TRAIL+ Thesis

Advanced Master Programme in Trade and Investment Law | 2022-2023

Access to critical raw materials: Is international investment law fit for purpose?

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DECLARATION

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ABSTRACT

How can the green transition be achieved in a fair and sustainable manner? The scarcity, geographical concentration, strategic importance, environmental impact and significance of Critical Raw Materials (CRMs) for the green and digital transition make access to natural resources a fundamental issue for the coming decades. In a society where electric vehicles and green energy is booming, where will the world find its indispensable inputs while ensuring just and sustainable economic growth for all?

This master thesis examined how the framework of international investment law allows both 'resource-rich' and 'resource-poor' countries to safeguard access to CRMs. While this dichotomy often leads to irreconcilable interests, throughout this thesis multiple avenues for balance were considered. Within International Investment Agreements (IIAs), countries can utilise investment screening, carve-outs and exception provisions. Outside IIAs, performance requirements, mining ownership rights, stabilisation clauses and due diligence requirements can act as reciprocal bridges between the two stakeholder groups. Nonetheless, these avenues are only capable of balancing out irreconcilable interests if used under the right terms and conditions.

ACKNOWLEDGEMENTS

Before starting this thesis, I would like to express my sincere gratitude towards everyone who has directly or indirectly supported me throughout the process of writing this master thesis as well as over the course of the LL.M. programme at the World Trade Institute. The past year has been challenging, but the long hours of commuting between Zurich, Bern and Geneva were well worth it compared to the substantial and meaningful knowledge I obtained.

In particular, I would like to thank Dr. Rodrigo Polanco for his excellent guidance and ability to let me grasp some fundamental issues regarding critical raw materials and international investment law. In addition, many thanks go to my parents, grandparents, brother and beloved boyfriend for their continuous emotional support.

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LIST OF ABBREVIATIONS

BIT	Bilateral Investment Treaty
CAI	EU-China Comprehensive Agreement on Investment
CBDR-RC	Common But Differentiated Responsibilities and Respective Capabilities
CETA	EU-Canada Comprehensive Economic and Trade Agreement
CFIA	Brazil-Mozambique Cooperation and Facilitation Investment Agreement
CRMs	Critical Raw Materials
CSDDD	Corporate Sustainability Due Diligence Directive
DRC	Democratic Republic of Congo
EDIT	Electronic Database of Investment Treaties
EPCA	EU-Kazakhstan Enhanced Partnership and Cooperation Agreement
EU	European Union
FET	Fair and Equitable Treatment
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
FPS	Full Protection and Security
GDP	Gross Domestic Product
GHG	Greenhouse Gases
ICJ	International Court of Justice
ICSID	International Centre for Settlement of Investment Disputes
IEA	International Energy Agency

IFC	International Financial Corporation
IIAs	International Investment Agreements
IISD	International Institute for Sustainable Development
IPCC	Intergovernmental Panel on Climate Change
IRA	Inflation Reduction Act
ISDS	Investor-State Dispute Settlement
ITLOS	International Tribunal for the Law of the Sea
MEAs	Multilateral Environmental Agreements
MFN	Most-Favoured-Nation principle
MoU	Memorandum of Understanding
MPRDA	South Africa's Mineral and Petroleum Resources Development Act
MNEs	Multinational Enterprises
NAFTA	North American Free Trade Agreement
NT	National Treatment principle
OECD	Organization for Economic Cooperation and Development
PTA	Preferential Trade Agreement
RBC	Responsible Business Conduct
SIFA	EU-Angola Sustainable Investment Facilitation Agreement
TRIMs	Agreement on Trade Related Investment Measures
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly

US	United States
USMCA	United States Mexico Canada Agreement
WTO	World Trade Organization

CHAPTER I. Introduction

1.1 State of Affairs

1.1.1 On a global level

Human activities, mainly through greenhouse gas (GHG) emissions, have 'unequivocally caused global warming' and, hence, climate change.[1] The largest share of those GHGs comes from fossil fuel combustion and industrial processes.[2] In an attempt to transition from a fossil fuel-driven society to a renewable energy-based global economy, the world is calling on its scarce and highly concentrated critical raw material reserves to expand and diversify its production of renewable energy technologies.[3]

Critical Raw Materials (CRMs) such as copper, nickel, cobalt, graphite, lithium, rare earth elements and many others are the foundations of industrial processes and indispensable inputs for a multitude of strategically and economically essential sectors.[4]

From wind turbines and electricity networks to electric vehicles, the demand for CRMs is omnipresent and exponentially increasing. According to the World Bank, the demand for high-impact minerals such as lithium will need 488% of 2018 production levels to meet the 2050 demand.[5] Similarly, according to the International Energy Agency (IEA), under a scenario in which the Paris Agreement targets are met, the demand for CRMs for clean energy technologies will quadruple by 2050.[6] Thereby, it was recognised that volatile CRM prices and highly concentrated CRM supply chains could have the effect of slowing down the energy transition and making it more expensive.[7]

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[1] Intergovernmental Panel on Climate Change (IPCC), 'Summary for Policymakers' in H. Lee and J. Romero (eds) *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC 2023), 4
[2] ibid
[3] United Nations, 'Five ways to jump-start the renewable energy transition now' <https://www.un.org/en/climatechange/raising-ambition/renewable-energy-transition> accessed 1 September 2023
[4] Commission, 'Proposal for a Regulation establishing a framework for ensuring a secure and sustainable supply of critical raw materials' (Explanatory Memorandum) COM/2023/160 final CRM Act
[5] World Bank 'Minerals for Climate action: The Mineral Intensity of the Clean Energy Transition' (2020) *World Bank Group* <https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf>
[6] International Energy Agency, 'World Energy Outlook' (2022) <https://iea.blob.core.windows.net/assets/830fe099-5530-48f2a7c111f35d510983/WorldEnergyOutlook2022.pdf> accessed 1 September 2023, 182
[7] ibid

Today's international and national investment strategies are not fit for the purpose of meeting this exponentially increasing CRM demand.[8] In order to improve global access to raw materials, increasing investments will be fundamental.[9] In this respect, foreign direct investment (FDI) is often sought to gain access to natural resources, with foreign investors going to host states with certain CRM abundances to access these CRMs.[10]

However, foreign investors might be confronted with national measures of resource-rich host states seeking to restrict and protect their national reserves. CRMs are highly concentrated and mostly found in emerging and developing economies.[11] When, e.g., a resource-rich, developing market enacts, an export restriction, the restriction is used as a tool to promote and protect local processing industries. Accordingly, developing economies have increasingly utilised export restrictions as a way to expand their domestic industries and benefit from CRM abundance in their countries.[12] While this might be a way for their domestic economies to flourish, the question is whether these developments are beneficial for the global economy, given the decrease in domestic prices relative to global prices.[13] In addition, while export restrictions might attract FDI in some countries, other countries will restrict or prohibit FDI in certain strategic sectors, which in turn will exacerbate the adverse impacts of export restrictions.[14]

This example demonstrates that the CRM's indispensability and its increasing demand transform CRMs into a geopolitical good, subject to geo-economic tensions. It is against this background that the war in Ukraine demonstrated the global urge to generate clean energy domestically, thereby reducing their dependencies on others and circumventing geopolitical tensions.[15]

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[8] International Energy Agency, 'The Role of Critical Minerals in Clean Energy Transitions' (2022) <https://iea.blob.core.windows.net/assets/ffd2a83b-8c30-4e9d-980a-52b6d9a86fdc/TheRoleofCriticalMinerals inCleanEnergyTransitions.pdf> accessed 2 September 2023, 1

[9] United Nations, 'Five ways to jump-start the renewable energy transition now' <https://www.un.org/en/climatechange/raising-ambition/renewable-energy-transition> accessed 1 September 2023

[10] John H. Dunning, 'The Eclectic Paradigm as an envelope for economic and business theories of MNE activity' (2000) 9 International Business Review 163-164

[11] Commission, 'Questions and Answers on the European Critical Raw Materials Act' (Questions and answers) QANDA/23/1662

[12] Ilaria Espa, *Export Restrictions on Critical Minerals and Metals* (Cambridge University Press 2015)

[13] Chien-Huei Wu, *Law and Politics on Export Restrictions* (Cambridge University Press, 2021), 208

[14] ibid

[15] Marie-Monique Franssen, 'If the water disappears, life will disappear' (*Green European Journal*, 13 June 2023) <https://www.greeneuropeanjournal.eu/if-the-water-disappears-life-will disappear/#:~:text=However%2C%20it%20also%20means%20that,groundwater%20in%20the%20surrounding %20regions.> accessed 1 September 2023

This thesis aims to analyse whether the legal framework regulating FDI, international investment law, can simultaneously i) support foreign investors in their quest to access CRMs and ii) leave sufficient policy space for host states to protect their (potential) CRM reserves in a sustainable and fair manner.

Recent years have shown that trade and investment policies are undeniably linked with environmental concerns. Within multilateral cooperation and negotiations, the focus shifted from commercial interests to climate and supply chain vulnerabilities.[16] The green transition can thereby be seen as the necessary global effort to adopt and maintain more sustainable and environmentally friendly practices at a scale large enough to slow climate change.[17]

On 10 March 2023, President of the U.S. Joe Biden and President of the European Commission Ursula von der Leyen issued a Joint Statement announcing new cooperative steps 'to deepen their economic relationship and build the clean energy economies of the future'.[18] Among those steps, they announced an EU-U.S. Critical Minerals Agreement. In the absence of a free trade agreement (FTA) between two of the world's biggest economies, this Agreement is one example of how a treaty framework could enable critical minerals extracted or processed in the EU to count towards the US' Inflation Reduction Act (IRA) clean vehicle tax credit requirements, thereby contributing to EU-US supply chains.[19]

Building upon this example of increased bilateral cooperation to secure resilient supply chains, the potential negative environmental impact of the extraction and processing of CRMs adds a layer of complexity to the CRM value chain. Despite supply chain risks being a barrier to the CRM market, environmental considerations call for a circular approach to the CRM value

[16] Adam Behsudi, ''We're not going back': The U.S. and Europe are entering a new trade era' *Politico* (Washington D.C., 6 March 2023) <https://www.politico.com/news/2023/06/03/us-europe-china-trade-00099954>

[17] Javier Sanchez-Reaza, Diego Ambasz and Predrag Djukic, 'Making the European Green Deal Work for People: The Role of Human Development in the Green Transition' (2023) *World Bank Group* <https://openknowledge.worldbank.org/handle/10986/39729>

[18] The White House, 'Joint Statement by President Biden and President von der Leyen' (10 March 2023) <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/10/joint-statement-by-president-biden-and-president-von-der-leyen-2/> accessed 1 September 2023

[19] Council of the EU, 'Trade with the United States: Council authorizes negotiations on EU-US Critical Minerals Agreement' (Brussels, 20 July 2023) <https://www.consilium.europa.eu/en/press/press-releases/2023/07/20/trade-with-the-united-states-council-authorises-negotiations-on-eu-us-critical-minerals-agreement/#:~:text=This%20agreement%20seeks%20to%20strengthen,supply%20chains%20of%20critical%20minerals>

chain, with more focus on recycling and sustainability throughout every stage of the CRM value chain.[20]

1.1.2 On an EU level

The EU commenced its ambitious industrial transformation into the green and digital transition.[21] This transformation, unlike precedents, has a tight deadline with challenging climate targets and a broad wave of legislative proposals that, if not implemented properly, could jeopardise meeting the set deadlines.[22] With its 'Fit for 55' package and REPowerEU plan, the EU stands at the forefront of rapidly deploying clean energy technologies.[23] In this respect, CRMs have been considered indispensable and will only increase to be of utmost importance for the twin transition. However, given the EU's excessive import dependency and the supply security risks associated with the CRMs' value chain, meeting the CRMs' demand within the world's third-biggest economy might be a Sisyphean task.

According to the 'Brussels Effect', global markets transmit the EU's regulatory action to both market participants and non-EU regulators, whereby EU action functions as a *de facto* global standard setter.[24] With a GDP of 16.64 trillion dollars, the EU is the third biggest economy in the world.[25] Furthermore, as the largest global trading bloc, the EU ranks first in both inbound and outbound international investments.[26] Against this background, it is worth noting that the EU Green Deal and its accompanying legislative proposals, might go beyond the Brussels Effect, wherewith the so-called export of EU regulatory standards to third countries, could

[20] COM/2023/160 final
[21] Commission, 'A secure and sustainable supply of critical raw materials in support of the twin transition' (Communication) COM(2023) 165 final
[22] Jean Pisani-Ferry, Simone Tagliapietra and Georg Zachmann, 'Europe's green deal will need broad support to succeed' *Politico* (Brussels, 6 September 2023) <https://www.politico.eu/article/europe-green-deal-broad-support-succeed/> accessed 4 September 2023
[23] Fatih Birol and Pascal Canfin, 'Why the European Union needs bold and broad strategies for critical materials' (*International Energy Agency*, 7 March 2023) <https://www.iea.org/commentaries/why-the-european-union-needs-bold-and-broad-strategies-for-critical-minerals> accessed 4 September 2023
[24] Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (OUP 2019), 1
[25] World Bank, 'GDP (current US$) - European Union, United States, China,' *The World Bank Group* <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2022&locations=EU-US-CN&start=1960>
[26] European Commission, 'EU position in world trade' <https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/eu-position-world-trade_en> accessed 3 August 2023

provoke severe global criticism and even disputes before the World Trade Organization's (WTO) dispute settlement mechanism.[27]

In relation to raw materials, the EU has been focusing on CRMs since 2008 with its 'Raw Materials Initiative'.[28] The Communication from the European Commission laying out the initiative, recognised the large import dependency of the EU and called for an integrated strategy to i) ensure access to raw materials in the world markets, ii) foster sustainable supply from European sources, and iii) reduce the EU's consumption of primary raw materials in order to decrease the EU's import dependency.[29] It was specifically recognised in 2008 that in order to ensure access to raw materials in world markets, the promotion of 'a sound investment climate' to help increase supply was key. In doing so, the Commission aimed to increase transparency of mining deals and revenues and establish a level playing field between companies and countries aiming to access CRMs.[30]

Starting in 2011, the EU has published five lists of CRMs (2011, 2014, 2017, 2020, 2023) and accompanying methodologies to establish the CRM lists. The fifth list of 34 CRMs was published in March 2023 as annexed to the European Commission's proposal for a Critical Raw Materials Regulation and based on the 2023 Study on the Critical Raw Materials for the EU as part of the EU's Green Deal.[31]

Besides the CRM list (see Annex II of the proposal), the proposal also contains a list of Strategic Raw Materials, which brings together 16 eminent CRMs (out of the 34 CRMs) which are considered *'raw materials used in strategic sectors such as renewable energy, digital, space and defence technologies and for whose projected demand growth compared to current levels of supply, combined with the difficulties of scaling up production, are likely to create supply risks in the near future.'*[32] The Strategic Raw Materials, as compiled in Annex I, will be reviewed and updated every 4 years on the basis of the criteria mentioned above.[33]

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[27] Barbara Moens and Karl Mathiesen, 'Trade partners see red over Europe's green agenda' *Politico* (Brussels, 16 January 2023) < https://www.politico.eu/article/eu-green-agenda-has-its-trading-partners-seeing-red-climate-neutrality/>

[28] Commission, 'The raw materials initiative – meeting our critical needs for growth and jobs in Europe' (Communication) COM(2008) 699 final

[29] ibid

[30] ibid 8

[31] European Commission, 'Critical Raw Materials' <https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials_en> accessed 28 August 2023

[32] See QANDA/23/1662

[33] See COM/2023/160 final Article 3.3

In her 2022 State of the European Union, President of the European Commission Ursula Von der Leyen stated that:[34]

> 'Lithium and rare earths are already replacing gas and oil at the heart of our economy. By 2030, our demand for rare earth metals will increase fivefold. (…) We have to avoid falling into the same dependency as with oil and gas.'

While 'the same dependency as with oil and gas' is to be avoided, a total self-sufficiency in the supply of CRMs is unfeasible.[35] For this reason, the proposed CRM Regulation aims to ensure the EU's 'access to a secure and sustainable supply of critical raw materials'.[36] With EU access, the Commission intends to secure all its Member States and their industries with sufficient CRMs which will enable Europe to meet its 2030 green and digital transition goals.[37] This general objective will be achieved in four ways. Firstly, the Commission targets a strengthening of every stage of the strategic raw materials value chain. In doing so, there are set minimum benchmarks in terms of:

i) the EU's extraction capacity to extract ores, minerals or concentrates needed to produce is at least 10% of the EU's annual consumption of strategic CRMs, to the extent that the EU's reserves allow for this benchmark;

ii) the EU's processing capacity (including all intermediate processing steps) is able to produce at least 40% of the EU's annual consumption of strategic CRMs;

iii) the EU's recycling capacity (including all intermediate recycling steps) is able to produce at least 15% of the EU's annual consumption of strategic CRMs.

These three benchmarks are set to be approached or reached by 2030. The second way to achieve the CRM's act general objective is by diversifying the EU's imports with the intention of guaranteeing that no single third country provides more than 65% of a certain strategic CRM at any relevant stage of processing of the EU's annual consumption.[38]

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[34] European Commission, '2022 State of the Union Address by President von der Leyen' (14 September 2022) <https://ec.europa.eu/commission/presscorner/detail/en/speech_22_5493> accessed 28 August 2023
[35] COM(2023) 165 final
[36] See COM/2023/160 final Article 1(1)
[37] European Commission, 'Critical Raw Materials Act' <https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en> accessed 18 September 2023
[38] See COM/2023/160 final Article 1.2(b)

Thirdly, the EU targets an improvement in its ability to monitor and mitigate supply risks of all CRMs.[39] And lastly, they aspire to improve the sustainability and circularity of all CRMs placed on the EU's internal market.[40]

In addition to the general objective, the CRM Act intends to expand its network of Strategic Partnerships to improve supply security and reach the benchmarks set out to achieve the general objective.[41]

1.2 Research questions and methodologies

In this master thesis, an assessment will be made on whether the legal framework of international investment law allows countries to safeguard access to CRMs. In doing so, the focus will be two-fold. On the one hand, there are resource-poor global actors, like the European Union, who seek to obtain access to CRMs through international cooperation and international trade and investment policies. The EU, is, in this regard, an exquisite example to elaborate upon, given its large import dependency and recent regulatory action taken to establish access to CRMs. On the other hand, there are resource-rich actors, like Latin American countries, which have the potential to expand their markets and benefit from their production capacities for various CRMs.[42] In addition, other resource-rich countries, like Namibia, are announcing export bans of unprocessed critical minerals as they strive to benefit from the exponentially increasing global demand for CRMs.[43] This development dimension, whereby resource-rich countries, which are often developing countries, are placed in a power position, makes this thesis all the more interesting.

1.2.1 Research questions

Given these differences in resources, the dual focus of this thesis leads to a somewhat contradictory position within international investment law. While resource-poor actors seeking

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[39] See COM/2023/160 final Article 1.2(c)
[40] See COM/2023/160 final Article 1.2(d)
[41] See COM/2023/160 final Article 33
[42] Alejandra Bernal, Joerg Husar and Johan Bracht, 'Latin America's opportunity in critical minerals for the clean energy transition' (*International Energy Agency*, 7 April 2023) <https://www.iea.org/commentaries/latin-america-s-opportunity-in-critical-minerals-for-the-clean-energy-transition> accessed 28 August 2023
[43] Nyasha Nyaungwa, 'Namibia bans export of unprocessed critical minerals' *Reuters* (8 June 2023) <https://www.reuters.com/markets/commodities/namibia-bans-export-unprocessed-critical-minerals-2023-06-08/#:~:text=The%20southern%20African%20country%20has,electric%20cars%20and%20wind%20turbines> accessed 28 August 2023

access to CRM rely on rather traditional IIAs with strong investor protection, resource-rich countries seek to self-regulate the CRM supply chain process. These countries thus aim to create policy space within IIAs and use the leeway sometimes provided in them, like exception clauses and carve-outs for it within IIAs. This dichotomy between a state's right to regulate and investor protection is found within both the ongoing debate in international investment law and the quest for countries to secure access to CRMs.

For this reason, the main research question of this paper is:

'Is international investment law able to safeguard access to critical raw materials?'

In providing an answer to this, other sub-research questions will highlight the tension between the right to regulate and investor protection within the relatively new CRM regulatory policies and strategic partnerships.

Namely:

1. *What are the limitations within international investment law under resource-rich countries' right to regulate to enact measures regarding the CRM supply chain?*
2. *What can resource-poor countries do to secure resilient CRM supply chains?*
3. *What policy space remains under the EU's 'right to regulate' to ensure resilient supply chains?*
4. *How is the EU's investment treaty regime handling access to CRMs?*
5. *How is the economic development of some resource-rich developing economies such as Indonesia, Namibia and Zimbabwe changing the CRMs discussion?*
6. *In what ways can sustainability issues and resilient supply chains be achieved simultaneously within investment policies?*
7. *Which legislative changes could be included in a new generation of IIAs to foster CRM access and resilient supply chains?*

1.2.2 Methodologies

The thesis will primarily be based on a thorough legal analysis of existing investment treaty regimes and regulatory changes in the past few years. While a focus will be given to the current EU regulatory regime as a case study for resource-poor actors, emphasis will equally be put on other international investment regimes in order to analyse whether international investment law allows for safeguarding resilient CRM supply chains.

