DOKUZ EYLÜL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF EUROPEAN UNION
EUROPEAN STUDIES PROGRAM
DOCTORAL THESIS
Doctor of Philosophy (PhD)

EUROPEAN UNION, CHINA AND CLIMATE CHANGE: A CASE OF COLLECTIVE SECURITISATION?

Seray KILIÇ

Supervisor
Assoc. Prof. Dr. Sevilay Zehra AKSOY

2024

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Müdür

DECLARATION

I hereby declare that this doctoral thesis titled as “European Union, China and Climate Change: A Case of Collective Securitisation?” has been written by myself in accordance with the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honour.

25.07.2024

ABSTRACT

Doctoral Thesis

Doctor of Philosophy (PhD)

European Union, China and Climate Change: A Case of Collective Securitisation?[1]

Seray KILIÇ

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Graduate School of Social Sciences

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In light of the increasing geopolitical contestations in climate change-related matters and the EU's growing emphasis on the security implications of climate actions, it would be a fair expectation that, as in other policy areas, the EU has adopted a securitising perspective towards China with regard to the latter's climate-related policies and actions. Drawing on this assumption, this study aims to scrutinise whether the confrontational dynamics of EU-China bilateral relations in the climate domain could be explained by the EU's securitisation towards China. To achieve this goal, the author uses the securitisation theory as the theoretical framework. Using a triangulation of the collective securitisation model and the threatification vs riskification model as analytical frameworks, the author conducts a qualitative discourse analysis of the primary and secondary sources. The findings reveal that the risk and threat articulations in the EU's discourse, together with the risk and threat dimensions in its policy outputs, point to the existence of a securitising perspective towards China. With regard to the form of securitisation, the findings show that for matters in which the European Commission has already developed a risk perspective and where there is a vocal audience with a high receptivity to the matter, the securitisation has taken the form of threatification. Whereas, for

[1] This dissertation has been supported by the Scientific and Technological Research Council of Türkiye (TUBITAK) under the 2211-A National PhD Scholarship Program.

matters in which the Commission has refrained from an explicit threat articulation or in which there has been a mismatch between the articulations of the securitising actors and the audience, the form of securitisation has remained as riskification.

Keywords: European Union, China, Securitisation, Climate, Energy.

ÖZET

Doktora Tezi

Avrupa Birliği, Çin ve İklim Değişikliği: Bir Kolektif Güvenlikleştirme Vakası mı?[2]

Seray KILIÇ

Dokuz Eylül Üniversitesi
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İklim değişikliği ile ilgili konularda giderek artan jeopolitik endişelere ve iklim politikalarının güvenlikle ilişkili sonuçlarının Avrupa Birliği (AB) nezdinde artan önemine bakıldığında, diğer politika alanlarında olduğu gibi, AB'nin Çin'in iklim alanındaki politika ve eylemlerine ilişkin bir güvenlikleştirme perspektifine sahip olduğunu varsaymak mümkündür. Bu varsayımdan hareket ederek, bu çalışmanın amacı, AB ve Çin arasında iklim alanındaki ilişkilerde gözlemlenen çatışma dinamiklerinin AB tarafından Çin'e karşı geliştirilen bir güvenlikleştirme bakış açısıyla açıklanıp açıklanamayacağını incelemektir. Bu amaçla, yazar, kuramsal çerçeve olarak güvenlikleştirme kuramını, analitik çerçeve olarak ise kolektif güvenlikleştirme modelini ve riskleştirme-tehditleştirme modelini kullanmıştır. AB'nin Çin'in iklimle ilgili politika ve eylemlerine yönelik söyleminde risk ve/veya tehdit unsurlarının varlığını tespit etmek üzere birincil ve ikincil kaynaklardan elde edilen kapsamlı veriler söylem analizi yöntemiyle incelenmiştir. AB'nin söylemlerinde yer verdiği risk ve tehdit unsurları ile politika çıktılarında mevcut olan risk ve tehlike boyutları bir arada ele alındığında, analiz bulguları, AB'nin Çin'e karşı güvenlikleştirme perspektifine sahip olduğunu ortaya koymaktadır. Buna göre, Avrupa Komisyonu'nun hâlihazırda bir risk perspektifi geliştirdiği ve konuya yüksek derecede duyarlı olan bir kitlenin mevcut olduğu konularda, bu perspektif

[2] Bu tez çalışması 2211-A Yurt İçi Genel Doktora Burs Programı kapsamında Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TÜBİTAK) tarafından desteklenmiştir.

tehditleştirme formunda gerçekleşmektedir. Komisyon'un söylemlerinde açık bir tehdit ifadesine vermediği ya da aktör ve kitle arasında uyumsuzluk olan konularda güvenlikleştirme perspektifi risk formunda gerçekleşmiştir.

Anahtar Kelimeler: Avrupa Birliği, Çin, Güvenlikleştirme, İklim, Enerji.

EUROPEAN UNION, CHINA AND CLIMATE CHANGE: A CASE OF COLLECTIVE SECURITISATION?

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ABBREVIATIONS

AEGEI	Africa-EU Green Energy Initiative
AFASE	Alliance for Affordable Solar Energy
ASEAN	Association of Southeast Asian Nations
BDI	Bundesverband der Deutschen Industrie
BRI	Belt and Road Initiative
CBAM	Carbon Border Adjustment Mechanism
CBDR	Common but Differentiated Responsibilities
CCMT	Climate Change Mitigation Technologies
CCP	Chinese Communist Party
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
COP	Conference of the Parties
CRM	Critical Raw Materials
CRM Act	European Critical Raw Materials Act
EBA	European Battery Alliance
ECL	European Climate Law
ECR	European Committee of the Regions
EEAS	European External Action Service
EESC	European Economic and Social Committee
EGD	European Green Deal
EIB	European Investment Bank
EP	European Parliament
ERMA	European Raw Materials Alliance
ESIA	European Solar PV Industry Alliance
ETS	Emissions Trading System
ETS	Emissions Trading System
EU	European Union
EUR	Euro
EV	Electric Vehicle
EWS	Early Warning System

FDI	Foreign Direct Investment
FSR	Foreign Subsidies Regulation
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GW	Gigawatts
HR/VP	High Representative for Foreign Affairs/Vice President of the Commission
IET	International Emissions Trading
IPCC	Intergovernmental Panel on Climate Change
IRA	US Inflation Reduction Act
JI	Joint implementation
LNG	Liquefied Natural Gas
MoU	Memorandum of Understanding
NDC	Nationally Determined Contribution
NGEU	Next Generation EU
NIS	Network and Information Security
NZIA	Net Zero Industry Act
OECD	Organisation for Economic Cooperation and Development
PSR	Polar Silk Road
PV	Photovoltaic
REE	Rare Earth Elements
RMI	Raw Materials Initiative
SSCCP	South-South Climate Cooperation Programme
T&D	Transmission and Distribution
TFEU	Treaty on the Functioning of the European Union
UK	United Kingdom
UNFCCC	United Nations Framework Convention on Climate Change
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
USD	United States Dollar
VW	Volkswagen
WTO	World Trade Organization

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INTRODUCTION

Since the establishment of diplomatic relations in 1975, the European Union (EU) and China have developed a multifaceted relationship. Initially, trade and economic cooperation were the main drivers of this relationship. Since the signing of their first trade agreement in 1978, the economic cooperation between these two actors has flourished, with China becoming the EU's largest trade partner in 2020 (Eurostat, 2024). Gradually, their partnership has expanded to cover a wide range of areas, including security, technology, education and research, and global challenges such as climate change, poverty and biodiversity. In 2003, this relationship reached its highest level with the establishment of a strategic partnership. Since then, the bilateral relations between these major powers have remained intact despite occasional interruptions.

However, the EU-China relationship has not evolved in a vacuum. Rather, it has been significantly shaped by the broader geopolitical landscape, particularly the emerging strategic rivalry between China and the United States of America (USA) (Chen, 2021). In the last decade, the USA and China have become 'enduring rivals' engaged in intense competition with political, economic and technological dimensions (Beckley, 2023: 12). This rivalry has naturally had implications on the EU, which has found itself torn between the strategic interests of China and the USA. To quote from Besch, Bond and Schuette (2020: 18), currently, 'Europe is watching nervously to see whether China and the US are caught in the 'Thucydides Trap''[3].

Apart from becoming a battleground for the USA-China rivalry, China's economic, military and diplomatic rise has put a strain on the EU's relationship with this rising power. As China's global footprint and influence have expanded, the EU has found it increasingly difficult to maintain a balanced and cohesive policy. To illustrate, the EU has opted for a 'low-intensity balancing strategy' against the Chinese threat in East Asia, especially in the South China Sea. At the same time, it has pursued an engagement strategy in economic, diplomatic and political realms, hoping that this

[3] Thucydides's Trap, a metaphor widely used in the International Relations scholarship, refers to the Greek historian Thucydides' depiction of the Peloponnesian War between Athens and Sparta, a hegemon state and a rising state, in the fifth century B.C. According to Thucydides, the reason of the war was the disruption of the status quo by Athens, which challenged the hegemonic power of Sparta, creating an insecure environment for the latter. For a detailed analysis on the relevance of Thucydides' Trap for the US-China relations, see Allison, G. (2017). The Thucydides Trap. *Foreign Policy*. 9(6): 73-80.

would incentivise China to remain engaged in and committed to the international rules-based order (Maher, 2017: 136). Indeed, in its most recent strategy on China, the European Commission[4] (2019: 1) defined it to be simultaneously 'a cooperation partner with whom the EU has closely aligned objectives, a negotiating partner with whom the EU needs to find a balance of interests, an economic competitor in the pursuit of technological leadership and a systemic rival promoting alternative models of governance'.

As Sattich and others claim (2021), in the current context of EU-China relations, the line between strategic partnership and rivalry is relatively thin. The relationship between these powers, the sum of a set of compartmentalised policy areas, has always been marked by both cooperation and competition (Chan, 2016; Hosli et al., 2020; Yan, 2020; Chen, 2021). Yet, it is increasingly acknowledged that cooperative elements are gradually replaced by confrontational elements in various realms (Chen and Gao, 2022; Cook, Ohle and Han, 2022; Freeman, 2022). As Josep Borrell, the High Representative for Foreign Affairs/Vice President of the Commission (HR/VP), acknowledged, 'the dimension of 'rival' [rivalry] has become more and more important' while the complexity of their relations has increased (European Union External Action, 2023).

One can observe that, even in the policy realms that the EU and China are inclined to cooperate most, there has been a shift towards a less encouraging environment for cooperation. The trajectory of their climate relations is noteworthy in this sense. The term climate relations refers to the relations that are directly or indirectly relevant to the policies on the mitigation of or adaptation to climate change (Belis and Schunz, 2013: 191). Scholars have so far analysed the EU-China climate relations at two levels: multilateral and bilateral. The former includes those examining the EU-China climate relations as part of the broader interactions within the global climate regime, often focusing on their relations with a third state, while the latter is concerned by the interactions that have direct implications on each other's climate-related policies.

Studies that analyse the EU-China relations at the multilateral level mainly focus on two actors: India and the USA. These countries are the two largest emitters;

[4] From here on, the European Commission is called as the "Commission".

hence, they are key players in international climate governance, along with the EU and China. For example, Belis and others (2018) examine the diplomatic relations between China, India and the EU within the framework of the international climate regime. Using the concept of multiple bilateralism, which is defined as a strategy that encompasses several bilateral relationships conducted parallel to the multilateral negotiation settings, the authors show that the intersection of bilateral relations acts as a driver of climate strategies pursued at the global level. One of their findings is that, after the Copenhagen Summit, the EU's acknowledgement of the specific (national) circumstances of the BASIC countries (Brazil, South Africa, India, China) changed its 'one-size-fits-all' strategy to a more differentiated climate diplomacy.

In another study on this trilateral relationship, Torney (2015: 106) contends that intergovernmental relations serve as 'channels through which climate ideas, policies and institutions diffuse from one jurisdiction to another'. With a constructivist approach, his study demonstrates the significance of ideational factors (socialisation, persuasion, lesson drawing and emulation) to understand how norm diffusion and institutionalisation of relations shape interstate climate cooperation. With regard to the climate policies of the EU, the US and China, Yan (2020) analyses the cooperation and competition dynamics in this trilateral relationship and argues that these actors managed to establish a global climate order under the United Nations Framework Convention on Climate Change (UNFCCC) despite their divergences on the distribution of responsibilities and cost.

When we look at the EU-China climate relations at the bilateral level, we can see that climate is often depicted as an area where China and the EU are inclined to cooperate most. This is mainly because, in line with the functional nature of their overall relations, the dominant theme in the early scholarship is the collaboration between China and the EU for global mitigation efforts. This scholarship offers two main explanations for their cooperation: the existence of common interests and the role of ideational factors.

