to the 19 mineral conflicts the EU Member States experienced in 2020 (Kivinen, Kotilainen & Kumpula, 2020), including protests against lithium mining in Portugal (Kijewski, 2022) and Germany (Zimmermann, 2023). While not an EU Member State, also the protests in Serbia following the government's approval of a new lithium mining project are important to mention. While the protests caused the government to revoke the contract with mining company Rio Tinto, many activists want to see a complete ban on lithium mines in Serbia (DW, 2022). On a smaller level, local resistance can lead to permitting delays, which are often already lengthy processes that the EU considers a '*major deterrent*'[34]. Consequently, the EU aims to provide certain '*Strategic Projects*'[35] with faster permitting processes, yet does not address how it will preserve community security simultaneously. While the sustainable sourcing of critical minerals is key to the EU, whether all sustainability pillars will be respected uniformly remains to be seen.

[31] Ibid., p. 3.
[32] Ibid., p. 9.
[33] Ibid., p. 3.
[34] Ibid., p. 1.
[35] Ibid., p. 3.

5.1.1.4. Interpretation

Based on this three-level analysis, it can be interpreted that the dominant discourse that is represented in the Communication document of the EU Critical Raw Materials Acts is constructed in a top-down manner. It mainly reflects the perceptions of conventionally powerful actors such as companies and statesmen and links a secure and sustainable supply of critical minerals to EU security more broadly. Securing this supply is labelled a '*challenge*', which can mainly be attributed to the geopolitical context and the EU's dependency on other countries to meet its demand, which currently still includes countries that are not '*like-minded'*. Apart from a challenge, securing supply is also described as an urgent matter, since an upscaled stable supply is necessary to achieve the goals set by the EU regarding the reduction of carbon emissions, import dependencies and attaining open strategic autonomy. Through this securitised narrative and by approaching the supply of critical minerals from a holistic and state-level perspective, the EU justifies the marginalisation of individuals and the prioritisation of 'green' mining projects over community security. This justification is necessary in light of the current resistance against new mineral projects. Accordingly, the discourse is mainly shaped by the EU's economic and political interest, while the sustainability pillar is rather selective as its primary focus is the environment. Lastly, a partnership with the EU is framed as an opportunity for sustainable development for mineral-rich countries, yet might in reality lead to new forms of dependencies that go further than technology versus resource as stated in the literature. Keeping in mind the historical context, this might lead to unequal development while it is important to remember that the transition to a carbon-neutral society will fail if not everyone, both States and individuals, participates.

5.1.2. The National Mining Policy 2050 of the Government of Chile

5.1.2.1. Text analysis

The two documents that are examined for themes, patterns and underlying meanings enclose the National Mining Policy of Chile. While they outline the objectives and regulatory framework for the development of the entire mining sector in Chile, the focus on critical minerals such as lithium and copper is reiterated both directly: *'[w]e must be able to maintain a certain level of production of minerals like copper and lithium*'[36], and indirectly: '*the minerals hidden in the entrails are essential for new technologies to reduce the carbon footprint'*[37]. While the documents utilise words to express the urgency of the situation, such as '*huge*

[36] Chile National Mining Policy 2050, p. 4.
[37] Ibid., p. 4.

opportunity', '*tremendous responsibility*', '*enormous contribution*', and '*greatest global challenge*', the overall tone of the National Mining Policy is factual and formal. Moreover, it is '*not intended to be a concrete or perfect solution to the problems of sustainable development in the sector, but rather it is intended to agree on a common and long-term vision…*'[38]. Still, the existence of this vision is considered existential, both nationally, as *'[t]he absence of a long-term national mining policy … challenges the possibilities of sustainable development of the mining sector and of the country as a whole'*[39], and globally, considering '*Chile has the potential to become a key player in the solution to the greatest planetary challenge*'[40]. Correspondingly, Chile's goals are incredibly ambitious and include becoming *'the most competitive innovative mining industry worldwide*'[41] and a '*global leader in responsible, sustainable, competitive and innovative production based on world-class standards'*[42].

The structure of the strategy documents follow 78 goals that are grouped into strategic objectives, corresponding to the four pillars of sustainability: economic, social, environmental, and institutional. The sustainability theme is the core of the strategy and encompasses innovative topics including water security, glacier protection, physical and mental health and gender equality in the mining industry. The prominent role of sustainability is linked to the second major theme apparent in the Policy, which revolves around the Chilean perception of mining. The '*valorization of mining by society'*[43] is both a clearly stated objective and implicitly visible in the language of the documents, for instance when it is argued that mining benefits everybody. Examples of this are '*being valuable and vital for Chile*', '*taking pride in .. our mining*', '*a source of national pride', 'improving the quality of life of all Chileans',* '*be valued by Chileans', 'property of all Chileans', 'to benefit all citizens*', '*for the benefit of the country',* and, '*for the country's inhabitants as a whole'*. Besides, the strategy also tries to improve the people's perception by acknowledging former mistakes, and by claiming that '*[t]he mining sector and industry have learned from the past'*[44]. It is recognised that '*part of the mining industry of the past did not take responsibility for its environmental and social effects*'[45] and that '*the industry is in cases of repair and compensation for the impacts that have occurred*'[46].

[38] Chile Aprueba Política Nacional Minera 2050, p. 10.
[39] Ibid., p. 3.
[40] Ibid., p. 5.
[41] Ibid., p. 9.
[42] Chile National Mining Policy 2050, p. 31.
[43] Ibid., p. 34.
[44] Chile Aprueba Política Nacional Minera 2050, p. 3.
[45] Chile National Mining Policy 2050, p. 146.
[46] Chile Aprueba Política Nacional Minera 2050, p. 4.

By assuring that from now on minerals will only be extracted sustainably and will benefit the development of the country and its citizens as a whole, the strategy tries to convince the people of the worth of developing the mining industry. This is necessary as new projects need social licences which depend on the '*beliefs, perceptions and opinions of the local population and other interest groups'*[47].

The third identified theme revolves around the language indicating a neo-extractivist and resource-nationalist ideology that pushes for a State-led, resource-based development. For instance, neo-extractivist views can be found in sentences expressing the desire to export raw materials in support of national development. Examples are: *'[c]onsidering that the mineral resources of the subsoil are property of the State, an important contribution of the mining activity in general, is produced through the taxes that it contributes to the fiscal coffers*'[48]; '*being valuable and vital for Chile through the generation of jobs and as a source of government revenue…*'[49]; and '*ensuring the development of the industry for the benefit of the country'*[50]. The strategy also addresses the need for a new '*governance model in the industry of lithium'*[51] and simultaneously asserts that *'[t]he Ministry of Mining must be a robust institution, with the capacity to define strategies and public policies that promote permanent development of the mining industry'*[52]. Moreover, by 2030, 30% of the technology patents in the sector should be applied for by Chilean natural or legal persons to '*promote the development of national technologies and innovations…*'[53]. Lastly, one of the outlined objectives concerns strengthening the state-owned companies Codelco and Enami[54]. Codelco, the state-owned company for mining and producing copper, is labelled '*an engine for the development of the country'*[55], and Enami '*plays a fundamental role in promoting small and medium national mining*'[56]. Nevertheless, it is also recognised that these companies need improvement to satisfy international standards, both institutionally and in terms of emission capture[57].

[47] Chile National Mining Policy 2050, p. 13.
[48] Chile Aprueba Política Nacional Minera 2050, p.3.
[49] Chile National Mining Policy 2050, p. 4.
[50] Ibid., p.60.
[51] Ibid., p. 130.
[52] Chile Aprueba Política Nacional Minera 2050, p. 4.
[53] Chile National Mining Policy 2050, p. 85.
[54] Ibid., p. 68.
[55] Ibid., p. 8.
[56] Ibid., p. 151.
[57] Ibid., pp. 117, 150-151.

The National Mining Policy does not adequately address Chile's role in the global (critical) mineral supply chains, as it solely states the desire to '[*p]articipate in international markets successfully'*[58]. This includes the need to '*attract investment'*[59], increase lithium production to strengthen '*its strategic participation in international markets*'[60], and improve '*the complete traceability of national mining production, in line with the SDGs and in order to ensure its competitiveness in international markets'*[61]. This language is very vague and does not give any guidance. Nonetheless, by stating the desire to accommodate the '*SDGs'* and '*international'*, '*global'* or '*world-class'* standards, it is likely the strategy does not only want to convince the Chilean people but foreign investors as well. All in all, the National Mining Policy links the development of the mining sector to that of the country and emphasises the need for sustainable and inclusive processes that adhere to international standards. In combination with utilising a type of language that embodies a feeling of needing to do better, the strategy aims to convince the Chilean population of the worth of expanding the extraction of minerals such as lithium and copper, as well as communicate its ambitions to the world.

5.1.2.2. Processing analysis

To understand how Chile's National Mining Policy is produced and interpreted, the comprehensive social process of the strategy which gathered the voices of approximately 3500 participants from the public-, private-, and academic spheres, as well as civil society and citizens over two years is analysed. This participatory process entailed several consultation phases to accumulate the challenges facing the Chilean mining industry. The first Central Phase brought together around 150 key actors representing all parts of society in roundtables to constitute the main issues concerning environmental, social, economic and governance sustainability[62]. Ultimately, these actors agreed on the following nine most relevant sustainability axes: institutionality and mining development; citizen participation and territorial development; comprehensive labour relations and gender equity; productivity and human capital; value chain and innovation; taxes and public investment; green mining; small and medium mining; and indigenous people (Gobierno de Chile, 2020d). The subsequent Territorial Phase incorporated a regional perspective by bringing together more than 1300 representatives from all regions in Chile. The subsequent Virtual phase deserves some more attention, as here

[58] Ibid., p. 26.
[59] Ibid., p. 59.
[60] Ibid., p. 80.
[61] Ibid., p. 76.
[62] Ibid., p. 23.

the opinions of the Chilean citizens were collected. In this phase, the participating public was asked to select and prioritise the most important challenges facing the mining industry. Among the prioritised topics, two referred to Chile's role in the global market, focussing on increasing the competitiveness of the mining sector and the virtuous insertion of the mining sector in the low-carbon global economy. Moreover, the development of the mineral value chains has been considered of high importance, indicating that the Chileans want to develop the downstream industry and step away from being solely a mineral exporter. Apart from this, many of the addressed topics concerned matters of sustainability and social and environmental protection[63]. Ultimately, all topics that have been identified as a priority by the citizens have been included in the National Mining Policy. At last, technical committees, State Administration Bodies, regional macro-workshops, meetings with experts and a final public consultation also provided input for the construction of the National Mining Policy (Gobierno de Chile, n.d.).

The inclusiveness and transparency of this participatory process have generated a strategy that takes into account the views and objectives of all stakeholders. While the public and private sectors were among the parties setting the course of the policy, the importance of the individual and communities seems to be taking precedence over the ambitions of the mining companies or political elite. Mining in Chile is described as a sector that should '*benefit all citizens'*[64], wherein the conventional powerful actors have to adapt to the local population. For instance, while it is a goal to speed up permit processing times, this has to be realised '*without compromising the leadership of mining in the environment and sustainability matters*'[65]. Accordingly, as the subjects of the discourse are also its participants, the prevailing social narrative that revolves mostly around sustainability and inclusivity has become the institutionally embedded discourse.

5.1.2.3. Social analysis

The contextualisation of the National Mining Policy, focusing on critical minerals, is essential to understand the strategy. Institutionally, the most important context feature is the announcement of the National Lithium Strategy in April 2023. While the nationalisation of lithium has been a topic under discussion for some time, it started to take shape after Chile's leftist President Gabriel Boric took office in 2022. The National Lithium Strategy entails a set

[63] Chile Public Consultation Virtual Phase.
[64] Chile National Mining Policy 2050, p. 29.
[65] Chile Aprueba Política Nacional Minera 2050, p. 15.

of measures – thus not a strategic document – that expand the role of the State in the lithium supply chain, and includes objectives such as initiating conversation with stakeholders, modernising the existing institutional framework, strengthening the Government's role in the Salar de Atacama lithium production; developing lithium mining in other salt flats; and establishing a National Lithium Company[66]. The bill establishing a State-owned lithium company has yet to be passed by the National Congress, which has an uncertain outcome as in May 2022 the Constitutional Assembly in Chile rejected the nationalisation of the mining of lithium, rare earth minerals and hydrocarbons, as well as a controlling share in copper mines, to be included in the new constitution (Reuters, 2022). After the entire newly proposed Chilean constitution was rejected in September 2022, in May 2023 a new constitutional assembly was elected. Herein, the conservatives won the most seats, which might impact the plans to fully nationalise lithium as the conservatives' objective is to bring more economic activity and foreign investment to Chile (Newell, 2023).

The National Lithium Strategy is labelled a '*historical opportunity'*[67], which requires examining the historical context to understand. The National Mining Policy states that '*Chile has always been a mining country, even before the arrival of the Spanish*'[68], as prehispanic communities already mined gold and copper. Nonetheless, mining in Chile expanded drastically during the time of colonisation, yet without any respect for human rights and the environment[69]. The colonisers solely extracted the minerals to be further produced in Europe, leaving the mineral-rich territories drained and damaged. The mining industry in Chile remained important after the country gained independence, yet the connected socio-environmental challenges and Chile's role as a raw material exporter continued. In 1971, all copper mines were nationalised under President Allende after the Congress passed Law 17.450. Moreover, in 1979, Decree Law 2886 led to Chile's lithium reserves, as well as other mineral reserves, becoming property of the State, which meant only the State, State-owned companies or businesses with a State-contract were allowed to mine lithium (Decreto Ley 2886, 1979). Consequently, Sociedad Química y Minera (Chile) and Albemarle Corporation (US) are the only multinationals extracting lithium in Chile. However, their contracts might be renegotiated as the Chilean Government wants lithium production to be based on public-private partnerships[70]. Ultimately,

[66] Chile National Lithium Strategy.
[67] Ibid.
[68] Chile National Mining Policy 2050, p. 4.
[69] Ibid., p. 6.
[70] Chile National Lithium Strategy.

the goal is to profit from *'[h]igh global demand, elevated prices and our country's extensive lithium reserves*' to '*increase wealth for Chile'*[71], which has not always been possible throughout history. This is also linked to the geopolitical context, as Chile wants to strengthen its strategic global position in comparison to its '*competitors'*[72] China, Canada, Australia and Peru. Especially the growing role of China in the production of critical minerals, taking into consideration that 43.5% of Chile's lithium carbonates was exported to China in 2021 (OEC, 2023), impacts the strategic role of Chile. Not only lithium, also for copper '*Chile's share of the foundry market has declined sharply over the last decade, given the significant increase of the capacity in China'*[73].