The next and second chapter will consist of a descriptive economic analysis of CRMs. After defining them and highlighting their strategic and economic importance, attention will be given to their global scarcity and concentration. The third chapter will then elaborate on policy space contracting parties can include within IIAs through exception clauses, carve-outs and investment screening. Hereby, a doctrinal and comparative research analysis will be conducted.

The subsequent and fourth chapter will then look at which policy space is left outside the framework of investment laws' treaty regime. In doing so, a continuation of the doctrinal and comparative analysis will take place. Following this, it will be possible to give a thorough response to each of the (sub-) research questions and identify current trends within international investment law in the fifth chapter.

CHAPTER II. CRITICAL RAW MATERIALS

2.1 Defining CRMs

To outline the scope of this thesis, it is essential to clarify all terms referring to critical minerals and critical materials, which are often used interchangeably such as e.g., critical (raw) materials, critical minerals, strategic raw materials, etc. In doing so, it is worth noting that most of the differences in terms are due to different governmental policy choices. In addition, it should be stressed that materials and minerals are not critical by definition.[44] Most countries classify divergent raw materials as critical based on their own domestic reserves, industries and supply security.[45]

The European Commission defines a raw material as 'a substance in processed or unprocessed state used as an input for the manufacturing of intermediate or final products, excluding substances predominantly used as food, feed or combustion fuel'.[46] A similar definition for mineral raw materials explains that mineral raw materials are 'industrial raw materials obtained from mineral resources, which are traded internationally in their unprocessed form or after a minimal amount of processing because of their economic value.'[47] While the EU does not make an explicit distinction between minerals and materials and puts both under the heading of a 'material', the US uses the definition of critical minerals to show that they are a specific type of critical material.[48] Additionally, the EU uses 'strategic raw materials' to refer to CRMs used in strategic sectors and which are therefore likely to create supply risks.[49]

CRMs have two defining characteristics. First of all, they are of high strategic importance to an economy. Second, they are subject to supply risks.[50] In addition, the materials have a lack of viable substitutes given their uniqueness and reliable features for a wide range of applications,

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[44] André Månberger, 'Critical Raw Material Supply Matters and the Potential of the Circular Economy to Contribute to Security' (2023) 58(2) Intereconomics, 2
[45] Bin Gu, 'Mineral Export Restraints and Sustainable Development – Are Rare Earths Testing the WTO's Loopholes?' (2011) 14(4) Journal of International Economic Law
[46] See COM/2023/160 final Article 2(1)
[47] cf Espa (n 12)
[48] U.S. Department of Energy, 'What are Critical Materials and Critical Minerals?' <https://www.energy.gov/cmm/what-are-critical-materials-and-critical-minerals#:~:text=DOE%20has%20determined%20the%20final,silicon%2C%20silicon%20carbide%20and%20terbium> accessed 28 August 2023
[49] QANDA/23/1662
[50] European Commission, 'Methodology for Establishing the EU List of Critical Raw Materials' (2017) Publications Office of the European Union

which strengthens their economic importance.[51] The EU, in its proposal for a CRM Regulation established two methodologies in order to identify raw materials as critical raw materials or strategic raw materials, respectively. These methodologies calculate *inter alia* i) economic importance of a raw material ii) its substitution index iii) its supply risk iv) its import reliance and v) market concentration (Herfindahl-Hirshman index).[52]

2.2 Economic and strategic importance of CRMs

Access to CRMs is a global concern due to its scarce availability on the one hand and its widespread applications for green technologies, telecommunications, steel-making, defence, space exploration, medical devices, aviation, other high-technology products, etc on the other.[53] While e.g. lithium, cobalt and manganese are fundamental for electric-vehicle batteries, rare earth elements and borates are used for electric car motors and wind turbine generators.[54] In this subsection, an overview will be given of both the economic and strategic importance of CRMs.

2.2.1 Economic importance

The global transition from fossil fuel towards renewable, green energy resources has as a consequence that non-renewable, scarce natural resources underpinning green technologies became more important than ever before.[55] This chapter provides for a descriptive analysis of five economically crucial CRMs for the green transition. These five CRMs were chosen because of their highly controversial environmental impact, scarcity, concentration or their use as geopolitical tool. In doing so, an overview will be given of both its uses, environmental and supply chain risks. All five of these CRMs are characterised as critical by both the EU and the

[51] CRM Alliance, 'What are Critical Raw Materials?' <https://www.crmalliance.eu/critical-raw-materials> accessed 30 August 2023
[52] See COM(2023) 160 final Annex 2 Section 2
[53] cf Espa (n 12)
[54] Marie Le Mouel and Niclas Poitiers, 'Why Europe's critical raw material strategy has to be international,' (Bruegel Analysis, 5 April 2023) <https://www.bruegel.org/analysis/why-europes-critical-raw-materials-strategy-has-be-international> accessed 30 August 2023
[55] Oliver Hailes, 'Lithium in International Law: Trade, Investment, and the Pursuit of Supply Chain Justice' (2022) 25 Journal of International Economic Law, 149

US. In addition, it should be noted that while some 'resource-poor' countries might have CRM reserves, mining potential might not always be economically an technically feasible.[56]

Before giving an overview of five specific CRMs, it is noteworthy that the CRM supply chain is a four-step process. As a first step, there is the mining of CRMs. This is the most capital- and technology intensive. In a second stage, refining and smelting will take place. This is carried out to extract the metal from its concentrate. Thirdly, there will be industrial processing. Here, the refined metal will be turned into a semi-finished product for the use of manufacturing. After the manufacturing, CRMs will be used in products. The last step of the process is the recycling, whereby scrap metal is reintroduced into the supply chain.[57] While most CRMs supply chains differ from one another, it is important to highlight that much of the supply chain complexity will depend on the CRM itself, its geography, possible mining and applications.

As part of CRMs economic importance, sustainability throughout its supply chain is a pivotal concern. Thereby, a sustainable lifecycle includes both environmental risks and human rights risks. Most significantly, it has been argued that sustainability should not be sacrificed for supply chain security.[58] For this reason, the following chapters will look for policy actions which could safeguard both sustainability concerns and resilient supply chains simultaneously.

2.2.2.1 Lithium (Li)

(1) Chemical properties and applications

Lithium (Li) is the lightest silver metal on the periodic table and is part of the alkali metal group. Given its reactive nature, it seldom appears as a pure metal but rather found in groundwater as lithium chloride or in silicate minerals, such as spodumene.[59] It has excellent electrical conductivity due to its reactivity and flammability.[60] As a result, it is considered ideal for both renewable and non-renewable batteries.

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[56] Ludovic Subran et al, 'Critical Raw Materials: Is Europe ready to go back to the future?' (Allianz Research, 1 August 2023) <https://www.allianz.com/content/dam/onemarketing/azcom/Allianz_com/economic-research/publications/specials/en/2023/august/01_08_2023-Critical-Raw-Materials.pdf> accessed 29 October 2023

[57] Melanie Müller, Christina Saulich, Svenja Schöneich and Meike Schulz, 'From Competition to a Sustainable Raw Materials Diplomacy,' (2023) Stiftung Wissenschaft und Politik Research Paper 2023/RP 01 <https://www.swp-berlin.org/10.18449/2023RP01/>

[58] ibid

[59] cf Hailes (n 55)

[60] CRM Alliance, 'Lithium' <https://www.crmalliance.eu/lithium> accessed 3 September 2023

Lithium supply became a global key priority mostly due to its wide variety of applications. The most important use of lithium is in lithium-ion renewable batteries which are found in mobile phones, laptops and electrical vehicles. According to the US Geological Survey, global end-use markets are estimated at 71% for batteries, 14% for ceramics and glass, 4% for lubricating greases, 2% for polymer production, 1% for air treatment and 6% for other uses.[61]

(2) Concentration and extraction

Lithium's top three global producers are Australia, Chile and China.[62] Most of the world's lithium is found in the Lithium Triangle which brings together Chile, Argentina and Bolivia and along with Peru accounts for 67% of the world's lithium supply under its salt flats.[63] Saltwater rich in metal is pumped out from reservoirs 200 metres below the salt flats after which it is transported via open-air pipelines which allows the water to evaporate. The residual brine is then brought to a recovery facility which extracts lithium from the brine.[64]

Alternatively, lithium extraction is pursued through hard rock sources such as spodumene, lepidolite, petalite and zinnwaldite. These hard rock lithium mines are mainly found in Australia, Canada, China and Zimbabwe.[65] While this is considered more carbon-intensive than salt-flat brines, it constitutes 60% of globally mined lithium.[66]

Lithium in Europe is scarce. Currently, Portugal is the only EU Member State that mines and processes lithium.[67] However, other countries on the European continent are making their way into lithium extraction as well. Most recently, the French mining company Imerys SA

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[61] U.S. Geological Survey, 'Mineral Commodity Summaries – Lithium' (2021) <https://pubs.usgs.gov/periodicals/mcs2021/mcs2021-lithium.pdf> accessed 3 September 2023
[62] Royal Society of Chemistry, 'Lithium' <https://www.rsc.org/periodic-table/element/3/lithium> accessed 3 September 2023
[63] Oscar Hernandez, 'Lithium: White Gold for a Region's Development' (*Inter-American Development Bank)* <https://www.iadb.org/en/improvinglives/lithium-white-gold-regions-development#:~:text=Argentina%2C%20Bolivia%20and%20Chile%20make,to%20the%20U.S.%20Geological%20Survey>; Samar Ahmad, 'The Lithium Triangle: Where Chile, Argentina and Bolivia meet' (*Harvard International Review*, 15 January 2020) <https://hir.harvard.edu/lithium-triangle/>
[64] cf Franssen (n 15)
[65] Tian-ming Gao, Na Fan, Wu Chen and Tao Dai, 'Lithium extraction from hard rock lithium ores (spodumene, lepidolite, zinnwaldite and petalite): Technology, resources, environment and cost' (2023) 6(1) China Geology
[66] Benchmark Source, 'Hard rock lithium vs. brine – how do their carbon curves compare?' (3 March 2023) <https://source.benchmarkminerals.com/article/hard-rock-vs-brine-how-do-their-carbon-curves-compare> accessed 4 September 2023
[67] Paul Krantz, 'Europe's quest for home-grown lithium' (*The Parliament* 20 July 2023) <https://www.theparliamentmagazine.eu/news/article/lithium-mining-race-europe-china-supply-chains> accessed 4 September 2023

announced its 80% controlling stake in a joint venture with the British start-up British Lithium who together aim develop the UK's lithium industry.[68]

(3) Risks

Most contradictory, while lithium is a fundamental component for renewable batteries, its mining industry faces severe environmental implications. For example, as extracting lithium requires approximately 500 000 gallons water per ton of lithium, its intensive use of water can impact local water reserves dramatically.[69] The increased pressure on water reserves due to lithium mining in combination with climate change and its accompanying drought in the Lithium Triangle might be fatal for indigenous communities and local ecosystems.[70]

Moreover, proper waste management is key for the green transition to be efficiently managed given lithium's toxic waste.[71] For example, in 2016, the Tibetan Liqi river was poisoned by the Chinese Ganzizhou Rongda Lithium mine after a toxic chemical leaked into the river thereby destroying the ecosystem.[72]

In this context, the recycling of lithium batteries is key in mitigating the environmental impacts of lithium mining. Hydrometallurgical processes, whereby metals are extracted from ore, are herein a crucial way of recycling and reducing battery waste.[73] The EU in this regard, took important regulatory steps with its Batteries Regulation which entered into force on 17 August 2023 and aims to ensure that batteries placed on the EU market are sustainable and circular throughout their whole value chain.[74]

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[68] Harry Dempsey, 'French miner Imerys to help develop UK's largest lithium deposit' *Financial Times* (London, 29 June 2023) <https://www.ft.com/content/771a51f5-1e9e-4f10-8e8d-863112844ff4> accessed 4 September 2023

[69] CIC EnergiUNE, 'Lithium mining in Spain: Good expectations with environmental challenge' (11 July 2023) <https://cicenergigune.com/en/blog/lithium-mining-spain-good-expectations-environmental-challenge> accessed 4 September 2023

[70] Fred Pearce, 'Why the Rush to Mine Lithium Could Dry Up the High Andes' (*Yale Environment* 360, 19 September 2022) <https://e360.yale.edu/features/lithium-mining-water-andes-argentina> accessed 4 September 2023

[71] Carolyn Gramling, 'The search for new geologic sources of lithium could power a clean future' (*ScienceNews*, 7 May 2019) <https://www.sciencenews.org/article/search-new-geologic-sources-lithium-could-power-clean-future?ref=hir.harvard.edu> accessed 4 September 2023

[72] Simon Denver, 'Tibetans in anguish as Chinese mines pollute their sacred grasslands,' (The Washington Post, 26 December 2016) < https://www.washingtonpost.com/world/asia_pacific/tibetans-in-anguish-as-chinese-mines-pollute-their-sacred-grasslands/2016/12/25/bb6aad06-63bc-11e6-b4d8-33e931b5a26d_story.html> accessed 4 September 2023

[73] TES, 'The difference between hydrometallurgy and pyrometallurgy' (5 February 2023) <https://www.tes-amm.com/news/the-difference-between-hydrometallurgy-and-pyrometallurgy#!/> accessed 4 September 2023

[74] European Commission, 'Batteries' <https://environment.ec.europa.eu/topics/waste-and-recycling/batteries_en> accessed 4 September 2023

2.2.2.2 Cobalt

(1) Chemical properties and industrial applications

Cobalt (Co) is a magnetic, silvery-blue metal used in a wide range of commercial, industrial and military applications, making it a specifically strategic CRM.[75] Its main uses are i) as a component of rechargeable battery electrodes and ii) as superalloys which are parts for gas turbine engines.[76] In addition, cobalt's chemical properties allow the CRM to be used as magnets.[77]

(2) Concentration and extraction

The Democratic Republic of Congo (DRC) accounts for 73% of the world's cobalt production.[78] In 2022, Indonesia became the second largest cobalt producer with 5% of the global share, while aiming to increase its supply by 10 times by 2030.[79]

98% of cobalt is mined as a by-product of nickel mining (38%) or copper mining (60%).[80] The remaining 2% primary cobalt mining deposits are mostly found on the ocean floors, generally 4 to 5.5 km deep.[81]

(3) Risks

Similarly to lithium mining, most of the environmental risks related to cobalt are water reserve impacts, waste management, biodiversity risks and air pollution.[82] In addition, as global cobalt demand is set to double by 2030, concerns regarding dangerous mining conditions in the DRC, child labour and human rights violating working conditions are challenging its position as world leader.[83] Due to these working conditions, cobalt is nicknamed 'the blood diamond of

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[75] United States Geological Survey (USGS), 'Cobalt Statistics and Information' <https://www.usgs.gov/centers/national-minerals-information-center/cobalt-statistics-and-information#:~:text=On%20a%20global%20basis%2C%20the,another%20major%20use%20for%20cobalt.> accessed 10 September 2023
[76] ibid
[77] Royal Society of Chemistry, 'Cobalt' <https://www.rsc.org/periodic-table/element/27/cobalt> accessed 10 September 2023
[78] United States Geological Survey (USGS), 'Cobalt – Mineral Commodity Summaries' (2023) <https://pubs.usgs.gov/periodicals/mcs2023/mcs2023-cobalt.pdf> accessed 10 September 2023
[79] Cobalt Institute, 'Cobalt Market Report 2022' (2023) <https://www.cobaltinstitute.org/wp-content/uploads/2023/05/Cobalt-Market-Report-2022_final.pdf> 10 September 2023, 22
[80] Cobalt Institute, 'Cobalt Mining' <https://www.cobaltinstitute.org/about-cobalt/cobalt-life-cycle/cobalt-mining/> accessed 10 September 2023
[81] ibid
[82] cf Cobalt Institute (n 80) 24
[83] Dionne Searcey and Eric Liption, 'Hunt for the 'Blood Diamond of Batteries' Impedes Green Energy Push' *The New York Times* (Kasulo, 29 November 2021) <https://www.nytimes.com/2021/11/29/world/congo-cobalt-albert-yuma-mulimbi.html> accessed 5 September 2023

batteries'.[84] Moreover, while 73% of cobalt is supplied by the DRC, China has bought stakes in almost all Congolese mining companies.[85] In relation to this, the DRC's President has acknowledged most China-DRC mining deals are not in any way beneficial for the developing country.[86]

2.2.2.3 Gallium (Ga) and Germanium (Ge)

(1) Chemical properties and applications

Gallium (Ga) is a soft, silvery-white metal which has a similar structure as silicone and is part of the boron group of the periodic table.[87] Gallium is not to be found as a free element in nature. Rather, it is extracted as a by-product from e.g., zinc blende, iron pyrites, bauxite and germanite.[88]

Germanium (Ge), on the other hand, is a semi-metal. It's natural abundance in ores is very rare as it is only found in very small quantities in germanite and argyrodite. It can also be extracted as a by-product from zinc ores or certain coals after which it can be commercially produced by processing zinc smelter flue dust.[89]

Both materials are crucial for the production of semiconductor devices.

(2) Concentration and extraction

Gallium's top three producers are China, Germany and Kazakhstan of which around 80% is produced in China.[90] Germanium's top producers are China and Russia, of which China produces 60% of the semi-metal globally.[91]

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[84] ibid
[85] Alex Colville, 'Mining in the heart of Africa: China and the Democratic Republic of Congo' *The China Project* (7 June 2023) <https://thechinaproject.com/2023/06/07/mining-the-heart-of-africa-china-and-the-democratic-republic-of-congo/> accessed 10 September 2023
[86] Jacqueline Simmons and Michael J. Kavanagh, 'Congo President Demands More From $6.2 Billion China Deal' *Bloomberg* (19 January 2023) < https://www.bloomberg.com/news/articles/2023-01-19/president-thinks-congo-mineral-riches-worth-more-than-china-s-6-2-billion-deal#xj4y7vzkg> accessed 10 September 2023
[87] Royal Society of Chemistry, 'Gallium' <https://www.rsc.org/periodictable/element/31/gallium#:~:text=Gallium%20is%20a%20soft%2C%20silvery,important%20component%20of%20many%20semiconductors.> accessed 5 September 2023
[88] Britannica, 'Gallium' <https://www.britannica.com/science/gallium> accessed 5 September 2023
[89] Royal Society of Chemistry, 'Germanium' <https://www.rsc.org/periodic-table/element/32/germanium>
[90] Royal Society of Chemistry, 'Gallium' <https://www.rsc.org/periodic-table/element/31/gallium>; Reuters, 'What are Gallium and Germanium and which countries are producers?' (7 July 2023) <https://www.reuters.com/markets/commodities/where-are-strategic-materials-germanium-gallium-produced-2023-07-04/> accessed 5 September 2023
[91] Cf Reuters (n 90)

(3) Risks

In light of the importance of both gallium and germanium for semiconductors, their role in the so-called U.S.-China chip war shows the geopolitical character of CRMs. On 3 July 2023, the Chinese Ministry of Commerce announced new export controls on Gallium and Germanium Related Items which entered into force on 1 August 2023.[92] According to experts, the export restrictions are the Chinese response to the US export controls on semi-conductors used for AI systems.[93]

2.2.3.4 Nickel (Ni)

(1) Chemical properties and applications

Nickel (Ni) is a silvery-white metal that resists corrosion and is often used to protect other metals.[94] It is the fifth-most abundant metal on Earth and is mostly present in the Earth's crust and core.[95]

Around 65% of consumed nickel is used to produce stainless-steel.[96] Another 11% is used in batteries.[97] Its properties allow for higher energy density and greater storage capacity, ultimately resulting in lower cost batteries.[98] Hence, its use in electric vehicles guarantees a longer range in electric driving.[99]

(2) Concentration

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[92] Chinese Ministry of Commerce, 'Announcement No. 23 of 2023 on Export Control on Gallium and Germanium Related Items' (3 July 2023) <http://www.mofcom.gov.cn/article/zwgk/gkzcfb/202307/20230703419666.shtml>

[93] Henry Farell and Abraham Newman, 'How the U.S. Stumbled Into Using Chips as a Weapon Against China' *The Wall Street Journal* (9 September 2023) <https://www.wsj.com/politics/policy/how-the-u-s-stumbled-into-using-chips-as-a-weapon-against-china-ec37e32> accessed 9 September 2023

[94] Royal Chemistry Institute, 'Nickel' <https://www.rsc.org/periodic-table/element/28/nickel> accessed 28 October 2023

[95] Nickel Institute, 'About Nickel' <https://nickelinstitute.org/en/about-nickel-and-its-applications/> accessed 28 October 2023

[96] United States Geological Survey (USGS), 'Nickel Statistics and Information' <https://www.usgs.gov/centers/national-minerals-information-center/nickel-statistics-and-information> accessed 28 October 2023

[97] Nickel Institute, 'About Nickel' <https://nickelinstitute.org/en/about-nickel-and-its-applications/> accessed 28 October 2023

[98] Nickel Institute, 'Nickel in batteries' <https://nickelinstitute.org/en/about-nickel-and-its-applications/nickel-in-batteries/> accessed 28 October 2023

[99] ibid

The majority of the world's nickel originates from Australia, Indonesia, South Africa, Russia and Canada.[100] Most interestingly, 80% of all nickel historically mined has been extracted in the past 30 years.[101]

(3) Risks

The extraction and production of nickel is linked to many environmental risks. Among them, there is air pollution, water contamination and a possible destruction of habitats and biodiversity.[102]

As will be explained in Section 2.2.2, nickel plays an increasingly strategic role for e.g., Indonesia, which uses the metal to increase its development level.

