Towards a Better Balance:

Leveraging EU Free Trade Agreements to advance responsible and resilient raw materials trade

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This study was commissioned by Transport & Environment, a Brussels-based NGO.

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List of abbreviations

CBAM	Carbon Border Adjustment Mechanism
CBD	Convention on Biological Diversity
CDBR – RC	Common but Differentiated Responsibilities and Respective Capability
CEAP	Circular Economy Action Plan of the EU
CITES	Convention on International Trade in Endangered Species
Corfo	Chilean Corporation for the Promotion of Production
Commission	European Commission
Convention on Wetlands	Convention on Wetlands of International Importance especially as Waterfowl Habitat
CRM	Critical Raw Material
CRMA	Critical Raw Materials Act
CSDDD	Corporate Sustainable Due Diligence Directive of the EU
DAGs	Domestic Advisory Groups
EIA	Environment Impact Assessment
ERM	Energy and Raw Material
ESG	Environmental, Social, and Governance
ESPR	Eco-design for Sustainable Products Regulation of the EU
EU	European Union
EUDR	Deforestation-free products Regulation of the EU
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GHG	Greenhouse Gases
HS	Harmonized System
ILO	International Labour Organization

ILO Convention 169	International Labour Organization Indigenous and Tribal Peoples Convention
IPR	Intellectual Property Right
IRMA	Initiative for Responsible Mining Assurance
LFP	Lithium Iron Phosphate
MEAs	Multilateral Environmental Agreements
MFN	Most-Favoured Nation
NDCs	Nationally Determined Contributions
NGOs	Non-Governmental Organizations
NPR-PPMs	Non-Product Related Process and Production Methods
OECD	Organisation for Economic Cooperation and Development
Paris Agreement	The Paris Agreement adopted at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015
PSNR	A State's Permanent Sovereignty over Natural Resources
RM	Raw Material
RMI	Responsible Minerals Initiative
R&D	Research and Development
SDGs	Sustainable Development Goals of the United Nations
SOEs	State-Owned Enterprises
SPA	Strategic Partnership Agreement
TRIMs	Trade-Related Investment Measures
TSD	Trade and Sustainable Development
TTIP	Transatlantic Trade and Investment Partnership
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNFCCC	United Nations Framework Convention on Climate Change
VCLT	Vienna Convention on the Law of Treaties
WTO	World Trade Organization

Executive Summary

The EU is facing a major trade policy dilemma. In line with the SDGs and the more sustainable growth model as defined by the EU Green Deal, it has adopted a new trade policy strategy to support achieving domestic and external policy objectives, while promoting greater sustainability. At the same time, a green transition will require the EU to increase access to RMs: the Commission has predicted that by 2050, demand for rare earths – a subset of RMs – will increase 5-12 times, and demand for lithium almost 60 times. Ironically, while securing increased access to RMs is a prerequisite for the green transition, it could undermine the development of sustainable trade and supply chains if not done responsibly according to best practices, given that the extractive industry is often associated with unsustainable practices such as deforestation, human rights violations, and negative development implications for resource-rich countries.

The EU has adopted various instruments to secure access to RMs, including the Critical Raw Materials Act (CRMA), Strategic Partnership Agreements (SPAs) and dedicated chapters on Energy and Raw Materials (ERM) in Free Trade Agreements (FTAs). This report zooms in on EU FTAs and unpacks whether the approach adopted by the EU strikes a balance between the objective of securing access to RMs for the green transition, sustainability considerations relevant to mining, and green industrial policy objectives in the resource-rich countries.

Methodology

In analysing relevant provisions in FTAs, this report focuses on the FTAs set out below. These FTAs represent the most recent EU FTAs, including those under negotiation, thus providing a relevant overview of the provisions included in EU FTAs:

1. EU-Vietnam FTA
2. EU-Mexico FTA
3. EU-Mercosur FTA
4. EU-Chile Advanced Framework Agreement
5. EU-New Zealand FTA
6. EU-India FTA
7. EU-Australia FTA
8. EU-Indonesia FTA
9. EU-Thailand FTA
10. EU-Tunisia FTA

For each of these FTAs, this paper has examined relevant ERM and TSD chapters.

Analysis of ERM Chapters

Overview of provisions

ERM chapters in the FTAs analysed do not show large amounts of variation with regards to provisions covered – even though the EU-Indonesia FTA, dating from 2017, contains the least comprehensive ERM chapter, whereas the current text of the FTAs with India and Australia appear to be the most comprehensive in terms of proposed ERM provisions.

The report distinguishes between general provisions and provisions contained in the ERM chapters, based on the objective they seek to pursue. While most provisions in ERM chapters are relevant both to RMs and energy, some provisions are addressed at regulating energy trade only. These provisions are reflected in a separate section.

- *General characteristics:* Chapters contain objective(s) and are followed by principles. The objectives range from trade facilitation to environmental sustainability, with references to green technology in some instances (New Zealand FTA) and value addition in others (Chile FTA). The principles include a reaffirmation of the international law principles of the PSNR and the right to regulate. However, although their legal weight is uncertain, they are likely to provide context for treaty interpretation under the VCLT in the event of any dispute. ERM chapters are also subject to the general exceptions provisions set out in a separate chapter in EU FTAs and to the general dispute settlement mechanisms provided for by the FTAs.

- *Provisions to secure supply of RMs and energy and create predictability for EU investors:* These include the elimination of import and export monopolies; restrictions on dual pricing; prohibitions on intervention in domestic pricing; streamlining and regulating "prior authorization" requirements; and cooperation on energy and RMs in international fora. These provisions seek to eliminate any distortion in RM trade to guarantee an unhindered supply of RMs from the FTA partner country to the EU. Provisions on dual pricing also guarantee that the EU does not suffer from discriminatorily high export prices in source countries and that European investors and firms face a level playing field when operating in such countries. The analysis of these provisions also reveals that they are binding and enforceable obligations.

- *Provisions to stimulate green industrialization in resource-rich countries:* Compared to provisions that secure the supply of RMs and energy, ERM chapters contain fewer provisions that could be invoked to stimulate green industrialization in resource-rich countries. The most relevant provisions are exceptions that the parties could invoke to justify what would otherwise be a violation of ERM provisions. Exceptions include the general exceptions, which mirror GATT Article XX exceptions, and the principles set out in the ERM agreements (although their legal value is ambiguous). In addition, the EU-Chile Advanced Framework Agreement includes a carve-out from the dual pricing obligation, allowing Chile to introduce or maintain measures to foster value addition. ERM chapters do not include obligations on technology transfers, or provisions that directly focus on the creation of green industries in resource-rich countries.

- *Provisions to advance environmental and social sustainability*: The FTAs include obligations to conduct Environmental Impact Assessments (EIAs), address pollution in the marine environment, promote R&D to encourage sustainable practices, and other cooperation provisions. Most sustainability provisions focus only on environmental sustainability, while references to social and economic sustainability are entirely absent.

- *Provisions only relevant to energy:* There are provisions to ensure access to energy infrastructure for producers of renewable energy and provisions to secure access to energy transport infrastructure, provisions on the harmonization of energy standards, and provisions that seek to reduce non-tariff barriers to renewable energy production.

Key take-aways from ERM chapters

Provisions that seek to ensure the EU's access to RMs and energy supply chains are the strongest, as they are couched in binding and enforceable language. By comparison, provisions seeking to stimulate green industrialization in resource-rich countries or advance sustainability objectives tend to be hortatory and fall short of establishing a clear obligation. For example, with regards to green industrialization, provisions are limited to exceptions from other obligations – either general exceptions, the invocation of principles, such as the right to regulate or PSNR, or, in the case of EU-Chile, an exception to the dual pricing obligation. While these carve-outs and exceptions could be strategically leveraged by resource-rich countries to stimulate green industrialization or advance sustainability objectives, they could be strengthened further to effectively mitigate the externalities associated with sourcing activities. Specifically, the dual-pricing exception in the EU-Chile Advanced Framework Agreement regarding Chile's ability to further develop its domestic processing, especially with regards to lithium, while being a step in the right direction, they should not necessarily be mirrored in other FTAs. While the conditions set out in the dual pricing carve-out are stringent, our research comprising interviews with Chilean trade officials suggests that the specific carve-out in the EU-Chile Advanced Framework Agreement was developed specifically to enable Chile to continue existing pricing practices that enable value-addition in the lithium sector. In future FTA negotiations, the EU and its trading partners are advised to include sui generis carve-outs to dual pricing, reflecting the specific situation in the country. These carve-outs would not necessarily have to follow the approach taken in the EU-Chile Advanced Framework Agreement.

While various ERM provisions seek to enhance sustainability, they stop short of imposing mandatory requirements. For example, conducting EIAs is not required in all situations, since the requirement to conduct EIAs is limited to projects requiring authorization, which may not comprise all mining projects. In this regard, the EU-New Zealand FTA adopts a different approach whereby the obligation to conduct an EIA is required where energy or raw materials projects may have a significant impact on the environment. Further, where EIAs are conducted, parties are merely required to take the findings "into account" – but not to act on them. Moreover, in most FTAs, allowing the participation of civil society in EIAs is not mandatory. Another observation that can be derived from this analysis is that most sustainability provisions in ERMs focus on the environmental pillar, but they place less emphasis on the social and economic dimensions of sustainability.

Thus, while ERM chapters generally succeed in securing access to RMs and energy and create predictability for EU investors, they are less effective in advancing green industrialization in resource-rich countries, or sustainability.

Analysis of TSD Chapters

This report has analysed TSD chapters, to identify the extent to which these chapters could fill the observed imbalance in the ERM chapters, with regards to sustainability and green industrialization. It finds that some of the institutional provisions integrated in TSD chapters, such as those on monitoring and the establishment of a TSD body, the DAGs, and the establishment of contact points might be welcome additions to ERM chapters to incorporate sustainability monitoring.

Moreover, TSD provisions are more expansive and deeper than the sustainability references in ERM chapters and could therefore be relevant to enhancing sustainability provisions in ERM chapters. However, their imprecise wording and hortatory nature, combined with a lack of explicit references to mining as well as, with exceptions, their exclusion from the general dispute settlement of the FTAs, suggests that existing TSD provisions would not fully address the sustainability gap observed in ERM

chapters. Though the EU-New Zealand FTA, following recent policy changes in the EU, does subject its TSD chapter to dispute settlement, effective enforcement will likely still be challenging given the hortatory/best endeavour nature of most of the obligations.

Specifically, with regards to environmental sustainability, TSD chapters contain general provisions that could be leveraged to address key environmental challenges associated with RM and energy mining, such as deforestation, biodiversity loss and climate change. However, they do not include explicit references to sustainability in the mining sector. Moreover, TSD chapters are too narrow in scope to address some environmental challenges specific to mining, such as soil erosion, water use, and contamination of water, as well as management of mining waste.

Similarly, sustainability provisions that refer to international standards and frameworks relevant to due diligence, such as the OECD Guidelines for Multinational Enterprises and the UN Global Compact and the UN Guiding Principles on Business and Human Rights, go beyond the sustainability provisions set out in ERM chapters and could therefore be relevant to better address sustainability provisions in ERM chapters. Their effectiveness is limited, however, due to their hortatory nature. Moreover, while provisions that seek to remove obstacles to trade and investment could advance the uptake of renewable energy in resource-rich countries, as well as lead to a dissemination of technology, the scope of these provisions is too narrow to be directly relevant to advancing sustainable mining. At the same time, TSD chapters do not contain the obligation to advance technology transfer.

Relevant provisions on social sustainability are the least numerous and focus predominantly on labour. These provisions could potentially address unsustainable labour practices in the mining industry. However, they are hortatory, similarly to the other sustainability provisions examined in this section and will thus have limited effect. In addition, references to human rights and indigenous rights, which are critical in the context of extractive activities, are notoriously absent in TSD chapters.

In sum, while the TSD provisions go much beyond sustainability provisions in ERM chapters, they are insufficiently specific to meaningfully rebalance the ERM chapter.

Options to strengthen sustainability and green industrialization objectives in ERM chapters

As noted, ERM chapters, as they stand, reflect an imbalance between their different objectives. Provisions that seek to secure supply of RMs and energy and create predictability for investors tend to set out clear, binding, and enforceable obligations, whereas provisions related to sustainability – whether incorporated in the ERM chapters or as part of the TSD chapters – tend to be hortatory and fall short of establishing clear rights or obligations. While TSD chapters contain broader and deeper sustainability provisions than those set out in ERMs, these provisions are not specific to mining, and those concluded prior to 2022 are not covered by dispute settlement provisions. Further imbalances are observed between the emphasis on environmental, economic, and social responsibility, with most TSD provisions focusing on the environmental angle, to a lesser extent on economic sustainability aspects, but with very little emphasis on social responsibility, such as human rights.

This lack of balance between accessing RMs and energy, and ensuring sustainability, needs to be rebalanced, given that the mining industry is beset with corruption, environmental damage, and human rights abuses. This means that ERM chapters, which can be expected to result in an increase in mining activities, risks aggravating unsustainable environmental and social practices, unless sustainability safeguards form a more integral part of ERM chapters. The implementation of market principles to ERM chapters, such as prohibitions on price regulation or dual pricing, could also undermine local green industrialization. For example, dual pricing prohibitions would make it more

difficult for resource-rich countries to develop a local manufacturing industry, as it limits such country's ability to keep domestic prices low compared to export prices.

As a result, to better balance securing access to RMs and energy supply chains with sustainability objectives will require a redesigning of ERM chapters, such that they include more exceptions and carve-outs relevant to economic, social, and environmental sustainability and establish binding and enforceable obligations that cover key environmental, social, and economic issues relevant to energy and mining projects. At the same time, and especially in the context of geopolitical competition for accessing RMs, sustainability requirements should not disincentivize resource-rich countries from supplying RMs and energy to the EU, or from complying with the market principle provisions in ERMs. In other words, redesigning ERM chapters requires walking a tightrope between establishing conditions necessary to secure access to RM and energy, while at the same time, ensuring that sustainability objectives are not undermined.

In rethinking ERM chapters, it is also important to keep in mind that FTAs are only one of the instruments that the EU is using to secure access to RMs but are not the only one. FTA ERM chapters will not always be the preferred instrument to better balance securing RM and energy supply chains with sustainability objectives.

Against this backdrop, the table below summarizes key policy options derived from the analysis set out in this paper, in an attempt to better balance the ERM chapter. As an overarching recommendation, better balancing ERM chapters with sustainability and green growth objectives should be done through enhancing and including additional provisions within the ERM chapter – not as part of the TSD chapter. This is aligned with the TSD review, which highlights as one of the key priorities to mainstream sustainability across the FTA, as opposed to limiting it to the TSD chapter. In addition, adding specific language to the ERM chapter would allow the inclusion of more mining-specific provisions. Finally, by enshrining sustainability provisions in the ERM chapters, they would automatically be subject to dispute settlement provisions – which is not always the case of TSD chapters.

Concern	Policy option
Green industrialization	
Most FTAs do not have a carve-out that can be invoked regarding the dual pricing prohibition. EU-Chile, which includes it, contains prima facie stringent conditions but which nonetheless will not hinder Chile's ability to pursue value-addition based on existing policies.[1]	● Ensure all ERM chapters include a dual-pricing carve-out. ● Reduce stringency of conditions that must be fulfilled to trigger the carve-out. This can be done by removing the price floor, and the requirement that dual pricing does not result in an export restriction for the other party. ● Another option would be to allow dual pricing for a limited time-period or restrict it to certain products.
High threshold set by jurisprudence to successfully invoke general exceptions.	Strengthen GATT Article XX exceptions in the context of ERM to shift the burden of proof and require members to agree that measures that fall within one of the subcategories are rebuttably presumed to be justified under the exceptions clause. Additionally, clarify the limits of Article XX(i) of the GATT.

[1] As noted based on an interview with a Chilean trade official.

Prohibition on performance requirements (including local content policies) in other chapters hinder development efforts.	Explore negotiating time-limited exemptions to rules on performance requirements.
Sustainability	
A. Broaden the scope of sustainability obligations	
Current focus of sustainability obligations in ERM chapters (and, to a slightly lesser extent, in TSD chapters) is predominantly on environmental sustainability.	Include sustainability provisions in ERM chapters that focus on social sustainability in the context of mining, such as those relevant to protecting indigenous rights, and provisions addressing corruption in the context of mining.
Certain provisions do not prescribe any minimum thresholds or objective criteria for measuring performance.	ERM chapters should establish baselines or minimum thresholds. For instance, establish a baseline standard that parties must comply with when engaging in offshore exploration of oil and gas in its territory. While no international standard has yet been developed to regulate this, ERM chapters should refer to ensuring protection of marine life, preventing long-term species and ecosystem disruption, reducing impact on fishing and food security, and ensuring the protection of coastal communities.
The ERM chapters lack specific requirements on conducting due diligence with regards to mining projects.	Chapters should include requirements to draft a water management plan for the activities carried out, along with the allocation of responsibilities and accountabilities at the corporate level for any detrimental impact on water sources; and the integration of water management plans into businesses at the time of conducting the EIA. Firms should also adopt waste management plans and could be required to lodge a financial guarantee to cover the costs of rehabilitation of land affected by waste. Other important element would be to ensure businesses prepare mining decommissioning plans.
Lack of details on how FTA parties must cooperate to meet sustainability standards.	Chapters could require parties to participate in rules and standard-making processes at international organizations relevant to sustainable mining, such as the UN Secretary-General's Panel on Critical Energy Transition Minerals.
B. Strengthen sustainability obligations	
Weak incentives to enhance sustainability.	Chapters could require parties to undertake domestic reforms in the mining sector as part of the pre-ratification process. In addition, parties could establish indicators, targets, and timelines to measure compliance with sustainability provisions in ERMs.
ERM chapters do not typically require parties to meet sustainability standards, but rather cooperate towards complying with them.	● Require mandatory compliance with specific international due diligence and supply chain management standards relevant to mining with regards to companies participating in RM trade and investment between the two parties. Establish thresholds on size of firms that must comply. ● Incorporate standards that are not explicitly set out in the CSDDD, or the more general due diligence frameworks referenced.

Insufficient focus on cooperation on circularity to promote the efficient use of resources (i.e. improving production processes as well as durability, reparability, design for disassembly, ease of reuse and recycling of goods).	Chapters must contain stronger language, including as part of technology transfer provisions, to ensure that resource-rich countries are able to build capacity in attaining circularity in minerals over time.
C. Strengthen pre-approval provisions for mining and energy projects.	
Weak provisions on EIAs. Currently, most ERM chapters link EIAs to the need for authorization, meaning there are occasions where EIAs are not needed. These provisions require an ex-ante determination of whether a project *may* have relevant impacts.	Strengthen EIA provisions by reversing the burden of proof and require that EIAs must be conducted for all RM and energy mining projects, unless a party can demonstrate that the project will have no negative implications on economic, environmental and social sustainability.
No guidance on the minimum requirements to be met in an EIA.	EIAs must be more prescriptive as to what should be assessed in an EIA, and ensure it reflects international best practices, such as the IRMA Standards for Responsible Mining and those set out in the International Association for Impact Assessment. At a minimum, EIAs should include the impact of the project on local communities and local land use, displacement and resettlement, rights based on customs or tradition, and environmental impacts on air and soil resources, marine resources, water and wetlands, biological diversity and biodiversity resources.
The contribution of the EIA is not specified. Parties are only to *take into account* the findings of the EIA.	Authorization decisions relevant to RM and energy projects must be "based on" the EIA.
Role of civil society in EIAs is not specified nor required.	Within the context of EIAs, provisions should require the involvement of civil society in (i) determining the necessity of an EIA; and (ii) reviewing and providing inputs to the conducted EIA.
Lack of uniformity in the due process elements of conducting EIAs across FTAs.	An opportunity to participate in the EIA must be "early and effective." Right of the public to comment on the final report must be provided.
No limits to the grant of authorization for dirty energy projects.	There could be obligations to phase-out such authorizations or include more stringent conditions to be proved by firms when requesting authorization.
D. Reduce tariff and non-tariff barriers	
Remove barriers to goods and services needed for sustainable mining.	● ERM chapters could include obligations to gradually reduce tariffs and make market access commitments with regards to goods and services relevant to sustainable mining. ● In addition, there might be scope to explore giving preferential market access to RMs that have been sustainably produced. However, there might be legal ambiguity related to this option, and its effectiveness will be limited where RM tariffs are already at zero.
E. Technical and financial assistance	
Many of the proposed options to enhance sustainability in ERM chapters will create financial burdens for resource-rich countries. It is imperative that the ERM chapter reflects that the EU takes on most of this burden, in line with principles of CDBR – RC. Such provisions are currently missing.	The EU could identify a specific amount of financial support, as well as list of activities that this support will be used for in the context of the ERM chapter – to be agreed in collaboration with the resource-rich country. This could include assistance to sustainable mining initiatives adopted within the

	resource-rich country, assistance to comply with specific sustainability provisions in the ERM – such as compliance with various MEAs – or assistance relevant to addressing financial constraints to stakeholder participation, for example in the context of civil society committees. These technical and financial assistance commitments could be incorporated in the FTA through an Annex to the ERM Chapter. The FTA should further include various provisions that would enable the review of progress made vis-à-vis the EU's technical and financial assistance obligations, done by a sub-committee on ERMs to be established. In the event that the commitments set out by the EU are not reached, the ERM chapter should enable the resource-rich country to request consultations. Failure to reach a satisfactory solution should enable the resource-rich country to adopt temporary and proportionate remedial measures. This is similar to the investment commitments set out in the EFTA-India FTA.
Inclusive Stakeholder Participation	
ERM chapters do not adequately address the issue of stakeholder participation with regards to various mining activities, and more generally, with regards to the implementation of ERM chapters.	ERM chapters should have special focus on two areas to guarantee inclusive stakeholder participation. First, monitoring and review processes, including through the establishment of independent DAGs and facilitating their interaction (but addressing and accounting for the weaknesses of existing DAGs); setting up an ERM Committee; and requiring consultations with civil society in monitoring processes are key to ensuring that sustainability commitments are met. Second, the mining industry is historically prone to various human rights abuses and social sustainability issues. Thus, access to justice through the availability of administrative and judicial tribunals, speedy delivery of justice, and availability of private remedies must be ensured. This too can be done through the inclusion of specific FTA provisions.