Lastly, the socio-environmental challenges related to the extraction of critical minerals are a pressing issue in Chile and has affected the perception of the population of the mining industry[74]. As a result, there have been protests against new lithium mining projects, which usually revolve around the impact of the mining on the local communities and the environment, including the rising water insecurity and the lack of communication between the population and the mining companies (Sherwood, 2019). Accordingly, sustainable mining is the focal point of the National Mining Policy, which also underwent an extensive Strategic Environmental Assessment process to identify and address the environmental risks of mining. Also the National Lithium Strategy aims to '*strengthen social and environmental sustainability*' and states that '*[l]ithium wealth could help finance new schools, hospitals, police stations, bridges and roads'*[75]. However, as stated in the literature, how effectively the increased government income can be spent depends on the accountability and the strength of the institutions (Perotti & Coviello, 2015).

5.1.2.4. Interpretation

In Chile, the dominant discourse on critical minerals and the roadmap for their development is constructed from a bottom-up perspective as the National Mining Policy 2050 is drafted by the Chilean people and for them. The inclusive drafting process has led to the discourse revolving around the challenges affecting the Chilean people on a local level, which is linked to the socio-environmental context and the growing insecurities linked to the expansion of mineral

[71] Ibid.
[72] Chile National Mining Policy 2050, p. 10.
[73] Ibid., p. 86.
[74] Ibid., p. 146.
[75] Chile National Lithium Strategy.

extraction, such as the great usage of water. As a result, while the strategy links the development of the (critical) mineral mining sector to the development of the country as a whole, as well as to combating climate change, the discourse prioritises the responsibility and sustainability of mining. Nevertheless, the discourse justifies the expansion of mining by claiming the profits will be '*for the country's inhabitants as a whole*'[76]. The strategy also tries to convince the citizens by promising that the mistakes of the past will not be repeated, referring to the historical context and the damaging nature of mineral extraction. Chile's exploitative history can also explain the objective of a robust Ministry of Mining and the announcement of the National Lithium Strategy, as it symbolises taking control of the country's resources. It is also linked to the focus on value addition and the production of critical minerals domestically, which additionally needs to be seen in the light of the geopolitical context. However, while the discourse voices the desire to strengthen Chile's strategic position in the critical mineral supply chains, the strategy does not properly address how this will be materialised. This is problematic as Chile's ambitions are considerable while some objectives such as increased lithium nationalisation and higher foreign investments do not go well hand-in-hand. To conclude, the social narrative and the values regarding critical minerals and their extraction are clear. Based on the assumption that the use of language has social and political implications, the presented discourse should have, in time, the power to alter the conventional power structures in which the interests of powerful economic and political actors are prioritised over the rights of local and indigenous groups.

5.2. Part 2: The EU-Chile Advanced Framework Agreement

This part of the analysis critically analyses the process of the formation of the guidelines for the cooperation on critical minerals between the EU and Chile to determine how it has been influenced by their respective dominant discourses on critical minerals. This is done, firstly, through an examination of the negotiation round reports from the EU and Chile concerning the Energy and Raw Materials chapter of the EU-Chile Advanced Framework Agreement. A detailed analysis of this can be found in Appendix 3. Secondly, the EU's textual proposal and the final text of the Energy and Raw Materials chapter are compared to identify which (relevant) articles have been changed, added or deleted, of which the results can be found in Appendix 4. While the EU and Chile '*showed a receptive will to consider each other's proposals, interests,*

[76] Chile Aprueba Política Nacional Minera 2050, p. 10.

and sensitivities'[77], the chapter on Energy and Raw Materials has been labelled '*a sensitive and complex chapter in the negotiation'*[78].

5.2.1. Objective and principles

Art. 8.1 discloses the objective of the chapter, which is an influential yet disputed provision. This can be demonstrated by EU's negotiation round report 6, which states that *'[f]urther discussions will be required, notably on the objectives and scope of the chapter*'[79]. Moreover, the text of Art. 8.1 in the proposal has been changed from: '*The Parties aim at facilitating trade and investment … and improving environmental sustainability*'[80], to '*The objective … is to promote dialogue and cooperation … and … foster sustainable fair trade and investment'*[81]. This change represents a wider shift in focus from mainly economic to a more all-inclusive cooperation in the field of raw materials. The negotiation round reports also reveal that the focus on promoting dialogue has not always been a shared objective. EU's negotiation round report 6 states that '*Chile presented its proposals for dialogues on energy and raw materials'*[82], while other reports mention the '*issue of ERM dialogues'*[83] and the unresolvedness of the '*cooperation / dialogue oriented provision'*[84]. Although the objective has been altered to include the focus on dialogue, it is also the only time in both chapter versions that the term 'dialogue' is mentioned. As identified in the first part of the analysis, the dominant discourses in the EU and Chile also present different overall objectives, as the EU's goal is securing a sustainable, affordable and diversified critical minerals supply while Chile wants to be the main responsible, competitive and innovative global supplier of these minerals. Respectively, as confirmed by the literature on lithium geopolitics, the EU's economic focus that is set by the agenda of the political and economic elites clashes with Chile's broader focus on the development of the mining industry and the country, which requires a wider sharing of knowledge and technology with the EU.

Chile's desire to get rid of the role of solely being a (critical) mineral exporter can also explain the addition to the final text of Art. 8.1 of '*ensuring a level playing-field in those sectors, and*

[77] EU Negotiation Round Report 8, p. 4.
[78] Chile Negotiation Round Report 10, p. 6.
[79] EU Negotiation Round Report 6, p. 4.
[80] EU Textual Proposal Chapter 8 Energy and Raw Materials, Art 8.1.
[81] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.1.
[82] EU Negotiation Round Report 6, p. 4.
[83] EU Negotiation Round Report 5, p. 4.
[84] EU Negotiation Round Report 9, p. 4.

to strengthen competitiveness of related value chains including value addition', as well as the cooperation being '*to Parties' mutual benefit'*[85]. While the EU mentions in its critical minerals strategy that partnerships should be mutually beneficial, the text analysis also disclosed a narrative of superiority regarding EU principles and values. Correspondingly, Art. 8.2 outlines the principles of the Energy and Raw Materials chapter, which in the textual proposal articulates the rights of the Parties to '*adopt, maintain and enforce measures necessary to securing the supply of energy goods and raw materials'*[86]. However, this phrasing favours the EU as a mineral-dependent region, as Chile would not need to adopt measures to secure supply. This sentence has likely been a point of discussion as the final text of Art. 8.2 now includes the Parties' right to '*regulate within their respective territories to achieve legitimate policy objectives*'[87]. This embodies a more neutral phrasing that treats the Parties as equals.

5.2.2. Monopolies, export pricing and regulated prices

According to the negotiation round reports, Art. 8.4 on import and export monopolies, Art. 8.5 on export pricing and Art. 8.6 on domestic regulated prices have been the most conflictual provisions. This can be demonstrated by the EU describing export monopolies and pricing as a '*crucial issue'*[88] and Chile labelling it a '*red line'*[89]. Nevertheless, the text of Art. 8.4 that prohibits the establishment of import or export monopolies has remained unchanged. Moreover, while the text of Art. 8.5.1, which disallows export prices for raw materials to be higher than domestic prices, has not been altered, paragraph 8.5.2 has been added and exempts Chile from this rule as long as the dual pricing fosters value addition[90]. Linked to Art. 8.5 is an Annex that outlines the rules related to paragraph 8.5.2, which contains that imposing domestically advantageous prices cannot result in export restrictions for the EU or affect the EU's capacity to source raw materials from Chile. Then again, Art. 8.7 on the process of granting authorisation for the exploration and production of raw materials following '*a public and non-discriminatory procedure*'[91] has not been edited. Lastly, while Art. 8.6 on domestic regulated pricing concerned both energy goods and raw materials in the textual proposal, the application to raw materials was removed in the final text. An interpretation that can be made from this is that,

[85] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.1.
[86] EU Textual Proposal Chapter 8 Energy and Raw Materials, Art. 8.2.
[87] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.2.
[88] EU Negotiation Round Report 8, p. 4.
[89] Chile Negotiation Round Report 9, p. 1.
[90] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.5.2.
[91] EU Textual Proposal Chapter 8 Energy and Raw Materials, Art 8.1.; EU Textual Proposal Chapter 8 Energy and Raw Materials, Art 8.1.

since Chile values the ability to impose domestic favourable prices for raw materials extensively, this might have meant making compromises on other provisions. Art. 8.5.2. also states that the exemption would allow the industrial sector to '*emerge within Chile'*[92], which can be linked to Chile's discourse of wanting to increase value addition, domestic development and strengthen their global strategic position. The EU's counter-response, which is presented in the Annex linked to Art. 8.5, can be explained by the EU's discourse that condemns unfair trade policies and desires affordable prices and long-term competitiveness.

5.2.3. Sustainability

The need for sustainable cooperation is voiced in the final text of the chapter and is highlighted by the negotiation round reports as a topic of concurrence[93]. However, it is noteworthy that in the EU textual proposal the term 'sustainability' is used only once, which is in the objective when it affirms the aim to improve environmental sustainability. As mentioned before, the text of Art. 8.1 has been changed so the objective now entails fostering '*sustainable fair trade and investment*'[94], which shifts the focus from solely the environmental pillar to the concept of sustainability in its entirety. This shift is possibly initiated by Chile, as the discourse in Chile focuses on all four pillars of sustainability in contrast to the EU. Additionally, in the final version of chapter 8, Art. 8.8 has been added, which requires both Parties to conduct an environmental impact assessment for every new raw materials project with a potentially significant environmental or social impact[95]. According to EU's negotiation round report 9, the environmental impact assessment was an '*important issue'*[96] that remained open. It is likely that especially Chile wanted to include a strong commitment to minimise socio-environmental risks since the new projects will be initiated on their territory. Moreover, in the dominant discourses, different levels of commitment regarding environmental assessments can be identified. For instance, in the EU the environmental footprinting assessments of '*specific'* materials will be considered '*if these are necessary to achieve the EU's environmental goals'*[97], while in Chile a stronger message is conveyed that advocates for '*traceability and reportability systems for 100% of production, regarding environmental, social and governance matters*'[98].

[92] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.5.2.
[93] EU Negotiation Round Report 3, p. 3.; Chile Negotiation Round Report 5, p. 3.
[94] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.1.
[95] Ibid., Art. 8.8.
[96] EU Negotiation Round Report 9, p. 4.
[97] EU Communication of the European Critical Raw Materials Act, p. 17.
[98] Chile National Mining Policy 2050, p. 38.

5.2.4. Cooperation on standards, research, development, innovation and raw materials

In Art. 8.1, the objective of the chapter includes the aim to promote cooperation in the field of raw materials. However, the '*cooperation / dialogue oriented provision*'[99] has also been labelled as a source of tension. Therefore, Art. 8.12, 8.13 and 8.14, which outline the proposed cooperation in more detail, are critically analysed. Firstly, Art. 8.12 addresses the cooperation on standards, which has expanded significantly for the final text. While the textual proposal only entailed '*preventing, identifying and eliminating unnecessary technical barriers to trade*'[100], the final text includes the promotion of the '*cooperation between their relevant regulatory and standardization bodies in areas such as energy efficiency, sustainable energy, and raw materials'*, including '*the convergence or harmonisation, where possible, of their respective current standards, based on mutual interest and reciprocity'*[101]. In the dominant discourse of the EU, the narrative entails that European experts and national standardisation bodies should set the international standards. However, in Chile the focus lies on conforming to global standards, which can explain why the text of this provision was revised for the final version.

Secondly, in Art. 8.13 the cooperation on research, development and innovation is addressed. While in the textual proposal the cooperation on research only applied to renewable energy and energy efficiency, the concentration on raw materials was added in the final text. Additionally, it has been added that cooperation in research, development and innovation is crucial to achieving sustainability and competitiveness, in addition to a new subparagraph that promotes '*value addition to the mutual benefit of the Parties and enhancement of productive capacity*'[102]. The inclusion of the new subparagraph concerning value addition and productive capacity can anew be associated with the dominant narrative present in Chile that expresses the desire to increase the domestic production of lithium and copper. This does not take away that the discourse in the EU also encompasses the ambition to increase internal value addition. However, as confirmed by the literature, the majority of the relevant technology is developed in the EU, making this addition to Art. 8.13 extra valuable for Chile.

[99] EU Negotiation Round Report 9, p. 4.
[100] EU Textual Proposal Chapter 8 Energy and Raw Materials, Art. 8.12.
[101] EU-Chile Advanced Framework Agreement Chapter 8 Energy and Raw Materials, Art. 8.12.
[102] Ibid., Art. 8.13.1.b.