2.2.2 Strategic importance

Economic globalisation led to a fragmentation of production processes which resulted in increased security risks for the different parts of a CRM global supply chain.[103] While these supply chain risks and weaknesses are anything but new for the global economy, CRM security risks have to be minimised in order to avoid a slowdown of the clean energy transition.[104]

Bearing in mind the economic importance of CRMs as explained above, its strategic importance is impossible to underestimate. This is due to both the scarcity of many CRMs on the one hand and its concentration in only few resource-rich countries on the other. Additionally, the significance of the green transition and the role of CRMs as essential element throughout this transition leads the CRM discussion into being subject to power politics and geopolitical confrontation.

One of the key goals for the EU is to diversify its CRM supply chain, thereby lessening its reliance on countries like e.g., China. All the more, given the importance of CRMs for the

[100] Nickel Institute, 'Nickel Availability' <https://nickelinstitute.org/en/about-nickel-and-its-applications/#02-nickel-availability> accessed 28 October 2023
[101] ibid
[102] Max Opray, 'Nickel mining: the hidden environmental cost of electric cars' *The Guardian* (London, 24 August 2017) <https://www.theguardian.com/sustainable-business/2017/aug/24/nickel-mining-hidden-environmental-cost-electric-cars-batteries> accessed 28 October 2023
[103] cf Wu (n 13) 193
[104] cf IEA (n 6)

realisation of the European Green Deal initiatives and the increased global competition within the CRM global market.[105]

The fear of import-dependent, resource-poor actors such as the EU lies in the fact that it is part of resource-rich country's permanent sovereignty to regulate its own natural resources and thus possibly adopts restrictive policies on its reserves. It was recognised by the United Nations General Assembly (UNGA) in 1962 that:[106]

> 1. **The right of peoples and nations to permanent sovereignty over their natural wealth and resources must be exercised in the interest of their national development** and of the well-being of the people of the State concerned.
>
> 2. **The exploration, development and disposition of such resources, as well as the import of the foreign capital required for these purposes, should be in conformity** with the rules and conditions which the peoples and **nations freely consider to be necessary or desirable** with regard to the authorization, restriction or prohibition of such activities.
>
> 4. **Nationalization, expropriation or requisitioning shall be based on grounds or reasons of public utility, security or the national interest which are recognized as overriding purely individual or private interests, both domestic and foreign.** In such cases the owner shall be paid appropriate compensation, in accordance with the rules in force in the State taking such measures in the exercise of its sovereignty and in accordance with international law. In any case where the question of compensation gives rise to a controversy, the national jurisdiction of the State taking such measures shall be exhausted. However, upon agreement by sovereign States and other parties concerned, settlement of the dispute should be made through arbitration or international adjudication.
>
> 6. **International co-operation for the economic development of developing countries**, whether in the form of public or private capital investments, exchange of goods and services, technical assistance, or exchange of scientific information, **shall be such as to further their independent national development** and shall be based upon respect for their sovereignty over their natural wealth and resources.
>
> 8. Foreign investment agreements freely entered into by or between sovereign States shall be observed in good faith; States and **international organizations shall strictly and conscientiously respect the sovereignty of peoples and nations over their natural wealth and resources** in accordance with the Charter and the principles set forth in the present resolution.

This principle of international law clearly conflicts with many interests of resource-poor actors, like the EU and highlights the importance of well-written IIAs in order to strike a fair balance. As a corollary of the principle of sovereignty, permanent sovereignty over a country's natural resources constitutes a fundamental element in the discussion regarding supply chain resilience. Following the principle and given that many CRMs are deposited in developing countries, IIAs

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[105] Commission, 'Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability' (Communication) COM(2020) 474 final

[106] United Nations General Assembly resolution 1803 (XVII) of 14 December 1962, 'Permanent sovereignty over natural resources' <https://www.ohchr.org/sites/default/files/resources.pdf>

should simultaneously further the country's national development while striking a balance with investor protection.

Against this background, the EU recently initiated a dispute before the WTO dispute settlement system regarding Indonesia's nickel export ban. As part of Indonesia's 2015-2035 National Industrialization Development Master Plan, the Asian country aims to transform its current role as CRM exporter into exporting highly competitive products, based on CRMs.[107] In 2020, Indonesia imposed an export ban on nickel ore which aimed to encourage local nickel extractors to refine nickel ore domestically, thereby exporting higher-value commodities.[108] After a WTO panel report where the EU won its case, Indonesia 'appealed into the void' as the WTO's Appellate Body is currently unable to hear an appealed case.[109] As a result, the panel report stays without legal effect.

In a response to the 'appeal-into-the-void', the EU launched a public consultation regarding the use of its Enforcement Regulation on Indonesian nickel export restrictions.[110] The Enforcement Regulation allows for unilateral enforcement measures in cases where there is a '*de facto* blocking of the final and binding resolution of the dispute'. Momentarily, the EU is considering import duties as countermeasures regarding steel and stainless-steel products originating from Indonesia which might be announced in the course of autumn.[111]

This example shows again the geopolitical character of CRM supply chain disruptions. While Indonesia's permanent sovereignty over its nickel resources seems to be limited by its obligations under WTO law. A similar balance has to be struck within international investment law in order for CRMs supply chains to be secured.

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[107] Rachmi Hertanti, 'Between a mineral and a hard place: Indonesia's export ban on raw materials' (*TNI,* 15 June 2023) <https://www.tni.org/en/article/between-a-mineral-and-a-hard-place>

[108] I Gusti Ngurah Parikesit Widiatedja, 'Indonesia's Export Ban on Nickel Ore: Does it Violate the World Trade Organization (WTO) Rules?' (2021) 55(4) Journal of World Trade, 667-696

[109] Iana Dreyer, 'WTO Corner: China files dispute on US export controls, Indonesia appeals on nickel' *Borderlex* (13 December 2022) <https://borderlex.net/2022/12/13/wto-corner-china-files-dispute-on-us-export-controls-indonesia-appeals-into-void-on-nickel/> accessed 9 September 2023

[110] European Commission, 'EU launches consultation on use of Enforcement Regulation on Indonesian nickel export restrictions' (7 July 2023) <https://policy.trade.ec.europa.eu/news/eu-launches-consultation-use-enforcement-regulation-indonesian-nickel-export-restrictions-2023-07 07_en#:~:text=A%20full %20ban%20on%20the,in%20Indonesia%20prior%20to%20export> accessed 7 September 2023

[111] European Commission, 'Survey – Information gathering under Article 9 of Regulation (EU) No 654/2014 regarding the Indonesian export ban and domestic processing requirement on nickel ore and possible EU commercial policy measures in response' <https://ec.europa.eu/eusurvey/runner/InformationgatheringonIndonesianexportbanonnickelore> accessed 31 August 2023

The EU's CRM suppliers specifically are highly concentrated in only a few third counties.[112] For example, the EU's magnesium supply comes for 97% out of China while its heavy rare earth elements are solely refined in China.[113] In May 2021, seven years of negotiations to reach the EU-China Comprehensive Investment Agreement (CAI) were thrown away by the European Parliament after freezing the CAI ratification due to Chinese sanctions on European individuals and entities, including five EU parliamentarians.[114] The Chinese sanctions were imposed after EU sanctions for human rights violations and large-scale detentions of the Uyghur population in Xinjiang, China.[115] Finally in April 2023 after meeting with the Chinese President Xi Jinping, President von der Leyen stated Brussels 'has to reassess the pact' given the new geopolitical context the world is in.[116]

CAI would not only have replaced Chinese BITs with EU Member States but also improved EU access into the Chinese economy and greater investor protection for EU investors.[117] Its geopolitical ending is therefore nothing less than a missed chance for the EU to create greater access to CRMs.

Both the example of Indonesia and the EU's aim to become independent from China shows on the one hand the willingness of the EU to become not totally reliant on third country imports. However, on the other hand, it shows that world's third biggest economy is not immune to many geopolitical tensions. One way to mitigate geopolitical tensions is legal certainty. With regard to international investment law, this might be found in its treaty regime, which will be discussed in the following chapter.

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[112] COM(2023) 160 final
[113] ibid
[114] European Parliament, 'MEPs refuse any agreement with China whilst sanctions are in place' (20 May 2021) <https://www.europarl.europa.eu/news/en/press-room/20210517IPR04123/meps-refuse-any-agreement-with-china-whilst-sanctions-are-in-place>
[115] Council of the EU, 'EU imposes further sanctions over serious violations of human rights around the world' (22 March 2021) <https://www.consilium.europa.eu/en/press/press-releases/2021/03/22/eu-imposes-further-sanctions-over-serious-violations-of-human-rights-around-the-world/>
[116] Suzanne Lynch, 'European Commission signals game over for China investment deal' *Politico* (Brussels, 6 April 2023 <https://www.politico.eu/article/european-commission-ursula-von-der-leyen-signal-game-over-china-investment-deal-cai/>
[117] Lily McElwee, 'The Rise and Demise of the EU-China Investment Agreement: Takeaways for the Future of German Debate on China' (*Center for Strategic and International Studies,* 20 March 2023) <https://www.csis.org/analysis/rise-and-demise-eu-china-investment-agreement-takeaways-future-german-debate-china>

CHAPTER III. RIGHT TO REGULATE AND POLICY SPACE IN INTERNATIONAL INVESTMENT AGREEMENTS (IIAs)

In recent years, international investment law and its accompanying treaty regime has been challenged by many due to its alleged imbalance between investors' rights and host states' obligations.[118] The issue stems from the fact that international investment agreements (IIAs) might preclude states from taking regulatory action to promote public interest policies, thereby neglecting host states' right to regulate.

The right to regulate in international investment law can be defined as '*the legal right exceptionally permitting the host state to regulate in derogation of international commitments it has undertaken by means of an investment agreement without incurring a duty to compensate.* '[119] It forms the underlying basis for host states to undertake any regulatory action, i.e. to exercise their sovereignty and impose measures for the sake of the public interest.[120] The clash between investor protection and host states' right to regulate is mostly played out in investor-State dispute settlement (ISDS), where ad-hoc tribunals preclude a host state from acting in pursuance of public interest concerns.[121] In cases where tribunals do not take into account a states' right to regulate, one talks about a 'regulatory chill effect'.[122] This effect encompasses *'the situation where a state actor will fail to enact or enforce bona fide regulatory measure because of a perceived or actual threat of investment arbitration'*.[123]

Critics contending the existence of a regulatory chill effect argue that investor-state arbitration results in situations where host states are less inclined to regulate certain controversial policy

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[118] Suzanne A. Spears, 'The quest for policy space in a new generation of international investment agreements' (2010) 13(4) Journal of International Economic Law <https://doi.org/10.1093/jiel/jgq048> accessed 30 August 2023, 1038; Peter Muchlinski, 'Negotiating New Generation International Investment Agreements: New Sustainable Development Oriented Initiatives' in Steffen Hindelang and Markus Krajewski (eds), *Shifting Paradigms in International Investment Law: More Balanced, Less Isolated, Increasingly Diversified* (OUP 2016)

[119] Catherine Titi, 'The Right to Regulate in International Investment Law' (2014) Nomos & Hart Publishing, <https://ssrn.com/abstract=3648106> accessed 30 August 2023, 33

[120] Crina Baltag FCIarb, Riddhi Joshi, Kabir Duggal, 'Recent Trends in Investment Arbitration on the Right to Regulate, Environment, Health and Corporate Social Responsibility: Too Much or Too Little?' (2023) ICSID Review, 5

[121] ibid 2

[122] Simon Lester and Bryan Mercurio, 'Safeguarding Policy Space in Investment Agreements' (2017) IIEL Issue Brief 12/2017 <https://www.cato.org/sites/cato.org/files/articles/lester-mercurio-iiel-issue-brief-december-2017.pdf> accessed 30 August 2023, 1

[123] Gloria Maria Alvarez et al, 'A Response to the Criticism against ISDS by EFILA' (2016) 33(1) Journal of International Arbitration, 22

areas. More specifically, claims from MNEs might intimidate governments from proposing controversial environmental regulatory policies. Thus, the threat of having to pay immense compensation for a possible violation of a foreign investor's rights imposes a chilling effect on the host state's regulatory autonomy.[124] Nonetheless, there has been no clear empirical evidence of a regulatory chill effect.[125] While this lack of evidence supports the argument that governments do not take into account their foreign investors when considering controversial regulatory action, others are convinced the characteristics of ISDS severely limit a host state's policy space.[126]

When it comes to international investment law, its treaty regime allows under some circumstances for contracting parties to pursue domestic regulatory policies. This creates 'policy space', which is *'the freedom and ability of a government to identify and pursue the most appropriate mix of economic and social policies to achieve equitable and sustainable development that is best suited to its particular national context'* and brings together a *de jure* policy sovereignty with a *de facto* national policy control.[127] The primary method for creating policy space within international investment law is through treaty provisions in IIAs, such as exception clauses, carve-outs, reservations, etc.[128]

In relation to CRMs, policy space within IIAs can be functional for both resource-rich and resource-poor countries. While resource-rich countries want to protect their reserves and use them as a tool to let their economies prosper, resource-poor countries want to invest in CRM projects in the hope for an increased supply security.

The key challenge of the CRM industry is to reciprocate CRM access in a way that enables foreign investors to create resilient supply chains in their resource-poor countries, while ensuring sustainable development of the resource-rich host state and its natural resources.

This chapter will go through all legislative options, followed a comparison between resource-rich and resource-poor states within their investment treaty regimes.

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[124] Caroline Moehlecke, 'The Chilling Effect of International Investment Disputes: Limited Challenges to State Sovereignty' (2020) 64 International Studies Quarterly, 1
[125] ibid
[126] Cf Alvarez (n 123) 23
[127] UNCTAD, *Trade and Development Report 2014*, UNCTAD/TDR/2014, 45
[128] Theodore Gleason and Catherine Titi, 'The Right to Regulate' (2022) Academic Forum on ISDS Concept Paper 2022/2, <https://ssrn.com/abstract=4255605> accessed 30 August 2023

3.1 Investment screening

3.1.1 Admission and Establishment under IIAs

Investment screening mechanisms relate to the admission of a foreign investment.[129] As a general rule, an investor's market access to a host country is not without limits. It falls within each host country's sovereignty, and as a corollary the state control over its territory, to regulate investor's market access.

Within IIAs, there are usually two approaches found to regulate investor's access. The first option is the admission model, which can be found in traditional IIAs and whereby the host state does not grant a right of entry but rather the possibility for foreign investors to enter the host state subject to any admission or screening procedures.[130] For example, Article 3 of the Colombia-Spain BIT (2021) states that:

> 1. Each Contracting Party shall promote and admit, in its Territory, Investments made by Investors of the other Contracting Party **in accordance with its legal system.**
>
> 2. Each Contracting Party shall, **in accordance with its legal system**, grant to Investments made in its territory the permits necessary for the realization and maintenance of such Investment.
>
> 3. Each Contracting Party shall endeavor to grant, **subject to its national law**, the authorizations required by the Investor to permit the activities of consultants or qualified personnel, whatever their nationality, necessary for the implementation and maintenance of the Investment.

The references to the domestic legal systems of each contracting party showcase the discretion of each country to regulate the admission of foreign investors. In doing so, there is no commitment made regarding non-discriminatory entry conditions. Only when the investor is admitted to the host country, he can invoke the non-discrimination principles and other standards of treatment and protection within the relevant IIA.[131] Within IIAs following the admission model, there will be no specific exceptions regarding the non-discrimination principles as the entry and establishment falls within the discretion of the host state.[132]

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[129] Jonathan Bonnitcha, 'The return of investment screening as a policy tool' (2020) Investment Treaty News IISD, <https://www.iisd.org/itn/en/2020/12/19/the-return-of-investment-screening-as-a-policy-tool-jonathan-bonnitcha/> accessed 28 August 2023

[130] Anna Joubin-Bret, 'Admission and Establishment in the Context of Investment Protection' in August Reinisch (ed) *Standards of Investment Protection* (OUP 2008), 9

[131] ibid 11

[132] ibid 12

The second option is the right of establishment by means of granting MFN and/or national treatment already in the pre-establishment phase.[133] This means that the host state guarantees non-discriminatory treatment throughout all phases of the investment, thereby limiting its policy space with respect to investor's establishment.[134]

Contrary to the admission model, the right of establishment can be subject to specific exceptions to national treatment and MFN. These exceptions can be in the form of a negative list, which exempts a list of sectors or activities from NT or MFN or a positive list, which states that NT and MFN is only granted under certain circumstances, for certain sectors or activities.[135] It is worth mentioning that in case of a negative list, the exceptions can be extensive, resulting in an excavation of the pre-establishment model.

For example, Article IV(2)(d) of the Canada-Egypt BIT (1996) uses the negative list approach and states that:

(d) The right of each Contracting Party to make or maintain exceptions within the sectors or matters listed in the Annex to this Agreement.

Whereafter the Annex states that:

> 1. In accordance with Article IV, subparagraph 2(d), Canada reserves the right to make and maintain exceptions in the sectors or matters listed below:
>
> — social services (i.e. public law enforcement; correctional services; income security or insurance; social security or insurance; social welfare; public education; public training; health and child care);
>
> — services in any other sector;
>
> — government securities — as described in SIC 8152;
>
> — residency requirements for ownership of oceanfront land;
>
> — measures implementing the Northwest Territories and the Yukon Oil and Gas Accords.

[133] ibid
[134] ibid
[135] ibid 13

3.1.2 Types of investment screening

Domestic investment laws may establish the screening or case-by-case reviews of a potential foreign investment conducted by a specialised public authority in the host country.[136] In relation to CRMs, a domestic investment screening regulation may allow e.g., a host state to restrict foreign investors from taking over certain industry facilities, like mining companies.[137] This would constitute inbound foreign investment screening, whereby the screening takes place in the host country.

A second type of investment screening is outbound foreign investment screening. This is a mechanism whereby the investors' home state screens capital outflow towards third countries.[138] At the moment of writing, only the US government officially issued an Executive Order on 9 August 2023 establishing an outbound investment program regarding US investments in certain national security technologies and products in 'countries of concern', like e.g., China.[139]

While the Order only covers semiconductors, quantum information technologies and artificial intelligence, its legal value cannot be underestimated given its potential precedential value. The EU, whose inbound foreign investment screening mechanism only entered into force in 2020, mentioned in its 2023 Work Programme that the European Commission is 'prepared to revise the EU's FDI screening regulation' and that they will 'examine whether additional tools are necessary in respect of outbound strategic investment controls'.[140] In its latest Communication on European Economic Security Strategy, outward investment screening is mentioned for security purposes in the areas of quantum, advanced semiconductors and artificial intelligence.[141] Given the importance of gallium (Ga) and germanium (Ge) for creating semiconductors, as explained above, it is probable that the EU will issue a similar outbound

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[136] Ignacio Gomez-Palacio and Peter Muchlinksi, 'Admission and Establishment' in Peter Muchlinksi, Federico Ortino and Christoph Schreurer (eds) *The Oxford Handbook of International Investment Law* (OUP 2012), 238.
[137] Sarah Bauerle Danzman and Sophie Meunier, 'Mapping the Characteristics of Foreign Investment Screening Mechanisms: The New PRISM Dataset' (2023) 67(2) International Studies Quarterly
[138] Chase D. Kaniecki, Vladimir Novak and Thomas Harbor, 'Outbound Investment Screening Regime – EU May Follow in U.S. Footsteps' (*Clearly Gottlieb*, 8 February 2023) <https://www.clearygottlieb.com/news-and-insights/publication-listing/outbound-investment-screening-regime-eu-may-follow-in-us-footsteps> accessed 28 August 2023
[139] U.S. Department of the Treasury, 'Outbound Investment Program' (9 August 2023) <https://home.treasury.gov/policy-issues/international/outbound-investment-program> accessed 28 August 2023
[140] Commission, 'Commission Work Programme 2023: A Union standing firm and united' (Communication) COM(2022) 548 final
[141] Commission, 'European Economic Security Strategy' (Joint Communication) JOIN(2023) 20 final

screening mechanism, thereby supporting its CRM policies and strengthening the creation of strategic partnerships like e.g., the EU's CRM club.

3.1.3 Investment screening mechanisms and IIAs

3.1.3.1 Scope and potential breaches

In order for domestic screening mechanisms to fall within the scope of an IIA, that agreement either has to follow the pre-establishment model or the screening mechanism should have the ability to screen already established investments.[142]

It should be noted that investment screening after the establishment of an investor into a host state ('retrospective investment screening') is rare. However, some investment screening regimes provide for mechanisms whereby an authority can take measures regarding the investment retrospectively. For example, the EU's investment screening regulation includes a 'cooperation mechanism' for investments which are not subject to pre-establishment screening and are '*likely to affect [a Member State's] security or public order'*.[143] Under the cooperation mechanism, any other EU Member State or the European Commission may provide an opinion up to 15 months after the investment has been completed which can initiate subsequent measures, including mitigation.