1. Introduction

The EU is facing a major trade policy dilemma. In line with the SDGs and the more sustainable growth model as defined by the EU Green Deal, it has adopted a new trade policy strategy to support achieving domestic and external policy objectives, while promoting greater sustainability.[2] In particular, FTAs have become a critical tool for aligning the EU's trade and sustainability commitments in partner countries, most notably through the inclusion of TSD chapters. These chapters, inter alia, require parties to uphold existing levels of environmental protection, require that the parties do not fail to effectively enforce environmental and labour standards, and carve out policy space allowing parties to establish their own levels of protection.

At the same time, FTAs are increasingly being used as a tool for the EU to secure access to RMs necessary for the green transition. The Commission has predicted that by 2050, demand for rare earths – a subset of RMs – will increase 5-12 times, and demand for lithium almost 60 times.[3]

This reflects the fact that renewable technologies like electric cars or wind or solar energy use much higher quantities of minerals compared to traditional technologies. The EU is heavily dependent on the import of these RMs and is using both regulatory instruments and FTAs to derisk RM supply chains. Specifically, recently negotiated FTAs all include chapters on ERM that aim to facilitate trade in energy and CRMs.[4]

The EU's focus on promoting sustainable trade and supply chains, and its interest in securing access to RMs necessary for the green transition are in line with the EU Green Deal. However, these two policy objectives are not automatically aligned. Indeed, securing increased access to RMs could undermine the development of sustainable trade and supply chains, given that the extractive industry is often associated with unsustainable practices such as deforestation, human rights violations, and negative development implications for the resource-rich country.[5] At the same time, rendering access to RMs contingent upon respecting stringent sustainability requirements would hinder the EU's ability to access the necessary RMs for the green transition, especially in light of the international scramble for RMs, underpinned by geopolitical rivalry.

Against this backdrop, this report explores how the current EU approach to FTAs balances the EU's interest in sustainable trade and value creation in resource-rich countries, with its objective of securing access to RMs for the green transition. After providing relevant background information, it engages in an in-depth analysis, first, of the provisions in ERM chapters, followed by the TSD chapters in EU FTAs. For both the ERM and TSD analysis, this report describes key provisions and analyses their implications vis-à-vis the above-mentioned objectives. This is followed by a comparative analysis of

[2] European Commission, "Trade Policy Review," (18 February 2021), p. 1.
[3] European Commission, "Commission Staff Working Document: EU Strategic Dependencies and Capacities: second stage of in-depth review," SWD (2022) 41 final (22 February 2022).
[4] Transport and Environment, available at https://www.transportenvironment.org/previous-work/sustainable-trade/better-trade/.
[5] Andrews, T., Elizalde, B., Le Billon, P., Hoon Oh, C, Reyes, D., and Thomson, I., "The Rise in Conflict Associated with Mining Operations: What Lies Beneath?" Canadian International Resources and Development Institute (2017); Kara, S., "Cobalt Red: How the Blood of the Congo Powers Our Lives," Macmillan Publishers (2023); European Parliament, "Social and Environmental impacts of mining activities in the EU," (2022), available at https://www.europarl.europa.eu/RegData/etudes/STUD/2022/729156/IPOL_STU(2022)729156_EN.pdf.

the extent to which sustainability and green industrial policy concerns are reflected in ERM chapters, and whether sustainable mining considerations are sufficiently represented in TSD chapters. Finally, this report provides policy options on how the EU could better balance sustainability and green industrial policy concerns with its objective of securing access to RMs.

2. Background

Prior to taking a deep dive into ERM and TSD chapters in EU FTAs, this section provides relevant background information on the EU's approach to securing access to CRMs and its push for sustainable trade. It provides an overview of the larger ecosystem of instruments and initiatives that are being adopted by the EU, which is critical to better contextualize challenges and opportunities in the FTA context.

2.1 Trade and Critical Raw Materials

To achieve both the green and digital transition, ensuring a secure and sustainable supply of CRMs is critical. Studies have predicted an unprecedented demand for CRMs, highlighting that it could increase ten-fold in the next decade. For instance, onshore and offshore wind turbines are expected to increase demand for rare earth metals 4.5 times by 2030, and 5.5 times by 2050, while batteries powering electric vehicles are forecasted to increase demand for lithium 11 times by 2039, and 17 times by 2050.[6]

The EU, a resource-poor region, relies heavily on imports, many of which are concentrated in a few suppliers – either for extraction or processing. With export and other trade restrictions being increasingly common, excessive reliance on a single supplier risks supply chain disruption. These challenges are shared by the global community, with countries such as China, Japan, the United States, and South Korea increasingly taking steps to reduce geopolitical dependencies and secure access to CRMs.[7]

The EU has adopted various regulatory initiatives and plans to derisk CRM supply chains. Its 2008 Raw Materials Initiative, followed by the 2020 Action Plan on Critical Raw Materials, sets forth actions to increase the EU's resilience. In March 2024, the Council adopted the CRMA which then went into effect in May 2024, seeking to ensure the EU's access to a secure and sustainable supply of CRMs by strengthening EU capacities through the value chain (see Box 1) and establishing onshore activities.[8]

[6] European Commission, "A secure and Sustainable Supply of Critical Raw Materials in Support of the Twin Transition" COM(2023) (16 March 2023).
[7] *Ibid*.
[8] *Ibid*.

Box 1: The EU Critical Raw Materials Act

The CRMA, adopted by the Council in March 2024, forms a part of the EU Green Deal Industrial Plan. It seeks to secure a steady supply of CRMs that are necessary to develop the domestic green manufacturing sector and identify pressure-points that may pose future economic security risks. The CRMA aims to improve the EU's self-sufficiency and de-risk from the geopolitics of CRMs trade by reducing its dependence on Chinese imports and diversifying its sourcing.

The CRMA applies to an overarching list of 34 *CRMs*, which contains a subset of 17 *strategic* RMs. Strategic RMs are those that have strategic importance, show forecasted demand growth, and involve difficulty of increasing production, whereas criticality is a function of economic importance and supply risk. This list will be reviewed at least every four years.

For the covered materials, the CRMA establishes minimum thresholds to increase domestic capacities of extraction, processing, and recycling of strategic RMs, and reduce dependence on any one single trading partner. It specifically requires that by 2030, 10% of strategic RMs needed must be mined, 25% recycled, and 40% processed in Europe. Attaining these levels would help ensure that by 2030 no more than 65% of each strategic RM would come from a single third country.

The CRMA facilitates access to finance for firms and reduces regulatory hurdles for projects to take off for identified projects. Such projects, termed "strategic projects" could be both within and outside the EU. The status of a project being "strategic" will be granted based on certain pre-defined criteria, such as technical feasibility and environmental and social sustainability. Recognizing that it requires CRMs from abroad, the CRMA also seeks to leverage the international trading and investment law regime to access CRMs.

Trade initiatives with trading partners occupy a central position in the EU's strategy to access the necessary CRMs to become a net-zero economy. In particular, the EU's strategy trade and external actions strategy comprises four different instruments:[9]

- **Establishing a CRM Club/Minerals Security Partnership Forum**. In March 2023, the Commission articulated its intention to establish a RM alliance with both consuming and producing partner countries to strengthen supply chains and diversify sourcing. Such a club would foster sustainable investment in producing countries and allow them to move up the value chain.[10] However, recently, the CRM Club was replaced by the establishment of a transatlantic cooperation called the Minerals Security Partnership Forum[11] (comprising Australia, Canada, Estonia, Finland, France, Germany, India, Italy, Japan, Norway, the Republic of Korea, Sweden, the United Kingdom, the United States, and the EU). It focuses on "advancing and accelerating individual projects and promoting policies that contribute to

[9] European Commission, "Critical Raw Materials: Ensuring secure and sustainable supply chains for EU's green and digital future" Press Release (16 March 2023), available at https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1661.

[10] European Commission, "A secure and Sustainable Supply of Critical Raw Materials in Support of the Twin Transition" COM(2023) (16 March 2023).

[11] European Commission, "EU and international partners agree to expand cooperation on critical raw materials" Press Release (5 April 2024), available at https://ec.europa.eu/commission/presscorner/detail/en/IP_24_1807.

resilient value chains and to bringing local value-addition." The forum remains open to members committed to global supply chain diversification and high ESG standards.

- **Trade and Investment Agreements:** The EU seeks to leverage the WTO and bilateral trade agreements to deepen trade and investment links worldwide and diversify CRM supply chains. Bilaterally, it is including chapters on ERM which focus, inter alia, on predictable impact assessment procedures and non-discriminatory treatment for investors. Indeed, since the (now failed) Transatlantic Trade and Investment Partnership negotiations, the EU has been negotiating FTAs with ERM chapters. The content of ERM chapters will be further elaborated upon in Section 3 below.
- **SPAs:** The EU has been signing SPAs on CRMs to implement the 2020 Action Plan on Critical Raw Materials. To date, strategic partnerships have been signed with Canada (2021),[12] Ukraine (2021),[13] Namibia (2022),[14] Kazakhstan (2022),[15] Argentina (2023),[16] Chile (2023),[17] DRC (2023),[18] Zambia (2023),[19] Greenland (2023),[20] Rwanda (2024),[21] Uzbekistan (2024)[22],

[12] "Framework for a Strategic Partnership on Raw Materials between Canada and the European Union," available at https://single-market-economy.ec.europa.eu/system/files/2023-12/Framework%20for%20a%20Strategic%20Partnership%20on%20Raw%20Materials%20Between%20Canada%20and%20The%20European%20Union.pdf.

[13] "Memorandum of Understanding between the European Union and Ukraine on a Strategic Partnership on Raw Materials" (13 July 2021), available at https://ec.europa.eu/docsroom/documents/46300.

[14] "Memorandum of Understanding on a Partnership on Sustainable Raw Materials Value Chains and Renewable Hydrogen Between the European Union Represented by the European Commission and the Republic of Namibia" (8 November 2022), available at https://single-market-economy.ec.europa.eu/system/files/2022-11/MoU-Namibia-batteries-hydrogen.pdf.

[15] "Memorandum of Understanding between the Republic of Kazakhstan and the European Union on a strategic partnership on sustainable raw materials, batteries and renewable hydrogen value chains" (11 July 2022), available at https://single-market-economy.ec.europa.eu/system/files/2022-11/EU-KAZ-MoU-signed_en.pdf.

[16] "Memorandum of Understanding on a Strategic Partnership on Sustainable Raw Materials Value Chains between the European Union and the Argentine Republic" (13 June 2023), available at https://single-market-economy.ec.europa.eu/system/files/2023-07/MoU_EU_Argentina_20230613.pdf.

[17] "Memorandum of Understanding between the European Union and the Republic of Chile on a strategic partnership on sustainable raw materials value chains" (18 July 2023), available at https://single-market-economy.ec.europa.eu/system/files/2023-07/MoU_EU_Chile_signed_20230718.pdf.

[18] "Protocole D'entente Sur Un Partenariat Sur Les Chaînes De Valeur Durables Des Matières Premières Critiques Et Strategiques Entre: L'union Européenne Représentée Par La Commission Européenne Et La République Démocratique Du Congo" (2023), available at https://single-market-economy.ec.europa.eu/system/files/2023-11/mou_eu-drc_signed.pdf.

[19] "Memorandum of Understanding on a Partnership on sustainable raw materials value chains between the European Union represented by the European Commission and the Republic of Zambia" (26 October 2023), available at https://single-market-economy.ec.europa.eu/system/files/2023-11/MoU_CRM_EU-Zambia_26_10_2023_signed.pdf.

[20] European Commission, "EU and Greenland sign strategic partnership on sustainable raw materials value chains" Press Release (30 November 2023), available at https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6166.

[21] European Commission, "EU and Rwanda sign a Memorandum of Understanding on Sustainable Raw Materials Value Chains" Press Release (19 February 2024), available at https://ec.europa.eu/commission/presscorner/detail/en/ip_24_822.

[22] European Commission, "EU establishes strategic partnership with Uzbekistan on critical raw materials" Press Release (5 April 2024), available at https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1806.

Australia (2024)[23] and these are likely to increase in number.[24] Broadly, these partnerships aim to support infrastructural investments and the creation of local added value and domestic revenue mobilisation through beneficiated and value-added minerals that would benefit manufacturing activities both at source and in the EU. They also include references to technology transfers, increased R&D, capacity-building programmes, and due diligence. Initially, SPAs were signed with countries the EU had FTAs with, but the trend seems to be changing. As such, the SPAs can be considered complementary to a trade agreement by offering a political framework and concrete bilateral cooperation in the field of CRMs. Legally, SPAs are not enforceable.

- **Global Gateway:** The Global Gateway supports investments in infrastructure projects relevant for the CRM supply chains. Specifically, through the Global Gateway, the EU assists partner countries with developing projects in infrastructure and connectivity, to enhance in-country value addition and boost private sector investment. In doing so, the Global Gateway aims to reduce the investment gap. Global Gateway initiatives also focus on advancing good governance, thereby reinforcing partner countries' legislative and enforcement framework to minimize adverse impacts arising from mining and processing activities.

In examining the interface between ERM and TSD chapters in EU FTAs, it is imperative to situate the analysis within the larger ecosystem of EU instruments and initiatives relevant to derisking CRM value chains. Indeed, FTAs will not always be the best instrument to advance the EU's interests.

2.2 Trade and Sustainable Development

Another key objective of the EU is to pursue sustainable trade policies. This is set out in the Treaty of Lisbon, which requires the EU institutions to integrate the EU's external objectives and principles such as human rights, social, and environmental protection into EU trade policy.[25] It also reflects the EU's commitment to implementing the Agenda 2030, which comprises a set of 17 SDGs and associated targets proposed by the UN. Broadly, sustainable development means "meeting the needs of the present whilst ensuring future generations can meet their own needs."[26] It comprises three pillars: economic, environmental, and social, which are further elaborated upon in Box 2.[27] Sustainability commitments are also at the forefront of the UNFCCC, the Paris Agreement, various multilateral agreements for the protection of the environment and labour standards, and the EU's ambitious climate and environmental objectives set out in the EU Green Deal.[28]

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[23] "Memorandum of understanding between the European Union and Australia on strategic partnership on a sustainable critical and strategic minerals" (28 May 2024), available at https://www.industry.gov.au/publications/memorandum-understanding-between-european-union-and-australia-strategic-partnership-sustainable-critical-and-strategic-minerals.

[24] Banya, N., "EU Seeks Critical Minerals Deals With More African Countries," Reuters (31 May 2023), available at https://www.reuters.com/markets/commodities/eu-seeks-critical-minerals-deals-with-more-african-countries-2023-05-31/.

[25] Ankersmit, L., Partiti, E., "Alternatives for the 'Energy and Raw Materials Chapters' in EU trade agreements," PowerShift e. V. (May 2020).

[26] United Nations, "Sustainability," citing the United Nations Brundtland Commission in 1987, available at https://www.un.org/en/academic-impact/sustainability#:~:text=In%201987%2C%20the%20United%20Nations,development%20needs%2C%20but%20with%20the.

[27] European Commission, "Sustainable development," available at https://policy.trade.ec.europa.eu/development-and-sustainability/sustainable-development_en.

[28] European Commission, "The Power of trade partnerships: together for green and just economic growth" COM(2022) 409 final (22 June 2022).

Box 2: Unpacking the three pillars of sustainability and their relevance for mining and sustainable RM/energy supply chains

Environmental sustainability. Environmental sustainability has been defined as "the ability to maintain things or qualities that are valued in the physical environment," understanding the physical environment as the land, water, atmosphere, physical resources, biological elements and farms in rural environments, buildings and roads in urban environments, or wild species or mineral resources in natural environments. It is the "ability to preserve and protect the natural environment over time through appropriate practices and policies."

Economic sustainability. The economic pillar of sustainability refers to the responsible management of "the planet's finite resources in a way that is mutually beneficial to society and the earth system" and serves as a connection between the other two dimensions of sustainability. The intent of economic sustainability is to conduct economic activities in a manner that promotes and preserves economic well-being in the long-term by balancing economic growth, financial stability, resource efficiency, and social equity.

Social sustainability. Social sustainability focuses on the well-being of people and communities. While no singular definition of the term exists, it generally focuses on the basic needs of people everywhere and the promotion and protection of human rights. This includes access to basic infrastructure and services, such as potable water and healthy food, medication, housing, access to justice, inter- and intra-generational equity, distribution of power and resources, decent work, education, among others. Achieving social sustainability requires addressing poverty, under-development, socioeconomic inequality, discrimination, social exclusion, prejudice, lack of access to resources, insecurity and conflict, and poor governance.

In accordance with EU law, all relevant EU policies, including trade policy, must promote sustainable development. Specifically, economic development must go hand in hand with social justice, respect for human rights, high labour standards, and high environmental standards.[29] With regards to FTAs, the Commission has noted that "[t]he EU is strongly committed to ensuring that its trade agreements foster sustainability, so that economic growth goes together with the protection of human rights, decent work, the climate and the environment, in full adherence to the Union's values and priorities."[30] Since the EU-Korea FTA that was concluded in 2009, all EU FTAs include TSD chapters. In 2018, the Commission launched the 15-point Action Plan to enhance implementation and enforcement of TSD chapters, and in 2022, the Commission published a review of TSD chapters, with the objective to champion sustainable trade together with trade partners, in line with the EU Green Deal.[31] Based on the review, the Commission identified a set of policy priorities and key action points to enhance the effectiveness of TSD chapters in EU FTAs, including: the need to be more proactive in cooperation with partners; stepping-up the country-specific approach; mainstreaming sustainability beyond the TSD chapter of trade agreements; increasing the monitoring of the implementation of TSD commitments; reinforcing the role of civil society; and enhancing enforcement by means of trade

[29] European Commission, "Sustainable development," available at https://policy.trade.ec.europa.eu/development-and-sustainability/sustainable-development_en.
[30] European Commission, "The Power of trade partnerships: together for green and just economic growth" COM(2022) 409 final (22 June 2022).
[31] *Ibid*.

sanctions as a measure of last resort.[32] Two FTAs that have been concluded since the TSD review, the EU-Chile Advanced Framework Agreement and the EU-New Zealand FTA, already incorporate these policy priorities identified in the TSD review. This will be revisited in more detail in Section 4 below.

It is important to note that sustainability provisions in EU FTAs do not operate in a vacuum but go hand in hand with autonomous instruments to support sustainable trade. Since the launch of the EU Green Deal, the EU has adopted its flagship CBAM, which taxes embedded GHG emissions in select commodities; the EUDR, which renders EU market access contingent on demonstrating compliance with deforestation-free production methods; and the CSDDD, which fosters sustainable and responsible business conduct; and the ESPR, which establishes minimum eco-design and performance requirements for products to comply with. These autonomous measures apply to all EU trading partners – even if no similar provisions are set out in the FTA.