The EU and China have been the biggest GHG emitters; hence, they have a common interest and responsibility in cooperating against the implications of climate change. Christiansen and others (2018: 136) argue that China and the EU have seen each other as 'core partners' in environmental matters since the beginning of their

cooperation in the mid-1990s. They claim that the EU-China cooperation stems from shared concerns, particularly about energy efficiency, mitigation of the effects of climate change and fostering renewable energy sources. For them, the institutionalisation of the bilateral relations throughout the 2000s via partnerships (Partnership on Climate Change), scientific efforts (the Europe-China Clean Energy Centre) and joint projects (EU-China Energy and Environment Program) is the most apparent cooperative dimension of this relationship. Belis and Schunz (2013) also demonstrate how the EU and China were able to display 'a gradually emerging partnership' in the post-Copenhagen period despite tangible tensions in their relations. The authors claim that two significant structural changes, globalisation and the rise of China, positively influenced the EU-China relations in the climate realm. While the collision between the traditional approach and the transnational problems arising from globalisation initially created a deadlock in global climate governance, especially in the presence of China's strong attachment to the principles of national sovereignty and non-interference, the authors argue that a shared perception of threats posed by climate change facilitated extensive dialogues and concrete cooperation initiatives between the actors.

The common commercial interests of the EU and China have also influenced their cooperation in the climate realm. Bo (2016) argues that the strategic ambition to have an innovation-based economy and become one of the leading actors in the global value chain has led China to seek advancements in climate technologies and low-carbon production methods that the EU has long had comparative advantage and technical expertise. Likewise, Belis and others (2018) argue that the economic prospects of low-carbon technology industries intrigue China's interest in the EU's low-carbon policy framework, which facilitates advancements in the field of renewable technologies. In other words, the alignment of European policies with China's conception of climate change as a chance to foster its low-carbon sector and a catalyst for its economic expansion has served as a driver of their cooperation in climate matters. Liu and others (2019: 245) even argue that, for China, with its remarkable performance in transitioning to a low-carbon economy, the EU is a role model that is 'less fraught with diplomatic and geopolitical tensions' than the US.

Apart from the interest-focused explanations, constructivist studies show that the cooperation between the EU and China is also driven by social factors. Gurol and Starkmann (2021), for example, focus on the roles ascribed to the EU and China by external and internal expectations. The authors argue that the external pressures for accountability, as well as the structural changes at the domestic level, transformed China's role conception from a 'weak power face', looking for less responsibility and more financial aid, to a 'strong power face' with a 'pick-and-choose' mitigation strategy (Ibid: 525). Meanwhile, the EU's role conception has changed from a 'global leader' and a 'normative power' that exerts its leadership through best practices into a 'cooperative leader' and a 'mediator' that facilitates coalition-building among ley players (Ibid: 527). The authors conclude that their changing role conceptions facilitated the establishment of cooperative climate relations between the EU and China.

In another constructivist study, Carrapatoso (2011) argues that the institutionalised dialogue between the EU and China has provided mechanisms of diffusion through which ideas have melted and thereby influenced the actors' policies at stake. The EU's commitment to multilateral negotiations, its display of the 'least credibility gap with regard to rhetoric and action' and its respect for China's foreign policy principles have considerably increased China's responsiveness (Ibid: 179). Similarly, Scott (2009) argues that the increasing frequency of climate-focused dialogues between the EU and China has contributed to the convergence of their climate policies. De Cock (2011) even argues that the EU has acted as a 'bilateral norm leader' vis-à-vis China, contributing to the 'social learning' among Chinese policymakers on climate change. Parallel to De Cock, in his study on the EU's and China's financial responses to climate change, Minas (2022) focuses on climate injustice and contends that China's utilisation of green finance systems resembles those of the EU in the sense that relevant financial policies have been developed through cooperative research conducted by Chinese institutions and international partners, particularly those from Europe. In other words, the Chinese administration treats the EU 'as a source of guidance' while, at the same time, refraining from any economic and political denunciation from the EU (Ibid: 392).

However, just as with the nature of their overall relationship, the EU-China climate relations are complex and the interplay between these actors is marked by both cooperative and confrontational elements. While the shared acknowledgement of climate change as a security threat has created venues of collaboration between China and the EU, the substantial differences in their perceptions and interests have made their collaboration a challenging task. Bo, Biedenkopf and Chen (2016) even argue that the cooperation between China and the EU has remained at the level of information exchange, technical cooperation and capacity building and has never evolved into a deep political partnership due to these confrontations.

Scholars who focus on the confrontational dynamics of the EU-China climate relations offer two main explanations: ideational divergences and geopolitical dynamics. First, China and the EU have contrasting ideational positions on climate matters. Schreurs (2020), for example, argues that the Chinese leaders' climate scepticism, i.e. the fear that the West manipulated the findings of scientific communities to hold the developing economies down, was influential on China's early interactions with the Western powers, including the EU and fed the ideational divergences in their climate policies. Yan and Torney (2016) also argue that the EU's insistence on mandatory emissions restrictions on developing countries with significant emission growth confronts China's emphasis on fair distribution of responsibilities between developed and developing countries. Similarly, Hefei and Hongyu (2017) claim that the differences in their interpretation of key principles of international climate governance influence their positions in international negotiations, particularly on issues of common but differentiated responsibilities, globally binding reduction goals and climate finance.

Bo (2016) draws attention to different perceptions of climate security between the EU and China. He argues that the EU perceives climate security as a multilateral issue, whereas China treats it as a homeland security matter and remains deeply concerned with the political ramifications of climate securitisation at the international level, particularly with the involvement of the United Nations Security Council. The Chinese administration's association of climate change with national security is widely supported by the Chinese scholars and policy-makers (Freeman, 2010: 10-13). In fact, Bocse's (2018) interviews with the EU officials reveal that differences in

administrative structures and perceptions make energy and climate cooperation harder as bilateral exchanges remain limited due to the classification of energy information as a 'state secret' by the Communist Party of China (CPC).

Likewise, Gippner (2014: 6) argues that China perceives climate change as a matter of national development since the 1990s; and accordingly treats it as an 'issue of international power struggle' for the developing countries like itself. According to Yeophantong and Goh (2022: 72) China's insistence on portraying itself as a 'responsible major developing power' in the climate realm replaces its self-identification as a 'responsible great power', which results in a lack of equivalent effort on the Chinese side for climate change mitigation. Indeed, according to Climate Action Tracker (2023), China's policies and actions remain 'highly insufficient' for achieving its climate commitments. Moreover, the government persistently advocates for the significance of fossil fuels in the process of changing its energy sector as well as financing the construction of coal plants outside China. As of January 2019, there are 399 gigawatts (GW) of coal plants being developed outside of China and one-quarter of them (102GW) are financed by Chinese financial institutions (Shearer, Brown and Buckley, 2019: 1). Qi and Dauvergne (2022) contends that China's depiction of itself as a developing power while simultaneously making massive investments in countries in the global South enhances its diplomatic and discursive influence in multilateral climate forums and helps China export its development model to these countries.

As Fu Cong, China's ambassador to the EU, stated during the COP28 Summit, 'global climate governance does not happen in a vacuum' (Euractive, 2023). Climate policy has implications on production, supply and consumption patterns. As climate actions, particularly those with an industrial dimension, become increasingly relevant to economic interests, the pursuit of mitigation and adaptation overlaps with broader geopolitical considerations. Green industrial policies encompass various measures such as investments, incentives, laws and policy supports that aim to promote the advancement of climate-related technologies. Various methods such as direct capital subsidies, research and development incentives, tariffs and duties and procurement regulations may be employed for this aim. Yet, rather than the choice of method, the defining characteristic lies in the intention of these policies, which are often driven by the opportunistic assumption that environmental action can stimulate economic growth

through the establishment of strategic sectors, employment opportunities and increasing export revenues. Such an approach naturally has confrontational and fragmenting implications on states and intuitions as they allow the actors to attain a competitive position in global production and reposition themselves within the global supply chains, eventually altering the international power distribution (Allan, Lewis and Oatley, 2021: 14).

The existence of cooperative elements in EU-China climate relations cannot be denied. Indeed, these two actors have consistently acknowledged their intention to cooperate against climate-induced challenges in their regular interactions. However, as Schreurs (2020) argues, the climate actions of China and the EU are increasingly motivated by the acknowledgement that green production is about not only environmental protection but also an opportunity for economic modernisation and competition. Kefferpütz (2022) even claims that 'climate cooperation alone may have run its course'; instead, 'climate competition should increasingly define the EU's policy towards China'. That is why, recently, we have encountered a bourgeoning scholarship that looks beyond ideational divergences and focuses on the geopolitical drivers of confrontations in EU-China climate relations. Bremberg and Michalski (2024), for example, scrutinise the tribulations that the EU and China have been experiencing since the Copenhagen Conference and underscore the relevance of geopolitical factors in climate policies. Oertel, Tollmann and Tsang (2020: 2) demonstrate that, in the face of the current geopolitical confrontations between 'rapidly decarbonising superpowers', the notion of 'partnership' can no longer explain the complexity of the EU's interaction with China in tackling the challenge of climate change. Similarly, Mazzocco (2023) argues that Europe's ability to achieve its climate, diversification and competitiveness objectives will largely rely on its response to China's trade and investment in the climate technology sector now that climate policy has become closely connected to geopolitical competition and domestic political economy.

The studies that scrutinise the EU-China climate relations from a geopolitical perspective generally offer explanations based on rational calculations. Holzer and Zhang (2008), for example, look beyond the cooperation rhetoric and analyse the confrontations between these actors. Applying the concept of nested games from game

theory to the interactions between the EU and China in the realm of clean energy technologies, the authors argue that the conflicting interests between business and civil society actors from both sides create insecurities and constraints, leading to a suboptimal behaviour of competition.

In another study, Altun and Ergenc (2023) analyse the EU-China relations in three interconnected sectors, namely standardisation, green taxonomy and the renewables sector, within the dialectical collaboration-competition nexus. Adopting a political economy perspective, the authors conclude that although the individual and common efforts of the EU and China in green taxonomies form a collaborative aspect, their competition in standardisation and the renewables sector reflects the competition facet of this relationship. In a similar vein, Sattich and others (2021) trace the unfolding of processes and events in four policy areas, namely climate policy, energy policy, industrial policy and international trade and investment policy, utilising the concept of policy interdependence. The authors assess that, particularly in climate and energy policies, the asymmetric interdependencies and competition stand as a source of confrontation. The authors further argue that even though the alignment of industrial policies may potentially connect the economic and climate agendas of these actors, disputes in trade policies take precedence over climate and energy policies, leading to conflicts in this policy area.

Despite the flourishing perspectives in the scholarship, so far, scholars have not offered adequate explanations on the security implications of climate actions pursued by these actors. In the recent years, climate change has been frequently understood as a 'security priority' (Dalby, 2015: 427). The geopolitical nature of climate policies creates a complex international landscape with security-related implications even though it is a challenging task to identify clear-cut losers and winners. States that can successfully manoeuvre their ability of risk management in climate and energy policies and their level of access to renewable energy technologies are likely to emerge as winners. In this context, global value chains, particularly supply chains of critical commodities, turn 'from blessing to curse' (Riecke, 2020: 5). Moreover, it can be argued that investment in renewables and new technologies has the potential to create new hubs of geopolitical influence, potentially resulting in a global landscape dominated by security concerns of few major powers (Vakulchuk, Overland and

Scholten, 2020: 6-7). Sovacool and others (2023) even argue that the deployment of low-carbon technologies has the potential to be weaponised as they could be used as tools for military negotiations to secure resources. That is why; Oberthür (2016: 119) claims that with the emergence of 'climate geopolitics', international climate politics has entered into the realm of high politics, making 'zero-sum logic' a prominent feature of climate relations between states.

Despite the initial focus on mitigation of climate change effects through GHG reduction, in the last decade, climate and security issues have increasingly merged and become a strategic topic on the EU's agenda (Sonnsjö and Bremberg, 2016). As HR/VP Borrell once acknowledged, for the EU, climate change has become a geopolitical issue, which is likely to create 'new security threats and shifts in global power' (European Union External Action, 2021). Youngs (2014: 15) even argues that, in the last decade, the geoeconomic dimension of climate change has affected the EU's policymaking more than the traditional security aspects. His argument would explain the recent commitment of the EU leaders to concentrate 'on energy and resource efficiency, circularity, decarbonisation, resilience to natural disasters and adaptation to climate change' with an effort to 'secure sustainable and inclusive growth and global leadership in this crucial decade' (European Council, 2023).

With regard to EU-China relations, the security-oriented arguments sound even more relevant, considering that the EU has been pursuing a securitising approach towards China in various policy realms. According to Chen and Gao (2022), the recent deterioration of EU-China relations can be explained by the shift in the EU's foreign policy discourses towards China since the mid-2010s. The authors argue that despite some rises and falls in their relationship, the EU did not regard China as an existential threat or a primary security challenge to the Union until the early 2010s. However, a combination of long-term dynamics (stemming from global volatilities and the EU's decline in the global scene) and a series of distinct yet interconnected external shocks (the change in Chinese foreign policy under the presidency of Xi Jinping, increasing frictions in bilateral economic relations and China's growing power in the cyberspace and the digital economy) have shifted the EU's discourse. The EU has attempted to securitise China as an existential threat across multiple policy frames, including Asian regional security, economic security, political security and information and technology

and cybersecurity. Among them, the EU's securitisation move is most enigmatic when it comes to Asian regional security, as 'China poses an existential threat to the EU's core economic and commercial interests' even though not all the attempts are considered successful due to insufficient audience acceptance, which hinders the implementation of common policies and consolidating the new status quo discourse (Ibid: 203).