While this is not retrospective screening *sensu strictu*, its scope does fall within the ambit of IIAs. Two other examples of retrospective screening are the 'call-in' procedures in the Australian and UK investment screening legislation.[144] Under both regulatory frameworks, under certain conditions, the Australian Treasurer and UK's Secretary of State, up to 10 and 5 years respectively, after the investment is made, may mitigate national security risks of established investments.[145]

So, while domestic screening mechanisms as such fall within a country's regulatory policy space, this does not mean they cannot reduce or violate obligations under IIAs. An investment screening procedure might violate national and most-favoured-nation (MFN) treatment

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[142] Tania Voon and Dean Merriman, 'Incoming: How International Investment Law Constrains Foreign Investment Screening' (2023) Journal of World Investment & Trade 24, 93
[143] Regulation (EU) 2019/452 of 19 March 2019 establishing a framework for screening of foreign direct investments into the Union [2019] LI 79/1, Article 7
[144] National Security and Investment Act 2021 (UK) and
[145] Cf Voon and Merriman (n 140), 87-88

provisions, protection against expropriation provisions or the standards of Fair and Equitable Treatment (FET) and Full Protection and Security (FPS).[146] Especially in cases of retrospective screening, the FET and FPS standards are likely to be violated.

In case of the pre-establishment model, inbound investment screening by definition only affects foreign investors. As a result, an ISDS claim in the absence of an exception or carve-out might be tempting for investors.[147]

Nonetheless, a host state might be able to argue that the screening mechanism is part of a national security concern and rely on a security exception if provided for in the relevant IIA. However, *'unless a treaty contains specific wording granting full discretion to the State to determine what it considers necessary for the protection of its essential security interests, national security clauses are not self-judging'*.[148] As a result, a host state invoking a national security exception bears the burden to prove the investment screening regime meets the nexus requirement for the clause to be triggered.[149]

Given the arising national security investment screening mechanisms, its appearance in arbitral awards increased significantly. Most recently, Huawei initiated an ICSID claim against Sweden after being precluded from its 5G rollout.[150] Against this background, it should be noted that the acceptance of national security and essential security interests is evolving within investment arbitration awards. It is thus unclear what the outcome of an essential security interest defence would bring to an ISDS dispute regarding an investment screening claim.

3.1.3.2 Remaining policy space

On 24 August 2023, the French Minister of Economy Bruno Le Maire stated in a speech his intention to broaden the scope of the French foreign investment control to be broadened to CRMs' extraction and transformation.[151] Given the minimum benchmarks the EU wants to reach regarding intra-EU extraction and refining as explained in Section 1.1.2, it seems the

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[146] ibid 93
[147] ibid 94
[148] CC/Devas (Mauritius) Ltd., Devas Employees Mauritius Private Limited and Telcom Devas Mauritius Limited v. Republic of India, PCA Case No. 2013-09, Award on Jurisdiction and Merits, 25 July 2016, para. 219
[149] ibid para. 233
[150] *Huawei Technologies Co., LTD. v. The Kingdom of Sweden* (7 January 2022) ICSID Request for Arbitration
[151] Théo Bourgery-Gonse, 'Eyeing China, France mulls foreign investment screenings in raw materials sector' (*EURACTIV*, 24 August 2023) <https://www.euractiv.com/section/economy-jobs/news/eyeing-china-france-mulls-foreign-investment-screenings-in-raw-materials-sector/> accessed 28 august 2023

proposal of Le Maire would be enacted in order to protect the French mining industry and possible French CRM reserves.

If an EU Member State wants to include CRM extraction and transformation without breaching its IIAs, it has some leeway. If the IIA in question follows the admission model, there is more policy space left for an inbound investment screening mechanism than under a pre-establishment model. This logic is all the more pertinent considering that investment screening mechanisms mostly relate to pre-investment screening, rather than retrospective screening.

However, in case of retrospective screening, there will be less policy space left under the admission model bearing in mind that all investor protection provisions from the respective IIA will be applicable.

To conclude, in theory, one could state that for the EU as a resource-poor actor seeking access so CRM reserves, investor access will mainly be guaranteed if investments take place under IIAs with a pre-establishment model, whereby non-discriminatory treatment is guaranteed during all phases of the investment. Against this background, it should be stated that the pre-establishment model within the EU's IIAs is rather rare. On the contrary, if a resource-rich host state wants to protect its CRM reserves, it should opt for an admission model under its IIAs, thereby preserving its right to enact investment screening regimes.

3.2 Exceptions

As part of the growing attention within international investment law for a host state's right to regulate, recent IIAs increasingly contain exception clauses.[152] This, contrary to traditional IIAs, which rarely contain exception clauses.[153]

Just as within other areas of treaty law, contracting parties to an IIA often wish to deviate from some obligations through exception clauses. Exception clauses, used interchangeably with non-precluded measures clauses, allow a contracting party to lawfully take certain actions that would otherwise violate substantive treaty obligations to foreign investors because of a particular regulatory or policy objective.[154] There exist several types of exception clauses with the main distinction being general and specific exceptions. In the past years, exception clauses have been increasingly implemented within IIAs as part of the debate on the right to regulate.[155] This is largely due to their perceived role as corrections for pro-investor awards of ISDS tribunals as they express the primacy of public policy objectives, e.g. environment, public health, labour rights, national security and public order over investor protection.[156] The following sub-sections will analyse exception clauses, thereby highlighting their function as a bridge between international investment law and other legal frameworks.[157]

3.2.1 General and security exception clauses

3.2.1.1 Treaty use

(1) General exceptions

General exception clauses are one way for contracting parties to circumvent IIA obligations for the benefit of their domestic policies. Following the example of the WTO Agreements and Article XX GATT, general exceptions specify that the IIA obligations safeguarding investor

[152] Kilian Wagner, 'Regulation by Exception – The Emergence of (General) Exception Clauses in International Investment Law?' (2021) 26 Austrian Review of International and European Law, 77
[153] ibid 81
[154] Caroline Henckels, 'Scope Limitation or Affirmative Defence? The Purpose and Role of Investment Treaty Exception Clauses' in Lorand Bartels and Federica Paddeu (eds) *Exceptions in International Law* (OUP 2020)
[155] Cf Wagner (n 152)
[156] Pathirinia Dilini and Mark McLaughin, 'Non-Precluded Measures Clauses: Regime, Trends and Practice' in Julien Chaisse, Leïla Choukroune and Sufian Jusoh (eds) *Handbook of International Investment Law and Policy* (Springer Singapore 2021), 483
[157] ibid

protection do not restrict the host states from taking regulatory measures necessary to achieve certain objectives.[158] There are several types of general exception clauses. The most important ones for the sake of this thesis are 'general public policy exceptions', which refer to a set of clauses which i) is not explicitly limited in scope to certain primary obligations ii) cover broad public policy concerns which go beyond public order and national security matters and iii) justify a measure that would normally be a violation of the IIA.[159] Within international trade law, Article XX GATT can be considered a 'general public policy exception' given its broad range of public policy concerns: human, animal and plant life or health; the conservation of exhaustible natural resources; etc.

Within international investment law, general public policy exceptions should be differentiated from 'right to regulate' clauses on the one hand, and strict 'public policy exceptions' on the other.[160] While the former solely affirms a state's regulatory autonomy, the latter incorporates the public policy power doctrine within an IIA and only extends to NT and MFN obligations.[161]

For example, Article 8.1 of the EU-Angola Sustainable Investment Facilitation Agreement states that:

> Nothing in this Agreement shall be construed to prevent the adoption or enforcement by either Party of measures:
>
> a) necessary to protect public security or public morals or to maintain public order (12);
>
> b) necessary to protect human, animal or plant life or health;
>
> c) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement including those relating to:
>
> i) the prevention of deceptive and fraudulent practices or to deal with the effects of a default on contracts;
>
> ii) the protection of the privacy of individuals in relation to the processing and dissemination of personal data and the protection of confidentiality of individual records and accounts;
>
> iii) safety.

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[158] Jarrod Hepburn, 'Specific Exceptions in Investment Law Protecting Domestic Policy Space' in Thomas Cottier and Krista Nadakavukaren Schefer (eds) *Elgar Encyclopedia of International Economic Law* (Edward Elgar Publishing 2017)
[159] Wolfgang Alschner and Kun Hui, 'Missing in Action: General Public Policy Exceptions in Investment Treaties' in Lisa Sachs, Jesse Coleman, Lise Johnson (eds) *Yearbook on International Investment Law and Policy* (OUP 2018) 2
[160] ibid 3
[161] ibid

As a footnote to Article 8.1 (a) it is stated that:

> (12) The public security and public order exceptions may be invoked only where a genuine and sufficiently serious threat is posed to one of the fundamental interests of society.

Other IIAs incorporate Article XX GATT, for example Article 2.22 of the EU – Vietnam FTA stipulates that:

> 1. Nothing in this Chapter prevents either Party from taking measures in accordance with Article XX of GATT 1994, including its Notes and Supplementary Provisions, which are incorporated into and made part of this Agreement, mutatis mutandis.
>
> 2. The Parties understand that before taking any measures provided for in subparagraphs (i) and (j) of Article XX of GATT 1994, the exporting Party intending to take such measures shall provide the other Party with all relevant information. Upon request of either Party, the Parties shall consult with a view to seeking an acceptable solution. The Parties may agree on any means needed to resolve the difficulties. If prior information or examination is impossible due to exceptional and critical circumstances requiring immediate action, the exporting Party may apply the necessary precautionary measures and shall immediately inform the other Party thereof.

Lastly, some IIAs include a 'prohibition and restriction clause' which is more lenient than the types described above.[162] For example, Article 11 of the China-Singapore BIT (1985) states that:

> The provisions of this Agreement shall not in any way limit the right of either Contracting Party to apply prohibitions or restrictions of any kind or take any other action which is directed to the protection or its essential security interests, or to the protection of public health or the prevention of diseases and pests in animal or plants or the protection of its environment.

In order to justify an alleged violation under a general exception clause, the nexus requirement has to be fulfilled as indicated by the 'necessary to' wording. Concretely, the host state has to prove that its disputed measure has 'a close and genuine relationship with the objective pursued'.[163] The nexus requirement ensures host state do not abuse exception provisions for protectionist purposes.[164]

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[162] ibid 7
[163] cf Dilini and McLaughin (n 156), 491
[164] ibid

In addition, many IIAs included that the measure at issue is 'not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination (…) or a disguised restriction on trade', thereby referring to the 'chapeau' of Article XX GATT which is a difficult standard to fulfil.[165]

(2) Security exceptions

Security exceptions on the other hand provide contracting parties with policy space when it comes to security-related concerns.[166] Similarly to the general exception clauses, they are often mirrored to Article XXI GATT, which serves as the security exception within WTO law.[167]

It has been recognised within case law that security exceptions are not self-judging and it is for the host state invoking the exception to prove the nexus-requirements between the measure and the objective is fulfilled.[168] Nonetheless, a state has a wide margin of appreciation in determining what a security interest entails.[169] As a result, severe financial crises or other internal emergencies can be recognised as a security objective.[170]

3.2.1.2 Effectiveness of general exception clauses

Deviating from IIAs substantive obligations is a fairly new attempt to modernise traditional IIAs and create a newer generation of IIAs, which aims at increasing a state's right to regulate.[171] Whereas this might be a convincing attempt, the effectiveness in creating policy space of such general exceptions within international investment law has been called into question.

In *Eco Oro v. Columbia Decision* and *Rand Investments Ltd and others v. Republic of Serbia*, the Tribunal held that the general exception clause does not prevent the payment of compensation even if the requirements of the exception are met.[172] The Tribunal in *Eco Oro v.*

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[165] See e.g. Article 32.1(4) UK – New Zealand FTA (2022)
[166] Caroline Henckels, 'Permission to Act: The Legal Character of General and Security Exceptions in International Trade and Investment Law' (2020) 69 International and Comparative Law Quarterly, 557
[167] cf Wagner (n 132), 86.
[168] *CC/Devas (Mauritius) Ltd., Devas Employees Mauritius Private Limited and Telcom Devas Mauritius Limited v. Republic of India*, PCA Case No. 2013-09, Award on Jurisdiction and Merit, para. 219
[169] cf Wagner (n 152) 87
[170] ibid
[171] ibid
[172] *Eco Oro Minerals Corp v. Republic of Colombia* ICSID Case No. ARB/16/41, 830; *Rand Investments Ltd. and others v. Republic of Serbia* ICSID Case No. ARB/18/8, 631-632 and 673

Colombia Decision thereby clarified that, while a State can indeed rely on the general exception clause to protect human, animal or plant life and health, the Colombia - Canada FTA is *'equally supportive of investment protection, had it been the intention of the Contracting Parties that a measure could be taken pursuant to Article 2201(3) without any liability for compensation, the Article would have been drafted (…) namely making explicit that the taking of such a measure would not give rise to any right to seek compensation.'*[173] Accordingly, the right to compensation could only have been avoided if it was explicitly stipulated within Article 2210(3). While the Award has received quite some criticism for putting investment protection and environmental protection on an equal footing, it also shows the potential inadequacies or the precarious policy space the general exception clause offers.[174]

3.2.1.3 CRM access and general exception clauses

With regard to access to CRMs, the effect of general exception clauses is unclear.[175] Needless to say that the effect of a general exception clause most often depends on the specific wording of the IIA in question. However, as recognised in WTO case law, a state might be able to rely on a general exception clause to justify their restrictions on CRM access.

Article XX(g) GATT states that:

> Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures:
>
> (g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

In addition to the chapeau of Article XX GATT, there are three requirements for the justification of a governmental measure under Article XX(g) GATT. First, the measure should be about 'the conservation of exhaustible natural resources'. Second, the measure should 'relate to' the

[173] ibid 829
[174] Roopa Mathews and Dilber Devitre, 'New Generation Investment Treaties and Environmental Exceptions: A Case Study of Treaty Interpretation in Eco Oro Minerals Corp. v. Columbia' (*Kluwers Arbitration Blog*, 11 April 2022) <https://arbitrationblog.kluwerarbitration.com/2022/04/11/new-generation-investment-treaties-and-environmental-exceptions-a-case-study-of-treaty-interpretation-in-eco-oro-minerals-corp-v-colombia/> accessed 7 September 2023
[175] cf Hepburn (n 158)

conservation of exhaustible natural resources and third, the measure should be made 'in conjunction with' restrictions on domestic production or consumption.

In *China – Raw Materials (2012)*, the Appellate Body recognised that:

> The word "conservation", in turn, means "the **preservation of the environment, especially of natural resources**"
>
> (…)
>
> Article XX(g) permits trade measures relating to the conservation of exhaustible natural resources if such trade measures work together with restrictions on domestic production or consumption, which operate so as to conserve an exhaustible natural resource.[176]

Similarly, in *China – Rare Earths (2014)*, the Panel acknowledged that it falls within a WTO Members' permanent sovereignty over its own natural resources that:

> (…) conservation as used in Article XX(g) does not simply mean placing a moratorium on the exploitation of natural resources, but includes also **measures that regulate and control such exploitation in accordance with a Member's development and conservation objectives.**
>
> (…) resource-endowed WTO Members are entitled to design conservation policies that meet their development needs, determine how much of a resource should be exploited today and how much should be preserved for the future, including for use by future generations, in a manner consistent with their sustainable development needs and their international obligations. (…) As such, **no WTO Member has, under WTO law, the right to dictate or control the allocation or distribution of rare earth resources to achieve an economic objective.** WTO Members' right to adopt conservation programmes is not a right to control the international markets in which extracted products are bought and sold. [177]

Given the existing examples of general exception clauses within IIAs which closely relate to WTO law, it is sensible to use WTO case law as a means of interpretation.[178]

Article 5(a)(iii) of the Colombia-Venezuela BIT (2023) lays down a non-discrimination requirement concerning the conservation of living or non-living exhaustible natural resources. Although Article 5(a)(iii) is not a general exception clause, it shows that future IIAs could include natural resources in their list of general exceptions reflecting Article XX(g) GATT.

Ad analogiam, one could argue in front of an investment arbitration tribunal that e.g., an export restriction falls within the general exception clause of the IIA given the meaning of 'conservation of natural resources'. This notwithstanding the balance that has to be preserved

[176] WTO Appellate Body Report, *China – Raw Materials*, para. 355 and 360
[177] WTO Panel Report, *China – Rare Earths*, para. 7. 266 and 7.267
[178] ibid

between national sovereignty over a country's CRM resources on the one hand and the right to sustainable development on the other.[179]

3.2.2 Specific exceptions

Apart from general exceptions, IIAs often also include specific exceptions. This second type of exception is specific to a certain treaty standard.[180] Contrary to general exception clauses which cover generally all IIA obligations, specific exceptions relate to e.g., taxation, performance requirements, export taxes, etc.[181]

The most relevant specific exception clauses for creating policy space in the CRM supply chain is by prohibiting export monopolies, duties, and export restrictions. An export tax or export duty is a financial charge or a tax on exported products, due given their exportation.[182] Without going into detail regarding the legality of export taxes under WTO law, recent IIAs often impose i) a general prohibition on export taxes or ii) allow existing export taxes but ban the introduction of new taxes or the increase of existing taxes.[183]

The EU, in its most recent IIAs, seems to include such specific exceptions. For example, Article 8.4 of the EU-Chile Advanced Framework Agreement stipulates:

> No Party shall designate or maintain a designated **import or export monopoly**. For the purposes of this Article, import or export monopoly means the exclusive right or grant of authority by a Party to an entity to import energy goods or raw materials from, or export energy goods or raw materials to, the other Party.

In addition, Article 8.5 prohibits dual-pricing schemes:

> (1) A Party shall not impose a higher price for exports of energy goods or raw materials to the other Party than the price charged for such good when destined for the domestic market, by means of any measure, such as licenses or minimum price requirements.

Under 'Chapter Two: National Treatment and Market Access' of the Chile – Ecuador Economic Complementation Agreement (2020), Article 2.4 deviates from the national treatment treaty standard by stating that:

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[179] Peter Van den Bossche and Werner Zdouc, *The Law and Policy of the World Trade Organization: Text, Cases and Materials* (4th edn, Cambridge University Press 2017), 575
[180] cf Gleason and Titi (n 128)
[181] cf Hepburn (n 158)
[182] cf Van den Bossche and Zdouc (n 179) 470
[183] Henry Gao and Weihuan Zhou, 'Export taxes and raw materials' in Michael Faure (ed) *Elgar Encyclopedia of Environmental Law* (Edward Elgar Publishing 2023)

> **Neither Party may adopt or maintain duties, taxes, or other charges on exports** of any good to the territory of the other Party, unless such duties, taxes, or charges are adopted or maintained on any good for domestic consumption, notwithstanding Article 2.6.

Article 2.6 subsequently says:

> Except as provided in Annex 2.3, neither Party may adopt or maintain any prohibition or restriction on the importation of any good of the other Party or on the exportation or sale for export of any good destined for the territory of the other Party, **except as provided in Articles XI, XX, and XXI of the GATT 1994,** including their respective interpretative notes. For this purpose, Article XI of the GATT 1994 and its respective interpretative notes are incorporated into and made an integral part of this Agreement, mutatis mutandis.

Both Article 2.4 and Article 2.6 are specific exceptions in the sense that they depart from national treatment. However, while export duties under Article 2.4 are strictly prohibited ('notwithstanding Article 2.6'), export restrictions can be justified if i) a general exception under Article XX GATT ii) the security exception under Article XXI GATT apply or alternatively in order to prevent a critical shortage of essential products or any other exception provided for in Article XI:2 GATT.

While these sorts of specific exceptions do not necessarily allow for policy space, they do safeguard investor's access and promote fair competition in the area of raw materials by prohibiting a host state from favouring its domestic extraction and production of CRMs. They are thus particularly beneficial for resource-poor actors like the EU include them in their IIAs in order to secure a resilient supply chain.