[32] *Ibid*.

3. ERM Chapters in EU FTAs

This section closely examines and analyses the ERM chapters in EU FTAs, whether signed or in the form of proposed texts in ongoing negotiations. It critically reviews provisions on RMs[33] and energy trade set out in ERM chapters. In doing so, it seeks to (i) better understand the effectiveness of the ERM chapters with regards to securing RM supply chains and creating predictability for EU companies when investing in RM-rich EU trading partners; (ii) examine the extent to which ERM chapters enable EU trading partners to develop a local green industry and value added in RMs; and (iii) identify and analyse the extent to which ERM chapters advance the three pillars of sustainable development, set out in Box 2 above.

This section proceeds as follows. After briefly discussing the methodology used, this section provides an overview of the general characteristics and introductory provisions of the ERM chapters which apply equally to energy disciplines and RM trade. It further analyses the extent to which ERM chapters include provisions that seek to secure access to energy and RMs and establish a secure environment for EU investors, followed by provisions that seek to simulate green industrialization in resource-rich countries, and provisions that aim to advance the three pillars of sustainability. This is followed by a section specifically focused on energy provisions in the ERMs.

For each of these categories, the analysis highlights how the identified provisions meet the above-mentioned objectives, identifying strengths and weaknesses. In particular, it finds an imbalance between provisions that seek to secure access to RMs and energy, which tend to be strongly worded and binding, and provisions that seek to advance green industrialization and sustainability objectives in the resource-rich countries, which tend to be weak and hortatory. Specific recommendations on how to address the imbalances identified in this section can be found in Section 5 below.

3.1 Methodology

Having set out the context and mapped key trends of both RMs and sustainability chapters in EU FTAs, the next section turns to analysing relevant provisions in more detail, starting with ERM chapters in Section 3, and followed by Section 4 on TSD chapters. With regards to both analyses, this report focuses on the list of FTAs set out in Table 1 below. These FTAs are among the EU's most recent, thus providing an accurate overview of the EU's current approach to ERM and TSD chapters in FTAs. Moreover, except for EU-Vietnam and EU-Mercosur, they all include ERM and TSD chapters.

About half of the selected EU FTAs, including EU-Vietnam, EU-Mexico, EU-Mercosur, EU-New Zealand, and the EU-Chile Advanced Framework Agreement, have been concluded, or reached an agreement in principle. Others, such as EU-India, EU-Australia, EU-Indonesia, EU-Thailand, and EU-Tunisia, are under negotiation. For the latter group of FTAs, this analysis is based on publicly available documents reflecting the EU's textual proposals for ERM and TSD chapters.

[33] The ERM chapters in the EU FTAs refer to "raw materials" or RMs as a broader category encompassing CRMs. The CRMs listed in the EU CRMA and the RMs listed in the FTAs largely overlap and, therefore, the foregoing analysis of the FTAs' ERM chapters will use the term RMs to maintain coherence with the terminology used in them.

Table 1: List of EU FTAs analysed in this report

FTA	ERM Chapter	TSD Chapter	TSD Chapter incorporating 2022 TSD Review	Status of Negotiation
EU-Vietnam FTA		X		Signed in June 2019; Ratified in 2020
EU-Mexico FTA	X	X		Agreement in principle in April 2018
EU-Mercosur FTA		X		Political agreement reached June 2019
EU-New Zealand FTA	X	X	X	Concluded in June 2022; Signed in July 2023
EU-Chile Advanced Framework Agreement	X	X	X	Concluded December 2022
EU-India FTA	X	X	Text of 31 March 2022	Under negotiation**
EU-Australia FTA	X	X	Negotiating rounds between July 2018 and 2024, no text publication date*	Under negotiation**
EU-Indonesia FTA	X	X	Published between February 2017 and November 2021	Under negotiation**
EU-Thailand FTA	X	X	Published January 2024*	Under negotiation**
EU-Tunisia FTA	X	X	Published between 29 April 2016 and 31 January 2019	Under negotiation**

* The texts and/or negotiations have taken place after the adoption of the TSD review. However, from the available texts, it is unclear whether these agreements incorporate any of the suggested reforms. In EU-Thailand, for example, the TSD chapter does not exclude the chapter from general dispute settlement mechanism, but the general dispute settlement chapter of the agreement includes a placeholder to exempt specific chapters in the FTA from dispute settlement.

** For the FTAs still under negotiation, the foregoing analysis is based on the publicly available official document reflecting the EU's textual proposal for the specific chapter. For such proposals, chapters, whether ERM or TSD, are not numbered and generally are marked with "X" or "XX". As a result, the provisions cited in footnotes beginning with "X" or "XX" should be read as denoting the chapter that the body of the text discusses, unless otherwise specified. For example, in Section 3, provisions cited as "Article X.4, proposed EU-India FTA" indicates Article X.4 of the ERM chapter of the EU-India FTA. Similarly, provisions footnoted in Section 4 will denote the TSD chapters, unless otherwise specified.

3.2 Overview of general characteristics of ERM chapters

This section provides a general overview of characteristics of ERM chapters. It focuses first on trends in ERM chapters in EU FTAs, followed by an overview of general provisions focusing on the ERM chapters' objective, principles, definitions, exceptions, and dispute settlement.

The EU has signed comprehensive FTAs with provisions on energy trade since 2013. Earlier FTAs, such as the EU-Ukraine FTA,[34] the EU-Georgia FTA,[35] and the EU-Moldova[36] included disciplines on energy trade, but the provision on RMs remained restricted to cooperation. Nonetheless, these agreements laid the groundwork for comprehensive chapters that are common in the EU's latest FTA texts and negotiations. The now-stalled negotiations for the TTIP were the first from the EU to include an ERM chapter, followed by the EU proposed text in the EU-Indonesia FTA. At present, all EU FTAs under negotiation include a proposed ERM chapter. Through these chapters, the EU is shifting its focus in FTA negotiations away from gaining market access for its exports, to enhancing trade and investment certainties and providing equal opportunities for companies sourcing RMs overseas.[37] As FTA provisions only apply to the FTA partners, the inclusion of ERM chapters allows EU companies to gain a competitive advantage over other foreign companies seeking to purchase RMs from these countries.[38]

Generally, the ERM chapters in the FTAs analysed in this report do not show large amounts of variation with regards to provisions covered. That said, there are differences, with the EU-Indonesia FTA, dating from 2017, containing the least comprehensive ERM chapter, and the proposed FTAs with India and Australia including the most comprehensive provisions. The FTA with Chile is unique too, for its approach to dual pricing as is further explained below. Given the general similarities between different FTAs, this section will focus on key provisions included in EU FTAs across the board, but will highlight outliers, where necessary and relevant.

In terms of the structure of ERM chapters, they typically begin by laying down the chapter's objective(s), followed by principles and definitions, which are set out in more detail below. These provisions, and particularly the principles, contextualize the substantive provisions in the ERM chapters and will likely be relevant when invoked in a dispute to provide context for interpretation under the provisions of the VCLT.[39] However, as is further elaborated upon in Box 4 below, their legal status is ambiguous, and could benefit from additional clarification.

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[34] "Association Agreement between the Union and its Member States, of the one part, and Ukraine, of the other part," OJ L 161 (29 May 2014), Ch. 11.

[35] "Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Georgia, of the other part," OJ L 261 (30 August 2014), Art. 297-300 and 313-314.

[36] "Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part," OJ L 260, (30 August 2014), Art. 65-66 and 345-354.

[37] Crochet, V., Zhou, W., "Critical insecurities? The European Union's strategy for a stable supply of minerals" Journal of International Economic Law (2024), available at https://doi.org/10.1093/jiel/jgae003.

[38] *Ibid*.

[39] For instance, regarding the legal weight of general principles and objectives, see Panel Report, *Australia – Tobacco Plain Packaging*, para. 7.2402.

> "Articles 7 and 8, together with the preamble of the TRIPS Agreement, set out general goals and principles underlying the TRIPS Agreement, which are to be borne in mind when specific provisions of the Agreement are being interpreted in their context and in light of the object and purpose of the Agreement."

Objective: Most ERM chapters include an explicit objective. The primary objective of ERM chapters in EU FTAs is to facilitate trade and investment in areas of RMs and energy. However, many ERM chapters also acknowledge the importance of improving environmental sustainability. The framing of the objective of the ERM chapter differs across FTAs. For instance, the proposed ERM text for the EU-India FTA provides that the objective of the chapter is to "facilitat[e] trade and investment in the areas of ERM and improving environmental sustainability in these areas…"[40]. In addition to facilitating trade and investment, the proposed text for the EU-Thailand FTA also highlights climate objectives, and the use of green technologies, as well as improving environmental sustainability with regards to ERMs.[41] The EU-New Zealand FTA also highlights the use of green technologies, as well as the importance of increasing energy generation from renewable sources and the sustainable production of RMs.[42] The EU-Chile FTA adopts a different approach focused on cooperation and dialogue in the ERM sectors, fostering sustainable and fair trade and investment ensuring a level playing-field in those sectors, and strengthening competitiveness of related value chains including value addition in accordance.[43] Presumably, the language is tailored to the partner country in question as other ERM chapters could have different objectives, or no specified objectives at all (for instance, the EU-Mexico FTA[44]).

Principles: A typical ERM chapter echoes the principle of a State's PSNR,[45] an established principle under international law that notes that States possess PSNR.[46] It stipulates that each party to the FTA has the sovereign right to determine what territories—on land and water alike—are available for exploration and production of energy goods and RMs.[47] The second guiding principle set out in ERM chapters is that the parties preserve their right to adopt, maintain and enforce measures necessary to securing the supply of energy goods and RMs[48], or the right to regulate to meet legitimate policy objectives,[49] or both.[50]

Definitions and scope: ERM chapters include an overarching definitional clause which clarifies RMs covered by the chapter, usually set out in the Annex to the chapter. This typically includes iron and steel, copper, nickel, aluminium, lead, zinc, tin, ores, salt, earths and stone, mineral fuels, organic and inorganic chemical compounds, etc.[51] However, the coverage differs between FTAs. For instance, the proposed ERM chapters for India and Australia are more expansive than the one agreed with Chile, and include wood, raw hides, cotton, wool, silk, and vegetable fibres. On the other hand, the EU-New Zealand FTA specifically clarifies that "RMs" does not include agricultural, forestry or fisheries goods.[52]

Similarly, energy goods are defined as goods listed by the corresponding HS code in annexes to the chapter. The lists usually make clear that the term "energy goods" includes fossil fuel sources such as solid fuel, crude oil, oil products, natural gas, including liquefied natural gas and liquefied petroleum

[40] See, *e.g.*, EU-India FTA, proposed Art. X.1.
[41] EU-Thailand FTA, proposed Art. X.1.
[42] EU-New Zealand FTA, Art. 13.1.
[43] EU-Chile FTA, Art. 8.1.
[44] EU-Mexico FTA, proposed Ch. X (ERM Chapter).
[45] See EU-Mexico FTA, proposed Ch. X (ERM Chapter), Art. X.1.2.
[46] Office of the United Nations High Commissioner for Human Rights, "General Assembly Resolution 1803(XVII) of 14 December 1962, 'Permanent Sovereignty over Natural Resources,'" available at https://www.ohchr.org/sites/default/files/Documents/ProfessionalInterest/resources.pdf.
[47] For example, EU-Chile FTA, Art. 8.2.1; EU-New Zealand FTA, Art. 13.2.1.
[48] EU-New Zealand FTA, Art. 13.2.2; also proposed by the EU in EU-India FTA, proposed Art. X.2.2.
[49] EU-Chile FTA, Art. 8.2.2.
[50] See EU-Mexico FTA, proposed Ch. X (ERM Chapter), Art. X.1.2.
[51] These lists are provided in the accompanying annexes to each chapter.
[52] EU-New Zealand FTA, Ch. 13, Footnote 1.

gas, and electrical energy.[53] The proposed EU-India FTA text explicitly covers renewable and low-carbon fuels as well, thereby expanding the coverage and depth of commitments sought to be established through the disciplines on "energy goods". In FTAs where the definition of energy goods extends to cleaner energy sources (such as renewable and low carbon fuels), ERM provisions such as the prohibition on monopolies, dual pricing, and domestically regulated prices arguably have a broader scope than in FTAs that do not include renewable energy in its scope.

Exceptions: ERM chapters are subject to the general exception provisions set out in a separate chapter in EU FTAs. These general exception provisions incorporate, mutatis mutandis, the GATT Article XX exceptions, allowing parties to justify otherwise ERM-inconsistent measures, if (i) the measure adopted falls into one of the subcategories; and (ii) the measure does not constitute arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on investment liberalization or trade in services. The subcategories include the adoption or enforcement of a measure necessary to protect public security or morals or to maintain public order; necessary to protect human, animal or plant life or health; necessary to secure compliance with laws or regulations not inconsistent with the provisions of the agreement; measures relating to the conservation of exhaustible natural resources if made effective in conjunction with restrictions on domestic production or consumption; measures involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry when the domestic price is held below the world price as part of a government stabilization plan - subject to certain conditions.[54]

Dispute settlement: ERM chapters are subject to the regular dispute settlement mechanisms of the FTAs. This means that FTA parties (governments) can challenge alleged violations of the provisions in the ERM chapter, following the detailed procedures stipulated in the FTA's dispute settlement chapter. If the panel finds that a party is in breach of the ERM provisions, trade sanctions could be imposed. In addition, some FTAs contain separate modes of dispute resolution, in the investment chapters, to address investors' grievances. Whether an investor can effectively use an investment protection mechanism depends on whether the FTA includes a specific investment protection chapter. This provides an additional layer of legal protection and certainty (or the perception thereof) to EU investors.

These general characteristics of ERM chapters should be kept in mind as we look at specific substantive provisions in the next sections. They will also be key for informing the recommendation section set out below.

3.3 ERM provisions to secure supply of RMs and energy and create predictability for EU investors

To facilitate trade and investment in areas relevant to RM and energy, ERM chapters include various substantive provisions that seek to secure supplies of RMs and create a predictable investment environment. These provisions predominantly focus on the application of market principles with regards to RM pricing; domestic regulations that seek to add transparency and non-discrimination to "prior authorization" requirements; and cooperation provisions.

[53] Neither the Chile nor the New Zealand FTA includes coal, whereas it is proposed to be included in the FTA with India.
"Electrical energy" bearing HS code 27.16 is listed as an energy good in all the FTAs. An expansive interpretation would mean that electrical energy generated from traditional as well as renewable sources of energy is covered.
[54] General Agreement on Tariffs and Trade 1994 (GATT 1994), 1867 U.N.T.S. 187, Art. XX.

All ERM chapters include provisions that seek to eliminate any distortion in trade in relation to RMs to guarantee the supply of RMs. Distortion refers to any measure that could hinder the free flow of RMs from the partner country to the EU.[55] Key provisions include the elimination of import and export monopolies, restrictions on dual pricing, and the elimination of domestic pricing, each of which are further discussed below.

The elimination of import and export monopolies: ERMs contain strongly worded provisions prohibiting parties from designating or maintaining an import or export monopoly – vis-à-vis the products covered under the scope of the agreement. [56] A monopoly is considered "the exclusive right of grant of authority by a Party to an entity to import energy goods or raw materials from, or export energy goods from or raw materials to the party."[57] Strict prohibitions on import and export monopolies prevent one company from developing excess capacity, with the ability to distort market prices. Modern comprehensive FTAs also separately include stricter obligations regulating the behaviour of SOEs with monopoly powers that could manage supplies of RMs in a country's national interest.[58] Accordingly, these provisions aim to increase predictability for EU investors in RMs covered in the ERM chapter. The extent to which these provisions will also attract EU investors in *renewable energy projects* will depend, in part, on the definition of energy good in an FTA extends to cleaner energy sources like renewable energy and low carbon fuels.

Restrictions on dual pricing: Except for Indonesia and Vietnam, all ERM chapters in the consulted FTAs also set out strict rules against the adoption of dual pricing for energy goods or RMs,[59] prohibiting domestic sales prices from being lower than export prices. Such a difference should not be brought about by even using licences or minimum price requirements, per the EU-New Zealand and EU-Tunisia FTAs.[60] While implementing dual pricing can diversify a country's domestic production structure or export base, [61] it may lead to distortions in the market if they are implemented as export restrictions, or if they amount to subsidies.[62] Thus, prohibiting dual pricing in the ERM chapters, aims to ensure fair competition both in cross-border trade and in the domestic market. Through these provisions, the EU ensures that it does not suffer from discriminatorily high export prices and that European investors and firms face a level playing field when operating in the partner country. These provisions go beyond prohibitions on export restrictions appearing elsewhere in the FTAs,[63] thus strengthening the EU's access to RMs by providing adequate legal arsenal to challenge trade restrictions.

However, as is further elaborated upon and analysed in Section 3.4 below, dual pricing restrictions have also been criticized for limiting countries' ability to accelerate the uptake of renewable energy,

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[55] Müller, B., Ghiotto, L., Bárcena, L. "The Raw Materials Rush: How the European Union Is Using Trade Agreements To Secure Supply Of Critical Raw Materials For Its Green Transition," Transnational Institute (10 January 2024), available at https://www.tni.org/en/publication/the-raw-materials-rush.

[56] EU-Chile FTA, Art. 8.4; EU-New Zealand FTA, Art. 13.4; EU-Mexico, proposed Art. 3; EU-India, EU-Australia, and EU-Thailand FTAs, proposed Art. X.4.

[57] For example, see EU-Chile FTA, Art. 8.4.

[58] Müller, B., Ghiotto, L., Bárcena, L. "The Raw Materials Rush: How the European Union Is Using Trade Agreements To Secure Supply Of Critical Raw Materials For Its Green Transition," Transnational Institute (10 January 2024), available at https://www.tni.org/en/publication/the-raw-materials-rush; Crochet, V., Zhou, W., "Critical insecurities? The European Union's strategy for a stable supply of minerals" Journal of International Economic Law (2024), available at https://doi.org/10.1093/jiel/jgae003.

[59] EU-Chile FTA, Art. 8.5; EU-New Zealand FTA, Art. 13.5; EU-Mexico, proposed Art. 4; EU-India, EU-Australia, and EU-Thailand FTAs, proposed Art. X.5.

[60] EU-New Zealand FTA, Art. 13.4.

[61] World Trade Organization, "Trade in natural resources," World Trade Report (2010).

[62] *Ibid*.

[63] For example, EU-New Zealand FTA, Art. 2.7, 2.11.

for instance, domestically. Seeking to address potential negative implications of dual pricing, the EU-Chile FTA includes an exception to the prohibition on dual pricing. Chile may resort to dual pricing to achieve the objective of value addition provided that several conditions are met, which is further elaborated and analysed in section 3.4 below.[64] Furthermore, if Chile were to successfully utilize the carve-out, it must make the details of the measure and the way it is implemented publicly available.[65]

Prohibition on intervention in domestic pricing: Except for Indonesia and Vietnam, all ERM chapters in the consulted FTAs require that energy goods and/or RMs prices reflect supply and demand, prohibiting government intervention in domestic pricing of energy goods and RMs.[66] Some FTAs specify that if prices of RMs or energy are to be regulated, it must be done to achieve a legitimate public policy objective,[67] whereas other FTAs allow for the regulation of ERMs by imposing a public service obligation.[68] In these instances, the regulated price must also be clearly-defined, transparent, and proportionate that is only coextensive with the circumstances giving rise to it and not any longer than necessary. Some agreements also require the price to be non-discriminatory.[69]

The EU is concerned that state manipulation of prices leads to discrimination against foreign players in the case of both RMs and energy. For example, in the realm of energy, too high of an energy price would impact input costs of businesses and their competitiveness, whereas prices that are too low would inhibit exports. Therefore, the EU considers only legitimate public policy objectives - including energy efficiency, energy from renewable sources, and climate protection[70] - to warrant government intervention.