In another study, Jakimów (2019: 370) argues that the European Commission and some of the core EU members (particularly France and Germany) securitise China's engagement with Central and Eastern European (CEE) members (particularly Czechia, Hungary, Poland and Slovakia) based on the fear of China's 'potential to split the EU'. The author argues that the CEE states promote the desecuritising narratives consciously developed by China in order to replace the prevailing perception that frames China as a threat. Therefore, securitisation and desecuritisation of China are simultaneously produced at the core and the periphery of the EU. Likewise, Tsimonis and Rogelja (2020) demonstrate how European think tanks are promoting the 'China threat' narrative, creating the conditions for a securitising move and emergency measures from the EU. The authors argue that the think tanks realise this securitisation through three discursive pillars: (i) politicising the Chinese investments and downgrading the agency of CEE states' investment decisions; (ii) promoting the notion that disagreement over these investments undermines the unity within the EU; and (iii) 'othering' the Chinese actors and their enablers in Europe as agents of a hostile political, social and economic order (Ibid: 104).

The Structure of the Dissertation; In light of the increasing geopolitical contestations in climate-related matters and the EU's growing emphasis on the security implications of climate actions, it would be a fair expectation that, as in other policy areas, the EU has adopted a securitising perspective towards China with regard to latter's climate-related policies and actions. Drawing on this assumption, this study aims to scrutinise whether the confrontational dynamics of the EU-China bilateral relations in the climate domain can be explained with the securitisation of the EU towards China. Accordingly, the research question of this dissertation is as follows: Has the EU adopted a securitising approach towards China with regard to the latter's

policies and actions in the climate domain? If so, is this approach grounded on a threat-based security logic (threatification) or a risk-based security logic (riskification)?

To answer this question, the author utilises the securitisation theory developed by Buzan, Wæver and de Wilde (1998) as the theoretical framework. Considering that, as a middle-level theory, securitisation is primarily concerned with the state as the unit of analysis, the author employs collective securitisation as the analytical framework of the study. Coined by Haacke and Williams (2008) and later elaborated by Sperling and Weber (2017 and 2019), collective securitisation refers to the process in which an actor acts on behalf of other empowered actors, such as member states, to address and manage security threats. As an analytical framework, the collective securitisation model allows us to apply securitisation theory to cases where multiple actors –with delegated authority- are involved in the securitising process. The subject of this study, the EU, is an organisation with its own policymaking agency delegated to it by its members. Therefore, collective securitisation is a relevant model for this study.

As a complementary analytical framework, the author also employs the threatification-riskification model developed by Diez, von Lucke and Wellmann (2016). The classic version of securitisation theory follows the logic of exception, meaning that it tends to address traditional security matters and point to existential threats that create a state of exceptionalism different from the everyday lives of the citizens. In the climate realm, however, it is 'not the avoidance of threats or the deterrence of enemies but the management of risks' that constitute the rationale of security policies (Kessler, 2010: 17). That is why the author draws upon Diez, von Lucke and Wellmann's differentiation of threatification and riskification as two different forms of securitisation. Applying a triangulation of the aforementioned analytical frameworks, the author conducts a qualitative analysis of extensive data derived from both primary and secondary sources to understand whether the EU has developed risk and/or threat articulations vis-à-vis China's climate-related policies and actions.

The analysis of the risk and threat articulations in the EU's discourse, together with the risk and threat dimensions in its policy outputs, reveals that the EU has undoubtedly developed a securitising perspective towards China vis-à-vis the latter's policies and actions in climate-related matters. With regard to the form of

securitisation, the findings show that for the matters that the Commission had previously developed a risk perspective and where there is a vocal audience with a high receptivity to the matter, the securitisation has taken the form of threatification. The EU's over-dependence on China for the supply and refining of raw materials, as well as the production and storage of renewable energy, are illustrations of this transformation. For the matters that the Commission has refrained from an explicit threat articulation or in which there has been a mismatch between the articulations of the securitising actors and the audience, the form of securitisation has remained as riskification. The EU's discourse and outputs on the matters of energy supply from third countries and clean technologies are examples of this mismatch.

The contributions of this study are three-fold. First, the study contributes to the scholarship on EU-China climate relations by providing an alternative explanation to the confrontational dynamics of this relationship. Specifically, the findings of this study offer a genuine insight into our understanding of this relationship by integrating securitisation as a relevant theory to study EU-China climate relations, which has been regarded as an area of cooperation even in the most challenging times of this relationship. Second, this study contributes to the general scholarship on securitisation through the utilisation of the riskification vs threatification model. By doing this, the study complements the studies that advocate the relevance of risk as a form of securitisation, particularly in non-traditional security realms. Third, the study contributes to the scholarship on collective securitisation in two ways. Different from the existing scholarship, this study focuses on the securitisation of an actor, i.e. policies and actions of an actor, whereas other studies scrutinise the securitisation of policy issues such as climate, energy, health, cybersecurity and migration. In addition, this study also includes the European Parliament (EP) in the analysis, as it is one of the securitising actors for the topic in question, whereas the existing scholarship has focused on the European Commission and the European Council only as the relevant actors.

The remaining of this study proceeds as follows. The following chapter introduces the theoretical and analytical frameworks of the study and explains the operationalisation of these frameworks. In line with the analytical steps provided by the collective securitisation model, in the second chapter, the author first portrays the

status quo in the EU and China climate relations (Stage 1) and then identifies the events that interrupted the status quo (Stage 2). The third (securitising move) and fourth (audience response) stages of the model are presented in the third chapter. In this chapter, the author analyses both the discourse and the practices of the EU and the responses from its audience in a non-sequential manner. The fifth stage of the model (policy outputs) is presented in the fourth chapter, which partly includes the audience response relevant to the measures presented. The concluding chapter presents the theoretical implications of the findings.

CHAPTER ONE
THEORETICAL AND ANALYTICAL FRAMEWORKS

This chapter introduces the theoretical and analytical frameworks of the study. It consists of four sections. The first section (1.1.) establishes the general conceptual framework deriving from the securitisation theory developed by Buzan, Wæver and de Wilde (1998). The following two sections provide the analytical frameworks. The second section (1.2.) provides the model developed by Diez, von Lucke and Wellmann (2016) to help the author identify the forms of securitisation (threatification vs riskification) in the collective discourse and practices of the actor in question. The third section (1.3.) provides the analytical steps developed by Sperling and Webber (2017) to help the author explain the securitisation process through a set of sequential stages. The final section (1.4.) explains the operationalisation of the theoretical and analytical frameworks to analyse the EU's changing attitude towards China with regard to their bilateral relations in the climate domain.

1.1. THEORETICAL FRAMEWORK: SECURITISATION THEORY

The early 1990s witnessed a growing discontent with the traditional approaches to security issues. With a narrow interpretation, these approaches assume that security exists as an objective reality and attribute an uncontested agency to the state (Buzan, 2015). The end of the Cold War presented an opportunity to emancipate from the traditional approaches and precipitated scholarly discussions on broadening the concept of security. Broadening has occurred through the concurrence of widening and deepening of the global security agenda. Widening expands the traditional security notion to include potential threats prevailing in non-traditional security realms. Deepening, on the other hand, concerns the referent actor of security. It is an effort to broaden the security concept vertically, beyond the level of nation-states. Deepening could be either up to the level of international security or down to the level of human security, as well as encompassing the intermediary levels such as societal or regional security (Krause and Williams, 1996).

Securitisation emerged as an alternative approach to the dominant theory of the time, namely neo-realism and the aforementioned broad interpretations. Its originality and inclusiveness made it 'one of the most significant conceptual innovations' in security studies (Peoples and Vaughan-Williams, 2010: 75). The concept was coined by Ole Wæver and was elaborated in his works with Barry Buzan and Jaap de Wilde, along with a group of scholars commonly known as the Copenhagen School. The School was primarily concerned with the non-military aspects of European security. It produced a rich body of scholarship on security studies upon the establishment of the Centre for Peace and Conflict Research (Copenhagen) in 1985 (Huysmans, 1998). The Copenhagen School claimed that the consensus among the alternative approaches that 'the more security the better' was not improving the security conditions at that time because 'security is by its nature a negative problem' (Wæver, 1989:36). Instead, what should have been done was to scrutinise the securitiness of the phenomenon at hand and to change the perception of security problems from threats to political challenges. Hence, they suggested a new formula: 'less security and more politics' (Wæver, 1989: 7).

1.1.1. Definition and Elements of Securitisation Theory

Securitisation shares the critical and constructivist assumption that security is neither objective nor fixed and threats to it are not determined simply by a constellation of material conditions (Krause and Williams, 1996: 242). However, in one of his initial iterations, Wæver also points out that a broader conceptualisation of security does not offer an improvement for two reasons. First, widening security and putting everything into the security basket make it an all-inclusive concept encompassing the whole political agenda. This would endanger the coherence of this concept and make it harder to distinguish the specific character of security issues. Second, addressing an issue from a security point of view envisages a notion of threat-defence and assigns security provisions to the state as the principal actor, whereas 'neither individual security nor international security exists' (Wæver, 1995: 2). He claimed that securitisation theory 'solved' these problems (Wæver, 2011: 469).

What is security from the securitisation perspective? Utilising a post-structuralist perspective of speech act theory, Wæver (1989: 5) answers this fundamental question: 'security is a speech act'. In other words, security is the act of utterance itself because 'by saying it something is done'. This perspective views security not as an objective condition or threat but as a performative speech act that describes a specific situation as the state of security. Hence, securityness is the quality not of the threats but of the way these threats are handled and therefore, securitisation is a performative act (Wæver, 2011: 468). The power of language lies in its potential to mobilise the masses due to a specific framing. In this sense, securitisation is a continuous process of conceptualisation that is widely used by the power holders in their speech acts to legitimise the employment of all necessary means to handle that situation. In this sense, it is a tool extensively used by the political elite who tend to keep control over the political order (Wæver, 1993; Buzan and Hansen, 2009).

Securitisation occurs 'whenever something took the form of the particular speech act of securitisation, with a securitising actor claiming an existential threat to a valued referent object to make the audience tolerate extraordinary measures that otherwise would not have been acceptable' (Wæver, 2011: 469). By definition, a successful securitisation has certain elements, three of which are mainly seen as imperative by the Copenhagen School: 'existential threats, emergency action and effects on interunit relations' (Buzan et al., 1998: 26).

1.1.1.1. Existential Threat

In their oft-quoted book, Security: A New Framework for Analysis (1998), Buzan and others claim that the core of security studies is more than war and force and non-military realms can also be included in the analysis as long as the security issues in these realms are distinguished from the normal political issues. The authors argue that political issues are located in a spectrum ranging from non-politicised (the issue is not a topic of public debate or political agenda) to politicised (the issue is part of the political agenda and public debate and is allocated some resources and means) and to securitisation. The criteria for distinction between the ends of this spectrum is that securitised issues 'have to be staged as existential threats to a referent object by a

securitising actor who thereby generates endorsement of emergency measures beyond rules that would otherwise bind' (Buzan et al., 1998: 5).

It can be inferred from the criteria mentioned above that there is a strict line between politics (politisation) and security (securitisation). Then, the question is: What constructs an existential threat? From this perspective, security threats refer to circumstances that pose a 'rapid or dramatic' threat to the state's authority, undermining its ability to effectively handle the situation (Wæver, 1993: 6). The Copenhagen School contends that to grasp the true nature of an existential threat, one needs to look at the nature of the referent object in question. A referent object can be anything that is 'seen to be existentially threatened and that have a legitimate claim to survival' (Buzan et al. 1998: 36). As the definition implies, 'referent objects are the socially constituted units' (Ibid: 43). Traditionally, the referent object is the state and its sovereignty. However, in principle, anything between the individual and system levels can be a referent object for a securitising agent that would urge the sense of survival: 'It has to survive* therefore it is necessary to …' (Buzan et al., 1998: 36).

The quality of existence, hence the nature of the existential threat and the referent object, varies in different sectors. To illustrate, in the military sector, the threat is related to the existence of a state's military forces. In the political sector, an existential threat would mean threats to the constituencies of sovereignty, such as territory, nation, recognition, legitimacy, or the state's governing authority. In the economic sector, the definition of threat is rather complex, depending on the nature of the economy. Still, it may vary from threats to the firms (such as bankruptcy) to the national economy itself. In the society sector, the referent object -the collective identities- is inherently larger; thus, it is even harder to draw a clear line between existential and 'lesser' threats (Buzan et al., 1998: 22-23). The critical point here is that responding to such a threat is imperative by fully mobilising all available resources with the utmost effort. Consequently, the mobilisation of resources involves a political choice.