3.3 Carve-outs and reservations

Another way for states to safeguard policy space under IIAs is through carve-outs or reservations. A carve-out is a provision in an IIA which exempts an entire sector or policy area from the scope of the IIA.[184] While comparable, a reservation allows contracting parties to unilaterally designate a sector or multiple sectors to which they reserve the right to adopt or maintain otherwise IIA-breaching measures in the future. Importantly, IIAs do generally not define a provision as a carve-out. Rather, one can identify a carve-out due to the specific

[184] Caroline Henckels, 'Should Investment Treaties Contain Public Policy Exceptions?' (2018) 29 Boston College Law Review, 2828

wording of a provision which often excludes a certain measure, sector or policy area by stating 'does/shall not apply to' or 'exempt from the provisions of the Agreement'.[185]

A carve-out or a reservation excludes a specific sector or industry *ex ante*. In contrast to an exception clause which allows for a justification *ex post*, thereby preserving policy space for future occurrences.[186] Carve-outs are often used to exempt government procurement or taxation measures, if not done so in a manner which constitutes expropriation.[187]Alternatively, a carve-out from a certain industry like e.g. concessions concerning natural resources can be stipulated.[188]

The main consequence of the distinction between exceptions and carve-outs lies in the burden of proof. In case of an *ex ante* carve-out, the complete exclusion of e.g. the CRM mining industry would create a level of legal certainty where investment arbitration claims are much less likely than in case of an exception clause, where the host state still has to prove the measure at issue is taken in close and genuine relationship with the objective pursued.[189] Carve-outs thus ultimately result in the highest level of certainty for host states that their national measures taken are not in violation of their IIAs.[190]

As a consequence, a CRM carve-out might ensure regulatory policy space for resource-rich countries, while resource-poor countries might face disadvantageous investor protection within the scope of the carve-out. However, it should be noted that a host state's CRM carve-out is not unlimited as it cannot be used to modify the meaning of the FET standard.[191]

3.4 Conclusion

The past sections have exhibited possible legal techniques for both resource-poor and resource-rich actors to safeguard their domestic policy domain. Given the broad investor protection enshrined in traditional IIAs, most of the mechanisms explained above are beneficial for host

[185] Joshua Paine and Elizabeth Sheargold, 'A Climate Change Carve-Out for Investment Treaties' (2023) 26(2) Journal of International Economic Law, 291
[186] Cf Henckels n (184)
[187] ibid
[188] See e.g. Greece-UAE BIT, article 1.1(e)
[189] Taejoon Ahn, 'The Utility of Carve-Out Clauses in Addressing Regulatory Concerns in Investment Treaty Arbitration' (2016) 12(1) Asian International Arbitration Journal, 73-74
[190] Andrew Mitchell and Elizabeth Sheargold, 'Protecting the autonomy of states to enact tobacco control measures under trade and investment agreements' (2015) 24 Tobacco Control
[191] See *Joseph Charles Lemire v. Ukraine*, ICSID Case No. ARB/06/18 (2011)

states who aim to protect their CRM reserves domestically. By inserting general exception clauses related to natural resources, a state could defend its measures in proving the measure was necessary to protect natural resources. Such an exception clause is strengthened by the international law principle of permanent sovereignty over a country's own natural resources. However, a host state willing to create a carve-out will have more certainty *ex ante* that ISDS claims are much less likely to arise, by excluding everything related to the raw materials supply chain from the relevant IIA.

With regard to investment screening, both resource-poor and resource-rich actors should in principle opt for different mechanisms in case they wish to maximise their domestic benefits. If a resource-poor actor, seeking access to CRMs, wants to ensure it is not subject to any investment screening mechanisms, it should try to implement the pre-establishment model in its IIAs with resource-rich countries. In contrast, if a country wants to protect its reserves by discouraging FDI, an admission model offers more regulatory autonomy to do so. However, given these contrasting interests, it might not be possible for both actors to reach an agreement. Moreover, within IIA treaty practice, it has been recognised that developed states often bear the role of rule-makers, while developing countries act as rule-takers.[192] It is thus likely that developed resource-poor countries are able to persuade their IIA counter-state party, at the cost of their CRM reserves.

That said, one cannot neglect that IIAs, just as other treaty regimes, strike an almost impossible balance between commitment and flexibility.[193] While the obligations laid down in IIAs create commitment, thereby securing legal certainty for foreign investors and attracting FDI, it also restricts the regulatory autonomy and flexibility for host states significantly. With regard to CRMs, the EU wants to ensure its investors can enter foreign markets who have more resources than the EU itself. This can only be done through IIAs with a high level of commitment. On the other hand, its Member States seek protect their possible CRM reserves by implementing investment screening mechanisms which require flexibility. Given this contradictory approach, the following chapter will conduct an analysis on which regulatory and policy options exist

[192] Wolfgang Alschner, *Investment Arbitration and State-Driven Reform: New Treaties, Old Outcomes* (OUP 2022) 28

[193] Anne van Aaken, 'International Investment Law Between Commitment and Flexibility,' (2009) 12(2) Journal of International Economic Law

outside an IIA treaty for both resource-rich and resource-poor actors, without violating their IIA obligations.

CHAPTER IV. THE REMAINING RIGHT TO REGULATE

4.1 Performance requirements

4.1.1 Legal concept

Performance requirements can be defined as *'stipulations, imposed on investors, requiring them to meet certain specified goals with respect to their operations in the host country'*.[194] These stipulations are imposed by host states with the aim of protecting their domestic markets. In doing so, they implement obligations on the foreign investor to conduct its business in a certain way for the benefit of the host state.[195] For instance, the host state can oblige the investor to use local materials, to hire local personnel or to export a certain quantity of products.[196] As an example, Article 254 of Colombia's Mining Law of 2001 allows the governmental mining authority to designate a minimum percentage of local workers and grants the competence to this authority to periodically assess whether this condition is complied with.[197] Likewise, a host state might link performance requirements with a foreign investor's admission into the host state or alternatively with the right to receive an advantage, such as e.g., a subsidy.[198]

Overall, there are three general objectives for states to adopt performance requirements: i) maximising beneficial FDI impacts on its economy ii) bolstering, diversifying and expanding a certain domestic industry via new products or processes and iii) increasing the value added to a product from FDI.[199] Ultimately, performance requirements aim to reduce imports and increase exports.[200] They can thus be a vital means for host states to ensure that foreign investments in their country leads to a boost of economic development.[201] Especially in relation

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[194] UNCTAD, 'Foreign Direct Investment and Performance Requirements: new evidence from selected countries', UNCTAD/ITE/IIA/2003/7
[195] Rudolf Dolzer, Ursula Kriebaum and Christoph Scheuer, *Principles of International Investment Law* (3rd edn OUP 2022) 140
[196] ibid
[197] Richard W. Roeder, *Foreign Mining Investment Law: The Cases of Australia, South Africa and Colombia* (Springer 2016) 104
[198] Alexandre Genest, 'Performance Requirement Prohibitions, *Lemire v. Ukraine* and *Mobil v. Canada*: Stuck Between a Rock and a Hard Place' (2013) 47 RJTUM 442
[199] Alexandre Genest, *Performance Requirement Prohibitions in International Investment Law* (Brill Publishing 2019) 19
[200] ibid
[201] Ella Merrill, Jesse Coleman, Lisa Sachs and Lise Johnson, 'International Investment Law and The Extractive Industries' (*Columbia Center on Sustainable Investment*, July 2022) <https://ccsi.columbia.edu/sites/default/files/content/docs/International-Investment-Law-Extractive-Industries-2022-09-01-Final.pdf > accessed 18 September 2023

to developing and least-developing countries with possible CRM reserves, performance requirements might be an ultimate way to further their development level.

However, while performance requirements at first glance look beneficial for a host state's development, they often go against fair competition and have the potential of creating adverse effects.[202] Above, given a foreign investor's aim to reduce costs, performance requirements can significantly impact the profitability of an investment.[203] For this reason, states have increasingly incorporated performance requirement prohibitions in their IIAs.[204] According to the Electronic Database of Investment Treaties (EDIT), there are multiple hundreds of IIAs which contain a performance requirement prohibition.[205] In the past, prohibitions on performance requirements were rarely included.[206] One of the early examples of performance requirement prohibitions can be found in Article 1106 of the North American Free Trade Agreement (NAFTA) which was later replaced by Article 14.10 of the United States-Mexico-Canada Agreement (USMCA) and states that:

1. No Party shall, in connection with the establishment, acquisition, expansion, management, conduct, operation, or sale or other disposition of an investment of an investor of a Party or of a non-Party in its territory, impose or enforce any requirement, or enforce any commitment or undertaking:

(a) to export a given level or percentage of goods or services;
(b) to achieve a given level or percentage of domestic content;
(c) to purchase, use, or accord a preference to a good produced or a service supplied in its territory, or to purchase a good or a service from a person in its territory;
(d) to relate in any way the volume or value of imports to the volume or value of exports or to the amount of foreign exchange inflows associated with the investment;
(e) to restrict sales of a good or a service in its territory that the investment produces or supplies by relating those sales in any way to the volume or value of its exports or foreign exchange earnings;
(f) to transfer a technology, a production process, or other proprietary knowledge to a person in its territory;
(g) to supply exclusively from the territory of the Party a good that the investment produces or a service that it supplies to a specific regional market or to the world market;
(h)
(i) to purchase, use, or accord a preference to, in its territory, technology of the Party or of a person of the Party, 13 or
(ii) that prevents the purchase or use of, or the according of a preference to, in its territory, a technology; or
(i) to adopt:
(i) **a given rate or amount of royalty under a license contract**, or

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[202] cf Genest (n 199) 27
[203] cf Roeder (n 197) 95
[204] Cf Dolzer, Kriebaum and Scheuer (n 195) 141
[205] Electronic Database of Investment Treaties, 'Investment Treaties' <https://edit.wti.org/document/investment-treaty/search> last accessed 28 October 2023
[206] Barton Legum and Ioana Petculescu, 'Performance Requirements' in Meg Kinnear, Geraldine R. Fischer, Jara Minguez Almeida, Luisa Fernanda Torres and Mairée Uran Bidegain (eds) *Building International Investment Law: The First 50 Years of ICSID* (Kluwer Law International 2016) 598

> (ii**) a given duration of the term of a license contract**, in regard to any license contract in existence at the time the requirement is imposed or enforced, or any commitment or undertaking is enforced, or any future license contract freely entered into between the investor and a person in its territory, provided that the requirement is imposed or the commitment or undertaking is enforced in a manner that constitutes direct interference with that license contract by an exercise of non-judicial governmental authority of a Party. For greater certainty, paragraph 1(i) does not apply when the license contract is concluded between the investor and a Party.

Many IIAs with a performance requirement provision are modelled on the WTO's Agreement on Trade-Related Investment Measures (TRIMs). In doing so, the provisions explicitly follow the TRIMs Agreement or go beyond the TRIMs Agreement (TRIMs +) by including additional prohibitions, such as e.g. technology transfer, research and development, etc.[207]

4.1.2 Performance requirements and the WTO

International trade and FDI have increasingly become inseparable due to globalisation and fragmented business activities of multinational enterprises (MNE), thereby contributing to the creation of cross-border trade and FDI networks.[208] As a result, some domestic measures are located on the interface between international trade and international investment, e.g., performance requirements. Within the WTO, performance requirements are addressed in the framework of the Agreement on Trade-Related Investment Measures (TRIMs).[209] While there is no definition of a 'trade-related investment measure' (TRIM) to be found in the Agreement, Article 1 recognises that 'The Agreement applies to investment measures related to trade in goods only'. The Preamble of the TRIMs Agreement states '*that certain investment measures can cause trade-restrictive and distorting effects'*. This shows WTO Members' realisation of the significant repercussions of IIAs on international trade.[210]

Under Article 2 TRIMs, a WTO Member may not apply *'any TRIM that is inconsistent with the provisions of Article III (National Treatment) or Article XI (General Elimination of Quantitative Restrictions) GATT 1994'*. An illustrative list of measures violating the NT-

[207] Catherine Edoardova Costaggiu and Marie - Helene Ludwig, 'Performance requirements' <https://jusmundi.com/en/document/publication/en-performance-requirements> accessed 28 October 2023
[208] Cf Genest (n 170) 25
[209] Cf Dolzer, Kriebaum and Scheuer (n 166) 141
[210] Chi Carmody, 'TRIMS and the Concept of Investment Under the WTO Agreement' in Chi Carmody, Yuji Iwasawa and Sylvia Rhodes (eds) *Trilateral Perspectives on International Legal Issues: Conflict and Coherence* (ASIL 2003), 326

principle or the obligation of general elimination of quantitative restrictions is provided for in the Annex to the TRIMs Agreement.

Interestingly, the TRIMs Agreement includes both mandatory ('enforceable under domestic law') and non-mandatory ('compliance with which is necessary to obtain an advantage') performance requirements.[211] The illustrative list is subdivided in two blocks. Paragraph 1 exemplifies TRIMs violating NT as a) local content TRIMs, which includes the purchase or use by an enterprise of products of domestic origin or from any domestic source, whether specified in terms of i) particular products ii) volume or value of the products or iii) proportion of volume or value of its local production. And b) trade-balancing TRIMs, which *'limits an enterprise' purchases or use of imported products to an amount related to the volume or value of local products that it exports'*.

Paragraph 2 of the annexed illustrative list prohibits TRIMs that are inconsistent with Article XI GATT. These include a) *'the importation by an enterprise of products used in or related to its local production, generally or to an amount related to the volume or value of local production that it exports'* b) '*the importation by an enterprise of products used in or related to its local production, by restricting its access to foreign exchange to an amount related to the foreign exchange inflows attributable to the enterprise'* or c) *'the exportation or sale for export by an enterprise of products, whether specified in terms of particular products, in terms of volume or value of products, or in terms of a proportion of volume or value of its local production.'*

In summing up this illustrative list, it is important to note that paragraph 2 only relates to measures that restrict exports given the scope of Article XI GATT. As a consequence, export incentives are not covered by the TRIMs Agreement as they do not prohibit or restrict the exportation or sale for export of products.[212]

Furthermore, Article 3 TRIMs recognises the application of all exceptions under GATT 1994 to the TRIMs Agreement. As a result, a resource-rich host state can justify a violation of the TRIMs Agreement under both the general (Article XX GATT) and security (Article XXI GATT) exceptions provisions. This allows for e.g., local content requirements violating two

[211] See Illustrative List (1) TRIMs Agreement
[212] World Trade Organization, 'Agreement on Trade Related Investment Measures' <https://www.wto.org/english/tratop_e/invest_e/invest_info_e.htm> accessed 26 September 2023

core principles under WTO law to be justified under e.g., Article XX(b) 'necessary to protect human, animal or plant life or health' and Article XX(g) 'related to the conservation of exhaustible natural resources' as explained in Section 3.2. It should be noted that in such a cases, the burden of proof lies on the resource-rich host state who claims the exception.

Article 4 TRIMs allows developing and least-developing countries to deviate temporarily from Article 2 TRIMs. Moreover, such countries may continue using performance requirements which normally violate the TRIMs Agreement under certain conditions.[213] More controversially, a performance requirement prohibition under an IIA can thus nullify the benefits granted by Article 4 TRIMs in their bilateral or regional relations.[214] With this in mind, several IIAs explicitly incorporate the rights and obligations under the TRIMs Agreement.[215] For example, Article 3 of the Brazil-Chile CFIA (2015) states that:

> 2. For greater certainty,
>
> (b) This Agreement shall not restrict in any way the rights and benefits which the legislation in force in the territory of a Party or international law, including the Agreement on Trade-Related Investment Measures (TRIMs) of the World Trade Organization, by an investor of the other party;

4.1.3 Performance requirements and CRM access

4.1.3.1 Resource-rich actors

Regarding the ability of performance requirements to influence CRM access, our two-fold dichotomy between resource-rich and resource-poor actors is equally applicable. Firstly, resource-rich countries, which aim to increase their development level, could make use of performance requirements to do so. Therefore, in cases where performance requirements are likely to be prohibited during IIA negotiations, a resource-rich host state should try to limit its effects.[216] This can be done in multiple ways.

A first option is by simply reaffirming TRIMs obligations (see e.g., Article 3 of the Brazil-Chile CFIA above) instead of inserting a prohibition *sensu stricto* as in Article 14.10 USMCA. Given

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[213] Suzy H. Nikièma, 'Performance Requirements in Investment Treaties' (*IISD* 2014) <https://www.iisd.org/system/files/publications/best-practices-performance-requirements-investment-treaties-en.pdf> accessed 26 September 2023

[214] ibid

[215] Cf Legum and Petculescu (n 206) 609

[216] IISD, 'A Sustainability Toolkit or Trade Negotiators: Trade and investment as vehicles for achieving the 2030 Sustainable Development Agenda' <https://www.iisd.org/toolkits/sustainability-toolkit-for-trade-negotiators/5-investment-provisions/5-4-safeguarding-policy-space/5-4-3-performance-requirement-prohibitions/> accessed 18 September 2023

that Article 14.10 USMCA goes much further in terms of scope than the TRIMs Agreement, a reiteration of the rights under the TRIMs Agreement limits the effect of a prohibition. In this way, the performance requirement prohibitions are solely trade-related given the scope of the TRIMs Agreement. Another example of a such a reaffirmation is found in Article 9 of the Canada-China BIT:

> The Contracting Parties reaffirm their obligations under the WTO Agreement on Trade-Related Investment Measures (TRIMs), as amended from time to time. Article 2 and the Annex of the TRIMs are incorporated into and made part of this Agreement.

A second way could be through placing performance requirement obligations outside the scope of ISDS, thereby excluding any form of potential arbitration on the matter. In the EU-Canada Comprehensive Economic and Trade Agreement (CETA), pursuant to Article 8.18, performance requirements cannot constitute a claim before an investment tribunal.

Additionally, a resource-rich developing host state could exclude non-mandatory performance requirements from the scope of a prohibition. For example, Article 8.5(3) CETA states that:

> Paragraph 2 does not prevent a Party from conditioning the receipt or continued receipt of an advantage, in connection with an investment in its territory, on compliance with a requirement to locate production, provide a service, train or employ workers, construct or expand particular facilities, or carry out research and development in its territory.

4.1.3.2 Resource-poor actors

In contrast, resource-poor actors such as the EU, who aim to limit export quotas and other restrictions favour strict bans on performance requirements in IIAs. According to this reasoning, the more extensive the prohibition in the IIA, the more protection and legal certainty there will be. Therefore, resource-poor actors will in principle benefit the most from prohibitions in the sense of Article 14.10 USMCA, given its broad scope compared to TRIMs affirmations.

Currently, within the EU's newer generation of IIAs, one can identify several prohibitions on performance requirements. More specifically, Article 10.10 of the EU-Chile Advanced Framework Agreement and Article 9 of the EU-Mexico FTA both stipulate a prohibition for performance requirements following the example of Article 14.10 USMCA. The provisionally agreed Article 2.6 of the EU-Australia FTA (still under negotiation) and Article 2.6 of the EU-Indonesia FTA (still under negotiation) also follow the USMCA example. As these examples, with the exception of Australia, stem from IIAs concluded with developing countries, the lack

of reciprocal benefits of these provisions could raise genuine concerns regarding the EU's underlying aspirations and ambitions in relation to these developing countries.

4.1.3.3 Towards a balanced solution

In the past two sections, a reiteration of the contrasting interests between resource-rich and resource-poor actors led to an opposing type of regulatory action concerning performance requirements.

In the International Institute for Sustainable Development's (IISD) Model International Agreement on Investment for Sustainable Development, its authors advocate against a prohibition of performance requirements in IIAs.[217] Rather, they argue that given their potential for furthering sustainable development, an IIA should expressly allow for performance requirements in cases where the foreign investor was aware of the performance requirements before making its investment.[218] This leads to the following IISD Model provision:

(A) The Parties recognize their obligations regarding trade-related investment measures established in other international agreements to which they are a Party.

(B) Subject to Paragraph (A), host states may impose performance requirements to promote domestic development benefits from investments. **Measures adopted prior to the completion of the host state measures prescribing the formalities for establishing an investment shall be deemed to be in compliance with this Agreement. If such measures are taken after the completion of the host state measures prescribing the formalities for establishing an investment, they shall be subject to the provisions of this Agreement.**

(C) Measures covered by this Article include requirements: i) to export a given level or percentage of goods or services; ii) to achieve a given level or percentage of domestic content; iii) to purchase, use or accord a preference to goods produced or services provided in its territory; iv) to purchase goods or services from persons in its territory; v) to relate the volume or value of imports to the volume or value of exports or to the amount of foreign exchange flows associated with such investment; vi) to restrict sales of goods or services in its territory that such investment produces by relating such sales to the volume or value of its exports or foreign exchange earnings; and vii) similar measures intended to promote domestic development.[219]

The underlying rationale for an explicit permission of such performance requirements is that the foreign investor was aware of them and could take them into account before making its investment decision. On the contrary, in cases where performance requirements are enacted during the lifecycle of a foreign investment, it can severely affect the economic rationale behind the investment and the requirements will thus be subject to other investment protection

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[217] Howard Mann, Konrad von Moltke, Luke Eric Peterson and Aaron Cosbey, 'IISD Model International Agreement on Investment for Sustainable Development' (2nd edn IISD 2006) <https://www.iisd.org/system/files/publications/investment_model_int_handbook.pdf>
[218] ibid 39
[219] ibid Article 26

standards of the IIA, such as e.g., NT and FET. By inserting a provision like the IISD Model, an ultimate balance is struck between a host state's right to regulate and its aim to ensure that FDI furthers its development level and the foreign investor's investment protection.

4.2 Ownership and CRM mineral rights

4.2.1 Mineral rights

Within the mining industry, the admission of foreign investments is subject to more scrutiny and public attention than any other industry.[220] This can mostly be explained by the size, duration, societal and environmental impact of mining projects.[221] Furthermore, it should be highlighted that the origins of mining law are ancient and went through many legal reforms throughout centuries.[222]

Concerning the ownership of CRMs, a distinction should be made between i) the ownership of CRMs ii) the ownership of CRM mineral rights and iii) CRM mining licenses.[223] The ownership of CRMs refers to 'the actual ownership of the minerals in the ground' and lies either with the host state or a private party.[224] Mineral rights on the other hand encompass the rights parties have in connection with the minerals.[225] Lastly, mining licenses are 'government permissions to conduct actual exploration and mining activities.'[226] In a strict sense, mining licenses are not mineral rights. However, given their important linkage to mineral rights, they are included in this section.