Streamlining and regulating "prior authorization" requirements: ERM chapters also contain provisions akin to domestic regulation that seek to ensure foreign entities do not face unnecessarily burdensome or restrictive requirements that impede market entry. For instance, ERM chapters include provisions that stipulate conditions and procedures that must be complied with when the exploration and production of energy goods and RMs requires prior authorization from respective state authorities.[71] Typically, ERM chapters specify the requirement for the authorization to be public and non-discriminatory. Different FTA ERM chapters highlight different objective criteria that must be followed in granting authorizations. For instance, the EU-Chile FTA requires the authorization process to be public and non-discriminatory, whereas other FTAs also establish conditions to that requirements and procedures for granting authorization "are established in advance, are made publicly available in such a manner as to enable interested entities to apply and are non-discriminatory".[72] Other FTAs propose cross-referencing to general domestic regulation provisions.[73] These provisions on prior authorization also highlight situations where parties can derogate form the requirements relevant to authorization. The applicability of these provisions differs. For instance, in the Mexico FTA, the provisions on

[64] EU- Chile FTA, Art. 8.5.2, Annex II (1).
[65] EU-Chile FTA, Ch. 8, Annex II (2).
[66] EU-Chile FTA, Art. 8.6 (only covers energy goods, which indicates that domestic pricing of RMs may be done in accordance with other obligations); EU-New Zealand FTA, Art. 13.6; EU-Mexico FTA, proposed Art. 5; EU-India and EU-Australia FTAs, proposed Art. X.6; EU-Thailand FTA, proposed Art. X.5.
[67] See, *e.g.*, EU-New Zealand FTA, Art. 13.6; EU-India FTA, proposed Art. X.6.
[68] EU-Mexico FTA, proposed Art. 5; EU-Chile FTA, Art. 8.6; EU-Australia, proposed Art. X.6.
[69] EU-Chile FTA, Art. 8.6; EU-New Zealand FTA, Art. 13.6. Also, EU-India FTA, proposed Art. X.6.
[70] For example, EU-Georgia AA, Art. 216(2).
[71] EU-Chile FTA, Art. 8.7 (only covers energy goods, which indicates that domestic pricing of RMs may be done in accordance with other obligations); EU-New Zealand FTA, Art. 13.7; EU-Mexico FTA, proposed Art. 6; EU-India and EU-Australia FTAs, proposed Art. X.7; EU-Thailand FTA, proposed Art. X.6.
[72] EU-Thailand FTA, proposed Art. X.6.
[73] EU-Australia FTA, proposed Art. X.7.

authorisation relate to exploration and production of energy goods[74] whereas in other FTAs, it also extends to RMs.[75]

Cooperation on energy and RMs in international fora: In addition to these binding obligations to prohibit trade restrictions and maintain a pro-competitive business environment, the ERM chapters contain softer provisions requiring the EU and its FTA partners to cooperate on reducing obstructions to trade in RMs.[76] But it is unclear how such cooperation is to manifest in real terms, and whether the expected consequence of such cooperation is limited to political signalling or extends to concerted retaliatory measures remains to be tested.

In sum, ERM chapters contain binding and enforceable provisions that seek to ensure that RM trade and pricing reflects market principles. Indeed, the obligations with regards to the application of market principles to RMs and energy use strong language such as "no party shall" or "a party shall not maintain", reflecting binding obligations.[77] Moreover, as noted earlier, these provisions are subject to dispute settlement provisions, which means they are legally enforceable. Many of the ERM provisions will facilitate the EU's access to RMs and energy goods, as it limits a resource-rich country's ability to charge higher RM prices for exporters or provide domestic operators a competitive advantage over foreign operations with regards to RMs. They go beyond obligations set out in the WTO or other chapters in EU FTAs, thereby increasing security and predictability for EU companies investing in RM in resource-rich EU trading partners, while at the same time, further restricting the policy space for resource-rich countries. While exceptions can be invoked, for instance, to achieve a legitimate public policy objective, as well as in accordance with the exceptions set out in GATT Article XX, which are integrated by reference into the ERM chapters, these exceptions are limited as they either use unclear language or establish high thresholds that must be met for them to be successfully invoked.

From an EU investor perspective, one potential limitation related to ERM provisions is that they do not automatically enable a private investor to resort to dispute settlement. Indeed, whether an investor can bring a claim depends on whether the FTA's investment chapter provides for investor-state dispute settlement. This is the case in the ongoing negotiations in the EU-Mexico and EU-Indonesia agreements, but not in the other EU FTAs.

3.4 ERM provisions to stimulate green industrialization in resource-rich countries

The previous section focused on obligations – predominantly imposed on the resource-rich EU trading partner – to facilitate secured access to RMs and an investment-friendly environment. This section analyses how and whether ERM chapters contain provisions that would support green economic growth and industrialization in resource-rich EU trading partners. As set out in Section 3.2 above, some ERM chapters highlight, among their objectives, the importance of the use of green technologies and the importance of increasing energy generation from renewable sources and sustainable production of RMs. Nevertheless, ERM chapters do not contain provisions – whether binding or non-binding – that would directly advance industrialization or green economic growth in resource-rich EU trading partners.

[74] EU-Mexico FTA, proposed Art. 6.
[75] See, *e.g.*, EU-New Zealand FTA, Art. 13.7.
[76] See, *e.g.*, EU-Chile FTA, Art. 8.14.1(a) and (b); EU-New Zealand FTA, Art. 13.14(a) and (b); EU-India FTA, proposed Art. X.18(1)(a) and (b); EU-Mexico FTA, proposed Art. 11(a) and (b).
[77] For a discussion on the usage of "shall" in denoting legal obligations in trade agreements, see Horn, H., Mavroidis, P.C., Sapir, A., "Beyond The WTO? An Anatomy of EU and US Preferential Trade Agreements," Bruegel Blueprint Series (2009).

Moreover, many of the market-pricing provisions explained in Section 3.3 above could potentially hinder a country's green industrialization efforts, as they limit a resource-rich country's policy space to ensure RMs are available at cheap prices, which could have otherwise given a competitive advantage to domestic processing industries or ensured local supply of the RM necessary for the domestic green transition. Similarly, with regards to energy, prohibitions on domestic regulated prices and dual pricing could have a chilling effect on government efforts to develop processing capacity at home, as it reduces their policy space to keep domestic energy prices low.

Only the EU-Chile Advanced Framework Agreement includes provisions that seek to directly safeguard policy space to advance industrialization objectives of the trading partner. Specifically, it includes a value-addition carve-out from the dual pricing prohibitions. Such a carve-out effectively allows Chile to maintain an existing dual pricing strategy whereby it may sell RMs like lithium at preferential prices to businesses based in Chile for value-addition purposes, so long as certain conditions are met. These conditions include: (i) that the measure does not result in an export restriction for the other party; (ii) it does not adversely affect the EU's capacity to source RMs from Chile; (iii) MFN treatment is applied if RMs are supplied at that preferential rate to companies in other countries; and (iv) the domestic price is not lower than the lowest price for exports of the same good, realized over the 12 preceding months.[78] Box 3 below examines the peculiarities of this carve-out in the specific Chilean context as well as the legal implications of extending a similarly worded carve-out to other FTAs.

[78] EU-Chile FTA, Art. 8.5.2 and Annex II (1).

Box 3: Not all that salty: Chile's Lithium Strategy and the Value-Addition Carve-Out

At first glance, the conditions attached to the successful invocation of the carve-out to the dual pricing prohibition in the Chile-EU Advanced Framework Agreement seem overly restrictive. Indeed, policy commentators and technical experts share their hesitations about the effectiveness of this carve-out for industrialization,[1] given the stringent conditions attached to them. For example, it might be difficult to prove that lower domestic prices will not impact EU's sourcing or, where doing so, it would not amount to export restrictions, if the absolute levels of RM production stayed constant.[2] Another limiting factor is the price threshold that must be met, leaving little room for the resource-rich country to price domestic companies significantly lower than foreign companies. In light of these factors, it remains to be seen whether any differential pricing based on the justifications provided for in these provisions can be maintained, once the FTA is in effect.

However, based on interviews conducted with Chilean trade officials closely involved in the negotiation of the EU FTA, it was clarified that the carve-out in the EU-Chile FTA carefully reflects the space retained for Chile to continue implementing its existing policy on value-addition on lithium. The policy in place requires the two companies involved in lithium extraction in Chile (SQM and Albemarle), to provide up to 25% of its production at preferential prices to specialized producers, in addition to some funding for R&D activities, in exchange for permitting expanded extraction.[3] Such specialised producers must be involved in value-addition activities using the lithium purchased at the preferential prices.[4] "Preferential Price", per the call for applications for specialized producers, means "the lowest parity price of the Company's export market (FOB, Chilean Port) to be fixed monthly for technical grade Lithium Carbonate, battery grade, technical grade Lithium Hydroxide, battery grade, as per its technical specification, and shall correspond in each case to the weighted average FOB export price calculated on the twenty percent of the volume exported by the Company with the lowest price in the last six months available, which shall apply to purchases of Lithium Products made by the Specialized Producer in the following month".

Per publicly available news, the Chilean Corporation for the Promotion of Production (Corfo) has assigned the status of specialized lithium producer to the Chinese EV manufacturer, BYD[5] as well as another Chinese company Yongqing Technology Co. Ltd., part of the Tsingshan holding company. These selections entail that SQM will supply up to 11,244 tons/year of battery-grade Lithium Carbonate to BYD and Yongqing each, at preferential prices until 2030. The project by BYD concerns the building of a "BYD Chile Lithium Cathode Plant" in the Antofagasta Region,[6] whereas Yongqing plans to invest 233 million USD in northern Chile to produce lithium iron phosphate (LFP).[7] Regarding the conditions attached to the carve-out in the EU-Chile FTA, since the value-addition policy is linked to only a certain quota (i.e., 25% of production); the bid is openly maintained; and the preferential price condition in the domestic Chilean policy covers only the last six months as opposed to the FTA requirement of 12 months, it is likely that these specific factual conditions will enable Chile to legally invoke the carve-out. However, continued review and monitoring of the provision will be needed to assess the ability of Chile to changes its policy in line with its industrialization goals, and its commitment to maintain non-discrimination towards European investors.

Box 3 Footnotes

1 "Letter from the EU-Chile joint statement Raw Materials Coalition and European Trade Justice Coalition to Members of the European Parliament" (January 2024), available at https://www.veblen-institute.org/IMG/pdf/statement_eu_chile.pdf.

2 Assuming that WTO jurisprudence may have persuasive value in an FTA dispute, the Appellate Body in *China – Raw Materials* found a restriction to mean that "which restricts someone or something, a limitation on action, a limiting condition or regulation' and, thus, generally, as something that has a limiting effect."

3 Poveda Bonilla, R., " Políticas públicas para la innovación y la agregación de valor del litio en Chile" Documentos de Proyectos (LC/TS.2020/84), Comisión Económica para América Latina y el Caribe (2021), available at https://repositorio.cepal.org/server/api/core/bitstreams/e24f42c2-96c0-44e9-96f0-73a09d5af2fd/content.

4 See Corfo, "Selection Process Of Specialized Producers Of Lithium Products With Added Value In Chile (courtesy translation)," available at https://wapp4.corfo.cl/archivos/WCSCONTI/PG/1476733263212/CALLSelectionProcess.pdf.

5 Corfo, "BYD Chile es la primera seleccionada por Corfo en el Llamado a Productores Especializados de Litio para impulsar iniciativas de valor" (19 April 2023), available at https://www.corfo.cl/sites/Satellite?c=C_NoticiaNacional&cid=1476735036931&d=Touch&pagename=CorfoPortalPublico/C_NoticiaNacional/corfoDetalleNoticiaNacionalWeb.

6 InvestChile, "CORFO selects BYD to boost lithium added value" (24 April 2023), available at https://blog.investchile.gob.cl/corfo-selects-byd-to-boost-lithium-added-value.

7 "Chinese investment project to inject more than US$200 million to boost National Lithium Strategy" (16 October 2023), available at https://www.gob.cl/en/news/chinese-investment-project-to-inject-more-than-us200-million-to-boost-national-lithium-strategy/.

ERM chapters also enable parties to derogate from the obligation to regulate domestic prices, provided this is done to achieve a legitimate public policy objective, or impose a public service obligation, as noted above. More generally, the right to adopt, maintain, and enforce measures necessary to security the supply of energy goods or RMs, or the right to regulate to meet legitimate policy objectives, is also set out as one of the principles of the ERM chapter, as highlighted in Section 3.2 above. While the legal value of this principle is ambiguous, as is further elaborated upon in Box 4 below, resource-rich parties could potentially invoke this principle to derogate from some of the market-based principles set out in Section 3.3 where this would enable them to advance the uptake of renewable energy domestically.

Box 4: Legal value of "objectives" and "principles" in ERM chapters

Neither the provision that sets out the ERM's objective, nor the provision establishing the principles of the ERM chapter set out clear substantive obligations. However, in the case of a dispute invoked under the ERM chapter (which is possible given that ERM chapters are subject to dispute settlement), arguments could be made that the objective and principles stated carry interpretative value in the context of the VCLT. For example, with regards to the PSNR principle included in the ERM chapters, resource-rich countries could argue that this principle limits the applicability of the ERM chapter to products that a country has designated that are ready to be traded. They could also argue that the PSNR principle provides certain overarching rights to manage resources as deemed fit. However, tensions may arise when this principle is faced off with trade rules such as non-discrimination. Thus, ambiguity remains as to whether signing up to trade rules have curtailed a country's ability to invoke PSNR, and if so, in what conditions (pre-production or post-production only). For instance, in *China – Raw Materials*, a WTO panel explained that, by joining the WTO, Members established limits to their PSNR.

The second principle relating to an overarching right to regulate that a country could potentially bring claims that non-compliance with one of the substantive provisions in situations of an energy shortage is justified, as the party is exercising its right to regulate and preserves its right to adopt measures to secure the supply of energy goods as established in the principles section. However, for such an argument to succeed, it would require that the panel interprets the right to regulate principle set out in the ERM chapter as "floor" to the chapter setting out minimum substantive international protections, as opposed to considering it without separate legal weight. Generally, it is less clear if the right to regulate can be considered as source of legal rights in and of itself, although it reaffirms existing international legal rights.

In addition, parties could invoke the general exceptions provisions to justify deviating from certain ERM obligations. The most relevant exception that a resource-rich country could invoke with regards to green growth and industrialization would be subparagraph (i) in GATT Article XX, which focuses on measures involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry when the domestic price is held below the world price as part of a government stabilization plan - subject to certain conditions. However, a 1950 Report of the Working Party on "the use of Quantitative Restrictions for Protective and other Commercial Purposes" noted that the Agreement does not permit the imposition of restrictions upon the export of a RM in order to protect or promote a domestic industry, whether by price advantage to that industry for the purchase of its materials, or by reducing the supply of such materials available to foreign competitors, or by other means. As discussed in Section 5 below, this report could benefit from further clarification in the context of Article XX(i) of the GATT. In any case, invoking Article XX to justify an otherwise inconsistent measure has proven to be an uphill battle in the context of the WTO.[79]

Another way to ensure policy space to enhance domestic industrialization could be through enabling the adoption of local content and performance requirements. However, any such requirements would have to be aligned with existing provisions set out in EU FTAs' chapters on trade in goods that ban export restrictions (including WTO+ prohibition on export taxes) and the chapters on investment that

[79] World Trade Organization, "Trade in natural resources", World Trade Report (2010), Chapter E titled 'Natural resources, international cooperation and trade regulation.'

prohibit a long list of performance requirements (also WTO+ as they extend beyond the illustrative list provided in the WTO Agreement on TRIMs).[80] As this would require the EU's FTAs to draw explicit rules, or exceptions to the rules otherwise present in the FTAs, this will be difficult to accomplish from a political perspective. Moreover, research suggests that local content requirements may have limited effectiveness as an industrial policy instrument unless complemented by foundational infrastructure and complementary access to finance, skills, and other elements necessary to develop any industry.[81]

Alternatively, parties can negotiate lowering tariff and non-tariff barriers with respect to clean energy goods, services and technologies to stimulate technology transfer. This will be further explored in Section 5.2.1 below that sets out various policy options.

3.5 ERM provisions to advance sustainability

This section analyses ERM provisions relevant to the three pillars of sustainability: environmental, economic, and social. It discusses and analyses the key methods that the ERM chapters employ, to uphold environmental and social objectives and disseminate sustainable technologies and practices. In contrast to the binding and enforceable provisions that seek to secure EU access to RMs, most sustainability provisions in ERM chapters do not establish stringent obligations, but instead focus on cooperation between the parties.

EIA: Except for EU-Indonesia, EU-Vietnam, and EU-Mexico FTAs, all FTAs reviewed for this report include the obligation to carry out an EIA before authorisation for exploration and production of energy goods and raw materials is granted, where a project *may* have effects on the environment; population and human health; biodiversity; land, soil, water, air and climate; and cultural heritage and landscape.[82] Most FTAs require that interested persons are provided an opportunity and an appropriate time period to comment on the outcome of the assessment, and that the results of this consultation process should be published before the authorisation is granted.

While the inclusion of an EIA is a step in the right direction and appears to be a more recent development, there are various ways in which the current EIA obligation could be strengthened, as further discussed in section 5.2.1 below. Specifically, the following concerns must be addressed: as not all projects are subject to prior authorization, the fact that the requirement to conduct an EIA is linked to projects requiring authorization would mean that for projects that do not require authorization, conducting an EIA is not required. Here, the strongest language is set out in the EU-New Zealand FTA, which does not link the obligation to conduct EIAs to the authorization requirement, but rather to activities related to production of energy goods and RMs and requires for it to be enshrined in law. Specifically, it provides that "each party shall ensure that its laws and regulations require an EIA for activities related to production of energy goods or RMs, where such activities may have a significant impact on the environment."[83] While this is an improvement over other FTAs, a remaining weakness is that the requirement to conduct an EIA is contingent upon an assessment that the project "may have a significant impact on the environment." This would require an *ex-ante prima facie* determination of whether a project *may* have relevant impacts, and only then would an EIA be

[80] Modern, comprehensive FTAs seek to fill gaps in WTO law, to promote free market principles. As a result, a combined interaction of both WTO law and FTA provisions needs to be considered carefully in order to assess the overall balance of rights and obligations preserved in enabling CRM-led industrialization.

[81] Korinek, J., Ramdoo, I. "Local Content Policies in Mineral-Exporting Countries," OECD Trade Policy Papers No. 209, OECD (2017), available at http://dx.doi.org/10.1787/4b9b2617-en; Rodrik, D. "Normalizing Industrial Policy," Commission on Growth and Development Working Paper No. 3 (2008).

[82] See, *e.g.*, EU-Chile FTA, Art. 8.8; EU-New Zealand FTA, Art. 13.8; EU-India FTA, proposed Art. X.8; EU-Thailand FTA, proposed Art. X.7.

[83] EU-New Zealand FTA, Art. 13.8.

conducted. Not requiring an EIA across the board creates the risk that EIAs are not conducted in a situation where environmental risks are not immediately apparent. Further, even if there is an EIA that concludes the environmental risks are severe and significant, the provision does not require that a party acts upon such a finding. It merely requires for a party to "take into account the findings of the EIA" prior to granting authorisation. Thus, even if a party conducts an EIA, there is no guarantee that this will result in actions that reduce the environmental impact of RM mining and energy activities.

There are also concerns related to due process in conducting EIAs. Most provisions envision two stages in the EIA provision: during the assessment, and during the period of comment post publication of the EIA report.[84] With regards to the first stage, the EU-New Zealand FTA calls for an "early and effective opportunity" to be provided to all interested persons to participate in the impact assessment,[85] whereas other FTA proposals, such as India and Australia, only require an opportunity (unqualified by other adjectives) to be provided.[86] Regarding the second stage, the EU-Chile FTA remains silent on the explicit right of the public to comment on the final report.[87] Further, the proposed texts in the EU-India and EU-Australia FTAs specify that "relevant non-governmental organisations" must be given the opportunity to comment on the report, whereas others do not. Thus, there is no binding obligation to seek views of NGOs during the EIA.[88] Yet, the increased role of civil society in integrating sustainability with RM value chains is an important aspect of providing a "social license" to mining activities and sustaining political outcomes. It also enhances democratic participation and provides a critical aid to holding states accountable to their pledges of environmental and social responsibility.

The ERM chapters also retain the scope to provide future authorizations for fossil fuel or dirty energy projects. For the purpose of furthering sustainability agenda, the ERM chapters can contain disciplines on authorizing projects relating to traditional, dirty sources of energy, subject to proving stringent criteria of utmost necessity.