1.1.1.2. Emergency/Extraordinary Action

The Copenhagen School's emphasis on existential threats is closely related to the concept of emergency action because extraordinary security measures can only be legitimised by the presence of such a threat. In an existentially threatening context, the securitising actor asserts its right to handle the issue through extraordinary methods, successfully circumventing the usual procedures or regulations that it would otherwise be obligated to follow (Buzan et al., 1998: 24-26). The critical aspect here is that emergency actions are measures beyond standard rules. The anxiety over the possible extinction of the referent object creates a sense of urgency against the relative slowness of routine politics, an exceptional circumstance that Roe (2008: 253) defines as 'panic politics of securitisation'. This panic situation does not necessitate the use of military means. For example, using a substantial amount of taxpayers' money to bail out banks in a financial crisis would be an emergency if it is pushed through under exceptional procedures (Oels, 2012: 191).

1.1.1.3. (Securitising) Actor and Audience

Securitising actors are the individuals or entities who declare a specific situation a referent object as existentially threatened (Buzan et al., 1998: 40). Security as a speech act suggests that the power to define and securitise specific issues lies in the hands of those who can effectively perform the act of securitisation through language and persuade their audience to accept their framing. Something becomes a security problem when the political elite declares it so: 'By naming a certain development a security problem, the 'state' claims a special right… which will in the final instance always be defined by the one using it' (Wæver, 1993:4). That is why, in his initial articulations, Wæver strongly emphasised the agency of the state and persistently engaged with the traditional/realist conceptions in his elaborations on security.

A functional actor is another type of unit involved in securitisation. These actors significantly affect the functioning of a sector and influence decision-making without being the securitisation actor or the referent object. The military and the

environmental sectors are the ones that we frequently encounter as functional actors. In the environmental sector, these actors could be economic entities such as transnational corporations, state firms and industrial firms. The activities and behaviours of these actors are significantly influential on the sector, but generally, they do not tend to politicise their influence. Governmental and non-governmental agencies may also constitute a group of functional actors (Buzan et al., 1998: 40-42).

Audience is another unit of securitisation. The audience includes whom the securitising agents attempt to convince about an existential threat and the necessity of exceptional measures to handle that threat. The Copenhagen School claims that the success of securitisation relies on audience acceptance. They argue that discourse would not take the form of securitisation only because it is depicted as an existential threat to a referent object. This would be a securitising move, but it becomes securitised 'only if and when the audience accepts it as such' (Buzan et al., 1998: 25). A securitising move might disturb inter-unit relations because such a move would grant authority to the securitising actor to deviate from the regulations (which the inter-unit order is based on) that it would otherwise be bound to (Ibid).

1.1.2. Critique and Revision of Securitisation Theory

The concept of securitisation is adapted to different cases and elaborated as a theoretical framework by many scholars. Its assumptions and operationalisation have also captured much criticism. The most prominent critique came from a group of scholars known as the Paris School. Represented by the works of well-known scholars such as Thierry Balzacq and Didier Bigo, the Paris School raised concerns over the Copenhagen School's disregard of the non-discursive means of securitisation, the agent-audience relations and the external context. Accordingly, they reconceptualised securitisation theory and contributed to the scholarship by introducing the "practice" as a means of securitisation and context as an element of the securitisation process.

First, Balzacq (2005:182) criticises the 'internalist view of the context' and argues that the external context is overlooked in the classical formulation of securitisation. Political developments do not take place in a void. On the contrary, the 'rhetorical games' occur within an external reality independent from rhetoric and

external developments significantly influence our perception. According to Guzzini (2011: 335), the social context that determines the embedded understanding of self vs other influences the audience receptivity of political discourse more than a 'generic friend–foe distinction'. Contextual factors are essential to understand, for example, why certain narratives are perceived as threatening by some political communities. So, when the context is not taken into account, securitisation focuses 'on the moment of intervention only' (McDonald, 2008: 564). As the relationship between the securitising agent and the audience occurs within a context, analysts should also pay attention to the context (Balzacq, 2005).

Parallel to the first argument, the Paris School criticises the emphasis on the speech act, defining it as a reductionist approach and suggests what Balzacq (2019:7) calls 'practice-centered analysis of securitisation'. For them, focusing on speech acts is too universalist and disconnected from the real world. Language does not construct but only shapes reality. Hence, discourse can only partially explain the securitisation processes, whereas putting other forms of actions such as images, everyday practices and bureaucratic techniques –the way they are chosen and operate- into the analysis can depict the process more accurately (McDonald, 2008; Balzacq, 2005; Balzacq, Léonard and Ruzicka, 2016). Therefore, the contribution of these non-discursive actions to the 'speech-physical action sequence of the securitisation' should be acknowledged (McDonald, 2008: 570). Moreover, Huysmans (2011: 372) states that the 'political meaning of the security speech act is invested in the notion of act rather than speech' and calls for re-engaging the concept of act in securitisation. In the reasoning of his call, Huysmans (Ibid: 375) emphasises the way security is conducted in the contemporary world:

'Securitising in contemporary world politics develops significantly through unspectacular processes of technologically driven surveillance, risk management and precautionary governance. These processes are less about declaring a territorialised enemy and threat of war than about dispersing techniques of administering uncertainty and mapping dangers' (Ibid: 375).

Finally, one of the most common criticisms against the Copenhagen School is its under conceptualisation of the audience. The audience is more than a passive receiver of the speech act. Its nature and status are essential because the audience approves the measures of the securitising agent (Roe, 2008; Floyd, 2019). Balzacq

(2011: 9) argues that effective securitisation is audience-centred, so the audience's feelings, needs and interests should be considered. Therefore, he depicts 'an empowering audience' that 'has a direct causal connection with the issue; and (…) has the ability to enable the securitising actor to adopt measures to tackle the threat'. Moreover, in the original formulation of securitisation theory, the power relations between the agent and the audience are ignored whereas securitisation is 'power-laden' (Balzacq, 2005: 179). The securitisation process is primarily carried out among elites and is heavily influenced by the power dynamics in a particular field. The depiction of threat originates within these dynamics and is disseminated to the audience (Ibid.)

Oels (2012: 186) argues that the Paris School offers 'the most interesting analytical perspective' to understand the implications of framing a specific topic as a security issue. Still, one should be aware that the Paris School does not replace discourse with practices. On the contrary, it suggests employing a holistic approach towards the dynamics of the securitisation process because neither the speech act nor the practice can help us grasp the processes individually. To eliminate their flaws and make a comprehensive analysis, one needs to integrate elements of both the *logic of exception* and the *logic of routine* (Bourbeau, 2014; Balzacq, Léonard and Ruzicka, 2016). This integrated approach allows for a deeper understanding of the complexities of the securitisation process and provides a more nuanced analysis of how security is constructed. The utilisation of this approach is also prevalent in the cases, which will be discussed in detail in the following sections.

1.1.3. Securitisation in Non-traditional Security Domains

The recent scholarship on securitisation points out the possibility of adapting this theory to analyse non-traditional and inherently transnational security matters (Mely, 2007; Rucktäschel and Schuck, 2018). According to Hameiri and Jones (2012), security has become non-traditional because states have become non-traditional due to the transformation of the global political economy. The non-traditional threats are not newly discovered. However, the scale of regulatory statehood has changed in a way that shifted governance 'into spaces beyond the national level' (Ibid: 462). This has consequently prompted and legitimised the employment of securitisation in studying

non-traditional issues. The bourgeoning of climate-related analyses in securitisation scholarship confirms this trend (Scott, 2008 and 2012; Brzoska, 2009; Oels, 2012; Floyd, 2010; Lucke, 2020; Arias, 2022).

Like their contemporaries, the Copenhagen School handles climate-related matters within the general environmental security framework. The School identifies three types of environment-related threats: threats to human civilisation from environmental changes such as earthquakes; threats to the planetary structure that stem from human activity and cause 'existential threats to (parts of) civilisation'; and threats that do not pose any existential threat to civilisation (Buzan et al., 1998: 79-80). Accordingly, their referent objects range from very concrete issues, such as species' survival and habitat, to rather vague issues, such as the planetary climate and biosphere. Between these macro and micro levels, there may be a mass of problems which are very complicated to refer to as existential threats. Among these threats, the second one is seen as the ultimate referent object in environmental security due to 'the risk of losing achieved levels of civilisation—a return to forms of societal barbarism' (Ibid: 75). That is why environmental security is primarily about 'the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend (Buzan, 1991, p.19-20).

As one of the five sectors thoroughly elaborated in their framework, securitisation in the environmental sector is problematic for the Copenhagen School. Buzan (1992) acknowledges that the security label is helpful to prioritise environmental challenges and invoke responses to them (quoted in Wæver, 1995: 12). Yet, the School is sceptical about the level of securitisation in this sector, arguing that the attempts so far have not met the criteria of extraordinary measures. One of the main reasons for this scepticism is their traditional interpretation of security, i.e. associating security with the state as the central unit. In his early articulations on securitisation, Wæver argues that addressing environmental issues, as security matters would invoke the traditional approach of threat-defence, which relies heavily on the state for measures. However, this approach does not always lead to desired actions. First, thinking of security in terms of 'us-them' and seeing threats as originating only from the outside of a state's borders could direct one's attention from its own contributions to environmental problems (Wæver, 1995: 13). Moreover, securitisation attempts bear

the potential undemocratic consequences because this would inadvertently lead to a state of exception and legitimise adopting undemocratic measures, which may result in losing the (general) sovereignty while addressing a specific challenge (Wæver, 1989: 48).

According to Roe (2008: 251), in a liberal context, the 'panic politics of securitisation' might even disrupt the critical components of a legislative structure such as accountability and openness. That is why Wæver (1995) was sceptical towards the works of scholars such as Mathews (1989) and Ullmann (1983), who drew attention to the implications of environmental change and called for a redefinition of security. For him, using the concept of environmental security might have a dramatising effect on the matter; however, this might also lead to the construction of an undesired image. What should be done instead is to frame environmental problems within the 'economy-ecology nexus', which would be a more constructive manner (Ibid: 13).

Several scholars share the Copenhagen School's argument that framing environmental issues (including climate change) as security matters does not necessarily bring the desired actions. Warner and Boas (2019: 1472), for example, claim that Western politicians and policy-makers often employ persuasive tactics to 'sell' the urgency of the 'climate crisis' to targeted audiences, both domestically and internationally; however, this attempt (to present climate change as a security concern) has not yet led to the implementation of extraordinary measures that surpass the normal politics. Their analysis of the British and the Danish cases demonstrates that when there is no immediate danger, implementing extreme security measures causes the target audience to become doubtful and fail to live up to the anticipation of extraordinary activities.

Rucktäschel and Schuck (2018) also stand against securitisation because determining at what level and to which extent the environmental problems pose a threat to security is not only a daunting task, but such an attempt might also lead to misuse of measures due to lack of transparency. Käkönen (1994) even argues that treating climate change -or environmental issues in general- as a traditional security matter would militarise rather than 'greening' it (as quoted in Trombetta, 2008: 586). The implications of "militarising" climate change are significant. Directing attention

towards military measures increases the stakes and hampers the more economically efficient adaptation options. In some areas of Africa, for instance, the extent to which climate change contributes to the escalation of violence and conflict depends not only on the physical effects of climate change but also on the region's vulnerability to conflict and the ability of its population to adapt to changing circumstances, which requires cost-effective capability building efforts. Furthermore, framing climate change as 'high politics' may divert attention from pressing development issues that provide more immediate dangers to vulnerable populations, such as severe poverty, limited access to education and the HIV/AIDS epidemic (Brown et al., 2007).

There is also scepticism towards the political agenda when the focus is on the vulnerable states. Arias' (2022) scrutiny of whether and why certain states discuss climate change as a security issue at the UN reveals that the language of security is used more by powerful countries (primarily the P5) to expand their control over the UNSC agenda. In contrast, vulnerable states such as the Small Island Developing States are less inclined to use the security frame to retain their control on the climate change agenda. That is why Arias concludes that 'securitisation is a tool of agenda control… to obtain more favourable outcomes and a greater share of institutional power' (Ibid: 2).

Indeed, we have been witnessing the gradual securitisation of climate change at different levels by various actors. For example, an analysis of the role of the UN Security Council as a key actor in addressing climate change governance demonstrates its contribution to a discursive shift from perceiving climate change as an environmental and political challenge to a threat perception at the national, international and human security levels. The fact that climate change is a security threat has found an expanding space in the UNSC agenda, which is significant in unleashing the UN's potential to make regulatory changes for much more effective governance of this issue at the global level (Scott 2008; 2012). What is more promising than the widespread consensus on the discussion of climate security within the UN framework is the existence of audience (states) acceptance that the vulnerability of human beings requires political action (Oels, 2009).

Those advocating the employability of securitisation in non-traditional security domains argue that, regardless of the established thresholds, securitisation attempts

increase the salience of the issue, that greater attention creates a sense of urgency and this enables effective mobilisation of means and resources (Brown et al., 2007; Floyd, 2007). Unlike the traditional sectors, in climate policy, the securitising actors are not only states but also an epistemic community of natural scientists and the referent object is not only the states (states' sovereignty and functions) but also humankind as both the cause and the victim of global warming. Hence, in the climate realm, securitisation is not based on the analogy of *us vs. them*; instead, 'the enemy is us' (Brauch, 2009:71). Due to the complexity of its implications, labelling climate security discourse as unsuccessful would be reductionist. In this matter, Scott (2012: 229) argues that climate change's physical and social consequences do not necessarily come with a label attached, so the current state is a situation of 'less-than-complete securitisation of climate change'.