Thirdly, Art. 8.14 concerns the cooperation on energy and raw materials, which has been expanded significantly in comparison to the textual proposal. An important addition is the '*shared commitment to responsible sourcing and sustainable production of raw materials and their mutual interest to facilitate the integration of raw materials value chains*'[103]. While the accentuation on responsible sourcing and sustainable production is especially relevant for Chile, the promotion of sustainable trade is labelled in negotiation round report 3 of the EU as a common goal, and is also present in both dominant discourses. Apart from this addition, the text of Art. 8.14 has also been altered. While the textual proposal includes the need to reduce distorting trade and investments measures '*in third countries'*[104], this phrasing has been deleted in the final text. As the reference to third countries likely refers to Chile - considering no other countries are involved in the Agreement - this again demonstrates that the textual proposal has not only been written by the EU but from a European perspective as well.

All in all, by cross-referencing the analysis of the negotiation round reports and the Energy and Raw Materials chapter of the EU-Chile Advanced Framework Agreement with the most important features of the dominant discourses as identified in the first part of the analysis, it is demonstrated how the discourses, and the divergences therein, have influenced the formation of the guidelines for the cooperation between the EU and Chile on critical minerals.

[103] Ibid., Art. 8.14.
[104] EU Textual Proposal Chapter 8 Energy and Raw Materials, Art. 8.14.

6. Discussion

The research question of the thesis asks how the cooperation on lithium between the EU and Chile is shaped by their respective dominant discourses on critical minerals. The analysis has displayed how the establishment of the guidelines that form the lithium cooperation is the result of a negotiation process in which both Parties represent their institutionally embedded dominant discourses, leading to a cooperation based on compromises. However, to understand on a deeper level how the dominant discourses on critical minerals have shaped the cooperation on lithium, this discussion section uses the results of the analysis to identify three underlying elements that are of explanatory value in understanding this process. Moreover, the practical and theoretical implications of the results of the analysis are addressed by linking them to the broader relationship between discourse and the geopolitics of lithium. While the results of the analysis mainly refer to critical minerals, it is possible to apply them to lithium as this is considered a critical mineral and an important component in the EU-Chile Advanced Framework Agreement as enunciated by the EU (European Commission, 2023c, p. 9).

The first underlying element that gives more insight into the process of how discourse can shape critical mineral partnerships is related to the way discursive practices can sustain and legitimise geopolitical objectives. The literature has demonstrated that the uttering of terms such as 'critical', 'urgent, 'essential', 'competition' or 'green mining' can be misused for political or economic gain as it shapes people's perceptions and subsequently has the ability to justify extreme and unsustainable policies (Wilson, 2018). This type of language can also be identified in the critical minerals strategy of the EU, which indicates the necessity for an urgent, amplified and securitised response, and pushes for the expansion of 'green' mining, sourcing and extraction, while in reality, this can never be fully sustainable. Moreover, the discourse paints mineral-rich countries as developing and in need of support, which strengthens the idea that the EU should not only be economically involved in these countries, but politically as well. In relation to the context in which the EU aims to become strategically autonomous in regards to critical minerals for the sake of its 'security', this has the potential to justify actions in the name of 'the greater good', yet might lead to the marginalisation of the affected local population or the compromise of the autonomy of third countries. In the case of Chile, it is interesting to note that copper and lithium are referred to as raw materials instead of critical minerals. Nevertheless, the discourse justifies the expansion of extraction by relating it to the benefits it can bring to the entire Chilean population. However, it is unavoidable that the expansion of

lithium extraction will negatively affect the local ecosystem and communities living around the salt flats who might not be as utilitarian as the Chilean Government wants them to be. It remains to be seen to what extent the Government will prioritise environmental and community security over economic benefits, as well as the extent to which the dominant discourse reflecting local challenges will materialise in practice. This is related to Chile's clashing ambitions of becoming the most competitive innovative mining industry worldwide – requiring foreign investments – while wanting to fully nationalise lithium. A strong Ministry of Mining is portrayed as a necessity to equally distribute the benefits of the expansion of the lithium industry which, in light of the historical and geopolitical context, has already led to the justification of the implementation of the National Lithium Strategy in 2023. Though, according to the literature, resource nationalisation does not always lead to economic development (Cervantes & Garduño-Rivera, 2022) and depends on the accountability and strength of State institutions (Perotti & Coviello, 2015). Which actions or practices require justification is subjective and influenced by the perceptions of the participants of the discourse, as well as the context. The strategy of justification is embedded in the dominant discourse, which lays the groundwork upon which foreign policy is constructed. Together with the way another State is perceived and the power (im)balances with that State, the content and depth of a partnership are determined.

The power (im)balances between States is the second underlying element that shapes on a deeper level how the guidelines for cooperation are constructed, as it influences which Parties' objective is more strongly represented in the cooperation. According to Altiparmak's (2022) article on lithium geopolitics, the relationship between lithium mineral-rich and dependent States is built on a system of interdependencies. These interdependencies are shaped by the geographical concentration of lithium and the necessary technologies to produce manufactured goods such as lithium-ion batteries or electric vehicles. Moreover, Altiparmak argues that even though this is a mutually beneficial relationship, the creation of interdependencies is also a strategy of consumer states to secure supply. In the EU textual proposal of the Energy and Raw Materials chapter, this accentuation on the security of supply is visible, for instance in the provision that would allow for the adoption of measures '*necessary to securing the supply'* and in its focus on eliminating trade barriers '*in third countries'*. This discourse is linked to the narrative in the EU that views critical mineral partnerships based on EU principles both as a necessity for the EU and as a development opportunity for the mineral-rich States. Nevertheless, in the final text of chapter 8, several additions have been made that emphasise the equality of the Parties, for example when ensuring a '*level-playing field'*, '*the mutual benefit of the*

Parties', or converging standards '*based on mutual interests and reciprocity'*. Moreover, additions have been made in the final text that demonstrate the importance of value addition, the most important being Art. 8.5.2. that allows Chile to implement dual pricing if it fosters value addition. This can be linked to the importance given to the development of domestic lithium and copper production capacities in Chile's discourse, while it should be mentioned that the EU's critical minerals strategy also states the ambition to support their partners in developing their processing industry. All in all, the provisions that have been altered, added or removed give a certain level of insight into the power (im)balances between the Parties in relation to their lithium cooperation. While historically the relationship between the Global North and the Global South regarding resources has been one based on exploitation and unequal development (Hernandez & Newell, 2022), the analysis demonstrates that the final Energy and Raw Materials chapter does not continue this trend. While additional information is needed to draw a more definitive conclusion on which Party has had more influence during the negotiation process regarding the guidelines, the results of the analysis support the literature that argues the balance of power is turning in favour of the critical mineral-rich States (Pitron, 2022; Crawford & Gordon, 2022). In this case study, this is partly linked to the EU's aim to decrease its dependency on States like China and increase its cooperation efforts with '*like-minded parties'* such as Chile. However, for the greatest part, it is connected to the substantial presence of lithium in Chile in combination with the criticality that is given to this mineral by the EU, which has increased Chile's geopolitical importance and their potential for a greater say in mining deal negotiations.

The third underlying element worth discussing is the way connotations are made to inherently linked terms to lithium, such as 'security' and 'sustainability', and the impact thereof. Interestingly, in the case of critical minerals, these terms are directly connected to each other, which can be demonstrated by the way in which 'security' is addressed in the dominant discourses. In the EU, security is linked to securing a stable, diversified, affordable and sustainable supply, while in Chile it is associated with protecting environmental and social security while expanding the mining sector for the development of the country. Accordingly, both Parties claim that security cannot be established in combination with an unsustainable lithium supply chain. However, what is meant by 'sustainability' differs between the EU and Chile. In the dominant discourse of the EU, the term 'sustainability' is linked to all the processes composing the lithium supply chain, from exploration to development. Nevertheless, a critical analysis shows that there is a considerable focus on environmental sustainability, which can for

instance be demonstrated by the focus in the textual proposal of chapter 8 on safeguarding environmental sustainability specifically. In Chile, due to the risks lithium extraction causes in the form of water, environmental and community insecurity - and as a result of the high communitarian participation in the establishment of the institutionally embedded dominant discourse - sustaining economic, environmental, social and institutional sustainability in the efforts of becoming the most competitive and innovative mining industry globally is discursively set as the priority. While sustainability in the lithium supply chain is deemed essential by both Parties, rising socio-environmental risks is existential for Chile's perceived security, while it is only a component of the EU's definition. Consequently, the EU textual proposal only offered limited and selective sustainability assurances while it became an integral part of the final text of the Energy and Raw Materials chapter, which even includes an added provision that requires an environmental impact assessment for new mining projects that cause environmental or social challenges. Accordingly, the meaning given by Parties to inherently linked terms to lithium like 'security' and 'sustainability', and how they view them in relation to each other, lies the groundwork upon which the guidelines for lithium cooperation efforts are constructed.

The results of the analysis have some important implications. Theoretically, by demonstrating how discourses have the ability to shape partnerships between mineral-rich and mineral-dependent entities – which are increasingly going to shape the geopolitics of lithium – the results support the assumptions made by critical geopolitics and political ecology on the relationship between discourse, knowledge and power. Moreover, it provides evidence in support of the claim made by political ecologists that there is a connection between political-economic systems and socio-environmental challenges. It validates that sustainable practices are threatened by globalisation, capitalism and extractivism, which are issues that need to be addressed on a geopolitical level in order to minimise the harm they cause. All in all, it confirms that geopolitical encounters, including resource distribution practices, are not only shaped by geographical factors such as a State being mineral-rich or mineral-dependent, but depend on the internal social, economic, and political dynamics, as well as the external power (im)balances between entities. Additionally, the analysis has displayed that the more 'subjects of the discourse' are represented in the 'participants of the discourse', the more inclusive the dominant discourse will likely be. This is valuable as the stakeholders that shape the discourse have the power to legitimise and sustain geopolitical objectives. Accordingly, this result both highlights

the agency of diverse non-State actors in shaping geopolitical processes and the importance of this for the construction of inclusive and representative foreign policies and partnerships.

The practical implications of the results are connected to the geopolitics of lithium more broadly. The analysis has demonstrated that while in the EU lithium and the creation of lithium partnerships is viewed as a necessity, in Chile it is perceived as an opportunity. This is the result of the strong narrative in the EU that lithium is essential for the realisation of the 'green' transition, which is depicted as the ultimate solution to climate change. However, instead of being the solution, it is rather a trade-off in which considerations need to be made between achieving climate goals, maintaining economic competitiveness and limiting socio-environmental challenges. While Chile also perceives lithium as an important component in the fight against climate change, its trade-off is different from that of the EU as it is more directly affected by the socio-environmental risks. The trade-offs of the EU and Chile are embedded in their dominant discourses and consequently affect how their partnership is shaped. This is meaningful as it demonstrates how discursive practices that label minerals like lithium as 'critical' can impact the power dynamics in mining deal negotiations. On a broader level, the interaction and negotiation between all global discourses regarding lithium will impact how the balance is formed between the push for the expansion of lithium extraction to 'combat' climate change and the protection of the local population and environment in mineral-rich areas. Hence, the allocation of significance to critical minerals like lithium will directly influence this equilibrium and consequently dictate how 'green' the transition to a carbon-neutral society will truly be.

7. Conclusion

The aim of this thesis has been to analyse how the cooperation on lithium, also called 'white gold', between the EU and Chile has been shaped by their respective dominant discourses on critical minerals. Through a critical discourse analysis of the (critical) minerals strategies of the EU and Chile and the Energy and Raw Materials chapter of the EU-Chile Advanced Framework Agreement, it has been demonstrated that the guidelines of the lithium cooperation have been formed by a negotiation process between the Parties' dominant discourses. This is the result of divergences in the discourses concerning the opportunities and challenges linked to critical minerals, which has led to a cooperation based on compromises, thereby validating the hypothesis. The discussion has demonstrated that the negotiation process has been shaped on a deeper level by the geopolitical objectives that are sustained and legitimised through these discourses; by the power (im)balances between the Parties; and by the connotations the discourses have created to inherently linked terms to lithium such as 'security' and 'sustainability', as well as their perceived interconnectedness. With a theoretical framework that is based on the assumptions made by critical geopolitics and political ecology on the relationship between discourse, knowledge and power, this thesis has provided a deeper understanding of how the geopolitics of lithium is constructed through perceptions, interpretations and discourses. It has demonstrated that the societal perception of the nexus between the opportunities and challenges of lithium - as shaped by the views of the participants of the discourse and the challenges they deem most important – can influence what meaning is attributed to the 'criticality' of these minerals, which in turn can shape how the geopolitics of lithium is constructed.

The research of this thesis has centred around the in-depth case study analysis of the lithium cooperation between the EU and Chile. This cooperation is an important geopolitical topic, as Chile holds the largest lithium reserves worldwide, while the EU's demand for lithium will increase drastically in its quest for Europe to become the first carbon-neutral continent. As the global lithium supply chain is constantly in development due to the growing demand and importance given to lithium, partnerships such as the one between the EU and Chile are significant in determining what the balance between the expansion of lithium extraction and the protection of the local population and environment will look like on an international level. While the unique historical and current economic and political relations between the EU and Chile make it hard to generalise the results of this study, it does give insights into how the

construction of cooperation efforts between critical mineral-rich and dependent entities go beyond geographical factors, thereby adding to the existing literature on the geopolitics of critical minerals that are mainly built on the classical understanding of geopolitics.