While subject to historical developments, most resource-rich jurisdictions opt for a supremacy of state ownership over mineral rights and minerals.[227] For example, while private ownership of minerals and mineral rights was recognised in the past in Australia, Colombia and South Africa, all three countries diminished private ownership. Australia, most interestingly, already

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[220] Cf Roeder (n 197) 194
[221] ibid
[222] John P. Williams, 'Legal Reform in Mining: Past, Present and Future' in Elizabeth Bastida, Thomas Wälde and Janeth Warden-Fernandez (eds) *International and Comparative Mineral Law and Policy: Trends and Prospects* (Kluwer Law International 2005) 37
[223] Cf Roeder (n 197) 47
[224] ibid
[225] ibid
[226] ibid
[227] ibid 168

declared the 'next generation of rights' concerning the use of subsoil, geothermal energy and GHG storage reservoirs as state property.[228] In South Africa, under the Mineral and Petroleum Resources Development Act (MPRDA), all private ownership of minerals ceased to exist.[229] Similarly, the Chilean Constitution describes '*absolute, exclusive, inalienable and imprescriptible ownership of all mines'*.[230] This tendency of states to opt for state ownership of minerals and their rights indicates that foreign investors will most likely directly engage with the state itself who aims to utilise their resources in a way which furthers their economies.[231]

Hence, when a foreign investor wishes to make an investment in the CRM industry, he will try to obtain a legal instrument which allocates rights and obligations upon both him and the host state which are additional to the host state's national mining legislation.[232] This legal instrument can then be considered the governmental permission of the host state to start mining activities in different phases of a mining investment project. In most cases, this permission will be a 'mining license' (used interchangeably with 'concession') which can be distinguished by the various phases a license covers. For example, there are exploration licenses, extraction licenses and retention licenses.[233]

As supported by the definition of mineral rights given above, a mineral license often transfers a mineral right by the governmental authority in exchange for the foreign investor's commitment to carry out e.g., mining exploration, development and production.[234]

Alternatively, a foreign investor can start negotiating a mining development agreement.[235] Such an agreement either supplements or implements the host state's national mining legislation.[236] Most advantageously, a mining development agreement can lay out stability mechanisms which aim to safeguard 'certain defined parameters for the duration of a mining project', such as e.g. taxation arrangements.[237] Especially in cases where the investment is substantial, a mining development arrangement has the ability to create greater legal certainty for a foreign

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[228] ibid
[229] ibid
[230] See Article 19.24 of the Chilean Constitution (1980)
[231] Cf Roeder (n 197) 168
[232] Peter D. Cameron, *International Energy Investment Law: The Pursuit of Stability* (2nd edn, OUP 2021) 84
[233] Cf Roeder (n 173) 58
[234] Cf Cameron (n 197) 84
[235] ibid
[236] ibid
[237] ibid

investor.[238] In this regard, the International Bar Association's Model Mine Development Agreement and IISD's Model Mining Development Agreement – Transparency Template can serve as great negotiation tools for the foreign investor and its host state.[239]

4.2.2 Ensuring resilient CRM supply chains

4.2.2.1 Balancing interests

For a resource-rich host state, ownership of minerals and mineral rights is one of the main ways to exercise sovereignty over its natural resources and demand royalties in return for access to these minerals.[240] Mineral ownership or rights as property of the state is thus a key tool for host states to protect its reserves. In view of this, foreign investors will often face resource nationalism of a host state in the form of alterations in mineral and mineral right ownership structures which can subsequently lead to indirect expropriation claims before ISDS tribunals.[241]

For example, in *Piero Foresti v. South Africa*, the claimants alleged South Africa from a violation of the FET standard and expropriation due to the enactment of the Mineral and Petroleum Resources Development Act (MPRDA) wherein the mineral rights held by the claimants where extinguished.[242] In response, South Africa defended itself by stating that the expropriation was lawful given that the MPRDA was enacted *'for multiple and important public purposes'* including environmental protection.[243] Although the arbitral proceedings were discontinued, this case showcases the tension between a resource-rich aim to protect its local communities and the environment versus a foreign investor's mineral rights.

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[238] ibid 85
[239] International Bar Association, 'Modal Mine Development Agreement: A Template for Negotiation and Drafting' (4 April 2011) <https://www.mmdaproject.org/presentations/MMDA1_0_110404Bookletv3.pdf> accessed 29 September 2023; Howard Mann, Luke Danielson, Kristi Disney, Mark Phillips, Marketa Zubkova, 'Model Mining Development and Transparency Template' (*IISD*, May 2012) <https://www.iisd.org/system/files/publications/mmda_transparency_report.pdf> accessed 29 September 2023
[240] Cf Roeder (n 197) 47
[241] ibid 48
[242] Mariel Dimsey, 'Arbitration and natural resource protection' in Shawkat Alam, Jahid Hossain Bhuiyan and Jona Razzaque (eds) *International Natural Resources Law, Investment and Sustainability* (Routledge 2018) 156
[243] *Piero Foresti, Laura de Carli & Others v. The Republic of South Africa*, ICSID Case No. ARB(AF)/07/1, para. 69

Similarly, in *Bernard von Pezold v. Zimbabwe* and *Borders Timbers Ltd v. Zimbabwe*, foreign investors alleged that Zimbabwe's Land Reform Programme violated the countries obligations to provide FET under its BITs with Switzerland and Germany.[244]

These three cases demonstrate the sharply contrasting interests to align investor protection with environmental and natural resources concerns.[245] It has been argued that while these interests often appear irreconcilable, dispute resolution will have to be achieved *'in a manner appropriate to the specific circumstances of a given case'*.[246] Concretely, this implies a balancing exercise of different objectives and public interest concerns inherent to the specific project at issue.[247] Nonetheless, such a balancing exercise might be a tall order.

4.2.2.2 Protection against indirect expropriation

For foreign investors to secure resilient and predictable access to CRM mines, strong protection against expropriation or legal certainty with regard to the host state domestic regulations is imperative. In this respect, it should be pointed out that it makes little difference for an investor whether its mining operation is expropriated and taken over by the host country or brought to an end due to changing domestic regulations. Either way, the mining operation cannot be continued leading to a loss of CRM supply chain security and economic benefits of the investment at issue.[248] On the assumption that legal certainty regarding domestic politics of a host state is implausible, a foreign investor should either create as much legal rights as possible in e.g., a mining development agreement or alternatively ensure a strong protection against expropriation.

As described in section 2.2.2 above, paragraph 4 of the UNGA's Resolution on permanent sovereignty over a country's natural resources describes that:

> 'Nationalization, expropriation or requisitioning shall be based on ground or reasons of public utility, security or the national interest which are recognized as overriding purely individual or private interests, both domestic and foreign. **In such cases the owner shall be paid appropriate compensation,** in accordance with the rules in force in the State taking such measures in the exercise of its sovereignty and in accordance with international law.'

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[244] Cf Dimsey (n 242) 156
[245] ibid
[246] ibid 157
[247] ibid
[248] Jürgen Bröhmer, ''Resource nationalism' and international law' in Shawkat Alam, Jahid Hossain Bhuiyan and Jona Razzaque (eds) *International Natural Resources Law, Investment and Sustainability* (Routledge 2018) 173

(1) Expropriation explained

Expropriation is the gravest infringement of a foreign investor's right that a host state can carry out.[249] However, under customary international law, a state has a sovereign right to expropriate in cases where the expropriation i) is undertaken for a public purpose ii) is carried out in accordance with due process principles iii) is non-discriminatory and iv) where the investor receives appropriate compensation.[250] Above, most state parties include these four conditions in their IIAs.[251] In cases where the host state does not fulfil these conditions, the expropriation is considered to be illegal.[252] Without going into details regarding every element which must be fulfilled, it should be highlighted that there is no general consensus regarding the conditions of 'appropriate compensation'.[253] Nonetheless, in most IIAs, state parties agree that compensation amounts to a 'fair market value' which is a first way of facilitating the discussion regarding the appropriate amount of compensation.[254] For instance, Article 2.6(2) of the EU-Singapore Investment Protection Agreement (2018) states that:

> 2. Compensation shall amount to the fair market value of the covered investment immediately before its expropriation or impending expropriation became public knowledge plus interest at a commercially reasonable rate, established on a market basis taking into account the length of time from the time of expropriation until the time of payment. Such compensation shall be effectively realisable, freely transferable in accordance with Article 2.7 (Transfer) and made without delay.

(2) Indirect expropriation

Contrary to direct expropriation, which affects the legal title of the foreign investor directly by the measure in question, indirect expropriation deprives the investor of the possibility to utilise its investment in any meaningful way without affecting the investor's legal title.[255] Typically, a host state will refuse to pay adequate compensation and deny that any form of expropriation

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[249] Krista Nadakavukaren Schefer, *International Investment Law: Text, Cases and Materials* (3rd edn Edward Elgar Publishing 2020) 207
[250] ibid 210
[251] ibid
[252] ibid 243
[253] Jonathan Bonnitcha and Sarah Brewin, 'Compensation under Investment Treaties' (2020) *IISD Best Practices Series* <https://www.iisd.org/system/files/publications/compensation-treaties-best-practicies-en.pdf>
[254] Cf Dolzer, Kriebaum and Scheuer (n 197) 184
[255] ibid 153

took place.[256] As a result, one could consider indirect expropriation as an illegal expropriation if the investor is by no means compensated.[257] While there is no comprehensive definition of indirect expropriation, i) actions that restrict the use, management or profitability of an investment ii) measures similar or tantamount to expropriation and iii) measures having an equivalent effect to expropriation can all be considered indirect expropriation.[258]

The key question regarding indirect expropriation is whether the governmental measure at issue constitutes indirect expropriation or a mere governmental regulation, which falls within a state's right to regulate.[259] In case the measure at issue is solely part of a *bona fide* governmental regulation, the investor does not have a right to receive adequate compensation.[260] While this distinction has to be made on a case-by-case basis, the US Model BIT states three criteria which indicate, among other factors, indirect expropriation:[261]

> (i) the economic impact of the government action, although the fact that an action or series of actions by a Party has an adverse effect on the economic value of an investment, standing alone, does not establish that an indirect expropriation has occurred;
> (ii) the extent to which the government action interferes with distinct, reasonable investment-backed expectations; and
> (iii) the character of the government action.

Following this, the US Model BIT states that:[262]

> (b) Except in rare circumstances, non-discriminatory regulatory actions by a Party that are designed and applied to protect legitimate public welfare objectives, such as public health, safety, and the environment, do not constitute indirect expropriations.

It should be highlighted that several ISDS tribunals have followed these three criteria, even in the absence of specific treaty wording.

Without delving deeper into the specifics of indirect expropriation, it should be highlighted that many governmental measures regarding the CRM industry will be taken to protect legitimate public welfare objectives, such as, environmental and labour concerns.

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[256] ibid
[257] ibid 184
[258] Cf Schefer (249) 254
[259] ibid
[260] ibid
[261] See US Model BIT 2012 Annex B paragraph 4(a)
[262] See US Model BIT 2012 Annex B paragraph 4(b)

As stated above, mining can be considered unsustainable per se, which means that any government can take action to prevent it or to minimise its impacts. Accordingly, many governments might be able to justify their measures under e.g., the US Model BIT 2012 Annex B paragraph 4(b) or any similar treaty protection. However, existing case law has underlined that even if the governmental measure at issue was taken in line of environmental objectives, it still constituted expropriation and accompanied with it, an appropriate compensation. In *Santa Elena v. Costa Rica*, the Tribunal stated that:[263]

> **Expropriatory environmental measures**—no matter how laudable and beneficial to society as a whole—**are, in this respect, similar to any other expropriatory measures** that a state may take in order to implement its policies: where property is expropriated, even for environmental purposes, whether domestic or international, **the state's obligation to pay compensation remains.**

Given that *Santa Elena v. Costa Rica* dates back to 1996, one could doubt that a tribunal would hold the same statement in current times. However, as it is intrinsic to a state's right to regulate that no compensation is due to the foreign investor, any finding contrary to *Santa Elena v. Costa Rica* violates a host state's regulatory autonomy.[264]

a state From a sustainability point of view, a host state's regulatory purpose has the potential of taking the upper hand in a balancing exercise. In contrast, CRMs and foreign investments are needed to facilitate the green transition. It is thus apparent that, investor protection and legal certainty can be considered as fundamental as governmental regulations mitigating sustainability issues. If a foreign investor expects economically depriving governmental measures in the near future, he will be less inclined to invest in CRM mining projects.

(3) A plea for a proportionality test within investment arbitration

While a treaty, a mining development agreement or a mining license can and should include stipulations to protect an investor from both direct and indirect expropriation, an assessment on whether the measure at issue falls within a state's right to regulate or not will always be the most contentious part.

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[263] See *Compañia del Desarrollo de Santa Elena S.A. v. Republic of Costa Rica*, ICSID Case No. ARB/96/1, para. 72

[264] Catharine Titi, 'The Right to Regulate in International Investment Law (revisited)' (2022) International and Comparative Law Research Center 18

In judicial disputes where two fundamental rights collide, national and supranational courts around the world, including the European Court of Justice, the WTO dispute settlement system and the European Court for Human Rights opt for a proportionality test.[265] In short, this test entails a three-tier structure, whereby i) the principle of suitability ii) the principle of necessity and iii) the principle of proportionality *sensu strictu* leads to a weighted balance of the two colliding fundamental rights.[266] Whereas there has only been limited use of the proportionality test within investment arbitration, the principle of proportionality (enshrined within the proportionality test) incorporates a method of legal interpretation which might be suitable in cases where there is a conflict of investor rights and public policy objectives.[267]

Within current investment arbitration claims, a proportionality test which has been applied in the context of three specific treaty provisions: indirect expropriation, a violation of FET and in case of justifications under a general exception or security exception.[268]

Multiple investment tribunals attempted to apply a proportionality test in order to restrict the invocation of a host state's police powers doctrine. The police powers doctrines *'provides that a State possesses an inherent right to regulate in protection of the public interest and does not act wrongfully when, pursuant to this power, enacts bona fide, non-discriminatory and proportionate regulations in accordance with due process.'*[269]

To date, there are some cases considering the proportionality test. Besides *Tecmed v. Mexico* which was long considered the most authoritative investment arbitration award in which a tribunal used the proportionality test in an elaborative manner, *Charanne v. Spain, RWE v. Spain* and *EDF v. Romania* made attempts in defining proportionality in investment arbitration.[270] While there is academic discussion regarding the methodology and the standard

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[265] Tomas Sobek and Josef Montag, 'Proportionality Test' in Alain Marciano and Giovanni Battista Ramello (eds) *Encyclopedia of Law and Economics* (Springer 2018) 1

[266] Han Xiuli, 'The Application of the Principle of Proportionality in *Tecmed v. Mexico*' (2007) 6(3) Chinese Journal of International Law 636

[267] Thomas Cottier, Roberto Echandi, Rafael Leal-Arcas, Rachel Liechti, Tetyana Payosova and Charlotte Sieber-Gasser, 'The Principle of Proportionality in International Law' (NCCR Working Paper No 2012/38, December 2012) <https://www.wti.org/media/filer_public/9f/1b/9f1bd3cf-dafd-4e14-b07d-8934a0c66b8f/proportionality_final_29102012_with_nccr_coversheet.pdf> accessed 23 September 2023, 24

[268] ibid

[269] Anastasiya Ugale and Alice Osman, 'Police Powers Doctrine' (*JusMundi*, 10 May 2023) <https://jusmundi.com/en/document/publication/en-police-powers-doctrine#:~:text=1.,in%20accordance%20with%20due%20process.> accessed 23 September 2023

[270] Caroline Henckels, 'Revisiting Proportionality Analysis in Investor-State Arbitration' (2012) 15(1) Journal of International Economic Law 230; Natalia Rodriguez Alvarez et al, '2023 PAW Recap – Day 5: The Power of

of review, the usage of the proportionality test does offer a way out of irreconcilable fundamental rights.[271]

4.3 Stabilisation clauses

4.3.1 Legal concept

4.3.1.1 Definition and types

A CRM mining investment is a long-term commitment between a foreign investor and the host state.[272] Major inherent risks for foreign investors are possible future government measures by the host state, which may not have been foreseeable at the time of the decision to invest.[273] These risks are all the more present due to the challenging political and sovereign risk profiles of many resource-rich countries.[274] Given the environmental impact of e.g., the CRM mining as described in Chapter II, one could easily think of a resource-rich host state enacting environmental regulations which minimise profits, limit the investor's access to the CRM, etc. As a result, one of the challenges for resource-poor countries will be to ensure legal certainty regarding the regulatory environment in the host state.

Within IIAs, an umbrella clause or a provisions on fair and equitable treatment (FET) and full protection and security (FSP) may safeguard some legal certainty.[275] However, given legal uncertainty regarding the proper construction of an umbrella clause on the one hand and the evolution of FET and FSP within investment arbitration on the other, a resource-poor country and its investors might wish to take a different legal avenue.[276] An alternative to achieve robust legal certainty is the inclusion of stabilisation clauses in investment-state agreements. An investor-state agreement, also called an 'investment contract' is an additional agreement which

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"Proportionality" – A Sleeping Giant of a Concept in Investment Arbitration?' (*Kluwer Arbitration Blog*, 4 September 2023) <https://arbitrationblog.kluwerarbitration.com/2023/04/04/2023-paw-recap-day-5-the-power-of-proportionality-a-sleeping-giant-of-a-concept-in-investment-arbitration/> accessed 29 October; Estefania Ponce-Duran and Andrew Willcocks, 'Proportionality in FET' *(IusMundi*, 29 August 2023) <https://jusmundi.com/en/document/publication/en-proportionality-in-fet> accessed 29 October

[271] Cf Henckels (n 270) 231

[272] Cf Schefer (n 217) 2

[273] ibid 3

[274] Sam Luttrell and Amanda Murphy, 'Overcoming Challenges to Stabilisation Provisions in Long-Term Mining Agreements' in Jason Fry QC and Louis-Alexis Bret (eds) *The Guide to Mining Arbitration* (2nd edn Global Arbitration Review 2021) 15

[275] Cf Dolzer, Kriebaum and Scheuer (n 195) 126

[276] Alperen Afşin Gözlügöl, 'The Effects of Umbrella Clauses: Their Relevance in Interpretation and in Practice' (2020) 21(4) The Journal of World Investment & Trade 558; Simon Batifort, Belén Ibañez and Remy Gerbay, 'Unearthing FET: What Did States Intend, and Does It Matter?' (*Kluwer Arbitration Blog*, 2 May 2022) <https://arbitrationblog.kluwerarbitration.com/2022/05/02/unearthing-fet-what-did-states-intend-and-does-it-matter/> accessed 23 September 2023

regulates the specifics and complexities of the specific investment at issue.[277] Thereby, a stabilisation clause refers to '*contractual clauses in private contracts between foreign investors and host states that address the issue of changes in law in the host state during the investment'.*[278] While the agreement is often between the foreign investor and the host state directly, some investor-state agreements are between a governmental entity and the foreign investor or a local subsidiary of the foreign investor and the state.[279]

Ultimately, a stabilisation clause will strike a balance between the host state's right to regulate and the foreign investor's need for investor protection against legislative changes jeopardising the economic value of the investment.[280] For example, a stabilisation clause might incorporate protection against an increase in taxes, mining licence royalties, a change in environmental regulations, etc.[281]

In addition, there are two important distinctions to be made. Firstly, there is the distinction between fiscal stabilisation clauses versus legal stabilisation clauses.[282] Fiscal stabilisation clauses contain protection against the host state's fiscal policies, such as: taxes, royalties, duties and other types of government revenue.[283] Legal stabilisation clauses, on the contrary, protect against non-fiscal, broader regulatory policies, such as: environmental, labour and mining laws.[284]

Secondly, there are freezing stabilisation clauses, which 'directly or indirectly purports to create a rule that the law applicable to the contract cannot be changed by the host state for an agreed period' and equilibrium stabilisation clauses, which does not purport or prevent a host state from changing its laws.[285] Rather, an equilibrium stabilisation clause solely requires that in case of a change of law which adversely affects the foreign investors' economic position, the parties have to negotiate a restorative solution, bringing the economic position of the foreign investor

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[277] Cf Dolzer, Kriebaum and Scheuer (n 195) 122
[278] Andrea Shemberg, 'Stabilization Clauses and Human Rights: A research project for IFC and the United Nations Special Representative to the Secretary General on Business and Human Rights' (11 March 2008) <https://media.business-humanrights.org/media/documents/files/reports-and-materials/Stabilization-Clauses-and-Human-Rights-11-Mar-2008.pdf> accessed 23 September 2023
[279] Cf Dolzer, Kriebaum and Scheuer (n 195) 123
[280] Cf Luttrell and Murphy (n 274) 15
[281] ibid
[282] ibid 17
[283] ibid
[284] ibid
[285] ibid

back to how it was before the change in law.[286] Alternatively, a specific compensation can be included in an equilibrium stabilisation clause. While an equilibrium stabilisation clause often has a broad scope, host states can include requirements stipulating that the clause only applies in cases where there is a material adverse effect on the foreign investor.[287] There are also hybrid stabilisation clauses, which share aspects of both freezing and equilibrium stabilisation.[288]

In addition, for both freezing and equilibrium stabilisation clauses, a 'limited' version exist whereby e.g., the freezing only relates to certain legislative actions (often tax or customs issues) or the equilibrium only occurs after a certain financial loss is incurred by the foreign investor.[289]

4.3.1.2 Criticism

Against this background, it has been held that stabilisation clauses act as a hindrance for sustainable development.[290] Especially in respect of stabilisation clauses including protection against a change in environmental regulations, this claim could be considered valid bearing in mind the many environmental obligations of host states under its MEAs. Nonetheless, it should be highlighted that there exist many different types of stabilisation clauses, each having their own pitfalls.