According to Oels (2012), instead of using the label of unsuccessful securitisation in climate issues, it would be more accurate to refer to successful climatisation. The concept of climatisation refers to the application of established security practices to address the challenges posed by climate change, as well as the introduction of new practices from climate policy into the security field. This implies that daily practices utilised in the traditional realm of security, such as scenario planning studies and the implementation of early warning systems, are employed to address the matter of climate change. Consequently, the security domain is expanding to incorporate climate change specialists who employ risk management techniques, climate modelling methodologies and other related practices (Ibid: 185).

1.2. ANALYTICAL FRAMEWORK 1: SECURITISATION AS *THREATIFICATION* VS. SECURITISATION AS *RISKIFICATION*

The Copenhagen School acknowledges that the nature of threats varies in each sector. As stated in the previous section, this is particularly valid for the environmental sector with varying levels of referent objects. In climate change, for example, threat perception cannot be limited to the traditional binary of normal politics vs. security matters (Buzan et al., 1998: 75, 85). Still, as stated in the previous section, the School

tends to keep the logic of exception, which considers 'only the high points (security speech acts) and not the plateaus on the road to securitisation' (Bourbeau, 2014: 192).

The traditional association of security with the state and the natural tendency to point to existential threats creates a state of exceptionalism different from the everyday life of the citizens (Bigo, 2002). However, in the face of rising transnational and non-traditional matters, security is not only about identifying an acute threat and responding to it. It is also about preventing and managing risks, which serves as the 'routinisation and normalisation of the exception' (Kessler, 2010:24). According to Kessler, in the age of risk, it is 'not the avoidance of threats or the deterrence of enemies but the management of risks' that constitute the rationale of security policies (Ibid: 17). Risk is potential harm to state interests; its presence may disrupt a state's efforts to secure its prosperity and even autonomy (policy manoeuvrability). Therefore, riskification refers to a process of systematic evaluation by a sovereign state to identify, prioritise and de-prioritise the events and processes potentially harmful to its interests, i.e. its security, prosperity and autonomy. The content and approach of riskification (definition of risks and interests) is determined by the ruling elite and it is 'the function of its (…) calculations of politically-defined returns-maximisation and risk-mitigation' (Kuik, 2023: 1188).

Due to its impact on the everyday lives of citizens, the significance of risk has expanded and diversified across national and international regulatory frameworks and governance systems. As Macenaite (2017: 509) states, risk has become 'a new lens' through which the regulators see the world. In the European context, a close reading of the regulations in various policy issues such as health (Bengtsson, Borg and Rhinard, 2018), data protection (Macenaite, 2017), cybersecurity (Backman, 2023) and investment (Mattlin and Rajavuori, 2023) reveal how the risk-based security logic has shaped the current governance of these issues in Europe.

The regulatory challenges experienced in the 1980s and 1990s resulted in a shift from excessive, rigid and high-cost regulation to risk-based regulation and evidence-based policymaking, utilising scientific risk-assessment tools such as economic cost-benefit analyses. The weakening of the established methods of regulation under the pressure of technological, economic and ideological changes of the 1970s and 80s necessitated re-regulation at the EU-level (Majone, 1997: 1).

Moreover, the regulatory pressure over the incidents of public concerns such as industrial safety, food safety, environmental protection, etc. underscored the necessity of establishing a suitable risk regulation framework at the European level (Alemanno, 2013: 39). Apart from the efficacy problems, according to Majone, the mismatch between the growth of the Union (then Community) competences and inadequacy of the regulatory institutions at that time created credibility problems (2010: 16). Hence, the reforms enacted in the 1980s, such as the introduction of minimum harmonisation and the New Approach to technical standardisation, were efforts for not only to improve the quality and efficacy of the European regulations but also for the credibility of the integration process (Majone, 2000: 274-276).

Macenaite (2017: 511-513) contends that the accountability considerations of the European bureaucracy led to the prioritisation of a risk-based approach in policy making as policy makers justify their conclusions with technocratic legitimacy. Indeed, due to the calculable and preventable nature of risks, the risk-security approach tends to legitimise the involvement of scientific institutions and experts in the processes. In contrast, the principal actor of securitisation is often the state elite. In his analysis of the French military officials' discourse, Estève (2021: 117) shows us the influence of the scientific communities to construct the risk narrative, which operated as a 'climatisation multiplier' and thereby legitimised the use of military means to deal with the harmful effects of climate change.

In this matter, riskification resembles the Copenhagen School's claim that the environmental sector has two different agendas. The scientific agenda reinforces the securitising attempts by employing a securitising logic equivalent to the sovereignty logic in the political sector: 'The environment has to survive; therefore, this issue should take priority over all others because if the environment is degraded to the point of no return, all other issues will lose their meaning' (Buzan et al., 1998: 37). The political agenda, on the other hand, is concerned with generating public awareness and mobilising communal resources to address the raised concerns. Concerning the latter, whether these concerns are real or not is less crucial as a matter of political concern than their perceived urgency. In other words, 'it is not the actual disasters but their prediction that leads to securitisation (Ibid: 71). Hence, when the governmental units put environmental concerns such as resource scarcity or sustainability on their agenda,

they are often handled within the ordinary policy debates, i.e. politicised, with little dramatic action for a successful securitisation (Ibid).

In the context of security studies, risk connotes a similar shift in the policymaking rationale. After the Cold War, Western security institutions shifted their focus from deterring a single threat to managing global security matters. This shift became more evident in 1991 when the North Atlantic Treaty Organization (NATO) defined the management of security issues and risks as a primary responsibility (Williams, 2008: 57). Hence, in the last two decades, a growing number of studies have used riskification as a framework to understand the governance dynamics of transnational security issues such as climate (Corry, 2012; Estève, 2021; Odeyemi, 2021; Englund and Barquet, 2023), energy (Judge and Maltby, 2017), health (Bengtsson, Borg and Rhinard, 2018) and cybersecurity (Backman, 2023).

The plurality of policy area-focused studies may lead one to assume that riskification is relevant for specific issues, but there are also examples of actor and relation-focused studies. For example, Kuik (2023) demonstrates that risk perception might lead to hedging as an insurance strategy in terms of strategic relations between international actors (states and organisations together). The response of ASEAN states to the intensifying US-China rivalry in the Indo-Pacific era serves as an exemplary case in this sense. The perception of riskification by Southeast Asian states, as manifested in the 'myriad, mixed and diffused dangers and challenges' without a clear hierarchy of severity, has resulted in a more inclusive, multi-domain and multi-layered partnership instead of the previous collective-defence alliances (Ibid: 1191). The perceived risks associated with internal (domestic or regional) and external (extra-regional) realities determine the degree and pattern of riskification. In the ASEAN case, different degrees of assertiveness by major powers such as China towards these states and the varying pathways pursued by the state elites for domestic legitimation reveals that riskification is susceptible to external and domestic factors (Ibid: 1197-1198).

Another example is Mattlin and Rajavuori's (2023) analysis of why the Nordic countries, widely regarded as having liberal foreign investment regimes, have recently made legislative and policy changes on foreign direct investments. The study reveals how these countries riskified the surge of Chinese investments in critical infrastructure

for protecting domestic technology capacities, particularly the defence and infrastructure companies. Moreover, the authors contend that, in the absence of public evidence showing direct harm to national security, the Nordic national intelligence and security services tend to highlight the potential hazards associated with Chinese investments. This tendency was evident in the text that mentioned the involvement of the Chinese party-state in foreign investments and highlighted Article 7 of the 2017 PRC National Intelligence law, which requires all Chinese citizens and companies to aid state intelligence upon request.

In securitisation studies, one can find two distinct approaches to riskification. The first one treats risk politics and securitisation as two distinct logics: threat-based and risk-based security logic. Risk is a potential threat with diffuse yet somehow calculable consequences, whereas threat, in the classical version of securitisation, is imminent and existential. (Lucke, Wellman and Diez, 2014: 862). In this sense, securitisation represents antagonism towards a specific issue or a counterpart. In contrast, riskification puts the emphasis on the harms that (are likely) to arise from that issue or relations with the counterpart. In other words, riskification does not entail a binary between friend and enemy.

In riskification, the would-be riskifying actor would need to point convincingly to the existence of future possible harmful events. This takes us to the 'constitutive causes' of harm rather than the direct causes of harm, which Corry (2012:238) identifies as 'second-order security politics'. Regarding countermeasures, the threat must be eliminated urgently to defend the referent object. On the other hand, risk-security is characterised by a precautionary logic, meaning that it replaces extraordinary measures with preventive and anticipatory measures. Hence, instead of emergency measures to tackle external sources of danger, the agents opt for permanent changes (such as increasing regulatory capacity to control carbon emissions) to reduce their vulnerability and enhance their governance capacity (Lucke, Wellmann and Diez, 2014; Corry, 2012).

From the perspective mentioned above, riskification 'is a competitor to securitisation theory' (Odeyemi, 2021: 78). Even though securitisation and riskification have some overlapping elements, an issue as a subject of risk is distinct from securitisation and does not necessarily lead to it. According to Corry (2012:255),

claims to refer to every instance of danger and risk as securitisation would blur this framework at the very least. Similarly, Judge and Maltby (2017) argue that risk and threat are based on different value and protection considerations, even though both processes begin with security speech acts. That is why, in their scrutiny of whether and in which form energy is constructed as a security issue, the authors remind that, for the energy sector, terms such as 'high dependence' or 'high consumption' do not inherently determine whether these conditions are framed as existential threats or risks. Hence, one should thoroughly examine the actors' framings (Ibid: 185).

Table 1: Threat-Based and Risk-Based Perspectives on Security

	Threat-based security	Risk-based security
Emphasis	Agency and intent of conflicting parties. Defend against direct causes of harm.	Systemic characteristics, populations at risk. Govern the constitutive causes of harm.
Policy prescription	Eliminate	Manage and mitigate, even "embrace".
Governmental technologies	Enemies constructed as threatening and external dangers to political community.	Populations constructed and posited to be at risk from internal dangers to political community.

Source: Bengtsson, Borg, and Rhinard, 2018: 28.

Another group of scholars, on the other hand, treat security politics and risk politics as intertwined concepts. This strand of scholarship demonstrates that the line between threat and risk is blurred and sometimes overlapping, especially in non-traditional security issues. Therefore, it would not be analytically feasible to say that a specific governance system consistently adopts a risk-based or threat-based approach to security (Diez, von Lucke and Wellmann, 2016; Trombetta, 2008; Bengtsson, Borg, and Rhinard, 2018). To illustrate, in their analysis of the early warning systems (EWS) in the health sector, Bengtsson, Borg and Rhinard (2018) demonstrate that the risk

conditions may sometimes convert into a conventional threat-based security logic. Hence, these two logics cannot be considered incommensurable. Rather, they may occur sequentially and this process (of transforming logic of risk to logic of threat) is a 'constructed process (…) by which a certain set of knowledge claims are used to shape and reshape how issues are viewed and managed' (Ibid: 33). At this point, one should pay attention to the context of risk and threat framings as 'context is paramount when unravelling articulations of security' (Ibid: 21).

The risk and threat-based security logic do not have to occur sequentially. Backman (2023) demonstrates that we can also see the parallel existence of the two logic, particularly when there is a practical tendency in the chosen policy area. For example, Backman's analysis of European cybersecurity policy points to an increasingly threat-based security logic in the policy formulations and the presence of risk-based security logic. The study further reveals that, despite differences in their constructions, risk- and threat-based logics in the cybersecurity domain are interrelated, making it evident that a certain system cannot consistently view security through a risk or threat-based lens (Ibid). Likewise, Englund and Barquet's (2023) analysis of securitisation trends in Swedish climate adaptation policy validates the coexistence of securitisation and riskification. The authors find that while the risk discourse is dominant in Swedish climate adaptation policies, actor constellations and policy tools and resources reflect the normal governance structure. Hence, they conclude that the efforts to address climate change face a discrepancy between rhetoric and implementation.

According to Diez, von Lucke, and Wellmann (2016: 37), the criteria for differentiating riskification and threatification -as a form of securitisation- is 'the level of threat concretisation'. Particularly in transnational security issues, the risks associated with threatification are less specific and more diffuse than threats in the classic approach to securitisation for three reasons. Climate security is exemplary in this sense. First, the nature of the risks associated with climate change is itself diffuse. Therefore, putting risk into the domain of danger is the personification of threat, making it easier to grasp, locate and handle the matter. Second, the referent object itself is diffuse despite the attempts to point to a specific object, such as a nation or a coastal region. Third, in risk articulation, the potential threat is spread over a longer

period; hence, the reference is mostly to the future (Ibid: 40-41). Yet, their main argument is that the appeal of risk and danger is interrelated since both are used to justify the invocation of threat and thereby legitimise certain measures:

> *'We do not see politics, danger and risk as distinct categories. Instead, they are ideal types that operate as poles in a space of three continua. The 'sphere of danger' cannot easily be separated from either risk or politics other than for hermeneutic purposes. Instead, political articulations move issues in this space through politicisation or securitisation in the forms of threatification or riskification.*' (Ibid: 37-38)

With this perspective, Diez, von Lucke and Wellmann (2016: 35) perceive risk as a sub-category of security and reconceptualise securitisation as 'a variety of different securitisations' based on 'spectrums of articulations'. In other words, their framework treats securitisation of climate change based as a spectrum consisting of politicisation, riskification and threatification as three distinct yet interrelated processes. The authors associate articulations of risk and danger with specific concepts and words (Table 1). It should be noted that the list of keywords is non-exclusive and non-exhaustive; the two discourses can occur in parallel.