Critical geopolitics has been criticised for its excessive focus on discourse, which partly applies to this thesis as well. The concentration on the discursive and institutionally embedded dominant discourse was selected out of constraints related to feasibility, yet does not fully capture the complete substance of the dominant discourses on critical minerals, as this is shaped by a vast number of societal practices and narratives. Nevertheless, by analysing how the construction of the institutionally embedded dominant discourses has affected the formation of the Energy and Raw Materials chapter of the EU-Chile Advanced Framework Agreement, this thesis adopts a material-discursive framework and partly addresses the criticism regarding the negligence on the material side of geopolitics. Further research on the same case study should consider how the myriad of societal narratives and practices in different communities and Member States impact how the dominant discourses have been shaped and developed over a longer period. Moreover, an important follow-up study would look more deeply into the balance between increasing critical mineral extraction and the protection of the local environment and communities in resource-rich areas. Herein, it is important to study by which States or non-State actors this balance is shaped, as the analysis has demonstrated that dominant discourses that represent the voices of conventional power actors, such as the political elites or private (multinational) companies, can lead to the marginalisation of local communities that suffer the consequences of the increase in extraction. While the results of the analysis of this thesis support the literature that assumes a shift of power towards critical mineral-rich States as a result of the growing perceived importance of these minerals, further research is necessary to confirm this and to outline the potential consequences in regard to the above-mentioned equilibrium.

While the extraction of critical minerals such as lithium can never be fully sustainable as exacting minerals from the earth will always compromise the abilities of future generations, there are ways to make the transition to a carbon-neutral society green*er*. For starters, it is important to include communities affected by the inevitable expansion of lithium extraction in the decision-making processes to ensure lithium strategies and practices concerning this expansion are representative and protect individual, community and environmental security. Moreover, raising awareness of the implications of treating minerals like lithium as a critical part of the solution to one of the most important societal challenges at present, can hopefully

limit the exacerbation of local socio-environmental risks in the name of the ‘greater good’. Therefore, enhancing our understanding of how the geopolitics of ‘white gold’ is shaped by the role attributed to lithium in the accommodation of the ‘green’ transition can hopefully contribute to a colourful experience for people worldwide on their journey towards clean energy.

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Appendix 1: Communication of the European Critical Raw Materials Act Text Analysis

Document: Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions. A secure and sustainable supply of critical raw materials in support of the twin transition (20-page document) (European Commission, 2023c).

Method and structure of text analysis: This text analysis follows Fairclough's method of examining the text, vocabulary, grammar and structure of the document (Fairclough, 1989, pp. 112-138). Accordingly, provocative vocabulary is highlighted in green and sentences in yellow. What makes the vocabulary or sentences thought-provoking is explained in the section 'comments'. The analysis follows the following structure:

1. Introduction and conclusion (outlines the motivation and objectives)
2. Objective 1: Developing the critical raw materials value chain in the EU
3. Objective 2: Boosting the diversification of supply and partnering in a mutually beneficial manner in support of global production
4. Objective 3: Fostering sustainable sourcing and promoting circularity

P.	Quote	Comments
Introduction and conclusion: motivation and objectives		
1	"The EU has embarked on an ambitious industrial transformation to achieve a green and digital transition."	Using the term *green* is a debated issue.
1	"It is also essential for increased security capabilities in the defence, space sectors."	Utilising the word *essential* creates a sense of urgency.
1	"It forecasts an unprecedented increase in demand for the key materials necessary to a successful twin transition."	The success of the transition is linked to the acquisition of materials, justifying the content of this strategy while the EU can only guess how much the increase in demand will be in reality.
1	"The analysis also reveals the EU's heavy dependence on a very limited number of suppliers for all the strategic technologies in several stages of their supply chains and, for some technologies, throughout the complete value chain."	By using adjectives like *heavy*, *very,* and *all* – words that could have been removed – a sense of urgency is created.
1	"While demand for CRMs has never been higher and could increase ten-fold in the next decade, their supply is confronted with greater geopolitical, as well as environmental and social risks and challenges."	The EU justifies the content of the strategy by outlining the (supposed) increase and challenges, thereby prioritising geopolitical risks.
1	"Above all, lengthy and uncertain permitting procedures are a major deterrent."	Using the adjective *major* creates a sense of pressure.
1	"The time between the start of a project and the materials being available in the market can be very protracted."	Using the adjective *very* creates a sense of pressure.

1	"For most CRMs, production is heavily concentrated in a few suppliers, and the EU relies heavily on imports."	By using the word *heavily* twice in one sentence, in addition to *few*, a sense of urgency is created.
1	"Excessive dependencies on single suppliers could disrupt entire supply chains, particularly as export restrictions and other trade restrictive measures are increasingly used amid intensifying global competition."	This sentence implies there is a likelihood that suppliers will deliberately disrupt supply. By restating the dependency on the EU and the geopolitical *competition*, it is the intention to justify word choices that imply urgency and pressure.
1	"The EU is not alone in facing these challenges. […] Countries like China, Japan, the United States or South Korea have taken steps to secure their supplies, to process and refine CRMs in order to reduce their strategic dependencies."	The combination of these sentences implies that the EU is falling behind and should follow these countries in securing supplies.
1	"Resource-rich, CRM-producing countries are also working at attracting partners with whom they can work to locally develop their CRM value chains sustainably."	This indicates that there is a clear distinction between the EU and 'other' resource-rich countries.
2	"But the game has changed and we need to do more. […] With a view to building mutually beneficial long-term relationships with resource-rich countries, the EU will seek win-win partnerships in full complementarity with the Global Gateway strategy."	By calling the CRMs supply chain a *game*, it is implied there are winners and losers, adding to the creation of urgency and pressure. However, the next sentence does imply the game can have multiple winners.
2	"While these partnerships should contribute to the diversification of the EU's raw materials supply chain, they should equally enhance the sustainability and value addition in the production of these resource rich developing and emerging countries."	Firstly, modal verbs are used to indicate the expectation of the partnerships. Secondly, using the word *these* adds to the discourse that creates a sense of 'othering'. Thirdly, the last part of this sentence problematically assumes that all resource-rich countries are developing and emerging.
2	"It will allow Europe to boost industrial capacities in an open and trade friendly manner, with high environmental and social standards, creating quality jobs and boosting growth while increasing our open strategic autonomy."	Using the word *our* – especially when talking about increasing autonomy – adds to the 'othering' discourse.
2	"Consequently, the EU needs to strengthen its global engagement, to develop and diversify investment, production, and trade with reliable partners while working to reduce its dependence on highly concentrated supplies and address the vulnerabilities that result from it."	Firstly, by using the words *needs* and *highly*, a sense of urgency and pressure is created. Secondly, using the term *reliable partners* implies there are also unreliable partners. However, it is not specified what makes a partner reliable.
2-3	"The EU will pursue these objectives in cooperation with third countries to ensure mutually beneficial partnerships, with a view to promoting their own economic development in a sustainable manner while also creating secure, resilient, affordable and sufficiently diversified value chains for the EU. This is also in the interest of EU's partners as it strengthens EU's added value in the partnership. For instance, in case of disruptions in partner countries, an increased capacity of EU would allow it to better support its partners and mitigate global supply challenges."	Firstly, this sentence is based on the assumption that a partnership with the EU will lead to sustainable economic development in the producing countries, while this is not supported by a source. Secondly, the last sentence (in relation to the former) implies that by becoming an EU partner and offering *affordable* CRMs, the EU's potential to mitigate supply challenges strengthens. This ignores that the power to mitigate supply challenges actually lies in the first place at the resource-rich countries, not the EU.

19	"The EU must secure a sustainable, affordable and diversified supply of CRMs to succeed in its green and digital transitions, which go hand in hand with just transition, as well as to ensure its security and defence. It needs to do so for its long-term competitiveness and to maintain its open strategic autonomy in a fast changing and increasingly challenging geopolitical environment."	Firstly, in the conclusion, the connection is drawn between a *sustainable, affordable and diversified supply* of CRMs and EU security. This securitised narrative has the potential to justify the EU's actions. Secondly, the term *just transition* is used in the conclusion for the first time, without giving a definition. Therefore, it is not clear if this indicates justice on the state level or individual level.
19	"It is only this way that the green and digital transition will become a reality for all."	The EU implies this strategy entails the only way to realise a *green* transition. Firstly, this implies a sense of EU superiority. Secondly, it disregards the individual level for whom the transition can never be called *green*.
Objective 1: Developing the critical raw materials value chain in the EU		
3	"Strategic raw materials are of high strategic importance, characterised by a potentially significant gap between global supply and projected demand, and are materials for which an increase in production is relatively difficult"	The definition of the term *strategic raw materials* is linked to the supply-demand gap, while the related socio-environmental challenges are not addressed.
6	"The European experts and national standardisation bodies are already important contributors to the work of the International Organisation for Standardisation (ISO) and should assume an even more active role in related international standards setting work in order to ensure that EU principles and values underlying relevant EU legislation, as well as international commitments, are reflected in international technical standards on CRMs."	This sentence assumes that the EU principles and values should be reflected in international technical standards. While EU standards are high-standing, this phrase inappropriately implies EU values are superior.
Objective 2: Boosting the diversification of supply and partnering in a mutually beneficial manner in support of global production		
7	"Given the current challenges, to have a real impact the toolset should be deployed simultaneously with interested partner countries."	Understanding what is meant by the *current challenges* and *interested partner countries* is subjective.
8	"Access to a secure, affordable, and sustainable supply of CRMs is a shared concern among many partners and a key theme in many intergovernmental […] or initiatives such as the Mineral Security Partnership or strategic partnerships with third countries."	Whether an affordable supply of CRMs is a shared concern is questionable.
8	"Moreover, international cooperation is essential to counter the market dominance by some and address the challenge of sustainability."	By treating *the market dominance by some* and *sustainability* as a challenge that should be countered, the EU is justifying their actions.
8	"The EU should join partners in promoting the reliable, commercially based, transparent and environmentally friendly supply of CRMs."	By pointing out the objective of a *commercially based supply* specifically, a base is established for the following criticism of protectionism. What is missing here is the social security guarantee.
8	"In particular, the CRM Club should foster sustainable investment in producing countries and allowing them to move up the value chain."	This phrasing implies that being in the *CRM Club* is a privilege and *allows* producing countries to move up the value chain.
8	"The Club would be open to the like-minded parties interested and willing to develop the following actions, based on an agreed set of principles."	Firstly, this phrasing confirms that the club is only open to selected countries. Secondly, who the EU considers *like-minded parties* is subjective.
9	"In December 2022, the EU concluded negotiations to modernise the existing EU-Chile Association Agreement on 9 December 2022. The Agreement contains a dedicated Energy and Raw	This sentence confirms that Chile's role in providing lithium specifically is an important aspect of the modernised Agreement.

	Materials chapter, which will contribute to providing better access to sustainable investment in critical raw materials such as lithium, while supporting Chile in developing its green economy, in particular with regard to renewable energy and hydrogen."	
9	"Given the capital-intensive nature of extractive and refining activities, economic operators need a business environment in resource rich countries that is investor friendly, predictable and stable. Building on existing multilateral, plurilateral and bilateral frameworks, the EU will further develop measures to achieve this objective."	This sentence implies that the EU will unilaterally develop measures to ensure a beneficial business environment in resource-rich countries. This is not something that can be imposed as is implied here, but should be established together with producing countries.
9	"Negotiations are also on-going with Australia and Indonesia, both holding significant reserves of raw materials vital for the energy transition such as rare earth elements and nickel."	This sentence implies that critical minerals are going to play a central role in trade agreements with resource-rich countries.
10	"Use its expanding network of Sustainable Investment Facilitation Agreements and Free Trade Agreements to support the ambition of the EU's trading partners to develop processing capacities and create win-win partnerships, such as with Chile and Australia."	This implies that the EU wants to support the development of the upstream CRM industry in Chile, instead of just importing raw materials.
10	"Given the urgency of enhancing CRM production worldwide…"	Using words like *urgent* creates a sense of pressure.
11	"These Partnerships pursue the following aims: […] (iii) to promote mutual industrial and economic benefits through an increase in value added in the production in third countries;"	This restates that the EU wants to promote the upstream industry in resource-rich countries.
11	"Such agreements and strategic partnerships are in fact complementary, offering a political framework and concrete bilateral cooperation in the specific field of CRMs."	This states that the EU does not only want to create economic partnerships, but also develop the political framework in resource-rich countries. The question is if this is desired by producing countries.
12	"The EU will support investments in infrastructure projects relevant for our CRM supply chains, to increase global supply and international value chain integration and help diversification."	Using words like *ours* and *theirs* adds to the othering discourse.
12	"This will provide the targeted partner countries with a high-quality and scaled-up EU offer, aligning partners' interests with EU interests, and will contribute to narrowing the global investment gap in the global CRM supply chains while boosting competitiveness, sustainability, and security."	This sentence implies that *targeted countries* – already indicating exclusivity - should accept the EU *offer* - indicating privilege - and align their interests with those of the EU to increase security.
13	"III.6. Combatting unfair trade practices and pushing harder on enforcement"	The title of this section states that the trade practices of some producing countries are *unfair*, instead of, for example, of a protectionist nature.
13	"Today, many governments have turned their attention to the development of the CRM sector, often driven by industrial as well as geopolitical objectives."	Clarifies the importance of industrial and geopolitical objectives.
14	"This could threaten security of supply or create an uneven playing field that undercuts companies' competitiveness, not just for the EU but for all countries who depend on imports of these materials. But trade restrictions also create inefficiencies. For example, export restrictions as a tool for stimulating local mineral processing do not pay off."	The EU severely criticises protectionist policies of producing countries and states that it does *not pay off* - which is only supported by citing one article on export controls in the African mining and processing industry. This criticism might be understandable from the EU point of view, but does not take into consideration *why* protectionist policies rising in number.
14	"The Commission is therefore making significant efforts to create transparency on distortive policies related to raw materials, by financing the OECD Database on export restrictions. This is a key first step in raising global awareness on the policy concerns brought by this issue, especially related to CRMs necessary for	The EU implies that the *distortive policies* – meaning distortive for consuming states - lead to policy concerns globally, while this is rather one-sided.