The main counterargument opposed to stabilisation clauses is that they discourage governments from taking climate action, reforming social and labour policies, etc. as host states fear investment arbitration claims given a potential breach of the stabilisation clause.[291] Having said that, there is currently no evidence to support this allegation.[292]

Nevertheless, a joint study conducted by the UN and the World Bank's International Financial Corporation (IFC) concluded, following a study of 76 investor-state agreements and 12 model contracts all including a stabilisation clause, that some stabilisation clauses have the potential

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[286] ibid 18
[287] Antony Crockett, 'Stabilisation clauses and sustainable development: Drafting for the future' in Chester Brown and Kate Miles (eds) *Evolution in Investment Treaty Law and Arbitration* (Cambridge University Press 2011) 522
[288] Cf Shemberg (n 278) 6
[289] ibid 8
[290] Cf Crockett (n 287) 516
[291] Audley Sheppard and Antony Crockett, 'Are Stabilization Clauses a Threat to Sustainable Development?' in Marie-Claire Cordonier Segger, Markus W Gehring and Andrew Newcombe (eds) *Sustainable Development In World Investment Law* (Kluwer Law International 2011) 335
[292] ibid

to be used by foreign investors to pursue exemptions as environmental and social legislation are not carved out in the scope of the stabilisation clause.[293]

4.3.2 Stabilisation clauses and CRM access

Having said that, this thesis aims to provide ways for both resource-poor and resource-rich countries to allocate all sorts of risks in a sustainable and just manner. It is thus fair to state that stabilisation clauses can be a way to allocate such risks. Given the many different types of stabilisation clauses, there are at least a few which can be considered equitable for resource-rich countries and useful in securing resilient CRM supply chains for resource-poor countries.

Stabilisation clauses offer a wide protection from both arbitrary or discriminatory legislation, expropriation and even nationalisation to fiscal regulatory changes and nullification of the investment contract.[294] Equally, a host state should not possess an unfettered right to change its mining contracts therewith undermining its ability to attract foreign investors required for furthering its development level.[295] While currently there are no arbitral awards regarding equilibrium stabilisation clauses, its absence could be seen as proof that the clauses are used to force host states to renegotiate.[296]

Currently, freezing stabilisation clauses are very rarely included in investor-state agreements and therefore for the sake of CRM access, less relevant.[297] However, equilibrium stabilisation clauses can ascertain investor's rights by incorporating both fiscal and legal stability while linking the obligation to renegotiate to a dispute settlement procedure and even an adequate compensation from the host state in case of failure to cooperate.[298]

It has been argued that investors might be forced to renegotiate existing stabilisation clauses by way of carving-out environmental and labour regulations.[299] In response to this, scholars have stated that one way to avoid disputes regarding both carve-outs nullifying the legal value of the stabilisation clause and stabilisation clauses as a whole, is by negotiating environmental and

[293] Cf Shemberg (n 278)
[294] ibid 4
[295] Cf Crockett (n 253) 530
[296] ibid 522
[297] ibid 521
[298] Cf Luttrell and Murphy (n 274) 18
[299] Cf Crockett (n 253) 537

social concerns during the initial negotiating phase, thereby diminishing arising disputes in the future.[300]

It should also be noted that in recent years certain resource-rich countries introduced or expressed their intention to introduce legislative measures which intent to nullify or affect negatively existing stabilisation provisions.[301] By way of illustration, the DRC in March 2018 promulgated a new mining code which discarded a ten-year stability clause under which many foreign investors decided to invest.[302] Notwithstanding, Article 319 of the 2018 Mining Code incorporates the possibility for arbitration under the ICSID convention.[303] Accordingly, foreign investors could rely on principles of international law, such as the principle of *pacta sunt servanda* enshrined in Article 26 of the Vienna Convention of the Law of Treaties (VCLT) and the doctrine of acquired rights.[304] In both cases, a promulgation of new legislation which voids an investor-state agreement or property rights of aliens established under national law, respectively, will lead to the host state being liable to pay damages.[305]

The EU in particular aims to secure resilient CRM supply chains.[306] If a resource-rich country changes government or the government decides to reform its CRM mining policies, such a CRM supply chain can be severely affected, leading to CRM shortages and even geopolitical confrontations.[307] Equilibrium stabilisation clauses offer a solution for resource-poor countries to gain more legal certainty regarding their mining investments. In addition, negotiations regarding the status and future prospects on environmental and social regulations should take place during the contracting phase. Lastly, by including a possibility for ICSID arbitration, foreign investors might be able to rely on international law principles in cases where stabilisation clauses are nullified.

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[300] ibid
[301] Cf Luttrell and Murphy (n 274) 22
[302] Heidi Vella, 'Overhauling the DRC's mining code' (*Mining Technology*, 28 March 2018) <https://www.mining-technology.com/features/overhauling-drcs-mining-code/?cf-view> accessed 20 September 2023
[303] Cf Luttrell and Murphy (n 274) 23
[304] ibid 32, 33
[305] ibid
[306] See COM/2023/160 final
[307] Cf Luttrell and Murphy (n 274) 15

4.4 Due diligence requirements

4.4.1 Concept and existing regimes

4.4.1.1 Concept

It has been alleged that the mining industry is inherently unsustainable.[308] This is largely due to its inevitable environmental impacts and the exhaustibility of its reserves. In this context, while the link between foreign investment and the promotion of sustainable development is widely recognised, much remains to guarantee that international investment law effectively promotes sustainability.[309]

As laid out in the past chapters, there are many inherent issues regarding the CRM mining industry. Among them, there are environmental and human rights concerns, supply chain risks, a risk for corruption, administrative burdens, etc. Within a host country, many different government entities can be responsible for issuing a concession, which might cause a significant delay or total denial of a foreign investment.[310] This often undermines good governance of the mining industries, which is even more exacerbated by the possibility of corruption in some resource-rich countries.[311]

Governance challenges related to the CRM mining industry threaten to impede a just and sustainable green transition.[312] For example, a corrupted government might award mining contracts to politically affiliated mining companies, environmental impact assessment might be bypassed, state-owned companies might be favoured, etc.[313] These examples yet again demonstrate the many risks involved in CRM mining. Thereby, they underline the need for a global effort with regard to the development and good governance of resource-rich countries to ensure the global resilience of CRM supply chains.

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[308] Maria Cecilia G. Dalupan, 'Mining and sustainable development: insights from international law' in Elizabeth Bastida, Thomas Wälde and Janeth Warden-Fernandez (eds) *International and Comparative Mineral Law and Policy: Trends and Prospects* (Kluwer Law International 2005) 164
[309] Markus W Gehring and Andrew Newcobe, 'An Introduction to Sustainable Development in World Investment Law' in Marie-Claire Cordonier Segger, Markus W Gehring and Andrew Newcombe (eds) *Sustainable Development In World Investment Law* (Kluwer Law International 2011) 9
[310] Cf Merill, Coleman, Sachs and Johnson n (201)
[311] Rt Hon Helen Clark, 'Helen Clark on why mining's good governance is a critical element of the energy transition' (*EITI*, 2 November 2022) <https://eiti.org/blog-post/helen-clark-why-minings-good-governance-critical-element-energy-transition>
[312] ibid
[313] ibid

One way such a global effort can be initiated is through due diligence requirements in both investment contracts and IIAs.[314] Given the potential of due diligence obligations to identify both sustainability and supply chain risks throughout a mineral supply chain, their inclusion offers multiple, reciprocal benefits. From the perspective of CRM access, due diligence requirements can assist resource-rich countries who aim to mitigate environmental and social impacts in their countries. Equally, foreign investors are confronted with additional transparency regarding each step of the supply chain, leading to higher predictability and supply chain security.

4.4.1.2 Existing regimes

(1) OECD

a) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas

In 2016, as part of their general effort to publish international voluntary standards for due diligence guidance and responsible business conduct (RBC), the OECD published its Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.[315] In short, these risk-based standards aim to facilitate MNEs in respecting human rights of local workers and avoid contributing to conflict while minimising potentially adverse impacts on an MNE's operations resulting from its own activities or their relationship with third parties.[316]

The OECD defines a mineral supply chain as *'the system of all the activities, organisations, actors, technology, information, resources and services involved in moving the mineral from the extraction site downstream to its incorporation in the final product for end consumers'*.[317] Within these activities, the OECD encourages all companies active in the mineral supply chain to carry out due diligence which should ensure that companies' activities do not contribute to human right abuses or conflict.[318]

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[314] ibid
[315] OECD, 'OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas' (3rd edn 2016 OECD Publishing) <https://www.oecd.org/daf/inv/mne/OECD-Due-Diligence-Guidance-Minerals-Edition3.pdf> accessed 23 September 2023
[316] ibid 13
[317] ibid 14
[318] ibid 15

The Guidance is built around a five-step framework, which includes:

1. Establishing strong company management systems. This can be done through i) adopting a company policy for the supply chain of minerals originating from conflict-affected and high-risk areas ii) including the supply chain policy into agreements with suppliers iii) establishing an early-warning risk-awareness system.
2. Identifying and assessing risks in the mineral supply chain in line of the OECD standards.
3. Designing and implementing a strategy to respond to identified risks by e.g., adopting a risk management plan. For instance, this plan could entail temporarily suspending trade with a supplier while seeking to mitigate the identified risks.
4. Carrying out independent third-party audit of supply chain due diligence at identified points in the supply chain.
5. Reporting on supply chain due diligence publicly through e.g., annual reports.

Further, the OECD Guidance provides for incorporating risk mitigation measures which include fiscal transparency on taxes, fees and royalties paid to host state's governments, identifying suspicious activities which may indicate money laundering activities, human rights violations, etc.[319]

As these are voluntary standards, no legal enforceability can be guaranteed.[320]

b) Handbook on Environmental Due Diligence in Mineral Supply Chains

In September 2023, the OECD published its Handbook on Environmental Due Diligence in Mineral Supply Chains.[321] The Handbook covers, similarly to the OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, risk-based due diligence in order for MNEs to identify, prevent, mitigate and account for how they tackle actual and potential impacts on people, society and the planet.[322] Due to the high complexity of a mineral supply chain, the OECD recognises that it might not be feasible to identify all impacts. As a result, it is encouraged to prioritise the most severe and significant

[319] ibid Annex III
[320] ibid 16
[321] OECD, 'Handbook on Environmental Due Diligence in Mineral Supply Chains' (2023 OECD Publishing) <https://www.oecd-ilibrary.org/docserver/cef843bf-en.pdf?expires=1696146798&id=id&accname=guest&checksum=2BA77B1C2A4C1A8E75D190F31C214582> accessed 23 September 2023
[322] ibid 18

risks and impacts and to dedicate resources accordingly.[323] This prioritisation should be conducted in line of the OECD's parameters on RBC.[324]

While the Handbook primarily covers environmental due diligence, it is considered that environmental impacts are closely interlinked with social impacts (human rights, impacts on local workers and communities, etc).[325] As a result, social impacts should be included in MNEs risk prioritisation processes.[326]

Similar to the OECD Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, the Handbook includes a six-step due diligence process:

1. Embed RBC into the company's policy and management systems.
2. Identify and assess actual and potential adverse impacts associated with enterprise operations, products or services.
3. Cease, prevent and mitigate adverse impacts.
4. Track implementation and results.
5. Communicate how impacts are addressed.
6. Provide for or cooperate in remediation when appropriate.

For each of these six steps, the Handbook lays out how to integrate environmental risk considerations by introducing evaluation methods, possible actions and policies and prevention and mitigation measures.

Similarly to the *Due Diligence Guidance for Responsible Supply Chains* described above, this Handbook is not legally enforceable and solely relies on the goodwill of MNEs to implement the due diligence process.

(2) EU

Against this background, the EU enacted its Regulation on Supply Chain Due Diligence Obligations for EU importers of tin, tantalum, tungsten, their ores and gold originating from conflict-affected or high-risk areas which entered into force on 1 January 2021.[327] This

[323] ibid
[324] ibid
[325] ibid
[326] ibid
[327] Regulation (EU) 2017/821 of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas [2017] L130/1

Regulation focuses on 'conflict minerals' such as tin, tungsten, tantalum and gold given the linkage of these four minerals with armed-conflicts and human right abuses.[328]

Within the scope of the Regulation, EU importers of these minerals are subject to management system obligations (Article 4), risk management obligations (Article 5), third-party audit obligations (Article 6) and disclosure obligations (Article 7). Additionally, EU Member States are required to lay out rules in case of infringements of these obligations (Article 16).

Outside of the mineral supply chain, the European Commission proposed in February 2022 a Proposal for a Directive on Corporate Sustainability Due Diligence (CSDDD) which aims to foster sustainability and responsible business conduct throughout global value chains and is currently under negotiation.[329]

Contrary to the OECD examples, an EU regulation has direct effect in Member States' domestic courts, leading to legal enforceability of the Regulation by EU citizens in their domestic courts.[330] However, while this means there is a sanctioning mechanism when no due diligence has been performed, compliance with possible observations of the due diligence mechanism is currently not part of the EU's regulatory action.

4.1.2 Due diligence requirements within international investment law

4.1.2.1 Under the FET standard

International investment law conceptualises a unique balance between public and private interests.[331] As a result, foreign investors are equally responsible for safeguarding public interests where possible. Apart from risk-based due diligence requirements during the investment as described in the existing regimes above, arbitration tribunals have held that there rests a due diligence obligation upon the foreign investor during the pre-contracting phase.

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[328] European Commission, 'Conflict Minerals Regulation: The regulation explained' <https://policy.trade.ec.europa.eu/development-and-sustainability/conflict-minerals-regulation/regulation-explained_en> accessed 23 September 2023

[329] European Commission, 'Just and sustainable economy: Commission lays down rules for companies to respect human rights and environment in global value chains' (23 February 2022) <https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1145> accessed 23 September 2023

[330] See Article 288 Treaty on the Functioning of the European Union (TFEU)

[331] Edward Guntrip, 'Private Actors, Public Goods and Responsibility for the Right to Water in International Investment Law: An Analysis of *Urbaser v. Argentina*' (2018) 1 Brill Open Law

In *Urbaser v. Argentina,* the tribunal held that:[332]

> 622. (…) When measures had been taken that have as their purpose and effect to implement such fundamental rights protected under the Constitution, they cannot hurt the fair and equitable treatment standard because **their occurrence must have been deemed to be accepted by the investor when entering into the investment and the Concession Contract.** (…)
>
> 623. The fair and equitable treatment standard is not focused exclusively on interests and expectations of a legal nature. **It does include the actual social and economic environment of the host State, which is also part of the expectations the investor has to acknowledge when making its business decision.**

In this arbitral award, the tribunal states that the foreign investor must be aware of fundamental rights protected under the host state's Constitution before entering into an agreement with the host state. Equally, other tribunals have recognised that to determine the reasonableness of a foreign investor's legitimate expectations, one should take into account the efforts undertaken by the investor in performing its due diligence before investing in a host state.[333]

4.1.2.2 Under customary international law

In respect of mandatory due diligence requirements during the investment, its extraterritoriality could be seen as impeding the international law principle of non-interference in a state's domestic affairs.

However, mandatory due diligence requirements could possibly be justified by the customary international law principle of prevention, as enshrined in the Rio Declaration from Principle 2 which states that:

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, **and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction**.

While the principle of permanent sovereignty over a country's natural resources as described in Chapter II leans towards a recognition of a host state's absolute sovereignty over its CRM reserves and thereby its capability of acting against the possible extraterritorial effects of

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[332] *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v. The Argentine Republic,* ICSID Case No. ARB/07/26 (2016), para. 622-623

[333] Yulia Levashova, 'Fair and Equitable Treatment and Investor's Due Diligence Under International Investment Law' (2020) 67 Netherlands International Law Review 239

mandatory due diligence requirements in the CRM mining industry, the principle of prevention limits the sovereign right of a state to exploit its natural resources.

This limitation is due given the second sentence of Principle 2 of the Rio Declaration which entails the general obligation of due diligence for all states to do their utmost best to protect the environment.[334] The International Court of Justice (ICJ) in *Pulp Millis* stated that:

> 101. The Court points out **that the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory.**
>
> (…)
>
> 197. (…) **an obligation to act with due diligence** in respect of all activities which take place under the jurisdiction **and control of each party**. It is an obligation which entails not only the adoption of appropriate rules and measures, but also **a certain level of vigilance** in their enforcement and the **exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators, to safeguard the rights of the other party.**[335]

The principle of prevention is recognised by the International Tribunal of the Law of the Sea (ITLOS) as an *erga omnes* obligation, *'owed to the international community as a whole'*.[336]

One could thus argue that mandatory due diligence requirements such as the CSDDD proposed by the EU and the EU's Conflict Minerals Regulation are part of the EU's level of vigilance regarding the administrative control it exercises upon its private operators. In this way, the EU facilitates safeguarding human rights and allowing for environmental protection within the host state.

This view can equally be supported under the principle of Common But Differentiated Responsibilities and Respective Capabilities (CBDR-RC) as enshrined in Principle 7 of the Rio Declaration:

> States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. **The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable**

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[334] International Legal Expert Group, 'Principles of International Law Relevant for Consideration in the Design and Implementation of Trade-Related Climate Measures and Policies' (*TESS*, September 2023) <https://tessforum.org/latest/principles-of-international-law-relevant-for-consideration-in-the-design-and-implementation-of-trade-related-climate-measures-and-policies> accessed 23 September 2023

[335] *Case concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, ICJ Reports 2010, paras. 623 and 197

[336] ITLOS, Responsibilities and Obligations of States with respect to Activities in the Area (Advisory Opinion) [2011] ITLOS Reports 10, 41, para. 180

development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

While all states have common responsibilities for environmental protection, Principle 7 acknowledges differentiated responsibilities due to different historical and current emissions on the one hand and diverging socio-economic circumstances on the other.[337] Moreover, due to varying technical, technological and financial capacities to contribute to environmental protection, one could argue that due diligence requirements imposed by developed countries are part of their exercise of CBDR-RC.

Forasmuch as due diligence requirements, voluntary or mandatory, contribute to both sustainable development and resilient supply chains, enacting them can solely benefit the balance between the two, thereby building reciprocal advantageous between resource-rich and resource-poor actors.

4.5 Investment facilitation

4.5.1 Investment facilitation within international investment law

Despite having no clear definition, 'investment facilitation' refers to *'a broad range of investment regulatory measures that could improve transparency and predictability of investment policies, streamline administrative procedures and provide tools to handle inquiries or complaints by investors'*.[338]

The goal of investment facilitation is two-fold. On the one hand, the measures aim to facilitate FDI through a transparent, predictable and efficient regulatory framework.[339] On the other, they are expected to support sustainable development and its accompanying standards.[340] In light of the emergence of a newer generation of IIAs some countries started including investment

[337] Cf International Legal Expert Group (n 334)
[338] Manjiao Chi, 'Investment Facilitation and Sustainable Development: Insufficiencies and Improvements of ASEAN Investment Treaties' (2022) 25 Journal of International Economic Law, 612
[339] Axel Berger, Sebastian Gsell and Zoryana Olekseyuk, 'Investment facilitation for development: a new route to global investment governance' (2019) Briefing paper, No. 5/2019 German Institute of Development and Sustainability
[340] ibid

facilitation, cooperation and risk mitigation mechanisms in their IIAs.[341] For instance, the Cooperation and Facilitation Investment Agreement (CFIA) (2014) between Brazil and Mozambique was one the first BITs with a focus on investment facilitation.[342] However, under CFIA, ISDS was not included.[343]

It has been recognised that investment facilitation can be critical for economic growth and development.[344] Likewise, investment facilitation agreements can increase legal certainty for foreign investors. Given these reciprocal benefits, they can act as excellent tools which simultaneously benefit foreign investors in accessing CRMs and resource-rich countries that can attract FDI in a sustainable manner.