Table 2: Keywords Distinguishing Risk and Danger Articulations

Danger	Risk
Threat, security, short term, immediately, urgent, existential, extraordinary, danger, direct, certain, clear-cut, clear, inevitable, emergency, emergency measures, survival, defence, destruction, eradicate	Long term, risk, risk management, resilience, probability, risk groups, risk areas, uncertainty, contingency, statistics, diffuse, unclear, indirect, scenario planning, precautionary principle, precaution, risk reduction, preparedness, manageable

Source: Diez, von Lucke, and Wellmann, 2016: 35.

The threshold to determine to which sphere an action belongs is also tentative: 'In empirical terms, we cannot determine this border in an absolute way. Yet this does not mean that it does not exist – issues will at some point have been moved out of the political debate, however gradually' (Ibid: 42). The indication of threshold, then, is the point at which topics are effectively securitised and removed from the realm of politics,

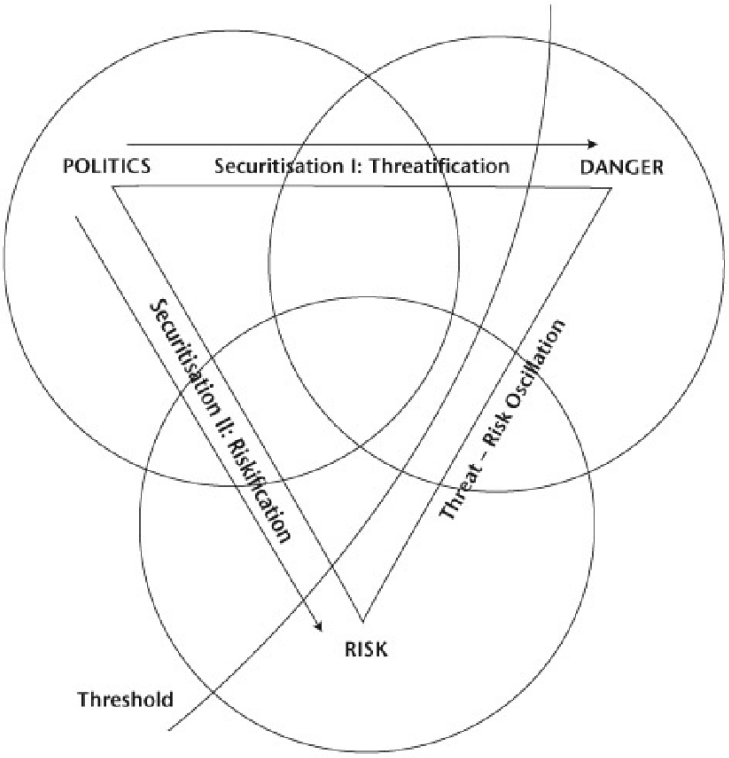
which takes us to the state of measures. In the 'danger mode', extraordinary measures are primarily intended to eradicate the existential threat even when total elimination is not achieved. It is crucial to note that the term extraordinary does not imply a military or undemocratic approach; rather, it refers to a policy that points to urgency and would not have been considered legitimate without a securitisation process. On the other hand, risk measures assume that the threat will impact us regardless of our actions, so the goal is to limit the impact and make it more manageable. With regard to climate change, measures such as adaptation and mitigation strategies would be responding to risk if, for example, they are designed to increase the resilience of populations against the possible materialisation of the threat. They would be extraordinary if they were applied to combat the threat and defend us with, for example, military measures to protect us against a migration flow or a conflict (Ibid).

However, one should note that the difference between ordinary and extraordinary/exceptional measures is not a clear line. Securitisation often results in measures that would not be considered legitimate under "normal" circumstances. Opposition to such measures would be met with marginalisation or even punishment. However, Diez and others argue that, in climate policy, even adaptation and mitigation strategies may become exceptional measures. These measures may be designed to overcome a risk or a threat. If adaptation involves determining the extent to which we can enhance the resilience of populations in anticipation of an impending threat, then mitigation measures would be a response to risk. If mitigation strategies prioritise eliminating the threat at any cost, such as changing military strategies to address migration flows, it would mean combatting a danger. Likewise, if mitigation, for example, aims to reduce the impact of the (climate change) threat through strategic measures, such as emissions trading regimes, it would still be an exceptional measure with a risk management approach. Ultimately, an emissions trading scheme places constraints on private and public actors, requiring it to be justified as a measure prioritising certain concerns over others. In any of these cases, the actions taken would not have been considered valid or would not have occurred as quickly or extensively as they would without a successful securitising discussion (Ibid.: 42-43).

For simplification, the authors draw a triangular map (Figure 1) showing the processes of *securitisation 1* - 'threatification as a move from politics towards danger-

, *securitisation 2* – 'riskification as a move from politics towards risk'- and *danger–risk oscillation*. The overlapping circles illustrate their argument that the borders of riskification and threatification are not fixed; rather, there are 'zones of transition' and that risk and danger articulations may coexist (Ibid: 40).

Figure 1: The Space of Politics and Security



Source: Diez, von Lucke, and Wellmann, 2016: 40.

After the disclosure of their logic of securitisation, the authors employ the typology matrix to find out the levels and referent objects in the actors' climate change discourses (Table 2). Based on the aforementioned assumptions, it is expected that the discourse of territorial danger would emphasise the state (national security) or a specific geographical region as the referent object, focusing on the possibility of violent conflict due to the socio-economic effects of climate change on the existing order. Territorial risk discourse, on the other hand, would focus on the possibility of climate change-driven instabilities in certain geographies with the probability of preventive measures such as resilience-building. Articulation of danger at the

individual level would consider the direct implications of climate change on the everyday life of individuals, referring to concepts such as vulnerability and human security and focus on eliminating these vulnerabilities. Risk articulation, however, would mention the future risks of climatic developments on vulnerable groups and suggest long-term strategies such as developing insurance schemes and coping mechanisms. Planetary danger articulation is expected to emphasise the interdependencies between human actions and the environment and suggest specific, immediate and significant actions against human activities that could endanger planetary security. Planetary risk articulation would emphasise scientifically proven hazards to the well-being of the planetary system, pointing to the growth-centred and resource-based capitalist system as the origin of the problems. Such an articulation would present preventive actions such as adapting sustainable economic practices (Ibid:42-46).

Table 3: Typology of Climate Security Discourses

Level of the referent object	Logic of securitisation	
	Threatification	Riskification
Territorial	Territorial danger	Territorial risk
Individual	Individual danger	Individual risk
Planetary	Planetary danger	Planetary risk

Source: Diez, von Lucke, and Wellmann, 2016: 42.

Diez, von Lucke and Wellmann (2016) operationalised this framework in their cross-country analysis. Using a six-fold matrix, they scrutinised whether and to what level the chosen countries (Turkey, Mexico, Germany and the US) securitise climate change. The general conclusion of their study is that all of them except Turkey adopted the climate security rhetoric in an increasing yet fragmented manner. Furthermore, they provide ample evidence that the normative differences between states, stemming from their contextual differences, can explain different levels of securitisations.

For example, the dominant theme of the security rhetoric employed by the US administration was territorial danger. Essentially, this results from the fact that the discursive entrepreneurs, a group of pundits in the think tanks, were primarily people with military backgrounds. Unexpectedly, the scientific community did not engage in the climate security discussions much, leaving room for policy-oriented arguments. The political consequence of this was legitimising the climate policy with references to these arguments, which explains the US administration's focus on territorial danger articulations such as 'national security threat', 'the spread of terrorism and failed states due to climate change' and 'climate change as threat multiplier' (Ibid:84). Germany, on the other hand, focused on the individual level and frequently used risk framing. As a 'forerunner' state with long-standing policies on environmental change, the climate security rhetoric of the German officials was heavily influenced by the scientific agenda (Ibid: 93). That is why the focus of their speech was the human beings with frequent references to 'human survival' in the face of the 'unmanageable and unforeseeable consequences' of a 'climate catastrophe' (Ibid:100). The authors contend that the Nazi past is another significant contextual factor that undermined potential military rhetoric in Germany, pushing climate security discussion to a more civilian side (Ibid).

As selected cases reveal, the framework developed by Diez, von Lucke, and Wellmann contributes to securitisation scholarship by loosening the strict distinction between normal politics and securitisation, thereby making it more relevant for climate change-related analyses. In this study, their framework will be employed to scrutinise the articulations of threat and/or risk in the EU's collective rhetoric and to assess the level of securitisation based on these articulations. The following section will introduce the collective securitisation model, which provides the analytical steps of this scrutiny.

1.3. ANALYTICAL FRAMEWORK 2: COLLECTIVE SECURITISATION

Collective securitisation refers to the process in which an actor acts on behalf of other empowered actors, such as its member states, to address and manage security threats. By aggregating and articulating the security concerns of multiple actors, the

institution creates a collective approach to security governance (Sperling and Webber 2019: 236). The concept was coined by Haacke and Williams (2008), who argued that the operationalisation of securitisation theory to regional entities requires a revision of the classic theory. By expanding upon its main principles, the collective securitisation framework allows us to apply securitisation theory to cases where multiple actors – with delegated authority- are involved in the securitising process. This section will first introduce collective securitisation as an analytical framework and then elaborate on its operationalisation in the EU context.

1.3.1. Definition and Elements of Collective Securitisation

The Copenhagen School has mostly concentrated on the middle level of securitisation, i.e., the state and argued that securitisation is generally easier at the middle level than at the individual and system levels. In their conceptualisation, the system refers to macro-level referent objects such as religions, ideologies, or institutions of the international system; hence, they also define it as macro securitisation. For them, the securitising actor for macro securitisation is the major power that has the ability to construct a macro-level referent object and mobilise a range of audiences. The Cold War, for example, was a successful macro securitisation -a constellation of two mutually opposing macro securitisations- with ideology as the referent object and the end of it was 'a massive act of macrodesecuritisation' (Buzan and Wæver, 2009: 270). The authors argue that aside from its scale and structural complexity, macro securitisation would not occur differently from what is observed at the middle levels (Ibid). However, studies -which will be explained in detail in this section- clearly illustrate that securitisation beyond the state level involves a multitude of actors -not necessarily major powers- and the actor-audience relationship is multifaceted. In this sense, collective securitisation is a promising intellectual development as it offers an analytical framework to facilitate the operationalisation of securitisation at the macro level. Haacke and Williams' (2008) analysis of how the African Union (AU) and the Association of Southeast Asian Nations (ASEAN) address transnational challenges demonstrates that securitisation of regional arrangements expands the boundaries of the classic approach. The authors argue that

securitisation may not always require a consensus on countermeasures beyond the usual boundaries of democratic procedures or measures that would otherwise be considered illegitimate. In the absence of the public sphere in its traditional meaning, the audience of a regional arrangement consists of state representatives of its member states. While the individual states try to 'hijack' the securitising moves of others, the participants likely respond to perceived threats with 'tried and proven' security practices (Ibid: 786). They observe that, in several cases, security challenges are effectively addressed within the boundaries of the established constitutional systems and practices. Hence, contrary to the Copenhagen School's dichotomy of politicisation vs. securitisation, security matters can be addressed at varying degrees of urgency (Ibid).

The continuum between politicisation and securitisation may stretch from a state where issues rarely find a place on the political agenda to one where those same issues are treated as 'political problems, concerns, risks, threats and sometimes even existential threats' (Haacke and Williams, 2008: 784). Moreover, the position of issues on this continuum may gradually shift rather than an abrupt moment of change in its seriousness and urgency. Hence, securitisation may occur as a 'more incremental and graduated process' (Ibid: 809). The authors further claim that even the inability of the constituents to reach a regional arrangement can signify the security of the issue at stake. In contrast, the absence of common formal declarations might be followed up by the initiation of some regional arrangements as an illustration of securitisation in practical terms (Ibid: 786-787).