	the energy transition, with a view to addressing these issues in the WTO."	
14	"The EU has already made use of dispute settlement in the CRM field."	This sentence is meant as a threat to any country thinking of implementing more protectionist policies, as it is followed by examples in which the EU imposed the dispute settlement mechanism.
14	"The EU's track-record to address unfair practices is unambiguous. The Commission will intensify enforcement to tackle the growing challenges in this sector and will address export restrictive actions taken by trading partners on ore, secondary raw materials or CRM containing waste in a resolute manner."	This adds to the threat exposed in the former highlighted sentence and strengthens it by claiming there is no doubt about the EU's commitment to addressing *unfair* practices.
14	"In addition, the Commission will also continue protecting the EU market by making use of its trade defence instruments where the facts justify it, in full respect of its international and internal legal obligations."	This moreover adds to the aforementioned threat by claiming that the EU will not back down from making use of its defence instruments to *protect* the market.
14	"Furthermore, in certain cases, foreign direct investments (FDI) by non-EU investors may pose a risk to security or public order in the EU precisely because they might impact the supply of critical inputs including raw materials. […]States can coordinate action to protect EU security and/or public order if these are threatened by FDI."	This might imply investments from, for example, China, in combination with China's growing global influence, is a security threat.
Objective 3: Promoting sustainability and circularity across the value chain		
15	"Efforts to improve sustainable development of CRM value chains also offers an opportunity to promote human rights, conflict-resolution and regional stability."	Firstly, this section starts without giving a definition of sustainability. Secondly, it starts from the assumption that CRM value chains are often linked to human rights violations, conflict and regional instability.
17	"Through accompanying measures, the EU will support as much as possible the respect of EU sustainability legislation in our partner countries."	This sentence implies that it is the EU legislation that should have prevalence.
17	"For CRMs that have a significant environmental footprint, the Regulation foresees the possibility to introduce in the future requirements on transparency of the environmental footprinting of specific raw materials, if these are necessary to achieve the EU's environmental goals."	Firstly, it can be argued that all CRMs have an environmental footprint. Secondly, why should this only be a possibility? Thirdly, the focus should not be on the EU's environmental goals, as climate change is a cross-border issue.
17	"At least in the mid-term, increasing the recycling rates of waste containing CRMs, but also promoting efficient use and substitution of CRMs, offers a big potential to reduce dependencies, build value chains and create jobs locally..."	This builds on the objective of creating strategic autonomy, which might lead to unclarity for producing countries on what the long-term potential is of a partnership with the EU.
18	"Areas of cooperation include regulatory cooperation and creating an integrated market for materials to be recycled."	This is a very vague and broad objective to want to pursue internationally.

Appendix 2: National Mining Policy of the Government of Chile Text Analysis

Document 1: National Mining Policy 2050 (152 dia-pages) (Gobierno de Chile, 2022a).

Structure of analysis: This text analysis follows Fairclough's method of examining the text, vocabulary, grammar and structure of the document (Fairclough, 1989, pp. 112-138). Accordingly, provocative vocabulary is highlighted in green and sentences in yellow. What makes the vocabulary or sentences thought-provoking is explained in the section 'comments'. The analysis follows the following structure:

1. Introduction
2. Context and current situation
3. Opportunity for mining and the country
4. Process for preparing the policy
5. Vision and objectives for Mining 2050
6. Goals for Mining in the 21st Century
7. Governance of Mining 2050
8. Annex: Technical data sheets on goals

p.	Quote	Comments
	Introduction	
4	"Chile has always been a mining country, even before the arrival of the Spanish."	Interesting that the first sentence of the document refers to the former colonists.
4	"When we talk about challenges, without a doubt the biggest one we face today as a planet is global warming; a threat against which a relatively small country like us should play a relevant role, because the minerals hidden in the entrails are essential for new technologies to reduce the carbon footprint."	While this is a document meant for the whole mining sector, this sentence demonstrates the special focus on critical minerals.
4	"This represents a huge opportunity for Chile, but at the same time it implies a tremendous responsibility."	Using words like *huge* and *tremendous* creates a sense of pressure.
4	"We must be able to maintain a certain level of production of minerals like copper and lithium without losing our competitiveness, meanwhile respecting the environment and maintaining ties to communities and institutions, regardless of the change of administrations."	This demonstrates the special focus on critical minerals. Moreover, it is interesting how it is mentioned that the production of these minerals should be separate from the political situation in the country.
4	"The ambition behind this work is as great as the challenge that drives it: to encourage mining, in addition to being valuable and vital for Chile through the generation of jobs and as a source of government revenue, to be sustainable, innovative, collaborative, transparent, equitable, connected and the most relevant."	This accentuates the benefits for the entire country and meant to justify the expansion of mining. Also, seeing it as a source of government revenue implies a neo-extractivist mentality.
4	"Today's problems cannot be solved by yesterday's solutions."	Use of a metaphor.

4	"We have the opportunity to help save the planet by taking pride not only in our mining, but especially in the way that we do it."	The creation of a feeling of pride is a way to justify certain actions.
4	"How? Being a global leader in responsible, competitive and innovative production; improving the quality of life of all Chileans and adding value in the operating territories."	Accentuating the benefits for the entire country is a means of justifying the expansion of mining.
4	"Our proposal is to give a sense of purpose to our flagship industry: to leave a more sustainable world to future generations."	Accentuating the importance of mining for the country adds to the creation of a sense of pride.
Context and current situation		
6	"The pre-hispanic cultures already extracted and processed gold and copper when the conquerors had not yet thought of venturing across the Atlantic."	Interesting word choice.
6	"Although mining has shaped the socioeconomic identity of many regions and its weight and contribution to the economy is unquestionable, in the 21st century a new social contract is necessary for Chileans with our flagship industry."	Again implies to create a sense of pride.
6	"One principle to revalue its enormous contribution to the development and the well-being of Chileans is to turn it into a source of national pride, whether they work in it or not."	Using the word *enormous* creates a sense of pressure. Also, again, there is the creation of a sense of pride.
7	"Our country is a worldwide mining power thanks to the rich minerals hidden inside it."	This demonstrates the focus on critical minerals. The use of the word *power* is an interesting choice as this is a loaded term.
8	"Codelco It is an autonomous state-owned company, property of all Chileans, is a world leader in both reserves and production of mine copper, and is an engine for the development of the country."	This accentuates the benefits of mining for the entire country and demonstrates a neo-extractivist mentality.
12	"Climate risk and water stress seriously threaten the world and mining production."	Using the phrasing *threaten the world* creates a sense of pressure and urgency.
Opportunity for mining and the country		
17	"According to estimates from Cochilco, our lithium carbonate exports by 2025 could be similar to those of our wine industry today."	This might be a relatable comparison for Chilean people.
18	"Chile's mining wealth will play a key role in the race against the greatest global threat."	Using words like *race* and *threat* creates a sense of hostility and urgency.
18	"With the world's largest copper and lithium reserves, Chile has the potential to become a key player in solving the greatest global challenge."	Using words like *key player, solving* and *greatest global threat* creates a sense of responsibility and pressure.
	"For this reason, our participation in the world market is essential to achieve an energy transition on time and on the scale necessary to face global warming."	This refers to Chile's role in the critical minerals global supply chain, yet is vague about what it actually entails.
	"There are many other minerals that are transcendental for renewable energy. Most of them will experience a significant growth in demand and our country can provide them."	Using words like *our country* creates a sense of pride.
Process for preparing policy		
26	"The National Mining Policy 2050 has been chosen to be a good practice case for the Resourcing Project of the European Union, which deals with the issue of responsible sourcing of resources."	This sentence mentions Chile's relationship with the EU, confirming their good relations.
Vision and objectives for Mining 2050		
29	"To maximize its contribution and be valued by Chileans, the mining industry must make its own the attributes that society demands … Participate in international markets successfully, and attract investment to benefit all citizens."	This accentuates the benefits for the entire country to influence the perceptions of Chileans.
30	"We seek to lay the foundations for a new social contract for citizens with the mining industry: an industry that has a clear purpose, aligned with the great challenges of Chile and that is a source of national pride."	Implies the creation of a sense of pride.

30	"Maintain and strengthen our leadership by supplying the minerals that the world needs by 2050 in the fight against global warming, address the consequences of climate change and generate value for the country."	By describing Chile as a key player in the fight against climate change, the intention might be to influence people's perceptions.
31	"A mining recognized and valued by citizens development model with 3 axes and a base that challenge the industry and the government."	Implies the creation of a sense of pride.
31	"Be a global leader in responsible, sustainable, competitive and innovative production based on world-class standards."	Using the term *world-class standards* is positively neutral.
Goals for mining in the 21st century		
Economic: Be a global leader in responsible, sustainable, competitive and innovative production with world-class standards.		
Social: Improve the quality of life of workers, develop harmoniously in the operating territories and add value to the communities and the country.		
47	"Generate spaces to aim for zero fatalities, where large mining has international standards."	Using the term *international standards* is positively neutral.
Environmental: Stand at the forefront of managing resources and the environment, addressing its impacts and generating a net gain in biodiversity.		
Institutionality: The government creates the conditions for sustainable development of the industry through stable institutions, providing a conducive environment and guarantees to attract investment, protecting the environment and the development of the territories.		
60	"Have a modern, transparent institutional framework with efficient management, ensuring the development of the industry for the benefit of the country."	The sentence accentuates the benefits for the entire country.
60 / 66	"Promote the valorization of mining by society … Ensure that information regarding perception, quality of the relationship and knowledge of mining is made available to the public."	The clear goal of wanting to create a sense of pride is mentioned.
60 / 68	"Strengthen Codelco and Enami as state-owned companies and international benchmarks. … Align the corporate governance of Enami with standards of the OECD and other state-owned companies."	This expresses a form of resource nationalism. Moreover, by using the terms *international benchmarks* and *standards of the OECD,* Chile admits its sector needs improvement.
62	"Have the Ministry of Mining that vigorously exercises its role of defining and promoting strategies and public policies, with the capacity to execute appropriate sectorial and territorial integration."	Using the term *vigorously* implies creating a positive perception of the Ministry.
62	"Update the structure, attributions and regulations of Cochilco to ensure the effective fulfillment of its role and the strategic alignment with the Ministry of Mining."	What is meant by the *role* of this state-owned company is not clearly stated.
62	"Update the structure, functions, and resource allocation of Sernageomin (National Geology and Mining Service of Chile) to ensure the effective fulfillment of its various roles and the efficient use of resources."	Again, it is unclear what is meant by *its various roles*.
Governance Of Mining 2050		
Annex: Technical data sheets on goals		
76	"It is important, however, to continue making progress in the complete traceability of national mining production, in line with the SDGs and in order to ensure its competitiveness in international markets."	By expressing the wish to be in line with the SDGs, Chile admits the sector needs improvement. Moreover, it is implied that the competitiveness of Chile is linked to upholding these standards instead of solely low prices, which implies innovative thinking.
77	"Additionally, if we analyze the budget that other mining countries allocate to basic exploration, we see how Chile and Peru invest the least in it."	Mentioning this comparison can justify increasing the spending for exploration purposes.

79	"Considering the above, it is prudent to promote minerals with potential for development (independent of copper) such as lithium, gold and iron."	Demonstrates a special focus on critical minerals.
	"In order to promote the development of national technologies and innovations in materials and metallurgy, this political policy seeks to achieve that by 2030, 30% of the total patents applied for in Chile, should be requested by Chilean natural and legal persons."	Demonstrates a resource-nationalist mentality.
88	"Canada and Australia led in the intensity of cost on R&D with approx. 0.6% and 0.5%, respectively in 2017. Chile only registered an intensity of cost of 0.075% in 2018."	Mentioning this comparison can justify the increased spending on R&D.
	"This policy is aligned with the need to respond to the challenges of the sector and comply with global standards, positioning ourselves among international leaders in research and development, meeting the goals related to carbon neutrality, among others."	Using the term *international standards* is positively neutral.
89	"Examples of countries that have succeeded in developing an internationally competitive supplier sector are Canada and Australia, where the former exported approx. US$ 2,500 million in 2017 and the second US$ 11,000 million in 20163 to more than 200 mining districts. Chile has the potential to replicate these examples, by promoting financing mechanisms for technological innovation in mining."	Mentioning this comparison can justify increasing the promotion of financing mechanisms for technological innovation.
93	"Although Chile has made progress in the incorporation of women into work, there is still a disadvantage with respect to our global benchmarks, where Canada has a participation of women of 18% and Australia 17% by 2020."	Mentioning this comparison has the intention to push for a higher representation of women in the mining sector.
101	"The concept of shared value is considered one of the founding criteria that allow community contributions and benefits to be carried out in light of the SDGs and the various international standards, since it goes beyond the concept of paternalism or assistance... The great challenge of shared value, in the context of the development of investment projects, is to ensure that local communities are, in turn, producer of wealth and not just recipients of the redistribution of resources."	Using the terms *SDGs* and *international standards* is positively neutral. Moreover, while (international) investments are needed to develop the industry, Chile is not afraid to prioritise individual and community rights.
117	"At present, national foundries (especially state-owned ones) do not have high emission capture level, a reality that is far from the global benchmark."	While this demonstrates a resource-nationalist mentality, Chile does admit that state-owned companies require development. Moreover, using the term *global benchmark* is positively neutral.
117	"This policy seeks to achieve international standards for foundries and refineries in terms of sustainability and environmental responsibility."	Using the term *international standards* is positively neutral.
130	"This policy seeks for the Ministry to be able to coordinate a long-term vision to respond to the great challenges that the industry is going through, to maintain and potential leadership in copper production and diversify the portfolio of other minerals, it is necessary to be a relevant actor in instances of planning and territorial ordering, promoting the compatibility of mining with the uses of the territory and thus avoid possible disasters, coordinate a vision of sustainable infrastructure and technologies necessary for the development of the industry, and generate a governance model in the industry of lithium among other topics."	These sentences in relation to each other promote a stronger role for the Ministry, which demonstrates a resource-nationalist mentality, in the lithium sector specifically. Moreover, using words like *great challenges* and *disaster* creates a sense of pressure.
135	"This model will consider relationship strategies among the different actors that coexist with non-metallic mining, such as private and public companies; State administration bodies such as the Ministry of	This demonstrates a resource-nationalist mentality for the lithium industry. However, it also mentions social actors