Pollution in the marine environment: Another sustainability-oriented provision relates to the prevention of pollution in the marine environment. Certain FTAs, such as the EU-New Zealand FTA, require the establishment of conditions necessary for safe offshore exploration and production of oil and gas in its territory,[89] in order to protect the marine environment and coastal communities against pollution. This is also proposed in the FTAs with India and Australia.[90] But no baseline is provided, nor minimum requirements that must be embedded in the conditions, apart from the fact that these must be based on "high standards." Thus, it provides significant leeway to a resource-rich party to define

[84] See, *e.g.*, EU-New Zealand FTA, Art. 13.8.2(a) and (c). "With respect to the environmental impact assessment referred to in paragraph 1, each Party shall, as required by its laws and regulations:
(a) ensure that all interested persons, including non-governmental organisations, have an early and effective opportunity, and an appropriate time period, to participate in the environmental impact assessment as well as an appropriate time period to provide comments on the environmental impact assessment report;"
[85] EU-New Zealand FTA, Art. 13.8.2(a).
[86] EU-India and EU-Australia FTAs, proposed Art. X.8.3.
[87] EU-Chile FTA, Art. 8.8.2. "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."
[88] It is worth noting that the EU-Chile FTA recognizes the role of the Trade in Goods Subcommittee in implementing the ERM chapter. A provision therein specifically provides for considering inputs from relevant stakeholders or experts before Trade in Goods committee deliberations on the ERM chapter. However, again, this is not a binding obligation for the committee to consider inputs from experts or civil society; the language of the FTA provides great flexibility to the parties to choose to (or not to) consider such inputs. EU-Chile FTA, Art. 8.17.
[89] EU-New Zealand FTA, Art. 13.9.
[90] EU-India and EU-Australia FTAs, proposed Art. X.9.

"high standards" and design conditions accordingly. In the absence of any instruction or minimum threshold, it is difficult to assess the actual contribution of this provision to the sustainability agenda.

R&D to promote sustainable practices: Except for the FTA with Vietnam and the proposed FTA with Indonesia, all ERM chapters contain provisions that seek to encourage research on minimizing adverse environmental impacts in RM value chains and to disseminate information on environmentally sound policies on RMs.[91] The FTAs reflect certain differences that highlight the *developmental* concerns arising out FTAs stressing IPR protections for technological innovations, with significant implications for environmentally sustainable mining practices. However, these provisions are hortatory and limited to parties having to only *promote* such research, since none of the FTAs analysed have introduced any enforceability in this provision. Respecting the spirit of this provision relies entirely on the actual implementation of the provision by FTA parties.

From a sustainability perspective, certain provisions might also play a limiting role. For example, the EU-New Zealand FTA highlights the need to cooperate on dissemination of information and best practices on environmentally sound and economically efficient policies regarding energy goods and RMs *in a manner that is consistent with the adequate and effective protection of IPRs*. Similar language is also included in the EU's proposed texts with India and Australia but is absent in the FTA with Chile. At the outset, this reference to IPR may have implications for widespread access to and uptake of green technologies for sustainable mining, with the risk of harming poorer resource-rich countries that cannot afford high-priced, IP-protected technologies necessary to shift to sustainable mining practices. Indeed, adequate and effective protection of IPRs to incentivise research and innovation must be balanced with the environmental and economic spillovers of quick diffusion of green technologies, such as through technology transfers.

Cooperation towards environmental and social sustainability: ERM chapters also include provisions focused on cooperation around sustainability. These cooperation provisions make reference to promoting corporate social responsibility in accordance with international standards, such as the OECD Guidelines for Multinational Enterprises and the respective Due Diligence Guidance;[92] responsible sourcing and mining in accordance with the SDGs;[93] efficient utilization of resources;[94] and/or abiding by international standards of environmental protection for offshore projects.[95] These international standards are well-recognized in the literature on sustainable mining practices, yet, the relevant provisions do not require parties to ensure businesses implement these standards with regards to energy and RM mining, but merely require that the parties cooperate to this end. The recommendations section, Section 5 below, sets out approaches to give more weight to provisions that seek to advance environmental and social cooperation.

Other cooperation provisions that could be relevant for sustainability concern cooperation provisions on standards. These provisions are not uniformly found across all the FTAs. For instance, the provision on standards and technical regulations extends to energy but not to RMs in the Mexico, Indonesia, India, Australia, New Zealand FTA texts (and proposed texts, as applicable), but does extend to RMs in the Chile FTA.[96] In the EU-Chile FTA, the focus is to cooperate in developing standards on energy

[91] See, *e.g.*, EU-Chile FTA, Art. 8.13; EU-New Zealand FTA, Art. 13.13; EU-India FTA, proposed Art. X.17.
[92] EU-Chile FTA, Art. 8.14; EU-New Zealand FTA, Art. 13.14; EU-India FTA, proposed Art. X.18; EU-Australia FTA, proposed Art. X.17.
[93] *Ibid*.
[94] For example, EU-New Zealand FTA, Art. 13.14(h); EU-India FTA, proposed Art. X.18(h); EU-Australia FTA, proposed Art. X.17(h).
[95] EU-New Zealand FTA, Art. 13.14; EU-India FTA, proposed Art. X.18; EU-Australia FTA, proposed Art. X.17.
[96] EU-Chile FTA, Art. 8.12.1.

efficiency, sustainable energy, and RMs, with a few contributing to TSD. This could present another route through which to enhance sustainability practices – especially if sustainable RM or energy standards could be linked to preferential market access or market price premiums, as discussed in more detail in Section 5 below.

Further, the FTAs also require parties to cooperate on circular mining. For instance, the language in the FTAs requires parties to cooperate with a view to "promote the efficient use of resources (i.e. improving production processes as well as durability, reparability, design for disassembly, ease of reuse and recycling of goods)".[97] Notably, this language is absent in the FTA texts with Chile and Indonesia. Specific language on circularity reflects the EU's ambition to transition to a circular economy, as is formulated in the EU CEAP, as well as the circular economy targets mentioned in the EU CRMA. EU SPAs also seek to cooperate with partners on circular economy in relation to CRMs, in order to reduce reliance on continued imports and extractive activities.

When discussing sustainability, it is also imperative to examine the overall sustainability implications of the approach adopted in the ERM chapter. Specifically, various provisions analysed above that seek to secure supply chains of RMs and energy for EU investors will cumulatively lead to an increase of mining activities in the country. Mining activities are notorious for their negative impact on sustainability, including human rights and the environment. Without sufficient safeguards built into the ERM chapter to address these externalities, ERM chapters could have an overall detrimental impact on sustainability in resource-rich countries. The GATT Article XX exceptions – and particular subparagraphs (b) that seeks to secure human, animal and plant life or health, and (g) which refers to exhaustible resources, could be invoked to justify otherwise ERM-inconsistent behaviour. In addition, parties could potentially invoke the overarching principle of the right to regulate as discussed earlier. However, invoking these exceptions would not directly minimize negative implications of increased mining with regards to sustainability.

In sum, while ERM chapters include sustainability provisions relevant to RMs, they fall short of including binding and enforceable provisions that require the parties to respect sustainability in the context of the RM value chain. The sustainability provisions set out in ERM chapters are mostly hortatory in nature, with a focus on cooperation. Thus, the effectiveness of the ERM chapters in advancing sustainability objectives will depend on such cooperation taking place. In addition, most sustainability provisions focus on environmental sustainability, but references to social and economic sustainability are absent, in comparison. This is particularly problematic given that mining activities are bound to increase as a result of the ERM chapters, which will lead to an increase in unsustainable outcomes if high sustainability standards are not met. While parties could attempt to mitigate these outcomes by invoking various exceptions, these might not have the direct effect of mitigating environmental or other harms.

3.6 ERM provisions only relevant to energy

The previous section has critically analysed provisions in ERM chapters that are relevant to both RMs and energy. This section analyses the remaining provisions that are exclusively relevant to energy goods. These include provisions that ensure access to energy infrastructure for producers of renewable energy; provisions to secure access to energy transport infrastructure; provisions on the harmonization of energy standards; and provisions that seek to reduce non-tariff barriers to renewable energy production.

[97] See EU-New Zealand FTA, Art. 13.14(h); EU-India FTA, proposed Art. X.18(h); EU-Australia FTA, proposed Art. X.17(h).

Access to energy infrastructure for producers of renewable energy: ERM chapters include provisions requiring that each party shall ensure that renewable energy producers in the party's territory, or suppliers of the other party, are granted access to the electricity network (transmission and distribution infrastructure). Such access must be granted within a reasonable period and be non-discriminatory, reasonable and, in some FTAs, cost reflective. The terms and conditions to access the electricity system must be published.[98] However, producers can be denied access to the infrastructure based on objective and non-discriminatory criteria, provided such a derogation is necessary to achieve a legitimate policy objective, such as maintaining stability of the electricity system.[99] Some FTAs (EU-Chile, EU-New Zealand, EU-India, and EU-Australia) also require the parties to ensure that owners or operators enable the connection between new renewable electricity generation facilities and the network, allow reliable use of the network, and take appropriate measures to minimise the curtailment of renewable electricity production. Further, some FTAs require the establishment of balancing services so that producers of renewable energy have access to goods and services under reasonable and non-discriminatory terms.[100] Exceptions relating to safety and integrity of equipment and infrastructure are also proposed to be included, per EU's proposals in FTAs with Mexico, India and Australia. The EU-Chile FTA also includes exceptions from various provisions for small and isolated electricity systems, as long as these are not disguised restrictions on trade.[101]

In sum, this provision aims to ensure that EU investors derive economic benefit from their investments in the renewable energy sector, by protecting them against factors obstructing their access to the grid. At the same time, concerns have arisen that access by foreign companies to domestic energy infrastructure networks can create excess pressure on the utilities and affect national energy transition plans by reducing their own supplies.[102] While existing provisions already envisage the right to regulate to achieve a legitimate policy objective, such as to maintain stability of the energy system, the provision is insufficiently precise to counteract these concerns.

Access to energy transport infrastructure: Recent ERM chapters contain detailed provisions on access to energy transport infrastructure generally and, more specifically, for electricity generated from renewable energy within the FTA partner's territory. Parties retain the right to provide more favourable terms for renewable or low carbon energy sources, as provided in some proposals.[103] In others such as the EU-Chile FTA, there must be no discrimination on the basis of the sources of electricity, possibly implying that there can be no preference for renewable energy over other sources.[104] Interestingly, the EU-New Zealand FTA does not contain provisions on access to energy transport infrastructure, although it has provisions pertaining to infrastructural access for renewable electricity. Various FTAs also provide for the inclusion of derogations from accessing energy transport systems, based on objective criteria that they are necessary to fulfil a legitimate policy objective.[105] Provisions that guarantee access to transport infrastructure ensure that EU investors can access and export the energy in which they invest.

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[98] See, *e.g.*, EU-New Zealand FTA, Art. 13.10; EU-Chile FTA, Art. 8.10.1; EU-India FTA, proposed Art. X.12.
[99] EU-Chile FTA, Art. 8.10.3; EU-New Zealand FTA, Art. 13.10.4; EU-India FTA, proposed Art. X.12.3.
[100] See, *e.g.*, EU-New Zealand FTA, Art. 13.10; EU-Chile FTA, Art. 8.10.2(c); EU-India FTA, proposed Art. X.12.2(c).
[101] EU-Chile FTA, Art. 8.16.
[102] Müller, B., Ghiotto, L., Bárcena, L. "The Raw Materials Rush: How the European Union Is Using Trade Agreements To Secure Supply Of Critical Raw Materials For Its Green Transition," Transnational Institute (10 January 2024), available at https://www.tni.org/en/publication/the-raw-materials-rush.
[103] EU-India FTA, proposed Art. X.10.3.
[104] EU-Chile FTA, Art. 8.9.
[105] EU-Chile FTA, Art. 8.9.3; EU-India FTA, proposed Art. X.10.2.

Harmonizing energy efficiency standards: ERM chapters across FTAs require parties to cooperate on standards to promote energy efficiency and sustainable energy consumption. They may also attempt to harmonize certification schemes relating to renewable fuels, which seems useful to encourage the cross-border trade in renewable fuels. Most of the EU FTAs take a soft law approach to liberalizing and streamlining sustainability in trade through standards, focusing mostly on cooperation, while leaving a great amount of flexibility to the parties on how to go about doing so. Notably, the EU-Vietnam FTA presents a departure from the other FTAs, by mandating that "if relevant international standards established by the International Organization for Standardization or the International Electrotechnical Commission exist, the Parties *shall* use those international standards, or their relevant parts, as a basis for any standard, technical regulation or conformity assessment procedure," except in cases where such standards would be "ineffective or inappropriate means for the fulfilment of the legitimate objective pursued."[106] Similar language should be introduced in binding and enforceable terms, since streamlining trade is beneficial to the uptake of renewable energy goods. It is, of course, necessary to acknowledge the difficulties that less-developed economies might face, both in terms of compliance and the adverse effects of non-compliance.

Reducing non-tariff barriers on renewable energy production: To promote the uptake of renewable energy, some of the ERM chapters also discipline non-tariff barriers, such as the EU-Vietnam FTA.[107] Such a provision is also proposed to be included in the FTAs with India and Thailand. These provisions generally require parties to "refrain from adopting" (in EU-Vietnam FTA) or simply not impose (in India and Thailand proposed texts) a variety of performance requirements including local content requirements and requirements to form joint ventures. These provisions could undermine developmental imperatives of the EU's FTA partners, especially developing countries who are yet to build their renewable energy industry and upscale green jobs. While the use of local content requirements with respect to goods is prohibited by WTO law, certain performance requirements are still allowed. The EU FTA ERM provisions thus act as WTO+. Other rules to limit non-tariff barriers include requiring that authorisation, certification, and licensing procedures are objective, transparent, non-arbitrary, and non-discriminatory; and that administrative fees and other terms and conditions relevant to accessing energy infrastructure are transparent and non-discriminatory.

Further, there are rules requiring government support to be transparent and non-discriminatory, and that no revisions in such support schemes impair the rights and economic viability of a project benefitting from support (specifically in the EU-India FTA). The proposed EU-Thailand FTA text requires the support measures to be designed in a manner that maximises the integration of electricity from renewable sources in the electricity market and to ensure that renewable energy producers are responding to market price signals. Presumably, these provisions aim to protect legitimate expectations of investors. However, the issue of stability in investment law in and of itself has been controversial in the context of the Energy Charter Treaty, and specifically, the Spanish renewable energy disputes.[108]

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[106] EU-Vietnam FTA, Art. 7.5.

[107] EU-Vietnam FTA, Art. 7.4.

[108] Mehranvar, L., Sasmal, S., "The Role of Investment Treaties and Investor–State Dispute Settlement (ISDS) in Renewable Energy Investments," Columbia Center on Sustainable Investment (2022), available at https://scholarship.law.columbia.edu/sustainable_investment/5; Aydos, M., Toledano, P., Brauch, M.D., Mehranvar, L., Iliopoulos, T., Sasmal, S. "Scaling Investment in Renewable Energy Generation to Achieve Sustainable Development Goals 7 (Affordable and Clean Energy) and 13 (Climate Action) and the Paris Agreement: Roadblocks and Drivers," Columbia Center on Sustainable Investment (2022), available at https://scholarship.law.columbia.edu/sustainable_investment/6.

3.7 Key takeaways

In the preceding analysis, we have analysed provisions in ERMs relevant to RMs and energy, and assessed the extent to which these provisions ensure secure access to RMs and energy and create a predictable investment environment; contribute to green development and industrialization in source countries; and advance sustainable development objectives relevant to mining. This section recapitulates the key concerns, which will form the basis of the policy options developed in Section 5 below.

Provisions that seek to ensure the EU's access to RMs and energy supply chains are the strongest, as they are couched in binding and enforceable language. By comparison, provisions seeking to stimulate green industrialization in resource-rich countries or advance sustainability objectives tend to be hortatory and fall short of establishing clear obligations. For example, with regards to green industrialization, provisions are limited to exceptions from other obligations – either general exceptions, the invocation of principles, such as the right to regulate or PSNR, or, in the case of the EU-Chile FTA, an exception to the dual pricing obligation. While these carve-outs and exceptions could be strategically leveraged by resource-rich countries to stimulate green industrialization or advance sustainability objectives, these provisions are likely not strong enough to address the negative externalities associated with energy and RM mining. Specifically, the impact of the dual-pricing exception in the EU-Chile FTA with regards Chile's ability to further develop domestic processing, especially with regards to lithium, will have to be monitored. While the carve-out is a step in the right direction, the language of the provision is stringent, suggesting that other countries negotiating with the EU must reassess the specifics of a carve-out in their own country contexts without necessarily resorting to the Chilean carve-out at the outset. Recommendations on how to improve the dual pricing carve-out are set out in Section 5.2.2 below.

In addition, while various ERM provisions seek to enhance sustainability, they stop short of imposing mandatory requirements. For example, conducting EIAs is not required in all situations, and where they are conducted, parties are merely required to take the findings "into account" – but not to act on them. Moreover, in most FTAs, civil society participation in EIAs is not mandatory. Here, the FTAs with New Zealand and the texts proposed with India and Australia require the EIA conducting countries to provide time and opportunity to non-governmental organizations to participate in the impact assessment. Another observation that can be derived from this analysis is that most sustainability provisions in ERMs focus on the environmental pillar, but they place less emphasis on the social and economic dimensions of sustainability. The EU-Chile FTA is an exception, with specific provisions on carve-outs from certain obligations, for the pursuit of value addition.

Thus, while the ERM chapters generally succeed in securing access to RMs and energy and create predictability for EU investors, they are less effective in advancing green industrialization in resource-rich countries, or sustainability objectives. Section 4 below explores whether this imbalance can be addressed by sustainability provisions in TSD chapters, before arriving at Section 5 which sets out policy options to better balance ERM chapters with sustainability and green industrialization objectives.

4. TSD Chapters in EU FTAs

Having critically examined the provisions in ERM chapters in Section 3, including their implications for sustainability, Section 4 closely examines and analyses TSD chapters in EU FTAs, whether signed or in the form of proposed texts in ongoing negotiations. In doing so, it seeks to better understand if and how TSD chapters could fill the sustainability gap identified in the ERM chapters. Specifically, this section proceeds by (i) providing an overview of TSD chapters, highlighting key characteristics and trends; (ii) addressing key substantive provisions that tend to be incorporated in ERMs and (iii) highlighting how these provisions could be relevant to advance sustainable mining and processing practices. It finds that, while TSD chapters include many sustainability provisions that could be relevant to advancing responsible mining, they fall short because (i) they are hortatory in nature; and (ii) they are insufficiently specific to counterbalance the binding and enforceable, access-oriented provisions set out in ERMs.

4.1 Overview of general characteristics of TSD chapters

As set out in Section 2.2, since the EU-Korea FTA, concluded in 2009, all EU FTAs include dedicated TSD chapters. Many TSD chapters include similar structures and provisions, including with regards to sustainability, transparency, cooperation, institutions, and dispute settlement. In more recent EU FTAs, such as EU-New Zealand and EU-Chile, general characteristics can vary from those in earlier agreements, as these seem to incorporate the EU policy reform priorities set out in more detail in box 5 below.

Box 5: TSD policy reform priorities

The ***need to be more proactive in cooperating with partners*** is addressed through the engagement with trade partners to foster compliance with international labor and environmental standards, including through technical and financial assistance.

Stepping-up country specific-engagement*:* Unlike older FTAs which incorporate boilerplate provisions that are practically unchanged and address the same general issues, revised TSD chapters must include provisions that are tailor-made for each trading partner. This would be done through impact assessments that identify sustainability priorities and the potential impacts for that economy, as well as time-bound implementation roadmaps with milestones.

Mainstreaming sustainability beyond TSD chapters: The EU considers that this could be achieved by prioritizing trade in environmental goods and services – *e.g.*, renewable energy and energy-efficient services – and ensuring the identification of provisions in the agreement that are most likely to affect sustainability. Another avenue is opening new markets to trade "green" goods and services and RMs.

Increasing monitoring of the implementation of TSD commitments: This would be done by involving EU delegations, member states' capitals and embassies. The aim is to promote work among EU members states and the European Parliament to monitor and implement the TSD commitments.

Reinforcing the role of civil society: This includes considering several measures, including (i) making easier for civil society and DAGs to lodge complaints on violations of sustainability commitments; (ii) implementing timelines for TSD complaints; (iii) involving DAGs in technical assistance projects; and (iv) ensuring transparency in the work of DAGs.

Enhancing enforcement: This would be addressed by incorporating the implementation provisions of the general dispute settlement mechanism of the FTAs into the TSD chapter, and by considering sanctions for breaches of the Paris Agreement and ILO principles.