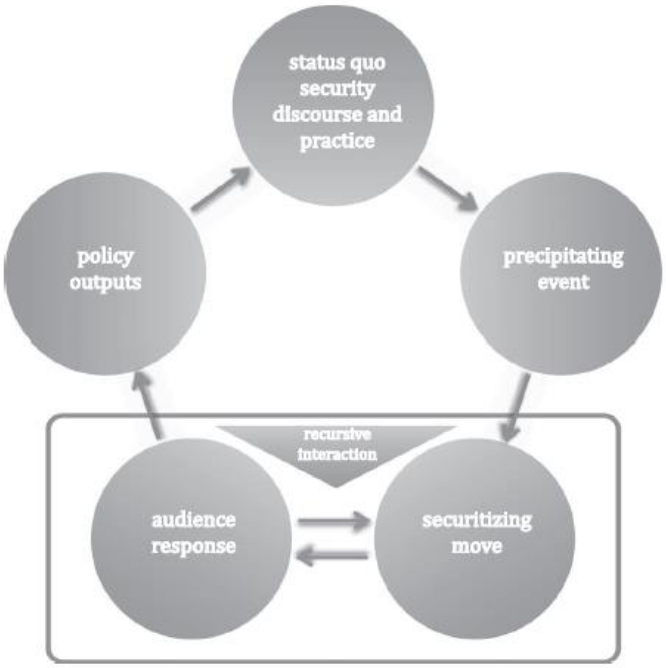
Sperling and Webber revised the concept of collective securitisation in their analysis of NATO's response to the Ukraine crisis. The authors criticised the study of Haacke and Williams, arguing that their study had no presumptions regarding the organisation's possession of the requisite authority to undertake independent action, nor did it recognise a recursive interaction between the organisation and its members. In their context, the organisation was little more than a site of bargaining between its member states. In contrast, Sperling and Webber focused on the role of regional security organisations as both a site and agent of collective securitisation. For them, an international organisation can assume such a role only when the organisation 'is possessed of legal and political authority, has agenda-setting powers, is the framework

for formulating and implementing common policies and is the repository of a common security narrative' (2017: 29).

In their articulations, Sperling and Webber (2017) propose various amendments to the classic formulation of securitisation theory and the concept of collective securitisation. First, they contend that, despite the threshold of audience acceptance, the Copenhagen School left the act of acceptance unexplored. In the context of organisations, however, the relationship between the agent and the audience is an ongoing process that involves negotiation, dialogue and compromise. They define this relationship as recursive interaction: 'repeated bargaining procedures and substantive exchanges between a security actor (the organisation) and its audience (the organisation's constituent members) over the content and form of threats as well as the policy responses appropriate to mitigating them' (2017: 26). Within this relationship the audience is neither a simple receiver nor an external actor; instead, it is empowered and a constitutive element of the securitisation process. Like Paris School's iterations on power relations, the authors contend that, in an organisational setting, the balance of positional power between the audience and the actor can explain the policy choice, i.e., why some issues are securitised and others are not. Pointing to the role of the US in the NATO context, they argue that powerful members can even blur the actor-audience distinction (Ibid).

Their second amendment is related to the notion of threat, particularly the inherent assertion that a threat can be regarded only when the integrity of the referent object is endangered. However, there might be instances in which the violation of rules challenges the specific area where it occurs and undermines the broader structure of international order or governance. Hence, for a theory of collective securitisation, we need to acknowledge such circumstances and different layers of referent objects: state, international organisation and international orde*r*. Expanding the notion of threat connotes the notion of measures. In this matter, the authors also contend that analysts should consider both practice and speech acts and that routinised policies can signify the securitisation of the political agenda. Moreover, routine practices might become integrated into the domestic policies of the audience and 'that state of affairs is just as relevant when applied to collective securitisation' (Ibid: 28).

Figure 2: Model of Collective Securitisation



Source: Sperling and Webber, 2017: 30.

Figure 3 shows the six stages of collective securitisation by a regional security organisation as formulated by Sperling and Weber (2017). The process starts with the existence of a status quo security discourse. A precipitating event (or a series of events) starts the second stage. A precipitating event would be a triggering incident with significant capability to interrupt the status quo and compel the securitising actor to acknowledge that the nature of the internal or external security environment is deteriorating. The precipitating event might be a dramatic incident (such as 9/11) or the culmination of an observable pattern: 'The issue here then becomes one of scale as much as of surprise' (Ibid: 30).

One of the unique elements of the framework is that, even though they are analytically separate, the third and the fourth stages occur co-dependently, resulting in a recursive interaction. The securitising move often takes place in the form of a speech act by authoritative actors, indicating the presence of a threat to a referent object. It may cease once the agreed policy is activated or may run alongside these policies as a strengthening narrative of repeating securitisation moves. This stage is followed by the fourth one, which involves the validation of the audience and between them lies

substantive interactions over the content of the threat and policy responses. Such an interaction does not necessitate homogenous concerns or equal vocalisation of all members; however, approximation to a certain extent is expected. The fifth stage represents the formulation and execution of policies, followed by the last stage, which represents a new strategic state of affairs. As noted by the authors, a 'disrupted external environment gives rise to a new status quo' (Sperling and Webber, 2019: 247). Before delving into its operationalisation, one needs to be aware of the authors' approach towards the notion of sequence. For analytical purposes, the framework depicts collective securitisation as a process consisting of sequential stages. However, the authors note that these stages often overlap (Sperling and Webber, 2017: 30).

Sperling and Webber's (2017) analysis is the first study to apply the collective securitisation model to a collective security organisation. In their study, the authors scrutinised the puzzling observation that NATO's adoption of a robust collective defence discourse vis-à-vis the Ukrainian crisis was different from its responses to previous Russian aggressions in the region. The prevailing motive in NATO's post-Cold War strategic approach towards Russia was 'a non-adversarial and cooperative relationship' (Ibid: 32). In other words, the status quo was the desecuritisation of the relations. Two sets of the incident, the 'twin crisis', performed as precipitating events: Russia's annexation of Crimea and seizure of the territories of the self-declared republics of Donetsk and Luhansk (Ibid: 34). The securitising move came in the form of the official discourse that defined Russia as an adversary and its actions as challenges the Euro-Atlantic security, which was a more dramatic tone compared to the Alliance's refrain from identification of Russia as an adversary. These events were a 'game-changer' for NATO (Ibid: 36). As expected, the Eastern members of the Alliance were more vocal in their concerns, but even the discourse of the most influential members (the US, the UK, Germany and France) depicted a language of threat.

As policy output, NATO responded to increasing Russian aggression not only by suspending its 'all practical civilian and military cooperation' with the adversary but also through military measures such as providing assurance to its eastern flank through NATO flights in the Polish and Romanian air spaces and reinvigorating the NATO Response Force (Sperling and Webber, 2017: 40). The final stage of the

process, the new status quo, became evident with then-Secretary General Jens Stoltenberg's acknowledgement that the challenges created by the Russian aggression would be influential in the Euro-Atlantic area. All in all, the study reveals that the Alliance had successfully engaged in a resecuritising move concerning the Euro-Atlantic security structure, presented the Ukrainian crisis as a critical security threat, and, by doing this, justified its mobilisation of resources to its member states.

1.3.2. EU as a Collective Securitising Actor

In the EU context, collective securitisation is a relevant theoretical orientation not only to examine its role within European security governance but also to determine how and to what degree the Union has become an agent that is capable of shaping its member states' national security agendas and policies. In this vein, collective securitisation expands our understanding of the EU as a security actor by highlighting its capacity to mobilise and coordinate efforts in response to security challenges (Lucarelli et al., 2020). The collective securitisation framework is based on the assumption that the organisation has the autonomy and agency to act as a securitising actor in its own right, separate from its member states. For the EU, this agency is granted through legal and political powers conferred by the member states. The EU asserts its authority through collective securitisation and exercises its governance role in addressing various policy domains (Sperling and Webber, 2019). Indeed, the scholarship treating the EU as a security actor –mostly in civilian and non-traditional matters- is quite convincing (Larsen, 2000; Manners, 2002; Smith, 2003; Sjursen, 2006; Tonra, 2008).

Considering the multi-level *sui generis* system of the EU, it is a fair expectation to encounter variations in the level of collective securitisation. The EU does not possess the same level of agency in each policy area. Likewise, the EU bodies have varying levels of competency in different policy areas. Hence, the studies on these issues show that even though the Commission and the Council are the primary securitising agents, there are also cases where interest groups or epistemic communities are involved in the processes as functional actors. In this vein, Lucarelli (2019: 419) mentions two obstacles to collective securitisation in different policy

areas. First, some security goods, such as energy and cyber, are private, i.e. national in nature, whereas others, such as climate change and health, have a more public nature. Security issues with a private quality are more resistant to collective securitisation. Sperling and Webber also acknowledge this in their expectation that 'collective securitisation is more likely to occur when a threat has a systemic referent (impinging upon international and collective identities, or the rules and norms governing interstate interactions)' (2017: 26). Second, in an organisational setting, the audience is often divided. In such a scenario, collective securitisation hardly occurs because the states have divergent views on the level of threat and the identification of the referent object (Lucarelli, 2019: 419).

A corpus of scholarship has applied collective securitisation to the EU context. These studies reveal varying levels of securitisations lying on a broad spectrum. Among them, counterterrorism and border security are relatively dominant themes (Kaunert and Léonard, 2019; Ceccorulli, 2019; MacKenzie and Kaunert, 2021; Shepherd, 2021; Duman et al., 2023). The study by Kaunert and Léonard (2019), for example, shows how the EU shifted its collective discourse to frame terrorism as a trans-border security threat and thereby became a securitising actor invoking a collective response to this threat. Before 9/11, the European states tended to view terrorism as a domestic (national) issue, as differences in their approach to terrorism resulted in a lack of shared threat perception. The status quo was disrupted by the terrorist attacks in 2001. After the attacks, the EU portrayed an exceptional securitising move by quickly adapting 'the language of war' (war on terror) (2019: 266). The speech act legitimised the securitisation of terrorism as a transnational threat. The authors note that this sudden shift was surprising, considering that the referent object was neither the EU nor Europe. Instead, the collective discourse shows that the threat was Al-Qaeda and the referent object was the 'civilised world' of which Europe was a part.

Kaunert and Léonard's article demonstrates that the securitising move was followed by the integration of counterterrorism measures such as the Framework Decision on Combating Terrorism, which shows that a standard definition of terrorism had been at last agreed upon at the supranational level. However, it is important to underline that the collective response (policy outputs) was not immediately transferred

to the domestic level. Hence, we can say that the routinisation of EU counterterrorism cooperation has partially taken place. After years of cycles between intense securitisation and a period of inertia, the EU has reached a new status quo, in which member states still tend to keep counterterrorism policies in their own domains. At the same time, the EU initiative has steadily gained prominence (Ibid).

The half-acceptance of the audience connotes Sperling and Webber's (2019) differentiation of *thin* and *thick* securitisation, which is determined by the the organisation's competency level. The thin variant of collective securitisation refers to a situation where a state, or a few states, express their security concerns to an international organisation and the latter is empowered to address and take action against a security matter if other member states respond sympathetically. In this scenario, the organisation acquires a 'superficial actorness' and serves as a bargaining site for the members without genuine autonomy or agency (Ibid: 236). The cases of the AU and ASEAN are illustrations of thin collective securitisation (Haacke and Williams, 2008). The thick variant, on the other hand, refers to a situation where the actorness is still tied to the aggregation of security calls from its members. Still, the organisation holds a certain level of autonomy that is distinct from them. In other words, the organisation enjoys autonomous decision-making capability and performs its actorness to ensure security (Sperling and Webber, 2019: 237).

The analyses of health security cooperation in the EU also have some significant implications for the collective securitisation framework. The article shows us how the health crises between the mid-1990s and late 2000s -such as the 'Mad Cow' disease in the mid-1990s and the outbreak of Severe Acute Respiratory Syndrome in 2003- provoked an institutional response and transformed the EU into a 'decisionist authority to define emergencies and guide political responses' (Bengtsson and Rhinard, 2019: 347). The article makes a significant contribution to the framework, particularly with regard to the third stage, by revealing that the securitising move was initially from the media outcry and national protectionism and later from the European Commission. Furthermore, the article demonstrates the blurring line between the actor and the audience. The authors claim that the involvement of organised groups and transnational professional networks such as the European Network of Epidemiologists twisted the securitisation process. The influence of functional actors (an epistemic

community) on policymaking considerably shaped the language and the policy choice of the Commission officials, who became both the audience and the actor of securitisation. The article also provides evidence for the assumption that securitisation does not necessarily happen in the form of extraordinary measures. The authors discovered that, beyond formal policies, repeated and recursive securitising moves were followed by 'less visible bureaucratic forms of output' in the health sector (Ibid: 359). That is why they define this collective securitisation case as 'subtler than in its original Copenhagen School conception' (Ibid: 347).

The significance of functional actors is also evident in the cybersecurity realm. European cybersecurity governance is a multi-layered (national, regional and global) space that requires the involvement of various actors from different policy areas, mainly the Freedom, Justice and Security, the Internal Market and the Common Security and Defence Policy. This complex governance system makes cybersecurity a challenge for the collective securitisation framework because the stages are 'overlapping, messy and interconnected' (Christou, 2019: 281). Due to this complexity, until the mid-2000s, EU policies towards cybersecurity issues - cybercrime, network and information security (NIS) as the focus of the study- were fragmented. The dominant discourse was based on the 'economic logic of cybersecurity', meaning that information and computer security were crucial for the EU's economic advancement, including the Single Market's realisation.