	the Environment, the Ministry of Mining, the Ministry of Public Works (DGA), municipalities, among others; social organizations and NGOs; actors from academia and relevant experts in the field; and, of course, social actors present in the territories (indigenous and non-indigenous communities). Thus, this policy seeks for the Ministry of Mining to assume the leadership of the design of this strategy, which will allow to increase the production of lithium through the implementation of the new governance structure in the salt flats."	should *of course* be included in the governance structure of the salt flats.
137	"The reality of mining is very different."	This acknowledgement can create a sense of understanding among the subjects of the discourse.
142	"This policy aims to optimize the mining tax system, seeking to generate fair compensation for the use of State resources, in line with other mining jurisdictions, and that maximizes development and the consequent productive chains."	This demonstrates a neo-extractivist mentality.
146	"However, due to the lack of adequate regulation and supervision, part of the mining industry of the past did not take responsibility for its environmental and social effects."	This acknowledgement can create a sense of understanding among the subjects of the discourse.
150	"This policy seeks Codelco to realize by 2023 improvements to the functioning of corporate governance in order to have a Board of Directors independent of power and political cycles, highly qualified and with broad powers, complying with the best corporate governance standards for state-owned companies."	While this demonstrates a resource-nationalist mentality, Chile does admit that the state-owned company require development.

Document 2: Aprueba Política Nacional Minera 2050 (Approval National Mining Policy 2050, 16-page document) (Gobierno de Chile, 2022b).

Structure of analysis:

1. Contexto y situación actual (Context and current situation)
2. La oportunidad para la minería y el país (The opportunity for mining and the country)
3. Proceso de elaboración de la Política Nacional Minera 2050 (Process of elaboration of the National Mining Policy 2050)
4. La vision y objectivos para la minería 2050 (The vision and objectives for mining 2050)
5. Las metas para la Minería del siglo XXI (The goals for mining in the 21st century)
6. Gobernanza de Minería 2050 (Governance of Mining 2050)

p.	(Original) Quote	Quote translated to English (via Google translate)	Comments
Contexto y situación actual			
2	"Esta industria tiene el potencial para seguir transformando a Chile y ayudarle para alcanzar un pleno desarrollo."	"This industry has the potential to continue transforming Chile and helping it to achieve full development."	Links the development of the mining industry to the development of the country. However, *full development* is a vague term.

2	"Para ello, requiere desarrollar como país un proceso sustentable para las próximas décadas que le permita responder, entre otros aspectos, a: (i) las realidades de los mercados mundiales…"	"To do this, the country needs to develop a sustainable process for the coming decades that allows it to respond, among other aspects, to: (i) the realities of world markets…"	It is unclear what is meant by *the realities of world markets.*
3	"La ausencia de una política nacional minera de largo plazo, que entregue respuestas a las crecientes y complejas transformaciones económicas, sociales y ambientales a escala nacional y global, desafía las posibilidades de desarrollo sustentable del sector minero *y* del país en su conjunto. Ello, se transforma en una limitación ya que se desaprovecha el potencial de la industria, por no utilizarse las riquezas minerales existentes y además, aumentan los riesgos de deterioro en otros bienes fundamentales para un desarrollo integral."	"The absence of a long-term national mining policy, which provides answers to the growing and complex economic, social and environmental transformations on a national and global scale, challenges the possibilities of sustainable development of the mining sector and of the country as a whole. This becomes a limitation since the potential of the industry is wasted, because the existing mineral wealth is not used and, in addition, the risks of deterioration in other fundamental assets for an integral development increase."	Links the creation of a strategy for the mining industry to the development of the country. Mentioning the *potential of the industry is wasted*, which can lead to *deterioration in other fundamental assets for an integral development* can aim to justify this National Mining Policy.
3	"El sector minero y la industria han aprendido del pasado trabajando por incorporar las mejores prácticas y altos estándares ambientales en sus operaciones."	"The mining sector and industry have learned from the past by working to incorporate best practices and high environmental standards into their operations."	This acknowledgement can create a sense of understanding among the subjects of the discourse.
3	"Considerando que los recursos minerales del subsuelo son propiedad del Estado, una importante contribución de la actividad minera en general, se produce a través de los impuestos que aporta a las arcas fiscales."	"Considering that the mineral resources of the subsoil are property of the State, an important contribution of the mining activity in general, is produced through the taxes that it contributes to the fiscal coffers."	This demonstrates a neo-extractivist mentality, but is also just a reality in Chile.
4	"Específicamente, se reconoce que la industria se encuentra en casos de reparación y compensación de los impactos ocurridos, sin un estándar regular, claro y efectivo."	"Specifically, it is recognized that the industry is in cases of repair and compensation for the impacts that have occurred, without a regular, clear and effective standard."	This acknowledgement can create a sense of understanding among the subjects of the discourse.
4	"Un ministerio que ayude a mantener una imagen de liderazgo institucional y técnico a nivel internacional permitiendo alinear objetivos de sus servicios como Cochilco y Sernageomin."	"A ministry that helps maintain an image of institutional and technical leadership at the international level, allowing the aligning of objectives of its services such as Cochilco and Sernageomin."	This demonstrates a resource-nationalist mentality. Moreover, hopefully, the focus does not lie on the image, but on the actual actions.
La oportunidad para la minería y el país			
6	"Según estimaciones de Cochilco, la demanda agregada de litio se cuadriplicará hacia el año 2030, impulsada por el auge de los vehículos eléctricos, y las exportaciones chilenas de este mineral, en que, al 2025, podrían ser similares a las de la industria vitivinícola (cerca de USD 1800 millones FOB)."	"According to Cochilco estimates, the aggregate demand for lithium will quadruple by 2030, driven by the rise of electric vehicles, and Chilean exports of this mineral, which, by 2025, could be similar to those of the wine industry (about USD 1.8 billion FOB)."	This demonstrates the focus on critical minerals, including lithium.

6	"Al poseer las mayores reservas mundiales de cobre y litio, Chile tiene el potencial de convertirse en un actor fundamental en la solución al mayor desafío planetario."	"Possessing the world's largest copper and lithium reserves, Chile has the potential to become a key player in the solution to the greatest planetary challenge."	This demonstrates the focus on critical minerals, including lithium. Moreover, utilising words such as *key, solution* and *greatest planetary challenge* creates a sense of pressure and urgency.
	"Dichos yacimientos tienen potencial de ser recuperados bajo ciertas condiciones de mercado, factibilidad técnica y modelos de negocios que viabilicen su extracción. Por ello es imprescindible la participación en el mercado mundial para apoyar el logro de la transición energética a tiempo y en la escala necesaria para enfrentar el calentamiento global."	"These deposits have the potential to be recovered under certain market conditions, technical feasibility and business models that make their extraction viable. For this reason, participation in the world market is essential to support the achievement of the energy transition on time and on the scale necessary to face global warming."	These sentences demonstrate the focus on critical minerals. Yet the language is a bit vague: which market conditions and which business models? Moreover, what does *participate in the world market* mean for Chile? Additionally, adding that it is *essential* to recover the deposits to face global warming *on time,* a sense of urgency and pressure is created.
Proceso de elaboración de la Política Nacional Minera 2050			
La vision y objectivos para la minería 2050			
8-9	"La visión propuesta para la Politica Nacional Minera 2050 y que se presenta a continuación, está basada en la sustentabilidad económica, social y ambiental además de contar con una buena gobernanza, sentando las bases para un nuevo contrato social de la ciudadanía con una industria minera que tenga un propósito claro, alineada con los grandes desafíos de Chile y que sea un motivo de orgullo nacional."	"The vision proposed for the National Mining Policy 2050 and which is presented below, is based on economic, social and environmental sustainability in addition to having good governance, laying the foundations for a new social contract of citizens with a mining industry that have a clear purpose, aligned with the great challenges of Chile and be a source of national pride."	Utilising the term *great challenges* creates a sense of pressure. Moreover, there is the creation of a sense of pride.
10	"El propósito de la Política Nacional Minera 2050, por tanto, es construir una mirada prospectiva que, respetando la facultad de gobernar, sirva para orientar a los distintos actores y tomadores de decisión de manera que no se pierda el rumbo respecto de los objetivos de país en el largo plazo."	"The purpose of the National Mining Policy 2050, therefore, is to build a prospective perspective that, while respecting the power to govern, serves to guide the different actors and decision makers so that the course is not lost regarding the country's objectives in the long run."	This demonstrates that, while agency is given to a number of different actors, the government has the power to govern, and thus make the final decisions.
10	"La Política Nacional Minera 2050 no pretende ser una solución concreta ni perfecta a los problemas del desarrollo sustentable del sector, sino que tiene por objeto acordar una visión común y de largo plazo y además, conducir ordenada y coherentemente el proceso para lograrlo en un marco de tiempo."	"The 2050 National Mining Policy is not intended to be a concrete or perfect solution to the problems of sustainable development in the sector, but rather it is intended to agree on a common and long-term vision and, furthermore, to lead the process in an orderly and coherent manner to achieve it within a framework of time."	This provides the realistic perspective that this policy is not a perfect solution to the problems. Framing it like this is likely appreciated by the Chilean people.
Las metas para la Minería del siglo XXI			
10	"Así, la Política Nacional Minera 2050 refunda la manera en que la desarrollamos y reemplazamos la percepción de una industria extractiva	"Thus, the 2050 National Mining Policy recasts the way in which we develop it and replaces the perception of an extractive industry with that of one	This demonstrates the desire to change the perspective of the mining sector. Moreover,

	por la de una reconocida como líder mundial en producción responsable, competitiva e innovadora, que aplica y crea estándares de clase mundial, y busca siempre la optimización de todos los recursos."	recognized as a world leader in responsible, competitive and innovative production, which applies and creates world-class standards, and always seeks the optimization of all resources."	using the term *world-class standards* is positively neutral.
11	"Promoviendo modelos de negocios que brinden valor colectivo y un desarrollo territorial equitativo en las regiones mineras, considerando localidades aislada y/o extremas, así como una mayor calidad de vida para los habitantes del país en su conjunto."	"Promoting business models that provide collective value and equitable territorial development in mining regions, considering isolated and/or extreme localities, as well as a better quality of life for the country's inhabitants as a whole."	This accentuates the benefits for the entire country, which can be used to alter the perceptions of the Chilean population in support of expanding the mining sector.
11	"Por último, requiere operar con los más altos estándares de seguridad, salud mental y física y respeto los derechos humanos, y orgullo de los chilenos y chilenas por su industria minera."	"Lastly, it requires operating with the highest standards of safety, mental and physical health and respect for human rights, and the pride of Chilean men and women for their mining industry."	It is innovative to both consider mental and physical health in the mining sector. Moreover, there is again a creation of a sense of pride.
13	"44. Alcanza estándares internacionales en sustentabilidad y responsabilidad con el medioambiente en fundiciones *y* refinerías del país."	"44. It reaches international standards in sustainability and responsibility with the environment in smelters and refineries in the country."	Using the term *international standards* is positively neutral.
14	"Una parte relevante del éxito o fracaso de los países ricos en recursos naturales en el aprovechamiento de estos en beneficio del país, es construir y mantener una buena gobernanza."	"A relevant part of the success or failure of countries rich in natural resources in the use of these for the benefit of the country is building and maintaining good governance."	Here, Chile separates itself from other countries based on geographical features. Moreover, this supports the literature that argues resource nationalism is only effective with good governance.

Appendix 3: Analysis of Negotiation Round Reports of the EU-Chile Advanced Framework Agreement

Method of the analysis:

The Negotiation Round Reports from the side of the EU and Chile have been analysed and the text mentioning the Energy and Raw Materials chapter added in the table. Herein, the sentences that mention points of concurrence are highlighted green, and the points of contrast yellow. If there are no highlights, this means the text that mentions the Energy and Raw Materials chapter makes no specific referrals to points of contrast or concurrence. Afterwards, the mentioned points have been summarised in a separate table to give an overview.