In this context, it should be noted that in July 2023, WTO Members concluded their negotiations on the Joint Initiative on Investment Facilitation for Development.[345] While the text of the agreement does not include investor protection, market access or ISDS, it does aim to address bureaucratic hindrances and transparency issues throughout host state's FDI procedures and regulations which will create increased legal certainty for foreign investors.[346]

Before elaborating on concrete examples of Investment Facilitation Agreements in the next section, it is noteworthy that the six Principles of Responsible Investment and the inclusion of environmental impact assessments are two additional ways of increasing sustainability standards within FDI.[347] For example, Article 14.1 of the Morocco – Nigeria BIT (2016) in states:

> Investors or the investment shall comply with environmental assessment screening and assessment processes applicable to their proposed investments prior to their establishment, as required by the laws of

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[341] Joe Zhang, 'Investment Facilitation: Making sense of concepts, discussions and processes' (*IISD*, 10 July 2018) <https://www.iisd.org/system/files/publications/investment-facilitation-webinar-background.pdf> accessed 18 September 2023

[342] ibid

[343] Nathalie Potin and Camila Brito de Urquiza, 'The Brazilian Cooperation and Facilitation Agreement: Are Foreign Investors Protected?' (*Kluwer Arbitration Blog*, 29 December 2021) <https://arbitrationblog.kluwerarbitration.com/2021/12/29/the-brazilian-cooperation-and-facilitation-investment-agreement-are-foreign-investors-protected/> accessed 18 September 2022

[344] UNCTAD, 'Facilitating Investment In The Sustainable Development Goals' (United Nations, 2023) <https://unctad.org/system/files/official-document/diaepcb2022d3_en.pdf> accessed 18 September 2022

[345] World Trade Organization, 'Investment facilitation negotiators announce deal on Agreement's text' (6 July 2023) <https://www.wto.org/english/news_e/news23_e/infac_06jul23_e.htm> accessed 18 September 2023

[346] Rashmi Jose, 'Investment Facilitation for Development Agreement: Why does it matter?' (*IISD*, 17 July 2023) <https://www.iisd.org/articles/policy-analysis/investment-facilitation-development-agreement> accessed 18 September 2023

[347] Principles for Responsible Investment, 'About us – What are the Principles for Responsible Investment?' <https://www.unpri.org/about-us/what-are-the-principles-for-responsible-investment> accessed 28 October 2023

the host state for such an investment or the laws of the home state for such an investment, whichever is more rigorous in relation to the investment in question.

4.5.2 Examples of Investment Facilitation Agreements

In November 2022, the EU concluded its first Sustainable Investment Facilitation Agreement (SIFA) with Angola.[348] In addition, the EU concluded Memoranda of Understanding to launch Strategic CRM Partnerships with Ukraine, Kazakhstan and Namibia.[349]

The SIFA aims to enhance transparency and predictability, to simplify investment authorisation procedures and to facilitate the dialogue between foreign investors and the host state administration.[350]

Article 3 SIFA acknowledges that the Agreement 'does not create or modify commitments relating to the liberalisation of investments, nor does it create or modify rules on the protection of established investors in the territories of the Parties'. The rights and obligations under SIFA are solely conferred upon the State Parties.[351] As a result, ISDS is not possible under SIFA. However, Chapter VI SIFA deals with 'Dispute Avoidance and Settlement and lays out consultation and arbitration possibilities between the EU and Angola.

Within SIFA, one does find the affirmation to fight corruption and other illegal activities, mechanisms to ensure transparency and predictability and a 'commitment to facilitate investment in facilitate investment in a way that contributes to the objective of sustainable development'.[352] This commitment is subsequently translated into i) the recognition of corporate social responsibility and accompanying due diligence standards for foreign investors ii) a pledge to adhere and promote multilateral environmental agreements (MEAs), like e.g., the Paris Agreement and the UNFCCC iii) an acknowledgment to promote investment in a way which advances women's economic empowerment and gender equality on the one hand and labour standards on the other.[353]

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[348] European Commission, 'EU and Angola conclude first-ever Sustainable Investment Facilitation Agreement' (18 November 2022) <https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6136> accessed 18 September 2023
[349] Victor Crochet and Weihuan Zhou, 'Critical insecurities? The European Union's trade and investment strategy for a stable supply of minerals for the green transition' (*EJIL:Talk!* 23 February 2023) <https://www.ejiltalk.org/critical-insecurities-the-european-unions-trade-and-investment-strategy-for-a-stable-supply-of-minerals-for-the-green-transition/> accessed 18 September 2023
[350] ibid
[351] See Article 55 SIFA
[352] See Article 28 SIFA
[353] See Article 34, 31, 32, 35 and 30 SIFA

While SIFA cannot be considered a traditional IIA, it theoretically does facilitate CRM mining opportunities for the EU exponentially, thereby leading towards higher resilience in the EU's CRM supply chains. Among its reserves, Angola possesses lithium, copper, cobalt, nickel and many others.[354]

Equally in November 2022, the EU concluded a Strategic Partnership with Kazakhstan which became effective in May 2023.[355] Most interestingly, this MoU offers reciprocal mechanisms whereby joint projects and closer bilateral cooperation leads to an EU outflow of R&D into Kazakhstan in return for EU access into the CRM mining and extraction industry in Kazakhstan.[356] The MoU is seen as *'an instrument for the implementation of (the EU Kazakhstan EPCA's) article 148 "Cooperation in raw materials and energy goods"'*.[357]

These two agreements offer theoretically great examples of investment facilitation frameworks which offer reciprocal benefits, ensure resilient supply chains and boost solutions for sustainability issues. However, these frameworks can only effectively work if both countries are committed to implement them as these are no legally binding agreements.

[354] Ver Angola, 'Government confirms that Angola has 36 out of 51 minerals considered most critical in the world' (8 February 2023) <https://www.verangola.net/va/en/022023/RawMaterials/34367/Government-confirms-that-Angola-has-36-of-the-51-minerals-considered-most-critical-in-the-world.htm> accessed 18 September 2023

[355] European Commission, 'COP27: European Union concludes a strategic partnership with Kazakhstan on raw materials, batteries and renewable hydrogen' (7 November 2022) <https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6585> accessed 18 September 2023; European Commission, 'EU-Kazakhstan strategic partnership becomes operational' (19 May 2023) <https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2815> accessed 18 September 2023

[356] 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 <https://single-market-economy.ec.europa.eu/system/files/2022-11/EU-KAZ-MoU-signed_en.pdf>

[357] ibid 4

CHAPTER V. LIMITATIONS AND LEEWAY FOR REGULATORY ACTION IN THE CRM INDUSTRY

5.1 For resource-rich actors

It has been advanced that during negotiations regarding FDI and CRMs, states should include three dimensions: economic development, social development and environmental protection in pursuit of sustainable development.[358] As there is no hierarchy among these three dimensions, resource-rich state parties bear a responsibility of safeguarding them equally and simultaneously within their territory. Prior to responding to the sub-research questions of this thesis, it should be noted that the responsibility of resource-rich actors to act according to this responsibility and withhold acting as rule-takers will be key for ascertaining reciprocal benefits between resource-rich and resource-poor actors.

Of the seven sub-research questions posed in Section 1.2.1, two concern the limitations and leeway of regulatory action for resource-rich actors:

- *What are the limitations and leeway within international investment law under resource-rich countries' right to regulate to enact measures regarding the CRM supply chain?*
- *How is the economic development of some resource-rich developing economies such as Indonesia, Namibia and Zimbabwe changing the CRMs discussion?*

In the next section, an answer will be given to each of them by giving an overview of the past chapters.

5.1.1 Limitations and leeway under the right to regulate

5.1.1.1 Within IIAs

Firstly, in respect of investment screening regimes, it falls within the sovereignty of the host state to regulate investor's establishment. Among the two approaches to regulate establishment, "the right of establishment" as discussed in Section 3.1.1, which includes a guarantee of non-

[358] Markus W. Gehring and Avidan Kent, 'International Investment Agreements and the emerging green economy: rising to the challenge' in Freya Baetens (ed) *Investment Law within International Law* (Cambridge University Press 2013) 190

discrimination throughout all phases of the investment, limits the host state's right to regulate the most.

Hence, when host states aim to establish domestic investment screening regimes, they should take into account the possibility of violating an IIA. Especially in cases of inbound investment screening, which by its very nature, solely affects foreign investors.

As a result, resource-rich host states that which to protect their CRM reserves from foreign investors, should in principle opt for an admission model in their IIAs which allows for the introduction of an inbound investment screening regulations as the entry of a foreign investor falls within the discretion of the host state. However, it should be noted that in respect of investment screening regimes, interests of host states *vis-à-vis* home states, might be difficult to reconcile given home states' theoretical preference for the pre-establishment model.

Secondly, resource-rich host states will safeguard their right to regulate the most by including general exception clauses following Article XX GATT, a reservation regarding its mining industry or a carve-out concerning environmental or social laws protecting their CRM reserves. Equally, a resource-rich host state can opt for the same three mechanisms with the objective of safeguarding human health of mining workers, diminishing environmental mining risks or biodiversity as a result of CRM exploitation. In this way, resource-rich countries can justify their measures by e.g., arguing the measure at issue was 'necessary to protect the conservation of exhaustible resources'.

Nonetheless, a resource-rich country will be limited by specific exceptions related to e.g., export restrictions, dual-pricing schemes and performance requirements. Therefore, in theory, such specific exceptions should be avoided when focusing on a resource-rich state's development level.

5.1.1.2 Under the remaining right to regulate

Many IIAs include affirmations of the state parties' right to regulate. According to EDIT, there are at least 21 IIAs which include a provision on a state's right to regulate.[359] For example, Article 12.3 of the EU-New Zealand FTA (2023) states that:

> The Parties reaffirm each Party's right to regulate within their territories to achieve legitimate policy objectives, such as **the protection of human, animal or plant life or health, social services, public education, safety, the environment, including climate change**, public morals, social or consumer protection, animal welfare, privacy and data protection, the promotion and protection of cultural diversity, and, in the case of New Zealand, the promotion or protection of the rights, interests, duties and responsibilities of Maori.

This affirmation could in principle lead to e.g., performance requirements enacted by the host state which can boost economic development or mineral ownership or rights regulations which benefit the host state and create fiscal revenues. Furthermore, a host state should aim to prohibit stabilisation clauses within investor-state contracts. Especially stabilisation clauses which hinder sustainable development, should be avoided by all means.

In respect of performance requirement prohibitions, resource-rich host states should attempt to restrict their impact as much as possible. The most straightforward way of doing this, is by excluding the performance requirement prohibition from ISDS, like in CETA. Alternatively, a mere affirmation of state parties' obligations under the TRIMs Agreement includes less extensive prohibitions than e.g., Article 14.10 USMCA. A third way, is by excluding non-mandatory performance requirements from the performance requirement prohibition. In this way, a positive incentive can be given to foreign investors to act according to the performance 'requirement'.

With regard to mineral ownership rights, a host state can benefit the most from its minerals when there is state ownership of both the mineral rights and the minerals. Through mining licenses, a host state can keep control over its CRM reserves and will be able to demand royalties which can benefit its economy.

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[359] Electronic Database of Investment Treaties, 'Investment Treaties' <https://edit.wti.org/document/investment-treaty/search> accessed 29 October 2023

5.1.2 Furthering economic development

Throughout this thesis, the importance of furthering economic development by way of FDI within the CRM mining industry has been highlighted several times. As mentioned, economic development is a fundamental dimension of sustainable development as a concept.[360] For this reason, securing resilient supply chains cannot be pursued if it is to the detriment of the host state's economic development level.

Moreover, in *Salini v. Morocco*, it was stated that *'the contribution to the economic development of the host state of the investment'* can be considered an additional condition under the definition of an investment.[361] While this additional condition has not been widely accepted in subsequent case law, the potential of contribution to the economy of the host state could be an alternative approach which can boosts the host state's development level.[362]

Especially with regard to performance requirements which aim to protect and advance domestic markets by e.g., hiring local workers, thereby creating added value within their developing economies, resource-rich host states should plea for an exclusion of ISDS when it comes to performance requirement provisions. As stated above, this is the case under CETA. Given that the EU agreed for such an exclusion within its IIA with Canada, any other developing state negotiating an IIA with the EU should push for a similar exclusion.

In addition, resource-rich developing countries should advocate for an explicit permission of performance requirements within the IIA in line of Article 26 of the IISD Model International Agreement on Investment for Sustainable Development given their great potential of positive impact on e.g., local workers and contribution to the host state's economy. Alternatively, a provisions regarding environmental impact assessments and 'Investment and Environment' as stipulated Article 13 and 14 of the Morocco – Nigeria BIT, allow for a sustainable development of the CRM industry.

Hence, the economic development level of many resource-rich countries is of paramount importance and inevitable for clean energy technologies to be secured without shortages and volatile CRM prices and for the green transition to be effective.

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[360] cf International Legal Expert Group (n 298) 29
[361] *Salini Costruttori S.p.A. and Italstrad S.p.A. v. Kingdom of Morocco*, ICSID Case No. ARB/OO/4, para. 52
[362] Darius Chan and Justin Lai, 'Two decades after Salini v. Morocco: The case for retaining the Salini test with modifications' (2023) Arbitration International 22

5.2 For resource-poor actors

Three sub-research questions related to resource-poor actors aiming to secure resilient CRM supply chains:

- *What can resource-poor countries do to secure resilient CRM supply chains?*
- *What policy space remains under the EU's 'right to regulate' to ensure resilient supply chains?*
- *How is the EU's investment treaty regime handling access to CRMs?*

5.2.1 Remaining policy space

Both within and outside of IIAs, resource-poor actors should theoretically aim for the highest possible level of investor protection. Then and only then, they can shield that their investments from violations of MFN, NT, FET, FPS or expropriation.

Within IIAs, resource-poor actors aiming to access a resource-rich host state, should aim to limit pre-establishment investment screening mechanisms. As mentioned above, by investing in countries with an admission model, they safeguard non-discriminatory treatment throughout all phases of the investment, leading to possible MFN or NT claims in cases of existing inbound investment screening regimes. Nonetheless, even under the admission model, a resource-poor home state should bear attention to the comprehensiveness of 'negative lists', which might excavate the advantages of the admission model.

In addition, specific exceptions within IIAs regarding export taxes, export monopolies, dual-pricing schemes all guarantee investor protection and resilient CRM supply chains.

Outside of IIAs, stabilisation clauses offer resource-poor foreign investors the possibility to create legal certainty regarding the host state's regulatory landscape. While some resource-rich host states have been trying to limit the effects of stabilisation clauses, they nevertheless allow for e.g., fiscal stability regarding royalties which could potentially impact the returned value on a CRM investment severely.

In order to avoid being severe subject to changes in mining ownership rights, resource-poor home states should try to secure strong protection against expropriation within IIAs. This is important due to the host state's right to regulate the ownership of minerals and mineral rights, which can result in indirect expropriation for foreign investments. As indirect expropriation has

to be assessed on a case-by-case basis, a strong treaty protection within the respective IIA could prevent investor violations and investment arbitration.

5.2.2 The EU's investment treaty regime

Against this backdrop, the EU's mistrust in ISDS is at least remarkable.[363] Although, as described in Section 1.1.2, the EU aims to expand its network of Strategic Partnerships through its international investment policies, it will unequivocally be subject to ISDS, which it should use in its own advantage to secure legal certainty for its foreign investors.

In recent times, the EU started implementing e.g., prohibitions on performance requirements, dual-pricing schemes, export restrictions, etc. which ameliorates their legal certainty regarding host state regulations which can adversely impact a CRM investment.

Additionally, while not creating any legal obligations, MoUs with several resource-rich countries were concluded over the past year, which illustrates the EU's eagerness in optimising their investment treaty regime for the benefit of CRM access.

As stated in Section 3.4, IIAs strike a nearly impossible balance between commitment and flexibility. For resource-poor actors, obtaining commitment from host states, will be the main way of achieving legal certainty for its foreign investors and resilient CRM supply chains.

[363] Paul Ames, 'ISDS: The most toxic acronym in Europe' *Politico* (Brussels, 17 September 2015) <https://www.politico.eu/article/isds-the-most-toxic-acronym-in-europe/> accessed 29 October 2023

5.3 On a multilateral level

The two remaining sub-research questions are:

- *In what ways can sustainability issues and resilient supply chains be achieved simultaneously within investment policies?*
- *Which legislative changes could be included in a new generation of IIAs to foster CRM access and resilient supply chains?*

5.3.1 Due diligence requirements and investment facilitation

Reconciling sustainable development with investment protection will be a fundamental challenge in response to the increasing demand of clean energy technologies. One way of facilitating this challenge is by creating transparency throughout every phase of the CRM supply chain in respect of both sustainability and supply chain risks.

Both voluntary and mandatory risk-based due diligence requirements allow foreign investors, the host state and the home state to monitor e.g., human rights violations, environmental risks, supply chain stress points. As a result, they permit all interested parties involved in the CRM mining industry to achieve sustainability issues and resilient supply chains simultaneously. However, mandatory due diligence requirements might trigger unlawful extraterritorial effects on investment partners which can cause both diplomatic and legal disputes. Accordingly, a key concern is i) for voluntary due diligence requirements, to encourage a widespread use and ii) for mandatory due diligence requirements, to justify their extraterritoriality by e.g., principles of international customary law.

However, for due diligence requirements to reach their full potential, host states should include mechanisms whereby observations impacting sustainable development, made in the due diligence process, should be addressed in practice. This will be key for positive change.

Equally, investment facilitation agreements allow for increasing predictability and legal certainty for investors, while supporting sustainable development and the economic development of host states. In this context, the EU's Sustainable Investment Facilitation Agreement with Angola provides a great example on how sustainability issues can be achieved simultaneously with resilient CRM supply chains by underlining transparency, corporate social responsibility, MEAs, gender equality, labour standards, etc.

5.3.2 Towards multilaterally agreed solutions

Additionally, a newer generation of IIAs should aim to strike a balance between investor protection and protecting CRM reserves. Given the existing balance towards investor protection in traditional IIAs, CRM reserves should be given additional attention in view of their scarceness and environmental impacts on the one hand and their role in furthering a host state's development level on the other.

As highlighted throughout this thesis, the CRM industry and their multipurpose usages entails a wide set of all sorts of risks. Given this inherent complexity and the exponentially increasing demand, unilateral measures which can potentially create volatile CRM prices and delay a green transition should be avoided.[364] Therefore, the multilateral community should cooperate and establish guidelines which assist balancing out competing interests.

This could be done by e.g., multilateral cooperation on export restrictions or performance requirements. In addition, multilateral guidance with regard to due diligence requirements would benefit the sustainability-CRM access balance greatly. While legally binding agreements in these matters would be the most beneficial, even soft law guidance could considerably support IIA negotiations and home and host states' conduct.

[364] Cf IEA (n 6)

CONCLUSION

This thesis sought to uncover whether international investment law, as a legal framework, is capable of reconciling the interests of both resource-rich and resource-poor countries while ensuring global access to CRMs. Especially given the importance of CRMs for renewable energy technologies and their ability to affect the pace of the energy transition, the international community benefits from an international investment framework which supports a just, sustainable and swift green transition for all.

The starting point of this master thesis was the many layers of complexity regarding CRMs. Their two defining characteristics: high strategic importance and supply risks, combined with their scarce availability and geographical concentration led and will continue leading to geopolitical risks, export restrictions resulting in industry disruptions and a possible slowdown of the green transition.

Within the framework of international investment law, foreign investors from resource-poor (often developed) countries seek to access CRMs in resource-rich (often developing) countries. Given the long-term commitment of a mining investment and possible changes in the host state's regulation regarding taxation of mining concessions or environmental and social laws, foreign investors face numerous risks that may violate IIA's investor protection provisions.

As outlined throughout this thesis, international investment law currently has many legal avenues, making international investment law in theory fit for the purpose of meeting an increasing CRM demand. However, to translate its suitability in practice, multilateral cooperation and mutual trust will be key. All the more, given the fact that international investment law should be fit for the purpose of creating reciprocal benefits for both foreign investors and host states.

So, a host state's right to regulate and protect its CRM reserves in order to avoid environmental harm or human rights violations is at least as essential as investor protection and ensuring resilient CRM supply chains.

In Chapter III, multiple avenues within IIAs for both stakeholder groups were highlighted. Chapter IV exposed opportunities outside the framework of IIAs. Most interestingly, in both Chapters, there were very few pathways which guaranteed mutual benefits. Only due diligence requirements and investment facilitation agreements are mechanisms which could establish reciprocal benefits and a sustainable approach to the CRM industry's growth.

Nonetheless, reciprocity of benefits should be a minimum standard in bilateral and multilateral FDI negotiations. This can be done by a weighing and balancing of several of the options discussed in this thesis. For example, investor protection could be guaranteed by a stabilisation clause which is not too broad in scope so as to allow a host state from protecting its CRM reserves for the sake of sustainable development.

Alternatively, an explicit provision allowing performance requirements in cases where the foreign investor was aware of their existence before making its investment, i) creates the necessary legal certainty for the foreign investor and ii) ensures an increase in development of the host state.

While only shortly mentioned in Section 2.2.1, the significance of recycling and a circular approach regarding the CRM value chain is likely to increase and will limit the need for foreign investment. Nonetheless, given that for many resource-poor countries, extraction of CRM reserves is simply not economically or technically feasible, investment protection and a state's right to regulate will have to be reconciled. This can be done through re-negotiating IIAs and investment contracts or e.g., through a proportionality test within investment arbitration.

To conclude, it should be noted that multilateral cooperation on performance requirements and export restrictions would benefit the international community greatly. Finding the 'golden mean' will be crucial to achieve a just and sustainable green transition for all.

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Greece – United Arab Emirates BIT (2014)

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Colombia – Spain BIT (2021)

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Colombia – Venezuela BIT (2023)

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EU-New Zealand FTA (2023)

Others

Vienna Convention of the Law of Treaties (VCLT) (1969)

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