Objective: TSD chapters generally start by outlining the objectives, scope, and/or context of the section. This typically includes language stating that the "[p]arties recognize that sustainable development encompasses economic development, social development, and environmental protection, all three being interdependent and mutually reinforcing".[109] TSD chapters further refer to the objective of promoting international trade and investment in a way that contributes to the objective of sustainable development and include references to the urgent need to address climate change. Moreover, TSD chapters highlight the objective "to enhance the integration of sustainable development, notably its environmental and social dimension (in particular the labor aspects) in the trade and investment relationship between the Parties, including through strengthening dialogue and cooperation."[110] They also refer to several international instruments related to sustainability, mainly those from the ILO and the 2030 Agenda for Sustainable Development.

[109] See, *e.g.*, EU-Vietnam FTA, Art. 13.1.3; EU-Mercosur FTA, Ch. XX, Art. 1.3; EU-New Zealand FTA, Art. 19.1.2; EU-Chile FTA, Art. 26.1; EU-India FTA, proposed Art. X.1.2; EU-Thailand FTA, proposed Art. XX.1.2; EU-Australia FTA, proposed Art. X.1.2; and EU-Tunisia FTA, proposed Ch. XX, Art. 1.2.

[110] EU-Mexico FTA, proposed Ch. XX, Art. 1.1; EU-Mercosur FTA, Ch. XX, Art. 1.1; EU New Zealand FTA, Art. 19.5; EU-Chile FTA, Art. 26.1.3; EU-India FTA, proposed Art. X.1.4; EU-Thailand FTA, proposed Art. XX.1.4; EU-Australia FTA, proposed Art. X.1.3; EU-Indonesia FTA, proposed Art. X.1.1.

TSD chapters in the FTAs studied in this report also stipulate some provisions common to all substantive areas (labour, environment, investment, and gender). First, they expressly recognize the right of the parties to have policies in place on any matter covered by the TSD chapter that adjust to their national priorities. They also recognize the right of the parties to establish the levels of protection that each party considers necessary, while requiring them to attempt at ensuring that such levels of protection are "high" (even though the provisions do not clarify what "high" means). Parties further commit to maintaining their levels of protection and not weakening, reducing, or making any waivers to promote trade or investment in their respective territories.

Right to regulate: TSD chapters also set out provisions establishing the parties' right to regulate and to determine their sustainable development policies and priorities; to establish the levels of domestic environmental and labour protection, including social protection, that it deems appropriate; and to adopt and modify its relevant laws and policies accordingly.

Non-regression principle: TSD chapters further provide that the Parties shall strive to encourage high levels of environmental and labour protection and endeavour to improve such levels; refrain from weakening or reducing levels of protection to encourage investment or trade; and not fail to effectively enforce environmental or labour laws.[111]

Monitoring and response mechanisms: All the FTAs analysed incorporate monitoring and/or response mechanisms in the TSD chapters. Specifically, they require that Parties establish a body that meets periodically to engage on matters related to the TSD chapter. This body is normally composed of senior officials – or their delegates – of each of the parties. They are generally tasked with any combination of the following: i) facilitating, monitoring, and reviewing the implementation of the TSD chapter, including cooperation activities; ii) conducting or aiding in the dispute settlement procedures set out in each chapter – mainly, consultations and panels of experts; iii) making recommendations or contributing to the work of the general administrative body of the FTA on TSD matters; or iv) coordinating with other bodies established by the FTAs on gender equality (EU-Chile). Meeting reports must be published after the meetings take place.

DAGs: In addition, since the first implementation of the TSD chapters in EU-Korea, several agreements refer to DAGs.[112] DAGs are advisory groups composed of members of the civil society. All FTAs but EU-Mexico stipulate that DAGs must maintain a balance in the representation of business organizations, trade unions, environmental organizations, as well as other kinds of associations.[113] Parties might receive advice or recommendations or hold discussions with DAGs on issues under the scope of the TSD chapter. There is currently no single approach to DAGs. Even though these bodies might have procedural obligations such as meeting periodically or producing a report from their meetings or their

[111] See EU-Vietnam FTA, Art. 13.2.2 and 13.3; EU-Mexico FTA, proposed Ch.XX, Art. 2; EU-New Zealand FTA, Art. 19.2; EU-Chile FTA, Art. 26.2; EU-India FTA, proposed Art. X.2; EU-Thailand FTA, proposed Art. XX.2; EU-Australia and EU-Indonesia FTAs, proposed Art. X.2; EU-Tunisia FTA, proposed Ch.XX, Art. 2 and 3.

[112] EU-Vietnam, EU-Mexico, EU-New Zealand, EU-Chile, EU-Australia, EU-Indonesia, and EU-Tunisia mention DAGs or refer to the relationship with the civil society within their TSD chapters. Some also point to the provision in the institutional or final provisions chapter on DAGs, when there are no specifics in the TSD chapter. EU-Mercosur, EU-India, and EU-Thailand make some kind of reference to the DAGs of the agreements within the institutional provision of the TSD chapter but have no explicit provision on the matter in that chapter or a different one. In EU-India, for instance, there is no available text yet on institutional or final provisions.

[113] European Commission, "Domestic Advisory Groups," available at https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/transparency-eu-trade-negotiations/domestic-advisory-groups_en; Bronckers, M., Gruni, G., "Retooling the Sustainability Standards in EU Free Trade Agreements," Journal of International Economic Law (2021).

agreements, the FTAs do not necessarily detail specific obligations on the exact activities that DAGs must perform, thus allowing them the discretion to decide on how to carry out their functions.

DAGs have been considered inadequate to deal with TSD matters. Some of the issues raised are the lack of transparency and accountability, stagnation in dialogue and collaboration, serious concerns about compliance with international standards in the FTA partners, the inadequacy of the yearly joint meeting, ignoring the developments at the domestic level (for example, of labour rights), and mistrust between trade unions and business representatives.[114] Other issues identified include weak vertical communication between governments and DAGs, and the lack of resources of DAG members to conduct research and participate meaningfully in the process.[115]

Contact points. All FTAs, including EU-New Zealand and EU-India, require that parties establish contact points, who are entrusted with facilitating communication and coordination among the parties to the FTAs. Parties must designate, upon entry into force, contact points within their respective administrations to specifically address any matter on the implementation of the TSD chapter. There is no obligation that these contact points have a specific rank within the government or any additional characteristics.

Dispute settlement: TSD chapters that were concluded before the TSD review in 2022 are not subject to regular dispute settlement. Instead, they subject the TSD chapter to TSD-specific dispute settlement. This involves applying a two-step procedure to resolve any disagreement that may arise in the implementation of the TSD commitments, starting with government consultations, followed by the establishment of a panel of experts. TSD-specific dispute proceeding is weak, given that there is no requirement to publish decisions, the fact that decisions are non-binding, and that no sanctions nor any other remedies can be imposed.[116] However, following the recommendation set out in the TSD policy review study, TSD chapters that are concluded/negotiated after 2022 will be subject to regular state-to-state dispute settlement. Indeed, EU-New Zealand and the proposed text in EU-Thailand, already consider this approach. [117]

Essential element clauses: As already mentioned, the review of the TSD policy review study highlighted the importance to enhance enforceability of the sustainability provisions and to move away from exhortatory obligations.[118] One way to do so, as reflected in Box 5, is by making compliance with certain MEAs, such as the Paris Agreement and ILO Conventions, an essential element of the FTAs. This means that failure to comply with the Paris Agreement or relevant ILO Convention could authorize the other party to unilaterally suspend the FTA, in whole or in part.[119] Such approach has been taken in the EU-New Zealand FTA.[120]

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[114] Bronckers, M., Gruni, G., "Retooling the Sustainability Standards in EU Free Trade Agreements," Journal of International Economic Law (2021). See also Martens, D., Potjomkina, D., Orbie, J., "DAGs in EU trade agreements" (2020).
[115] Blot, E., Oger, A., Harrison, J., "Enhancing sustainability in EU Free Trade Agreements: The case for a holistic approach" Policy report, Institute for European Environmental Policy (2022).
[116] *Ibid*.; van't Wout, D., "The enforceability of the trade and sustainable development chapters of the European Union's free trade agreements," Asia Europe Journal (2020).
[117] While not mentioning dispute settlement within the TSD chapter, the latter has currently incorporated specific periods and rules within the dispute settlement chapter that shall apply to sustainable development.
[118] European Commission, "The Power of trade partnerships: together for green and just economic growth" COM(2022) 409 final (22 June 2022).
[119] van der Ven, C., Lamy, P., Pons, G., Leturcq, P., "GT12/Make-or-break: Including Multilateral Environmental Agreements as 'essential elements' in EU Free Trade Agreements" (2023).
[120] EU-New Zealand FTA, Art. 27.4.

Having established some key, overarching characteristics of TSD chapters, the next section focuses on the substance of TSD chapters and examines how TSD provisions could potentially be relevant to advancing sustainable mining objectives.

4.2 TSD provisions and their relevance to advancing sustainable mining and processing

TSD chapters do not directly address sustainable mining or processing practices. However, more general provisions relevant to advancing the three pillars of sustainability could be leveraged to promote sustainable mining and processing practices, as well as green industrialization in resource-rich countries, as set out below.

4.2.1 Environmental sustainability

Mining is associated with severe environmental impacts, including deforestation and the erosion of soil layers, negative implications on biodiversity, soil erosion and contamination, production of waste mining rocks, which contain radioactive materials, water contamination, and acid mine drainage.[121]

Several provisions typically included in TSD chapters in FTAs could, directly or indirectly, be leveraged to advance environmental sustainability in mining and processing. These are summarized below. However, these provisions tend to fall short of establishing clear obligations on the parties, and therefore, remain weak and unenforceable (even if dispute settlement applies). Indeed, it would be difficult for the parties to prove that the other party has failed to effectively cooperate with regards to sustainability requirements or has failed to promote certain environmental standards. In addition, these provisions are limited, as their link to sustainable mining is too tenuous.

Trade and fossil fuel reform: The EU-New Zealand FTA contains various provisions that seek to reform and progressively reduce fossil fuel subsidies. A direct link exists between fossil fuel subsidies and developing the renewable and clean energy sector. Indeed, the EU-New Zealand FTA provides that "fossil fuel subsidies can distort markets, disadvantage renewable and clean energy, and be inconsistent with the goals of the Paris Agreement."[122] Thus, this language is potentially relevant to increasing the uptake of renewable energy. The caveat, however, is that the language does not create specific obligations vis-à-vis fossil fuel subsidy reform, and the hortatory nature of the provisions.

Trade and biodiversity: Mining can negatively affect biodiversity. By altering habitats through deforestation, the population of certain species may see an important decline.[123] Further, contamination of surface water by inefficiently handling mining can lead to negative effects on ecosystems and, thus, biodiversity not only on land. Chemicals released can enter waterways and pollute them, which is harmful for the environment as a whole and, particularly, to species that depend on such bodies of water.[124]

TSD chapters include the recognition of the importance of conserving and sustainably using biological diversity, in compliance with the CBD and the CITES. Specifically, TSD chapters include provisions requiring parties to "take appropriate action to conserve biological diversity when it is subject to pressures linked to trade and investment…" This is relevant to reducing risk to biodiversity in connection to mining and processing of RMs and energy. However, "appropriate action" is left

[121] Grübler, J., Stöllinger, R., Tondl, G., "Wanted! Free Trade Agreements in the Service of Environmental and Climate Protection" Research Report, wiiw (2021).
[122] EU-New Zealand FTA, Art. 19.7.
[123] Ayuk, E.T., Pedro, A.M., Ekins, P., "Mineral Resource Governance in the 21st Century," UNEP (2020).
[124] *Ibid*.

undefined, rendering the nature of this obligation weak. Moreover, the provision does not directly link the obligation to conserve biodiversity to mining activities, which potentially renders it less impactful in the context of mining.

Trade and forests. Mining tends to be associated with cutting forest and other vegetation cover and the removal of topsoil.[125] Ancillary activities, such as building roads, railways, energy generation facilities, or other kinds of infrastructure can exacerbate deforestation. TSD chapters include specific provisions that promote the importance of conservation and sustainable management of forests, with a focus on combatting illegal logging; promoting the conservation and sustainable management of forests and trade in forests products; exchange information on sustainable forest management initiatives; and collaboration in bilateral, regional, and international fora on forest preservation issues, as appropriate.[126] This would be relevant to trade in RMs and energy, given that they could be considered "forest products". However, the provisions set out in forestry headings in TSD chapters are couched in weak, hortatory language, and fall short of imposing concrete obligations on the parties. Moreover, the forestry provisions do not explicitly link deforestation to mining. Again, more specificity here could strengthen their effectiveness with regards to RM mining activities.

Climate change. TSD chapters include various provisions relevant to trade and climate change that are anchored in the UNFCCC and the Paris Agreement. As mentioned above, the EU-New Zealand FTA elevates the Paris Agreement to an essential element. While, on the one hand, this could result in countries taking their Paris Agreement commitments and NDCs more seriously,[127] the connection with accessing RMs and energy and sustainability objectives is not straightforward. Indeed, the EU's interest in securing supply chains for RMs and energy is to advance the EU green transition, in line with its NDCs and the Paris Agreement. In this context, the sustainable extraction and processing of these materials is not automatically safeguarded by reinforcing the importance of complying with the Paris Agreement. At the same time, it is possible that resource-rich countries' NDCs include language on greening the extraction of energy and RMs.

In sum, TSD chapters include various provisions that have the potential to address the environmental harm that is linked to mining and RM processing, such as deforestation loss, biodiversity degradation, and climate change. However, these provisions would need to be strengthened to rebalance environmental sustainability with securing access to RMs and energy. This is, in part, because they do not set out binding obligations on the parties due to the hortatory and imprecise language used in the provisions – even if in some FTAs the TSD chapters are subject to dispute settlement. In addition, the link between mining and environmental sustainability provisions set out in TSD chapters is too tenuous to have serious results for sustainable mining. Indeed, agreeing to promote sustainable forestry management does not necessarily mean that deforestation caused by mining will be minimized, as the focus of the cooperation could be elsewhere than mining (*e.g.,* agriculture). Likewise, the provision requiring FTA parties to take appropriate action to conserve biological diversity when subject to pressures linked to trade and investment falls short of requiring doing so in the context of mining. It also does not provide guidance as to what "appropriate action" would entail. Furthermore, there are several environmental issues associated with mining that are not covered, directly or indirectly, by the

[125] *Ibid*.
[126] EU-Vietnam FTA, Art. 13.8; EU-Mexico FTA, proposed Ch. XX, Art. 7; EU-Mercosur FTA, Ch. XX, Art. 8; EU New Zealand, Art. 19.9; EU-Chile FTA, Art. 26.11; EU-India FTA, proposed Art. X.8; EU-Thailand FTA, proposed Art. XX.8; EU-Australia and EU-Indonesia FTAs, proposed Art. X.7; EU-Tunisia, proposed Ch. XX, Art. 9.
[127] van der Ven, C., Lamy, P., Pons, G., Leturcq, P., "GT12/Make-or-break: Including Multilateral Environmental Agreements as 'essential elements' in EU Free Trade Agreements" (2023).

existing TSD chapters. This includes, for instance, soil erosion, water use, water contamination, and the management of mining waste.

Thus, existing TSD chapters, while containing various provisions relevant to environmental sustainability, lack breadth in coverage, clarity of obligations, and direct links to mining, and must therefore be strengthened to safeguard environmental sustainability in the context of the obligations set out in the ERM chapters.

4.2.2 Economic sustainability

TSD chapters include various provisions relevant to economic sustainability, i.e., conducting economic activities in a manner that promotes and preserves economic well-being in the long-term by balancing economic growth, financial stability, resource efficiency, and social equity. Going beyond the need for RM-led industrialization, it is also necessary to assess the extent to which TSD chapters facilitate the meeting of industrialization targets in a socially sustainable and long-term viable manner. Most notable are provisions that relate to corporate responsibility and responsible supply chain management. For example, all the analysed FTAs but EU-Vietnam include provisions whereby the parties "recognize the importance of responsible business conduct and corporate social responsibility, including responsible supply chain management…".[128] In particular, parties agree to promote relevant instruments, including the OECD Guidelines for Multinational Enterprises, the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the UN Global Compact and the UN Guiding Principles on Business and Human Rights. Furthermore, TSD chapters include provisions that emphasize the importance of promoting corporate social responsibility, responsible business conduct including supply chain management, and recognize the utility of international sector-specific guidelines relevant to corporate and social responsibility, including the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and its supplements.

These provisions reference international standards for sustainable business conduct that go beyond the international standards referenced in ERM chapters. In particular, the reference to international sector-specific guidelines to corporate and social responsibility, including to Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, is directly relevant to promoting sustainable mining and processing practices. However, this provision carries limited weight, given that the obligation is merely to "promote" these standards.

Other provisions in TSD chapters seek to remove obstacles to trade and investment in goods and services relevant to climate change mitigation and adaptation, including renewable energy and energy efficient products and services. The focus is on both addressing tariff and non-tariff barriers. For instance, the EU-New Zealand FTA recalls the parties' commitments on eliminating customs duties on environmental goods, and commitments made on environmental services and manufacturing activities, that contribute to achieving environmental and climate goals, including by minimizing or remediating environmental damage to water, air, and soil and by contributing to disseminate technologies that help to mitigate climate change. Annex 19 to the TSD chapter in EU-New Zealand contains a list of goods and services that are considered "environmental goods and services". This includes "wholesale trade services of mining, construction and civil engineering machinery and equipment" and nature and landscape protection services, which could be directly relevant to

[128] EU-Mexico FTA, proposed Ch. XX, Art. 9.1; EU-Mercosur FTA, Ch. XX, Art. 11.1; EU-New Zealand FTA, Art. 19.12.1; EU-Chile FTA, Art. 26.3.1; EU-India FTA, proposed Art. X.11.1; EU-Thailand FTA, proposed Art. XX.11.1; EU-Australia and EU-Indonesia FTAs, proposed Art. X.9.1; EU-Tunisia FTA, proposed Ch. XX, Art. 11.1.

sustainable mining.[129] Many of the environmental goods focus on materials needed to build renewable energy facilities, like solar and wind.

These provisions can stimulate green industrialization in resource-rich countries, by reducing tariff and non-tariff barriers to the importation of these products. Besides increasing trade and investment in goods and services relevant to climate change, these provisions could also have the effect of disseminating relevant technologies, as is noted in the text of the TSD chapter. The limitation is that only a handful of the green goods and services highlighted in EU-New Zealand would be directly relevant to technologies needed to advance sustainable mining. Another challenge for resource-rich countries is that many environmental goods and services relevant to mining are areas in which developed countries tend to have a comparative advantage – potentially hurting green industrialization objectives in resource-rich countries.

In sum, TSD chapters contain various provisions on economic sustainability that could be relevant in the context of sustainably mining RMs and energy and are broader in scope compared to what is included in ERM chapters. However, these provisions focus on cooperation and promotion, and, as a result, do not set out clear substantive obligations. In addition, TSD chapters seek to remove obstacles to trade and investment relevant to climate change, which could advance the uptake of renewable energy in resource-rich countries. However, the extent to which this would be the case depends on the parties' tariff schedules, and the commitments they have made for relevant environmental goods, parties' services schedules, and the extent to which non-tariff barriers are being eliminated. The TSD chapter in EU-New Zealand contains a list of environmental goods and services and could be an example to emulate. However, the list of goods and services identified in EU-New Zealand is only in part relevant to advance sustainable mining. Finally, while some TSD chapters reference technology dissemination, especially in the context of promoting sustainable trade and investment, there are no specific obligations set out in the TSD chapters to advance technology transfers.

4.2.3 Social sustainability

Social sustainability, which focuses on the well-being of people and communities, is also critical for sustainable mining activities. With regards to mining, social sustainability focuses on protecting indigenous people and human rights of communities living next to mining sites.

With regards to social sustainability, TSD chapters emphasize protecting labour rights. Labour provisions in TSD chapters tend to "reaffirm [the parties'] commitment to promote the development of international trade in a way that is conducive to decent work for all." They also reaffirm their commitments and obligations pursuant to the ILO Declaration on Fundamental Principles and Rights at Work and its Follow-up, adopted by the International Labour Conference at its 86th Session in 1998.[130] Typically, TSD chapters require parties to "respect, promote and effectively implement" the principles of (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) the elimination of all forms of forced or compulsory labour; (iii) the effective abolition of child labour; and (iv) the elimination of discrimination in respect of employment and occupation.