Round	EU	Chile (translated to English via Google Translate)	Chile (original)
1	There are no reports available for Negotiation Round 1		
2	"An in depth discussion took place on the scope and content of the text for a possible ERM chapter and information was exchanged on the EU's policy areas as well as on the policy and legislative framework in Chile."	"In new matters proposed by the EU - such as Energy and Raw Materials, Investment Court - Chile focused on properly understanding its foundations and interests."	"En materias nuevas propuestas por la UE - como Energía y Materias Primas, Corte de Inversiones - Chile se centró en comprender apropiadamente sus fundamentos e intereses."
3	"Both parties engaged in a useful and in-depth discussion of the provisions that would be related to 60% of Chile's exports to the EU and two important investment sectors for the EU in Chile (energy and mining). While both parties share the goal of promoting sustainable trade and investment in ERMs, differences need to be overcome on certain issues such as the proposals to eliminate dual pricing and export monopolies."	"…in other matters such as Trade in Goods, Energy and Raw Materials, Sustainable Development, Investments, Intellectual Property, Geographical Indications and the investment dispute resolution mechanism, it was possible to more clearly identify the areas with the greatest differences. This allowed each party to justify their different positions, making it clear that there is still a lot of work to be done. Both Chile and the EU have to carry out internal consultations to be clear on how to continue advancing in matters where there are greater differences."	"… en otras materias como Comercio de Bienes, Energía y Materias Primas, Desarrollo Sostenible, Inversiones, Propiedad Intelectual, Indicaciones Geográficas y el mecanismo de resolución de disputas en inversiones, se pudo identificar con más claridad las áreas con mayores diferencias. Esto permitió que cada parte fundamentara sus distintas posturas, quedando claro, que todavía queda mucho trabajo por realizar. Tanto Chile como la UE, tienen que realizar consultas internas para tener claridad en cómo seguir avanzando en las materias donde existen mayores diferencias."
4	"The parties continued to discuss the text proposals on Energy and Raw Materials, and exchanged information on their respective regulatory frameworks and market conditions for the mining and energy sectors. The parties identified shared approaches on the promotion of trade and investment of renewable energies and discussed their respective	"Another sensitive area is related to energy and raw materials that would have a regulatory impact for Chile, for which reason Chile would like to avoid or eliminate these initiatives."	"Otra área sensible se relaciona en materia de energía y materias primas que para Chile conllevarían un impacto regulatorio, por lo que Chile quisiera evitar o bien eliminar estas iniciativas."

	approaches on other issues such as export pricing, regulated pricing or the applicability of dispute settlement to the chapter."		
5	"There were constructive discussions in this area which allowed consolidating the text to provide the basis for further discussions and eventual agreement on text, including on the issue of ERM dialogues and a number of energy-investment related articles."	"Finally, there are the most contentious issues in the negotiation and where progress has been less. Here we can highlight energy and raw materials, intellectual property, the mechanism to resolve disputes between investors and the State, and negotiations on access to the goods market."	"Finalmente existen los temas más contenciosos de la negociación y donde el avance ha sido menor. Acá se puede destacar energía y materias primas, propiedad intelectual, el mecanismo para resolver disputas entre inversionistas y Estado y las negociaciones en acceso al mercado de bienes."
6	"There were good discussions in this area. The parties discussed their respective proposals and Chile presented its proposals for dialogues on energy and raw materials. Further discussions will be required, notably on the objectives and scope of the chapter."	"On the other hand, there were the most complex chapters that required making political decisions in order to move forward. These are the chapter on Intellectual Property, Energy and Raw Materials, Geographical Indications and the Investment Court. In particular, there was no significant progress in these matters in the last round."	"Por otro lado, quedaban los capítulos más complejos y que requerían tomar decisiones políticas para poder avanzar. Estos son el capítulo de Propiedad Intelectual, Energía y Materias Primas, Indicaciones Geográficas y la Corte de Inversiones. En particular en estas materias no hubo avance significativo en la última ronda."
7	"The parties continued to discuss their respective proposals and increased their understanding of their respective proposals and which areas need more work."	"Additionally, he added that Chile has clearly expressed to the EU its red lines in matters of Intellectual Property, Energy and Raw Materials, Financial Services, among others. The EU, for its part, has expressed its willingness to seek accommodations in the aforementioned matters and it has already been possible to advance in discussions in this Round regarding Geographical Indications." "On the other hand, there is another group of issues that still requires significant work to be done in the most sensitive chapters, in which there is some degree of progress, but significant negotiating work is still required in future stages of the process. These chapters are: Geographical Indications, Financial Services, Investments, the Investment Court, Energy and Raw Materials, Subsidies, Sustainable Development, Gender and Commerce, State Companies, Trade Defense and Intellectual Property."	"Adicionalmente, agregó que Chile ha expresado con claridad a la UE sus líneas rojas en materias de Propiedad Intelectual, Energía y Materias Primas, Servicios Financieros entre otras. La UE por su lado, ha manifestado la voluntad de buscar acomodos en las materias mencionadas y ya se pudo avanzar en discusiones en esta Ronda en materia de Indicaciones Geográficas." "Por otro lado, hay otro grupo de temas que todavía se requiere un importante trabajo a realizar en los capítulos más sensibles, en los cuales existe algún grado de avance, pero aún se requiere un trabajo negociador importante en las etapas futuras del proceso. Estos capítulos son: Indicaciones Geográficas, Servicios Financieros, Inversiones, la Corte de Inversiones, Energía y Materias Primas, Subsidios, Desarrollo Sostenible, Género y Comercio, Empresas del Estado, Defensa Comercial y Propiedad Intelectual."
8	"The parties exchanged views on the respective text proposals with the objective to find a way forward based on a consolidation of the proposals made. They showed a receptive will	"Likewise, it is important to point out that an intense work of intersessional meetings is being developed, for example, in matters such as Energy and Raw Materials, Sustainable	"Asimismo, es importante señalar que se está desarrollando un intenso trabajo de reuniones intersesionales como, por ejemplo, en materias como Energía y Materias Primas,

	to consider each other's proposals, interests, and sensitivities. However, there is still distance on crucial issues such as export monopolies, dual pricing and access to infrastructure. Further discussion is needed across all these areas in order to reach an agreement."	Development, Investment Protection and Rules of Origin among others."	Desarrollo Sostenible, Protección de Inversiones y Reglas de Origen entre otros."
9	"The round addressed all substantial aspects of the Chapter based on the respective text proposals and the Parties made significant progress on a series of provisions. Important issues however remain open, including with regard to export restrictions, the relationship between the chapter and other parts of the trade title, cooperation / dialogue oriented provision and Environmental Impact Assessments."	"On the other hand, in Energy and Raw Materials progress was also made in the text and the discussion on the two red lines in terms of Export Monopolies and Export Prices was set aside, which will be discussed soon." "In addition, there are still some more sensitive chapters where progress was made in reaching a consensus on part of the texts and the most sensitive issues were left for an intersessional discussion. These matters are Intellectual Property, Geographical Indications, Energy and Raw Materials, Investments, and the Investment Court among others."	"Por otro lado, en Energía y Materias Primas también se logró avanzar en el texto y se dejó de lado la discusión sobre las dos líneas rojas en términos de Monopolios de Exportación y Precios de Exportación, las cuales serán discutidas próximamente." "Además, todavía existen algunos capítulos más sensibles donde se avanzó en consensuar parte de los textos y se dejó los temas más sensibles para una discusión intersesional. Estas materias son Propiedad Intelectual, Indicaciones Geográficas, Energía y Materias Primas, Inversiones, y la Corte de inversiones entre otros."
10	"The Parties had three half-day sessions on the Energy and Raw Materials chapter, which resulted in incremental progress on all aspects of the text on the table. Chile, however, maintains strong reservations to parts of the EU's proposals relating to undistorted trade and investment in raw materials."	"In Energy and Raw Materials, which is a sensitive and complex chapter in the negotiation, good progress was made by "cleaning up" the text and proposing alternatives to continue advancing. The red lines of Chile were not addressed, to continue advancing in other articles." "On the other hand, there are still some more sensitive chapters where progress was made in reaching a consensus on part of the texts, leaving the most complex issues for an intersessional discussion, among which are: Intellectual Property, Geographical Indications, Energy and Raw Materials, Investments, Financial Services, Subsidies, Commercial Defense and the Investment Court, among others."	"En Energía y Materias Primas, que es un capítulo sensible y complejo en la negociación, se logró un buen avance "limpiando" el texto y proponiendo alternativas para seguir avanzando. Las líneas rojas de Chile no fueron abordadas, para seguir avanzando en otros artículos." "Por otra parte, aún existen algunos capítulos más sensibles donde se avanzó en consensuar parte de los textos, dejando los temas más complejos, para una discusión intersesional, entre los que se encuentran: Propiedad Intelectual, Indicaciones Geográficas, Energía y Materias Primas, Inversiones, Servicios Financieros, Subsidios, Defensa Comercial y la Corte de inversiones, entre otros."

Overview of the mentioned topics of contrast and concurrence in the Negotiation Round Reports	
Contrast	Concurrence
• Dual pricing (II) • Export monopolies (III) • Export pricing (II) • Regulated pricing • The applicability of dispute settlement • ERM dialogues • Energy-investment related articles • Access to infrastructure • Export restrictions • The relationship between the chapter and other parts of the trade title • Cooperation / dialogue oriented provision • Environmental Impact Assessments • Undistorted trade • Investment in raw materials	• Promoting (sustainable) trade • Investment of ERMs / renewable energies (II)

Appendix 4: Comparison of the EU textual proposal and the final text of Chapter 8 on Energy and Raw Materials

Method of the analysis:

The draft and final version of Chapter 8 on Energy and Raw Materials have been compared to analyse which parts have been deleted, added and altered. This is demonstrated accordingly:

- ~~Striped through~~ = deleted from the textual proposal
- Underlined = added in the final text
- Normal = preserved from the textual proposal

In the 'comments' section the relevant changes, additions or removals are noted for clarification purposes. A number of Articles solely concern Energy Goods (which are by Annex I (in both the proposal and final version) defined as solid fuel, crude oil, oil products, natural gas, including liquefied natural gas and liquefied petroleum gas, and electrical energy) and have thus been excluded from the analysis.

Art.	Final text vs. Textual proposal	Comments
8.1: Objective	The ~~Parties aim at facilitating trade and investment~~ objective of this Chapter is to promote dialogue and cooperation in the ~~areas of~~ energy and raw ~~materials,~~material sectors to Parties' mutual benefit, to foster sustainable ~~and improving environmental sustainability~~fair trade and investment ensuring a level playing-field in ~~these areas,~~those sectors, and to strengthen competitiveness of related value chains including value addition in accordance with the provisions of this Agreement.	• Changed: improving environmental sustainability → foster sustainable and fair trade and investment • Added: to the Parties' mutual benefit + ensuring a level playing-field + including value addition
8.2: Principles	1. Each Party retains the sovereign right to determine whether areas within its territory, as well as in ~~its archipelagic and territorial waters,~~the exclusive economic zone ~~and continental shelf,~~ are available for ~~exploring for and producing~~exploration, production and transportation of energy goods and raw materials. 2. ~~Recalling the general provision on the Parties' right to regulate and consistent~~ In accordance with the ~~other~~ provisions of this ~~Agreement~~ Chapter, the Parties ~~reserve~~reaffirm the right to regulate within their ~~rights~~respective territories to ~~adopt, maintain and enforce measures necessary to securing the supply~~achieve legitimate policy objectives in the area of energy ~~goods~~ and raw materials.	• Changed: reserve their rights to adopt, maintain and enforce measures necessary to securing the supply → reaffirm the right to regulate within their respective territories to achieve legitimate policy objectives • Deleted: the sovereign right in its archipelagic and territorial waters and the continental shelf
8.3 Definitions	Definitions on: ~~Energy efficiency~~ ~~Monopoly~~ System operator (with a different definition for the EU and Chile), Balancing Renewable fuels	• Added: definition of system operator, balancing and renewable fuels • Deleted: definition of energy efficiency and monopoly
8.4 Import and export monopolies	No Party shall designate or maintain a designated import or export monopoly. For the purposes of this Article, import or export monopoly means the exclusive right or grant of authority by a Party to an entity to import energy goods or raw materials from, or export energy goods or raw materials to, the other Party.	No changes were made

8.5 Export pricing[2]	(1) A Party shall not impose a higher price for exports of energy goods or raw materials to the other Party than the price charged for such ~~goods~~good when destined for the domestic market, by means of any measure, such as licenses or minimum price requirements. (2) ~~Article~~ Notwithstanding paragraph 1 of this Article, Chile may introduce or maintain measures with the objective to foster value addition, by supplying industrial sectors at preferential prices of raw materials so they can emerge within Chile provided that such measures satisfy the conditions set out in Annex II to this Chapter. [2] For greater certainty, this article is without prejudice to the Annex XXX (ENAP) of Chapter 22 (State owned enterprises, enterprises granted special rights or privileges and designated monopolies). Annex II 1. A measure that Chile maintains or introduces pursuant to Article 8.5 Export Pricing, paragraph 2, shall meet all the conditions set out in this paragraph. Such a measure shall: a) not result in an export restriction for the other Party pursuant to Article X.11 [export restrictions] of the [National Treatment and Market Access for Goods Chapter]; b) not adversely affect the capacity of the European Union to source raw materials from Chile; c) if the raw material is supplied at that preferential price to any economic operator in any other country, be accorded immediately and unconditionally to economic operators in like situations in the European Union; and d) not result in a preferential price that is below the lowest price for exports of the same good realized during the preceding 12 months. 2. In accordance with Chile's laws and regulations, the measure and the way it is implemented shall be made publicly available and at the request of the EU, Chile shall share with the EU detailed and reliable information on the product scope, the production volume that is covered by the measure, whether domestic sales at preferential prices have taken place, and the domestic price that has resulted from the measure.	• Added: Chile may introduce or maintain measures with the objective to foster value addition, by supplying industrial sectors at preferential prices of raw materials so they can emerge within Chile + the conditions in the Annex
8.6 Domestic regulated prices	1. ~~The price charged for the supply of energy goods and raw materials to industrial consumers shall be determined solely by supply and demand.~~ The Parties recognise the importance of competitive energy markets to deliver a wide choice in the supply of energy goods and to enhance consumers welfare. The Parties also recognise that regulatory needs and approaches may differ between markets. 2. Further to paragraph 1, as determined by a Party's domestic laws and regulations, each Party shall ensure that the supply of energy goods shall be based on market principles. 3. ~~By way of derogation from paragraph 1 of this Article, the Parties may impose in the general economic interest [or Public Service Obligation] an obligation on undertakings which relates to the price of supply of energy goods and raw materials, (hereinafter referred to as "regulated price").~~A Party may only regulate the price charged for the supply of energy goods by imposing a public service obligation.	• Changed: focus on energy goods and raw materials → energy goods + the price charged … to industrial consumers shall be determined solely by supply and demand → The Parties also recognise that regulatory needs and approaches may differ between markets. • Added: each Party shall ensure that the supply of energy goods shall be based on market principles. • Deleted: Where the price, at which energy goods and raw materials are sold on the domestic market, is regulated,

	4. If imposing a public service obligation, ~~The Parties~~ that Party shall ensure that ~~this~~ the obligation is clearly defined, transparent, non-discriminatory, ~~verifiable and of limited duration. In applying this obligation, the Parties shall also guarantee equality of access to consumers for other undertakings~~ and does not go beyond what is necessary to achieve the objectives of the public service obligation. ~~Where the price, at which energy goods and raw materials are sold on the domestic market, is regulated, the Party concerned shall ensure that the methodology underlying the calculation of the regulated price is published prior to the entry into force of the regulated price.~~	the Party concerned shall ensure that the methodology underlying the calculation of the regulated price is published prior to the entry into force of the regulated price
8.7 Authorisation for exploration and production of energy goods and raw materials	1. Without prejudice [Domestic Regulation],] If a Party requires an authorisation to explore ~~for~~ or produce energy goods ~~[hydrocarbons and electricity]~~ and raw materials ~~[ores and concentrates]~~, that Party shall ~~grant~~ensure that such ~~an~~ authorisation ~~in accordance with the conditions and procedures set out in Articles [X] and [X] of Section [A] [Domestic Regulation]~~ is granted following a public and non-discriminatory procedure[3]. 2. That Party shall publish, inter alia, the type of authorisation, the relevant area or part thereof, and the proposed date or time limit for granting the authorisation, in such a manner as to enable potentially interested applicants to submit applications. 3. ~~The Parties~~ A Party may ~~grant authorisations without complying with the conditions and procedures set out in Articles [X] and [X]~~derogate from paragraph 2, of ~~Section [A]~~this Article, and [Domestic Regulation] in any of the following cases ~~related~~relating to hydrocarbons: a) the area has been subject to a previous procedure ~~complying with Articles [X] and [X]~~ which has not resulted in an authorisation being granted; b) the area is available on a permanent basis for the exploration for or production; or c) the authorisation granted has been relinquished before its date of extinction. 4. Each Party may require an entity which has been granted an authorisation to pay a financial contribution or a contribution in kind. The contribution shall be fixed in such a manner so as not to interfere with the management and the decision-making process of the entity which has been granted an authorisation. 5. Each Party shall ensure that the applicant is provided with the reasons for the rejection of its application so as to enable such a person to have recourse to procedures for appeal or review where necessary. The procedures for appeal or review shall be made public in advance. [3] For greater certainty, in the event of any inconsistency between this Article and [Investment Chapter] and [Services Chapter] and their respective annexes, those Chapters and annexes shall prevail with regard to any such inconsistency	• Changes: Apart from phrasing, the content of this article has remained the same
8.8 Assessment of environ-mental impact	1. Each Party shall ensure that an assessment of environmental impact[4] is carried out prior to granting authorization for a project or activity relating to energy or raw materials that may have a significant impact on population; human health; biodiversity; land, soil, water, air or	• Added: the entire Article that obliges the Parties to ensure that an assessment of environmental impact is carried out prior to granting

	climate; and cultural heritage or landscape. This assessment shall identify and assess those significant impacts. 2. Each Party shall ensure that relevant information is available to the public as part of the process for the assessment of environmental impact, and give time and opportunities to the public to participate in and provide comments therein. 3. Each Party shall publish and take into account the findings of the assessment of environmental impact prior to granting the authorization for the project or activity. [4] In the case of Chile, "assessment of environmental impact" means the study of the environmental impact, as defined in Law 19.300 Title 1, Article 2, literal (i), or its successor, and as regulated by Article 11 of the same Law.	authorization for a project or activity relating to energy or raw materials
~~8.8 Transit~~	-	This Article on the facilitation of transit has been deleted, yet as it concerns Energy Goods this Article is deemed irrelevant to this analysis
8.9 Third-party access to energy transport infrastructure (formerly Art. 10)	-	As this Article concerns Energy Goods it is deemed irrelevant to this analysis
~~8.9 Interference and unauthorised taking~~	-	This Article on taking measures to prohibit the interruption, reduction or stoppage, or the unauthorised taking of energy goods in transit has been deleted, yet as it concerns Energy Goods this Article is deemed irrelevant to this analysis
8.10 Access to infrastructure for producers of electricity generated from renewable energy sources	-	Newly added Article, yet as this Article concerns Energy Goods it is deemed irrelevant to this analysis
8.11 Independent body (formerly Regulatory Authority)	1. Each Party shall maintain or establish an functionally independent ~~regulatory~~ body or ~~any other independent body~~bodies that ~~is legally distinct and functionally separate from, and not accountable to other authorities as well as to operators providing or entities having access to energy transport infrastructure, and which shall be entrusted to~~: i. fixes or approves the terms, conditions and tariffs of access to and use of the electricity network; and	• Changes: Apart from phrasing, the content of this article has remained the same

	ii. resolves disputes, within a reasonable period of time, regarding appropriate terms, conditions and tariffs forof access to and use of the electricity network ~~within a reasonable period of time~~. 2. For purposes of paragraph 1, in performing those duties and exercising those powers, the body or bodies shall act transparently and impartially with regard to users, owners and operators of the electricity network.	
8.12 Cooperation on Standards (formerly Art. 13 on Standards, technical regulations and conformity assessments)	1. With a view to preventing, identifying and eliminating unnecessary technical barriers to trade in ~~renewable~~ energy ~~and energy efficiency~~ goods and raw materials, the provisions contained in [TBT Chapter] shall apply to these goods. 2. In accordance with Article [X.X (International Standards)] and Article [X.X (Regulatory Cooperation)] of Chapter [TBT Chapter], the Parties shall as appropriate promote cooperation between their relevant regulatory and standardization bodies in area such as energy efficiency, sustainable energy, and raw materials, with a view to contributing to trade, investment, and sustainable development, inter alia, through: a) the convergence or harmonisation, where possible, of their respective current standards, based on mutual interest and reciprocity, and according to modalities to be agreed by the regulators and the standardisation bodies concerned; b) joint analysis, methodologies and approaches, where possible, to assist and facilitate the development of relevant tests and measurement standards, in cooperation with the relevant respective standardisation organisations; c) the development of common standards, where possible, on energy efficiency and renewable energy; and d) the promotion of standards on raw materials, renewable energy generation and energy efficiency equipment, including product design and labeling, where appropriate, through existing international cooperation initiatives. 3. For the purposes of implementing this Chapter, the Parties aim to encourage the development and use of open standards and interoperability of networks, systems, devices, applications, or components in the energy and raw materials sector.	• Changed: technical trade in energy good → in energy goods and raw materials • Added: the convergence or harmonisation, where possible, of their respective current standards, based on mutual interest and reciprocity + the promotion of standards on raw materials, renewable energy generation and energy efficiency equipment, including product design and labeling, where appropriate, through existing international cooperation initiatives.
~~8.12 Safety and integrity of equipment and infrastructure~~	~~Nothing in this Section shall be construed to prevent a Party from adopting temporary measures necessary to protect the safety and to preserve the integrity of energy equipment or infrastructure, subject to the requirement that such measures are not applied in a manner which would constitute a disguised restriction on trade or investment of the other Party.~~	This Article on preventing a Party from adopting temporary measures necessary to protect the safety and to preserve the integrity of energy equipment or infrastructure has been deleted, yet as it concerns Energy Goods this Article is deemed irrelevant to this analysis
8.13 Research, development and innovation (formerly Art. 14)	1. ~~The Parties shall promote~~ Recognising that research, development and innovation ~~in the areas of energy~~ are key elements to further develop efficiency, sustainability and ~~renewable~~competitiveness in the energy~~,~~ and ~~to this end~~raw material sectors, the Parties ~~shall~~agree to cooperate as appropriate, inter alia, in: a) ~~promote~~promoting the research, development~~, and application~~ innovation and dissemination of ~~energy efficient and~~ environmentally sound and cost-effective technologies, processes and practices in the areas of energy ~~efficiency~~ and	• Changes: areas of energy efficiency and renewable energy → areas of energy and raw materials • Added: sustainability and competitiveness as key elements + the promotion of value addition to the mutual benefit of the Parties and enhancement of productive

	~~renewable energy~~ raw materials~~, which would minimise harmful environmental impacts in the entire energy chain~~; ~~and promote the dissemination of information and best practices on environmentally sound and economically efficient energy policies, and cost-effective practices and technologies in the areas of energy efficiency and renewable energy, in a manner that is consistent with the adequate and effective protection of intellectual property rights;~~ b) promoting value addition to the mutual benefit of the Parties and enhancement of productive capacity in energy and raw materials; and c) strengthening capacity building in the context of research, development and innovation initiatives. ~~promote bilateral cooperation in pre-normative research in the area of renewable energy equipment and energy efficiency.~~	capacity in energy and raw materials
8.14 Cooperation on Energy and Raw Materials (formerly Art. 15)	1. The Parties shall as appropriate cooperate in the area of energy and raw materials with a view to, inter alia: a) reduce or eliminate measures that in themselves or together with other measures could distort trade and investment ~~distorting measures in third countries~~, including of a technical, regulatory, and economic nature affecting energy ~~and~~or raw materials; b) ~~coordinate~~discuss, whenever possible, their positions in international fora where relevant trade and investment issues ~~related to energy and raw materials~~ are discussed and foster international programmes in the areas of energy ~~efficient~~efficiency, renewable energy and raw materials; c) promote responsible business conduct in accordance with international standards that have been endorsed or are supported by the area of Parties, such as the OECD Guidelines for Multinational Enterprises and in particular its Chapter IX on Science and Technology; ~~c) foster exchange of aggregated market data in the area of energy and raw materials;~~ ~~d) promote research, development and innovation in the areas of energy efficiency, renewable energy and raw materials;~~ ~~e) foster exchange of information and best practices on domestic policy developments;~~ ~~f) promote internationally high standards of safety and environmental protection for offshore oil, gas and mining operations, by increasing transparency, sharing information, including on industry safety and environmental performance~~ Thematic cooperation on Energy (irrelevant) Thematic cooperation on Raw Materials 3. Recognising their shared commitment to responsible sourcing and sustainable production of raw materials and their mutual interest to facilitate the integration of raw materials value chains, the Parties agree to cooperate on any relevant issue of mutual interest, such as: a) responsible mining practices and raw materials value chains sustainability, including the contribution of the raw materials value chains to the fulfilment of the UN Sustainable Development Goals;	• Added: promote responsible business conduct in accordance with international standards + new thematic cooperation on Raw materials including: responsible mining practices and raw materials value chains sustainability, including the contribution of the raw materials value chains to the fulfilment of the UN Sustainable Development Goals + raw materials value chains, including value addition + identification of areas of common interest for cooperation on research, development, and innovation activities covering the entire raw materials value chain, including cutting-edge technologies, smart mining and digital mines. • Deleted: in third countries + foster exchange of information and best practices on domestic policy developments

	b) raw materials value chains, including value addition; c) identification of areas of common interest for cooperation on research, development, and innovation activities covering the entire raw materials value chain, including cutting-edge technologies, smart mining and digital mines. 4. Cooperation activities will be developed taking into account available resources. Activities can be carried out in person or by any technological means available to the Parties. 5. Cooperation activities can be developed and implemented with the participation of international organizations, global fora, research institutions, as agreed between the Parties. 6. The Parties shall, as appropriate when implementing this Article, foster proper coordination with regard to the implementation of Articles [X.X Cooperation on Raw Materials] and [X.X Cooperation on Energy] of the [Political Title of this Agreement].	
8.15 Energy transition and renewable fuels	-	Newly added Article, yet as this Article concerns Energy Goods it is deemed irrelevant to this analysis
8.16 Exception for Small and Isolated Electricity Systems	-	Newly added Article, yet as this Article concerns Energy Goods it is deemed irrelevant to this analysis
8.17 Role of the Trade in Goods Sub-Committee in implementing the Energy and Raw Materials Chapter	1. The Sub-Committee on Trade in Goods established by Article X.4 of [Sub-Committees of part III of this Agreement] shall be the body responsible for the implementation of this Chapter. The functions set out in points (a), (c), (d), (e) and (i) of Article X.18 of the Chapter on Trade in Goods shall apply to this Chapter mutatis mutandis. 2. Consistent with Articles 8.10 (Cooperation on Standards), 8.11 (Research, development and innovation), Article 8.12 (Cooperation on Energy and Raw Materials) and Article 8.13 (Energy transition and renewable fuels), if mutually agreed by the Parties, recommend to establish or facilitate other means of cooperation between them in the areas of energy and raw materials. 3. Upon to the agreement of the Parties, the Trade in Goods Committee shall meet in sessions dedicated to the implementation of this Chapter. When preparing such sessions, each Party may consider, as appropriate, inputs from of relevant stakeholders or experts. 4. Each Party shall designate a contact point to facilitate the implementation of this Article, including by ensuring the appropriate involvement of representatives of that Party, notify the other Party of its contact details and promptly notify the other Party of any changes to those contact details. For the EU, the contact point shall be the notified contact point for the Trade in Goods Committee. For Chile, the contact point shall be from the Under-Secretariat of International Economic Relations of the Ministry of Foreign Affairs or its successor.	• Added: the entire Article, yet for the purpose of thesis this is not very relevant