These provisions could be relevant to increasing social sustainability in the mining of RMs and energy, given that mining often goes hand in hand with poor working conditions, including fatal accidents with heavy machinery; governmental interference of workers' organizations; restrictive legislation; and

[129] EU-New Zealand FTA, Annex 19, p. 8.

[130] EU-Vietnam FTA, Art. 13.4; EU-Mexico FTA, proposed Ch. XX, Art. 3; EU-Mercosur FTA, Ch. XX, Art. 4; EU-New Zealand FTA, Art. 19.3; EU-Chile FTA, Art. 26.15; EU-India FTA, proposed Art. X.3; EU-Thailand FTA, proposed Art. XX.3; EU-Australia and EU-Indonesia FTAs, proposed Art. X.3; EU-Tunisia FTA, proposed Ch. XX, Art. 4.

restrictions on the right to strike are some examples of the ways in which mining affects work-related rights.[131] However, again, the language of the labour provisions in TSD chapters is weak, and difficult to enforce.

Compared to environmental references, TSD chapters do not include many references to the social impacts of mining. A reference to human rights, which is highly relevant in the context of sustainable mining, seems to be lacking in TSD chapters.[132] Indeed, human rights only appear in connection to corporate responsibility and responsible supply chain management, highlighted in Section 4.2.2. There is also a lack of references to the rights of indigenous communities. Some TSD chapters refer to indigenous communities within the context of biodiversity, recognizing the importance of respecting, protecting, preserving, and maintaining knowledge innovations and practices of indigenous peoples and local communities.[133] EU-New Zealand has a separate chapter on Māori rights. However, this chapter focuses on the role of international trade to advance Māori wellbeing, and how to enhance their participation in international trade. It does not focus on protecting Māori rights in the context of RM and energy mining. In this regard, what is missing is a reference to international instruments that more generally recognize indigenous right to self-determination, such as the ILO Convention 169, which recognizes indigenous people's right to self-determination within a nation, and the UNDRIP.[134] This is further elaborated upon in Section 5 below.

4.3 Key Takeaways

This section has examined whether some of the sustainability gaps identified in the ERM chapter can be addressed by provisions set out in TSD chapters. On the one hand, some of the institutional provisions integrated in TSD chapters, such as those on monitoring and the establishment of a TSD body, the DAGs, and the establishment of contact points might be welcome additions to ERM chapters to incorporate sustainability monitoring. On the other hand, while TSD provisions are more expansive and go deeper than the sustainability references in ERM chapters, their imprecise wording and hortatory nature, combined with a lack of explicit references to mining, suggests that existing TSD provisions would not fully address the sustainability gap observed in ERM chapters.

Specifically, with regards to environmental sustainability, TSD chapters contain general provisions that could be leveraged to address key environmental challenges associated with RM and energy mining, such as deforestation, biodiversity loss, and climate change. However, they do not include explicit references to sustainability in the mining sector. Moreover, TSD chapters are too narrow in scope to address some environmental challenges specific to mining, such as soil erosion, water use, and contamination of water, as well as management of mining waste.

Similarly, economic sustainability provisions that refer to international standards and frameworks relevant to due diligence, such as the OECD Guidelines for Multinational Enterprises and the UN Global Compact and the UN Guiding Principles on Business and Human Rights, go beyond the sustainability provisions set out in ERM chapters and could therefore be relevant to better address sustainability provisions in ERM chapters. Their effectiveness is limited, however, by their hortatory nature. Moreover, while provisions that seek to remove obstacles to trade and investment could advance the uptake of renewable energy in resource-rich countries, as well as lead to a dissemination of

[131] Ayuk, E.T., Pedro, A.M., Ekins, P., "Mineral Resource Governance in the 21st Century," UNEP (2020).
[132] See also Ankersmit, L., Partiti, E., "Alternatives for the 'Energy and Raw Materials Chapters' in EU trade agreements – An Inclusive Approach," PowerShift e. V. (May 2020).
[133] See EU-New Zealand FTA, Art. 19.8.
[134] S2B Network, "100+ organisations call on MEPs to vote against EU-Chile Deal" (17 January 2024), available at https://www.bilaterals.org/?100-organisations-call-on-meps-to.

technology, the scope of these provisions is too narrow to be directly relevant to advancing sustainable mining. At the same time, TSD chapters do not contain the obligation to advance technology transfers.

Provisions on social sustainability relevant are the least numerous and focus predominantly on labour. These provisions could potentially address unsustainable labour practices in the mining industry. However, these provisions are hortatory, similarly to the other sustainability provisions examined in this section and will thus have limited effect. In addition, references to human rights and indigenous rights, which are critical in the context of extractive activities, are notoriously absent in TSD chapters.

In sum, while the TSD provisions go beyond sustainability provisions in ERM chapters, they are insufficiently specific to meaningfully rebalance the ERM chapters. This calls for a re-design of ERM chapters, such that securing the supply of RM and energy can be better balanced with sustainability considerations and green industrialization in resource-rich countries. This will be addressed in the next section.

5. Towards a better balance

5.1 Overview of key considerations

This section provides recommendations on how ERM chapters can better balance different – and at times, competing – objectives of securing an adequate supply of RMs and renewable energy, while advancing green industrial policy objectives in resource-rich countries and respecting sustainable trade.

As noted, ERM chapters, as they stand, reflect an imbalance between these different objectives. Provisions that seek to secure supply of RMs and energy and create predictability for investors tend to set out clear, binding, and enforceable obligations, whereas provisions related to sustainability – whether incorporated in the ERM chapters or as part of the TSD chapters – tend to be hortatory and fall short of establishing clear rights or obligations. While TSD chapters contain broader and deeper sustainability provisions than those set out in ERMs, these provisions are not specific to mining, and those concluded prior to 2022 are not covered by dispute settlement provisions. Further imbalances are observed between the emphasis on environmental, economic, and social responsibility, with most TSD provisions focusing on the environmental angle, and to a lesser extent on economic sustainability aspects, but with very little emphasis on social responsibility, such as human rights.

This lack of balance between accessing RMs and energy, and ensuring sustainability, is problematic, given that the mining industry is beset with corruption, environmental damage, and human rights abuses.[135] This means that ERM chapters, which can be expected to result in an increase in mining activities, risk aggravating unsustainable environmental and social practices, unless sustainability safeguards form a more integral part of ERM chapters. The implementation of market principles to ERM chapters, such as prohibitions on price regulation or dual pricing, could also undermine local green industrialization. For example, dual pricing prohibitions would make it more difficult for resource-rich countries to develop a local manufacturing industry, as it limits a resource-rich country's ability to keep domestic prices low compared to export prices.

As a result, to better balance securing access to RMs and energy supply chains with sustainability objectives will require a redesign of ERM chapters, such that they include more exceptions and carve-outs relevant to sustainability and establishes binding and enforceable sustainability obligations that cover key environmental, social, and economic issues relevant to mining. At the same time, and especially in the context of geopolitical competition for accessing RMs, sustainability requirements should not disincentivize resource-rich countries from supplying RMs and energy to the EU, or from complying with the market principle provisions in ERMs. In other words, redesigning ERM chapters requires walking a tightrope between establishing conditions necessary to secure access to RM and energy, while at the same time ensuring that sustainability objectives are not undermined.

In rethinking ERM chapters, it is also important to keep in mind that FTAs are only one of the instruments that the EU is using to secure access to RMs but are not the only one. Indeed, as highlighted in Section 2 above, FTA chapters seek to complement the CRMA and SPAs with strategic partners. The EU also provides technical and financial assistance through the Global Gateway. With regards to sustainability provisions, various unilateral EU trade measures, such as the CSDDD, will

[135] Fern "A Partnership of Equals? How to strengthen the EU's Critical Raw Materials Strategic Partnerships" (November 2023).

already render mandatory compliance with various due diligence requirements, suggesting that strengthening these provisions in FTAs might not have much added value. In other words, FTA ERM chapters will not always be the preferred instrument to better balance securing RM and energy supply chains with sustainability objectives.

Based on the observation of the gaps in ERM and TSD chapters, this section sets out specific policy options on how ERM chapters can be redesigned to reflect a better balance between securing RM and energy access for the EU, and sustainability and green growth objectives in the resource-rich countries.

5.2 Options to improve ERM chapters

As an overarching recommendation, better balancing ERM chapters with sustainability and green growth objectives should be done through enhancing and including additional provisions within the ERM chapter, not as part of the TSD chapter. Indeed, this would be aligned with the 2022 TSD review, which highlights as one of the key priorities to mainstream sustainability across the FTA, as opposed to limiting it to the TSD chapter. Furthermore, adding specific language to the ERM chapter would allow the inclusion of more mining-specific provisions. Finally, by enshrining sustainability provisions in the ERM chapters, they would automatically be subject to dispute settlement provisions.

This section sets out policy options to improve ERM chapters, divided in three categories. The first one identifies how ERM chapters can be improved by strengthening sustainability provisions, with liability to be borne by the EU in some instances and its FTA partners in others. The second category focuses on provisions that could ensure more value-addition for green industrialization relevant to ERM chapters, whereas the third category zooms in on the inclusion of enhanced social sustainability elements in the ERM chapter to guarantee inclusive stakeholder participation.

5.2.1 Category 1: Strengthening sustainability provisions in ERM chapters

There are several approaches that can be taken to strengthen sustainability obligations in the ERM chapter. An important way to do so is to turn unenforceable sustainability references into enforceable obligations. In other words, advancing the sustainability of mining practices cannot be just an aspiration, but must be linked to actual obligations. It must also be reflected through strong carve-outs and exception clauses, where existing provisions could hinder sustainability objectives in the resource-rich country.

Broaden the scope of sustainability obligations: A major shortcoming observed in the preceding analysis concerns the narrowness of focus with regards to sustainability provisions in ERM and TSD chapters. In both, environmental sustainability is mostly present, but economic and especially social sustainability is less of a focus. In addition, even with regards to environmental sustainability, many sustainability issues specific to mining are not addressed. To tackle this shortcoming, a second recommendation is to broaden the scope of the sustainability areas covered in the ERM chapter. In particular, it must include provisions relevant to protecting indigenous rights, addressing corruption in the context of mining, provisions relevant to water use, soil, and waste management. For those areas in which international frameworks exist, the ERM chapter should include commitments to adhere to them. This would include the ILO Convention 169 (although the EU has not ratified this); the UNDRIP for the protection of indigenous rights; and the UN Convention against corruption. For sustainability issues not directly addressed by an international treaty or convention, provisions can reflect prevailing “best practices” from existing frameworks on sustainable mining, including the IRMA, the Responsible Minerals Initiative ESG Standard for Mineral Supply Chains, the Responsible

Business Alliance,[136] and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

In addition, for areas in which no international standards exist, ERM chapters should establish a baseline or minimum requirements. This would be the case, for instance, with regards to the prevention of pollution in the marine environment. As noted in Section 3.5 above, ERM chapters require the establishment of conditions necessary for safe offshore exploration and production of oil and gas in its territory[137] to protect the marine environment and coastal communities against pollution. It requires that the parties develop "high standards" but does not define what "high standards" entail. As no international standard has yet been developed to regulate pollution in the marine environment relevant to mining, ERM chapters should establish baseline standards that parties must comply with when engaging in offshore exploration of oil and gas in its territory.

This could additionally include references to ensuring protection of marine life, preventing long-term species and ecosystem disruption, reducing impact on fishing and food security, and ensuring the protection of coastal communities.[138] It could also include a mention that the parties would cooperate to develop international standards relevant to offshore oil and gas exploration. These principles are already echoed by the UNCLOS, especially in Articles 192-196, as well as Chapter 17 of Agenda 21.[139] Another approach could be the explicit incorporation of the precautionary principle.

In addition, with regards to due diligence practices, the ERM chapters provide an opportunity to include several due diligence practices for businesses that are specific to mining. This would include the requirement to draft a water management plan for the activities carried out, and the allocation of responsibilities and accountabilities at the corporate level for any detrimental impact on water sources; and the integration of water management plans into businesses at the time of conducting the EIA.[140] Firms must also adopt waste management plans, and could be required to lodge a financial guarantee to cover the costs of rehabilitation of land affected by waste.[141] Other important element would be to ensure that businesses prepare mining decommissioning plans.

Related to expanding the scope of sustainability provisions in ERM chapters, FTA parties could be required to engage, to the extent possible, in ongoing processes relevant to sustainable mining practices that could serve as guiding principles to incentivize not only extraction but also backward and forward linkages in resource-rich countries, while adopting sustainability standards. This could be, for instance, the UN Secretary-General's Panel on Critical Energy Transition Minerals, which seeks to support a just and equitable transition to renewable energy while harnessing critical energy transition minerals for sustainable development; ensure that countries endowed with these minerals fully

[136] "Critical Raw Materials Act," ACEA Position Paper (March 2023), available at https://www.acea.auto/files/ACEA_position_paper_Critical_Raw_Materials_Act.pdf.
[137] EU-New Zealand FTA, Art. 13.9.
[138] Ashford, O., Baines, J., Barbanell, M., and Wang, K., "What We Know About Deep-sea Mining — And What We Don't," World Resources Institute (23 February 2024), available at https://www.wri.org/insights/deep-sea-mining-explained.
[139] "Report of the United Nations Conference on Environment and Development" (3-14 June 1992), available at https://Www.Un.Org/Depts/Los/Consultative_Process/Documents/A21-Ch17.Htm, Chapter 17, Protection of the Oceans, All Kinds of Seas, Including Enclosed and Semi-Enclosed Seas, and Coastal Areas and the Protection, Rational Use and Development of Their Living Resources.
[140] Ankersmit, L., Partiti, E., "Alternatives for the 'Energy and Raw Materials Chapters' in EU trade agreements – An Inclusive Approach," PowerShift e. V. (May 2020).
[141] *Ibid*.

benefit economically through local value addition; and strengthen international cooperation, including through the alignment and harmonization of existing norms, standards, and initiatives.[142]

Strengthening sustainability obligations: In terms of the obligation itself, parties can explore various options to strengthen it. This includes using stronger language, creating binding frameworks to evaluate progress, and requiring the parties to enshrine in their national laws various sustainability obligations specific to mining during the pre-ratification process. Each of these options is further elaborated upon below.

As set out in the preceding analysis, a key shortcoming of the sustainability provisions in both the ERM and TSD chapters is their hortatory nature. Indeed, even when provisions are subject to dispute settlement, an obligation focused on cooperation alone or only stipulating the parties' desire to engage will be difficult to enforce. ERM chapters must address this by including reference to various sustainability frameworks or objectives in the context of RM and energy mining in a stronger language. Such language would identify more explicitly commitments and expectations vis-à-vis sustainability objectives. To do so, language such as "shall" and "must" should become the norm, as opposed to provisions that "aim" or "seek to" or "endeavour to".[143]

Another way to strengthen the sustainability dimension of EMR chapters is to require, as part of a pre-ratification process, that domestic reforms will be undertaken relevant to certain sustainability issues specifically salient with regards to the mining context. An example of an FTA that adopted this approach is the 2009 US-Peru FTA, which includes a dedicated Annex on Forest Sector Governance for Peru that had to be approved prior to the ratification of the FTA.[144] Of course, a drawback of this approach is that resource-rich countries that have other resource-hungry countries knocking on their doors might not want to agree to any pre-FTA domestic reform process – especially when this is not required by other trading partners.

Another way to strengthen the sustainability provisions in the ERM chapter relevant to mining is to include a binding framework to evaluate the progress parties have made with regards to the relevant commitments set out.[145] This could be by including specific indicators, targets, and timelines to identify whether sustainability commitments have been met.[146] For example, such targets and indicators could be adopted, where they exist, from organizations that have set out relevant sustainability frameworks which are included in the cooperation provisions in most ERM chapters. This includes the OECD Guidelines for Multinational Enterprises and the respective Due Diligence Guidance;[147] responsible sourcing and mining in accordance with the SDGs;[148] efficient utilization of resources;[149] circular economy practices, and international standards of environmental protection for offshore projects.[150] Developing these targets and indicators within the context of specific RM and

[142] United Nations, "The UN Secretary-General's Panel on Critical Energy Transition Minerals," available at https://www.un.org/en/climatechange/critical-minerals.
[143] Blot, E., Oger, A., Harrison, J., "Enhancing sustainability in EU Free Trade Agreements: The case for a holistic approach" Policy report, Institute for European Environmental Policy (2022).
[144] Velut et al, 2022. Cited in *Ibid*.
[145] *Id*.
[146] *Ibid*.
[147] EU-Chile FTA, Art. 8.14; EU-New Zealand FTA, Art. 13.14; EU-India FTA, proposed Art. X.18; EU-Australia FTA, proposed Art. X.17.
[148] *Ibid*.
[149] For example, EU-New Zealand FTA, Art. 13.14(h); EU-India FTA, proposed Art. X.18(h); EU-Australia FTA, proposed Art. X.17(h).
[150] EU-New Zealand FTA, Art. 13.14; EU-India FTA, proposed Art. X.18; EU-Australia FTA, proposed Art. X.17.

energy mining projects will enable the parties to monitor the extent to which sustainability objectives are being adhered to with regards to RM and energy, giving these provisions more weight.

Moreover, parties can also opt to require mandatory compliance with specific international due diligence and supply chain management standards relevant to mining, as preconditions to importation. At present, as highlighted in this report, both ERM and TSD chapters refer to various international frameworks that impose due diligence standards on companies. However, neither ERM nor TSD chapters render compliance with these due diligence standards mandatory. A redesigned ERM chapter could require businesses of a certain size, engaged in RM and energy trade between the EU and the resource-rich country, to implement specific provisions in these and other relevant due diligence frameworks.

Nevertheless, for EU businesses, the added value of doing so might be limited, given that the EU just passed the CSDDD, which requires companies to prevent and address human rights and environmental impacts in their value chains, and establishes monitoring and access to just mechanisms. For businesses in resource-rich countries, it might be difficult to comply with these standards, possibly presenting discrimination challenges. This would have to be addressed, including through the provision of EU technical assistance. This will be further explored below.

Strengthening EIAs: A specific way to strengthen the sustainability obligation in ERMs would be through strengthening EIA provisions included in current ERMs. As noted in preceding sections, most ERM chapters in FTAs link the requirement to conduct an EIA to projects that require authorization and may have an effect on the environment, population and human health, biodiversity, land, soil water, air, climate, and cultural heritage and landscape. Thus, RM and energy projects that are not subject to authorization would not be required to conduct an EIA. This provides a resource-rich government great leeway to decide which projects would be subject to EIAs. An outlier is EU-New Zealand FTA, which does not link EIAs to authorization, but rather to activities related to production of energy goods where such activities may have a significant impact on the environment. Moreover, EU-New Zealand requires EIAs to be enshrined in law. While this provision in EU-New Zealand can be considered a "best practice" that could be adopted going forward, it requires an *ex-ante* understanding of the environmental impact, which might not always be clear without doing an EIA. Moreover, the scope of the EIA is limited to the environment.

One suggestion to strengthen the EIA obligation in ERM chapters would be to reverse the burden of proof and require that EIAs must be conducted for all RM and energy mining projects, unless a party can demonstrate that the project will have no negative implications vis-à-vis the three pillars of sustainability. Doing so would require a party to either carry out an EIA, or a preliminary investigation to determine the project will not have negative sustainability implications. Either way, some investigation would be carried out. In addition, EIAs must be more prescriptive as to what should be assessed in an EIA, and ensure it reflects international best practices, such as the IRMA Standards for Responsible Mining and those set out in the International Association for Impact Assessment.[151] At a minimum, EIAs should include the impact of the project on local communities and local land use, displacement and resettlement, rights based on customs or tradition, and environmental impacts on air and soil resources, marine resources, water and wetlands, biological diversity and biodiversity resources.[152]

[151] Ankersmit, L., Partiti, E., "Alternatives for the 'Energy and Raw Materials Chapters' in EU trade agreements – An Inclusive Approach," PowerShift e. V. (May 2020).
[152] *Id*. at p. 29.

Another area where existing EIA provisions can improve concerns due process. While some FTAs specify that "relevant non-governmental organisations" must be given the opportunity to comment on the report, there is no binding obligation to seek views of NGOs during the EIA.[153] It is, however, critical that local communities and NGOs are involved in EIAs. Indeed, this is an important aspect of developing sustained political outcomes, providing a social license to mining and energy activities, and to hold states accountable to their commitments to environmental and social responsibility. Within the context of EIAs, provisions should require for civil society to be involved in (i) determining the necessity of an EIA; and (ii) reviewing and providing inputs to the conducted EIA.

Finally, EIA provisions could also be strengthened by requiring not merely that the parties take the outcome of EIA assessments "into account," but rather, that authorization decisions relevant to RM and energy projects are "based on" the EIA, and requiring for mitigating measures to be put in place should the EIA find significantly negative implications for the local communities and the environment. "Take into account" leaves greater flexibility to authorities to treat EIA outcome as they deem fit, whereas "based on" would require authorities to take EIA outcomes at their full value with greater accountability. Although a potential result could be the blocking of projects, identifying higher levels of environmental and social risks can help mitigate any negative externalities beforehand and allow for ex-ante safeguarding of environmental and social interests.

***Technical and financial assistance**:* Many of the policy options to strengthen sustainability set out above will impose greater burdens and associated costs of compliance on the resource-rich countries. A key problem is that many resource-rich countries do not have the requisite financial and technical resources to effectively address these issues. This calls for stronger commitments from the EU with regards to technical and financial assistance in the context of sustainable mining through FTAs.

One way to establish an obligation on the EU to contribute to the sustainability of mining and processing activities relevant to resource-rich countries would be to include a provision, and an accompanying annex, specifying contributions the EU will make to enhance sustainability in the resource-rich country. This would be aligned with the EU's focus on sustainability as a key objective of its FTAs, as well as the Paris Agreement principle of CBDR-RC.

Specifically, the EU could identify a specific amount of financial support, as well as a list of activities that this support will be used for in the context of the ERM chapter – to be agreed in collaboration with the resource-rich country. This could include assistance to sustainable mining initiatives adopted within the resource-rich country, assistance to comply with specific sustainability provisions in the ERM – such as compliance with various MEAs – or assistance relevant to addressing financial constraints to stakeholder participation, for example in the context of civil society committees (see Section 5.2.3 below). In addition, the EU could identify areas in which it will set up training programs to enhance skill building regarding sustainable mining and processing and identify specific technologies that are patented in the EU and relevant to sustainable mining and green industrialization, and set out how it will make these available and accessible to the resource-rich country.

[153] It is worth noting that the EU-Chile FTA recognizes the role of the Trade in Goods Subcommittee in implementing the ERM chapter. A provision therein specifically provides for considering inputs from relevant stakeholders or experts before Trade in Goods committee deliberations on the ERM chapter. However, again, this is not a binding obligation for the committee to consider inputs from experts or civil society. The language of the FTA provides great flexibility to the parties to choose to (or not to) consider such inputs. EU-Chile FTA, Art. 8.17.

These technical and financial assistance commitments that would be mobilized to implement the ERM chapter, including additional sustainability obligations, could be incorporated in the FTA through an annex to the ERM chapter. The FTA should further include various provisions that would enable the review of progress made vis-à-vis the EU's technical and financial assistance obligations, done by a sub-committee on ERMs to be established. In the event that the commitments set out by the EU are not met, the ERM chapter should enable the resource-rich country to request consultations. Failure to reach a satisfactory solution should enable the resource-rich country to adopt temporary and proportionate remedial measures.

This approach would elevate the "objective" to advance sustainability typically set out in ERMs from a mere contextual statement into a binding obligation on the EU's side – with consequences in case of failure to comply. While incorporating technical and financial assistance provisions into an FTA as binding commitments is not a common practice, this novel approach could build on the recently agreed EFTA-India FTA, which creates a binding target for Iceland, Liechtenstein, Norway, and Switzerland to invest a total of 100 billion and create one million jobs over the next 15 years and establishes an appropriate review framework.[154]

Reducing tariff and non-tariff barriers: Another way to establish a better balance between accessing RMs and energy objectives on the one hand, and sustainability objectives, on the other, is through reducing tariff and non-tariff barriers to relevant environmental goods and services. As highlighted in the TSD discussion in Section 4 above, some FTAs, like EU-New Zealand, already include in their TSD chapters commitments relevant to environmental goods and services. While goods and associated services related to renewable energy, such as solar and wind, would be relevant to enabling sustainable mining and developing green industrialization in the resource-rich country, there are various goods and services that are not included in the list set out in EU-New Zealand FTA that could be relevant for advancing sustainable mining, as well as developing green industrialization in the resource-rich country. This would include, for instance, enzymes, vegetable fibre panels, polysilicon, solar mirror film, glass sheets, and wind turbine towers.[155] Amongst services, the following could benefit from liberalization and facilitation: environmental services, services incidental to mining, manufacturing and energy distribution, engineering services, maintenance and repair of equipment, construction and related engineering services, freight transportation services, etc. Going forward, as part of an annex to the ERM chapter, parties should strive to reduce tariffs and make market access commitments on goods and services relevant to sustainable mining.

Accessing relevant goods and services is also a powerful way to disseminate new technologies relevant to sustainable mining. Technology transfers can also be encouraged through service schedules to both, ensure liberalization and attain a balance between demanding countries imposing the higher standards and resource-rich countries that must comply with the higher standards. While generally EU investment chapters prohibit performance requirements such as technology transfers, an option to facilitate technology transfers remains open within the context of services schedules. In particular, Mode 3 relates to commercial presence abroad, which relates to foreign investments. Article XVI of the GATS provides the conditions that countries can impose on foreign services providers (or investors) where market access commitments are undertaken. One such conditions is requiring a joint venture, which could be one way for technology to be transferred to domestic firms. More generally, the entry of foreign service providers relevant to sustainable mining can facilitate the organic diffusion of skills and knowhow to the domestic firms. Thus, countries that maintain policy space to regulate

[154] EFTA-India TEPA, Ch. 7.
[155] EU-New Zealand FTA, Annex 19.

Mode 3 services can utilise it to make market access under Mode 3 contingent upon entering into joint venture requirements. This indicates that regarding FDI in services relevant to mining, resource-rich countries may be able to impose different conditions that could further facilitate technology transfer if they have retained the policy space in their services schedules. The EU could also impose more favourable tariffs on sustainably produced RMs and energy compared to those that were not sustainably produced. This would enable sustainable produced goods and services to be sold at a price advantage. However, doing so will likely have limited benefits, given that the vast majority of EU CRMs have import tariffs of zero – reflecting MFN tariffs. The remaining RMs are subject to a tariff between 2-7 percent for unprocessed products, and 3-9 percent for processed goods.[156] Another challenge that would need to be addressed relevant to this approach concerns its legality. Indeed, adopting different tariffs based on NPR-PPMs could be considered discriminatory under the existing WTO jurisprudence.

Finally, ERM chapters should contain stronger language relevant to reducing non-tariff barriers with respect to goods and services that could facilitate sustainable mining. They can do so, in particular, by requiring the parties to harmonize specific goods to relevant international standards, and by including more stringent language on the use of equivalence and conformity assessment procedures, where relevant. Moreover, transparency provisions must also be included.

5.2.2 Category 2: Enhancing policy space for green industrialization and RM value-addition in ERM chapters

Enhancing exceptions and carve-outs from ERM obligations will also be important to better balance access to RMs and energy supply chains with sustainability objectives. This is especially the case where an obligation set out in the ERM chapter, such as the prohibition on dual pricing, or prohibitions to regulate domestic pricing, or access to energy infrastructure, could have potential negative implications for the resource-rich country – either with regards to sustainability or a country's ability to stimulate green growth domestically. It is important that the exceptions are balanced, and do not contain loopholes that undermine the provisions set out in the ERM chapter, but at the same time are not impossibly difficult to invoke.

As noted in Section 3.2, ERM chapters have built in or are subject to a variety of different exceptions (GATT Article XX) or principles that could be interpreted as carve-outs (*e.g.*, the right to regulate), which resource-rich countries could resort to, to justify actions that would otherwise violate various obligations in the ERM chapter. However, as explained, these exceptions would be difficult to successfully invoke, for a variety of reasons.

Successfully invoking GATT Article XX exceptions, which are incorporated mutatis mutandis in EU FTAs and apply to ERM chapters, requires demonstrating that the measure was adopted to pursue a legitimate regulatory objective, in line with one of the subparagraphs, and demonstrating that the measure does not amount to arbitrary or unjustifiable discrimination or a disguised restriction on trade. At least within the context of WTO jurisprudence, proving that both conditions exist has been an uphill battle. This is, in part, because the party invoking the exception (the respondent) carries the burden of proof. Thus, one suggestion is to shift the burden of proof and for FTA parties to agree that

[156] European Commission "Proposal for a regulation of the European Parliament and of the Council establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020" (16 March 2023).

measures that fall within one of the subcategories are rebuttably presumed to be justified under the exceptions clause.[157]

Another option would be to add a clarification that GATT Article XX, subparagraph (i) – which focuses on measures involving restrictions on exports of domestic materials necessary to ensure essential quantities of such materials to a domestic processing industry when the domestic price is held below the world price – can be invoked to impose export restrictions on RMs and energy to protect or promote a domestic industry for a specified period of time – as opposed to the 1950 Report of the Working Party, which established that the exception could not be invoked for this purpose. In any event, the 1950 Report would benefit from clarification on a number of aspects on invoking the exception, for instance, defining the contours of a domestic stabilization plan, meaning of protectionism, as well as the time-limits for justified actions.[158] For the purposes of the exception, the limits could be defined in terms of time (x years) or in terms of thresholds, such as market competitiveness. Clarifying the exception as well as the implications of the Working Party Report could potentially allow countries to justify the imposition of dual pricing or other measures that are otherwise prohibited under the ERM chapter, for a limited time. However, this would be more realistic to be pursued in the context of the WTO, given that it would otherwise enable resource-rich countries to apply more restrictive measures to the EU vis-à-vis other trading partners for whom the original restrictions apply.

Another way to clarify and improve exceptions to ERM chapters is by including and strengthening existing carve-outs. Notably, EU-Chile is the only FTA that includes a carve-out for dual pricing. It is imperative that, going forward, all ERM chapters also include a dual pricing carve-out. However, as has already been noted in Section 3.4 above, the existing dual pricing carve-out is subject to a number of cumulative conditions that render the carve-out mostly symbolic. Indeed, dual pricing may lead to an export restriction and may adversely affect the EU's capacity to source RMs from its FTA trade partners, if the dual pricing leads to diversion of more raw materials to domestic activities and effectively limits the resources exported to the EU.[159] The price floor that is imposed further limits the resource-rich country's ability to engage in dual pricing. This calls for a better balance that would enable resource-rich countries to effectively invoke the dual pricing exception when necessary. A start would be the removal of the price floor and the requirement that dual pricing does not result in an export restriction for the other party. Even when dual pricing is being resorted to, adverse consequences for EU trade could be buffered through SPAs. It is worth reiterating that within the Chilean context, the specific language of the carve-out may suffice for Chile's industrialization interests, but it is important to note that the same should not be automatically extended in other negotiations. A careful *economic and policy* analysis of the specific prevailing conditions in the resource-rich trading partner must be undertaken to tailor the conditions of the carve-out to that country's context. Accordingly, our analysis of the *legal implications* of the conditions in the EU-Chile FTA must be read in a context-neutral manner.

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[157] van der Ven, C., Tokas, M., "Leveraging Trade Agreements for an Inclusive Circular Economy Transition: Options under the World Trade Organization and EU Regional Trade Agreements," TULIP Consulting (July 2023).

[158] Korinek, J., Bartos, J., "Multilateralising Regionalism: Disciplines on Export Restrictions In Regional Trade Agreements," OECD (2014), Chapter 5 in Export Restrictions in Raw Materials Trade: Facts, fallacies and better practices.

[159] The Appellate Body in *China – Raw Materials* found a restriction to mean that "which restricts someone or something, a limitation on action, a limiting condition or regulation' and, thus, generally, as something that has a limiting effect." Appellate Body Report, *China – Raw Materials*, paras. 319-320.

Another option could be to allow dual pricing for a limited period (x years from ratification), and then gradually phase them out. Another option could be to allow resource-rich countries to restrict the applicable scope of the dual pricing prohibition – either to a specific industry(ies) or to specific RMs or energy products. Alternatively, the resource-rich party could agree to a prohibition on dual pricing, in return for the EU agreeing on certain performance requirements. Parties to an FTA could also negotiate specific kinds of performance requirements that would be allowed, to balance the limitations on policy space created by dual pricing prohibitions.

Finally, as highlighted, ERM chapters refer to two principles: the PSNR, an established principle under international law that notes that states possess PSNR, and the principle that the parties preserve their right to adopt, maintain, and enforce measures necessary to securing the supply of energy goods and RMs,[160] or the right to regulate to meet legitimate policy objectives,[161] or both.[162] The legal value of these provisions is ambiguous, given that they are set out as principles and not explicit exceptions. This calls for a clarification of how and when these two principles can be invoked and relate to the binding obligations in the ERM chapter. For instance, clarification is required as to whether PSNR allows the resource-rich party to reduce the applicability of the ERM chapter to RMs and energy that it has decided to extract and trade, and how an invocation of the principle interacts with any investor protections in the investment chapters of the FTAs. Regarding the second principle, and in particular the right to regulate to meet legitimate policy objectives, ERM chapters could clarify that this would be a sufficient legal basis to deviate from different obligations in the chapter. Indeed, the carve-outs for legitimate policy objectives are included in several substantive obligations in the ERM chapter, including the right to regulate domestic prices and access to energy infrastructure for producers of renewable energy to maintain stability of the energy system. To provide further guidance, ERM chapters could also draw up a list of what would be considered a "legitimate policy objective" in the context of ERM chapters. Alternatively, the FTA parties could issue joint interpretative statements to ascertain the meaning and legal implications of these legal terms and provide some clarity and predictability. Such statements can also aid future dispute settlement panels in identifying the intent of the parties.

5.2.3 Category 3: Inclusive Stakeholder Participation

Enhancing monitoring and evaluation: Currently, ERM chapters lack monitoring and evaluation mechanisms comparable to those present in the TSD chapter, particularly after the 2022 TSD review. To ensure inclusive stakeholder engagement, most notably from civil society groups within resource-rich countries, it is key to establish monitoring and evaluation mechanisms within the context of the ERM chapter. There are various ways in which this can be done.

First, ERM chapters could establish DAGs - fora where interested parties can exchange opinions, points of view, best practices, etc. These spaces currently exist in the general context of the FTAs, but by establishing one specifically relevant to EMRs, the DAG could be more effective as its focus would be on sustainable mining and green industrial policy in the resource-rich countries.

However, establishing DAGs in the context of ERM chapters would require addressing weaknesses that have been observed within existing DAGs, including by enhancing transparency, accountability, and dialogue; and increasing the involvement of EU DAG representatives in expert groups and meetings of TSD committees. Ideally, they would also impose financial obligations on the developed country FTA party to allow for its proper function and provide for resources for their logistical

[160] EU-New Zealand FTA, Art. 13.2.2; also proposed by the EU in EU-India FTA, proposed Art. X.2.2.
[161] EU-Chile FTA, Art. 8.2.2.
[162] See EU-Mexico FTA, proposed Art. X.1.2.

support.[163] DAGs must also be empowered to suo moto investigate any potential violations and undertake independent assessments of concerning situations. Independence of DAGs is another key criterion that must be mandated through the FTAs.

Further, FTAs must facilitate the regular interaction of respective DAGs of the EU and its FTA partners, especially in the sustainable mining and responsible raw materials supply chains context. Sustainability being a factor of both demand and supply, it is necessary for the DAGs to meet and discuss any challenges (e.g., in meeting environmental standards) and potential ways to overcome them. DAG interactions can spill over to positive outcomes in cooperation mechanisms, technical assistance and even future FTA review processes.

Second, ERM chapters should include a provision that would create a Committee on ERM. All the TSD chapters in the EU FTAs require parties to establish a committee that is subsidiary to the administrative body of the FTA and whose task is to deal with TSD-related matters. Similarly, ERM chapters would benefit from incorporating such a requirement. This could bring the attention to parties of the FTAs to specific issues that may arise during the implementation.

Third, allow and, even, require consultation with civil society. Traditionally, civil society is adversely affected by the actions from corporations and those from their governments and have little influence over the decisions being made. Creating a mechanism for civil society to participate in the implementation of ERM chapters could allow for a more effective system, as well as bringing attention to topics that may not traditionally be considered by governments or companies. This could take the form of a consultation process with civil society throughout the lifecycle of the FTAs. Such an obligation could require involvement of the EU (or its Parliament) for the implementation of the ERM chapter and for assistance.[164]

Access to justice: The final recommendation is making available mechanisms for affected communities or private stakeholders to have access to administrative and/or judicial remedies to raise violations of domestic laws related to ERMs. Such a mechanism should be aimed at requiring both corporations and states to abide by the rules stipulated in FTAs related to ERMs.

Unlike TSD chapters, ERM chapters in EU FTAs do not require effective enforcement of ERM-related laws. Further, there is currently no reference to a mechanism for or even a recognition of rights of private stakeholders and involved communities regarding ERM projects that may affect them. Even in cases where there are clear obligations, if there is no mechanism to enforce them, they could as well be non-existent. Providing a mechanism for interested parties to require the implementation of ERM chapters would render such provisions much more efficient and, de facto, operable.

This is linked to the third aspect of the previous recommendation – the participation of civil society. Though civil society and, specifically, native population, is generally not involved in nor consulted in ERM projects, they tend to be the most affected. Hence, it is important to implement a mechanism for civil society to be heard and for them to actively participate and require authorities to act to protect their rights.

There has been criticism to the provisions related to the mechanisms for access to justice in TSD chapters. This should be considered if such provisions are implemented in ERM chapters as well. For

[163] Blot, E., "Leveraging Free Trade Agreements for Sustainability: Reviewing the Implementation of the EU's New Approach to Sustainable Trade," Institute for European Environmental Policy (July 2023).
[164] *Ibid*.

instance, generally speaking, domestic enforcement of sustainability standards in FTAs have been considered to lack detail.[165]

These private remedies are considered appropriate to contribute indirectly to the effective implementation of international standards. However, they are not present in most of the EU-FTAs and, specifically, in those analysed in this study.

[165] Bronckers, M., Gruni, G., "Retooling the Sustainability Standards in EU Free Trade Agreements," Journal of International Economic Law (2021).

6. Conclusion

The demand for critical minerals to fuel the energy transition on the European continent brings to the fore major challenges for EU policymakers. These challenges include navigating the complexities of securing access from reliable trading partners as a resource-hungry region, while ensuring that fulfilling this increased demand does not come at the expense of resource-rich, source countries from attaining their sustainable development goals.

In this context, this report has examined in detail a fundamental tool in the EU's external trade policy tool-kit, i.e., FTAs and, in specific, their chapters of "Energy and Raw Materials" and "Trade and Sustainable Development," with a view to assess whether these provisions attain the different objectives of securing access to RMs and energy, on the one hand, and sustainable development and green industrialization, on the other hand. Based on a critical analysis of relevant provisions in ERM chapters and TSD chapters, this report has found that provisions relevant to securing access to raw materials are binding and enforceable, whereas sustainability-oriented provisions remain weak, both substantively and in terms of enforceability.

Based on the observed sustainability gap, this report has provided various recommendations to strengthen sustainability provisions in ERMs – ranging from increasing focus on social sustainability, to including indicators and targets to make sustainability provisions more enforceable, to enhancing trade in environmental goods and services relevant to sustainable mining. A key recommendation, however, is to ensure that the additional burden of sustainability does not fall solely on resource-rich countries. To this end, a major recommendation in this report is for the EU to make specific and enforceable financial and technical assistance commitments – within the context of the ERM chapters – with the possibility to review progress with regards to these commitments. This will have the benefit of making the EU's technical and financial assistance binding, and of connecting it better to the sustainability and green industrialization challenges within the context of ERM chapters.

ERM chapters in EU FTAs constitute powerful tools to ensure responsible RM supply chains and sustainability in both the EU and its partner countries. But these FTAs are one of many in the EU's external policy arsenal and complement several other efforts. Yet, FTAs remain a strong source of binding legal obligations comprising commitments to free trade and upliftment of environmental and social standards. This report has identified possible pathways to further improve ERM chapters to balance access with sustainable development understood as encompassing economic, environmental, and social considerations. It is imperative for the EU, a major regulatory power and a trade rule-maker, to pioneer a balanced approach to pursuing trade policies to ensure access to RMs, while delivering just development in the quarters most needing it.

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