Christou claims that both specific events (such as the cyber-attacks on Estonian infrastructure in 2007) and long-term trends in technology development performed as precipitating events. The alarming disruptions in cybersecurity created security logic supplementary to economic logic. The securitising move came from the Commission with speeches emphasising the narratives of 'managing security risks' and 'fast-changing landscape of threats' vis-à-vis the vulnerability of NIS within Europe (Ibid: 291). The salience of the process lies at this stage because the Commission not only explicitly entailed the relevant stakeholders into the securitising move but also involved them in the policy output through regulatory interactions to improve legislation and law enforcement. Hence, the actor-audience relationship was not simply blurred but 'co-dependent' (Ibid: 295). The stage of audience acceptance is also eye-catching because member states' acceptance of policy outputs such as the EU

cybersecurity strategy and NIS Directive was motivated by both cybersecurity and internal market logic.

Christou's analysis also significantly contributes to the discussions on (extra)ordinary measures. His analysis reveals that the EU's discourse had both risk and threat references and that the Union could act upon a shared understanding of the 'risk of politically motivated attacks on civilian targets and of shortcomings in military cyber defence' (2019: 280). However, the analysis also shows that securitisation occurred through routine political processes rather than in any extraordinary measures taken outside the realm of normal politics. In this sense, the cybersecurity measures implemented by the EU were in line with its modus operandi rather than deviating from it. Based on this observation, Christou argues that, in cybersecurity, the interchangeability of risk and threat notions implies that the latter is not a separate category that requires extraordinary measures.

Hyttinen and Heinikoski (2019) apply this framework to a relatively less explored policy area in the securitisation scholarship: money laundering. Their study is significant in two aspects. First, the authors contribute to the discussions on audience acceptance by focusing on a specific member: Finland. Second, their analysis of national discourse and practice reveals that the motivation for acceptance does not necessarily and exclusively come from the collective security rhetoric; instead, there may be other actor-specific motivations. After the 9/11 attacks, money laundering was increasingly associated with terrorism and the fight against this criminal activity gained renewed attention. The Commission adopted a securitising rhetoric that established a stricter relation between administrative and criminal law, reinforcing the criminalisation of self-laundering.

Consequently, anti-money laundering measures such as Directive 2006/70/EC were put into practice. At first, just as some other sceptical member states, the Finnish administration kept its position against the explicit and supranational criminalisation of money laundering. One of the main concerns was that the directives would potentially impact national criminal law to the extent that compromises on fundamental principles of the rule of law were required. However, despite its initial reservations, Finland accepted the directive to protect its legal economy and financial system against money laundering and eventually conformed to other member states.

Hence, the Finnish case shows that when the policy output does not appeal to its primary concerns, the audience may not be convinced about 'the appropriateness of the response' (Hyttinen and Heinikoski, 2019: 830). However, acceptance does not always require sincerity. Instead, the absence of internalisation of security rhetoric might be compensated by either collective pressure or other actors-specific motivations.

Another critical study, in terms of the theoretical implications, is the energy sector analysis by Hofmann and Staeger (2019). Energy security has long been a critical issue on the EU's political agenda as the Union is dependent on external sources of energy supply. Even though the EU has made intensive efforts for energy and supply diversification, its dependence creates an asymmetrical relationship with the energy exporting countries, particularly Russia. The political leverage at the hands of these countries consequently increases the EU's vulnerability. The authors argue that the Commission's involvement in the energy security discussion, a label traditionally used by the Council, could be understood as extraordinary. However, the authors also argue that securitisation occurred 'only in name and not through policy measures' (Ibid:325). When the Council supported the pro-securitisation members led by Poland in characterising Russia as a security threat, the Commission seized the chance to enhance its autonomy by participating in collective securitisation through policy proposals. Its involvement was the demonstration of how the Commission, the regulatory body, added a security frame to its initial market frame.

The energy supply issue is naturally a topic of both the economic sector, which is the primary operational area of the Commission and the security sector. Hofmann and Staeger's study (2019) shows that the Commission could successfully exploit this conceptual ambiguity to present supply-driven challenges as threats to the EU rules and norms (referent objects). However, political divisions among the audience over the content of the security threat hampered the common response. Several major EU member states that rely on cost-effective Russian energy dismissed the idea of considering Russia's involvement in the EU's energy market as a security concern. Therefore, the proposed policy measures (output) were largely modified, leading to a failure in thick collective securitisation.

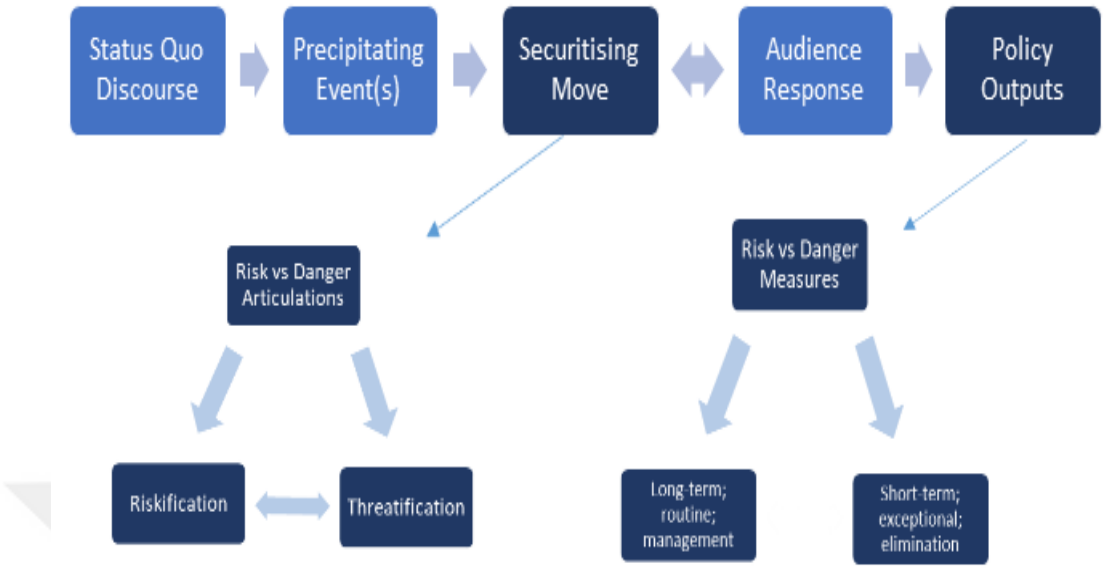
Overall, the selected cases mentioned above clearly demonstrate that the EU has performed collective securitisation in various policy areas so far. It is apparent that in all cases, the EU had a status quo, which was disrupted by a precipitating event – either in the form of an abrupt crisis or as supplementary to a long-term deteriorating situation- but mainly by a series of events. The cases also show that the precipitating events were not necessarily of external origin. Cybersecurity and health security cases reveal that the threat was external (global trends and epidemics) and domestic. The case of money laundering shows that threats are not always existential; instead, they are challenges to the routine functioning of legal and economic structures. Likewise, the selection shows that the referent object stretches from the system level (emphasis on civilisation) to the middle level (such as the emphasis on the Single Market).

The policy outputs were not always emergency measures. However, the absence of such measures does not mean that securitisation did not occur at all. We can say the securitising moves (in both rhetoric and practice) produced transformative policy outputs, such as new institutions or procedures, even though their transformative effect varies from issue to issue.

1.4. OPERATIONALISATION OF THE ANALYTICAL FRAMEWORKS

In the course of the analysis, the author applies a triangulation of the aforementioned analytical frameworks. The operationalisation of these frameworks is visualised in Figure 3. In line with the analytical steps provided by the collective securitisation model (Sperling and Webber, 2016 and 2019), in Chapter 3, the author first portrays the status quo between the EU and China in the climate realm (Stage 1) and then identifies the event(s) that interrupted the status quo (Stage 2). The author consults both primary and secondary sources to identify the status quo and the events. The primary sources include the statements, summit declarations and conclusions jointly issued by the EU and China (such as the EU-China Joint Statement on Climate Change), Commission communications concerning China (such as the communication on EU-China Strategic Outlook) and the Commission's issues-focused communications (such as the communication on Clean Energy For All Europeans).

Figure 3: Operationalisation of the Analytical Frameworks



Source: Author's own compilation.

The third (securitising move) and fourth (audience response) stages of the model are presented in Chapter 4. At this stage, the author analyses both the discourse and the practices of the EU by conducting a combination of discourse analysis and policy tracing. Indeed, among a broad range of methods, discourse analysis, content analysis and process tracing are the most frequently used methods in securitisation studies (Balzacq et al., 2015:519.) Even though the (classic) securitisation theory focuses only on speech as an act of securitisation -as discussed in Section 2.1.2.-, the recent studies in non-traditional security domains attribute a significant role to practices (Balzacq, 2005; Leonard, 2010; Kaunert and Leonard, 2011; Balzacq, Léonard and Ruzicka, 2016). Inherently, studies of riskification also take speech act and practice (including tools and resource allocations) together as data input in order to analyse the governance and actor (member state) contestation in the chosen policy area (Backman, 2023; Englund and Barquet, 2023).

The nature of the policy area determines the choice of securitising actors. According to Article 191 TFEU (Treaty on the Functioning of the European Union), climate policy is an area of shared competence, meaning that the legislative and implementing authority falls under the responsibility of both the EU and the Member

States. The legislative process for areas of shared competency is the ordinary legislative procedure, known as the co-decision procedure, until the Lisbon Treaty was put into force. According to Article 294 TFEU, the ordinary legislative procedure usually starts with the submission of a Commission proposal to the European Parliament and the Council. Occasionally, through its own initiative report, the European Parliament calls on the Commission to propose legislation on a specific issue (Article 225 TFEU), which can be seen as an indicator of the former's priorities and concerns. The Parliament informs the Council about its position after the first reading. If the Council approve the Parliament's position, the proposal shall be adopted with the Council's wording. The EP conducts a second reading if the Council does not approve the position. In case of further disagreement, the Conciliation Committee, composed of an equal number of members or representatives from the Council and EP, is tasked with reaching a conciliation on the joint document. The legislative outcome may be in the form of regulation, directive, or decision, all of which are binding upon the Member States. According to Article 288, regulations are directly applicable to all Member States, whereas directives leave the choice of form and application methods to the national authorities.

The shared competency in climate policy has rarely been a source of tension. Instead, this unique decision-making procedure facilitates the convergence of climate policies and EU priorities. Accordingly, the EU has often acted as a unitary actor, making climate a 'signature policy area' whereby the EU can demonstrate its actorness on the world stage (Mergenthaler, 2015: 149-150). It should be noted that the role of the European Council is significant at this point. Even though it does not have legislative power, the European Council, which is responsible for defining the general political directions and priorities of the Union, is also an influential player in climate policy. It is observed that the European Council has done more than offer the impetus in climate-related matters. Rather, it has influenced –sometimes obstructed- the evolution of an institutional policy by providing thorough guidance and instructions on the course of future policy. According to Dupont (2019: 370-371), the legislative structure of the Union, together with the influence of the European Council, facilitated the enactment of often bold decisions concerning climate change, which eventually paved the way for an unusual level of securitisation in this policy area.

Accordingly, this study is based on a qualitative analysis of extensive data derived from the relevant documents issued by the European Council, the Commission, the Council (of the EU) and the Parliament between 10 September 2019 (commencement of the von der Leyen Commission) and 01 March 2024 (the end of the desk-based research). The author pursued two methods for data acquisition. First, for the European Council conclusions, including the conclusions of the periodic and informal meetings, the author directly consulted the online document registry of this body. As a result of the first reading of the documents issued by the European Council within the selected time frame, the author acquired 28 European Council conclusions and declarations and included 14 of them in the dataset based on their relevance to the topic in question.

Second, for the Commission communications, Council conclusions and Parliament resolutions, the author consulted the EU's official registry of legal documents, Eur-Lex. For the document search, the authors used two keywords, "China" and "climate", together. Out of 1328 documents (excluding consolidated versions and corrigenda) that include the chosen keywords in title or text and were issued between 10 September 2019 and 01 March 2024, the number of documents reached is as follows: 551 documents issued by the Commission, 313 documents issued by the Parliament, 211 documents issued by the Council. As a result of the first reading, based on their relevance to the topic in question, the author included 81 Commission documents (including communications, proposals and staff working documents), 32 Parliament resolutions and recommendations and 9 Council conclusions. In order to acquire additional data concerning the position of the Commission President and relevant Commissioners, the author also consulted the press releases of the Commission. Using the keywords "China" and "climate" together, the author conducted a document search using the press material provided by the Commission Spokesperson's Service. Out of 522 documents that included the chosen keywords in title or text and were issued between 10 September 2019 and 01 March 2024, the author selected 136 press releases based on their relevance with the subject of this dissertation and included them in the dataset. Due to the two-hatted role of the High Representative as the Vice-President of the Commission, the author also consulted the press releases of the European External Action Service (EEAS). Again,

using the keywords “China” and “climate” together, the author conducted a document search using the press material provided by the EEAS. Out of 360 press materials that included the chosen keywords in the title or text and were issued between 10 September 2019 and 01 March 2024, the author selected 35 materials based on their relevance and included them in the dataset.

At this point, the keywords provided by Diez, von Lucke and Wellmann’s (2016) riskification vs threatification framework (Table 2) serve as a guide to determine whether a securitising perspective shapes the collective discourse and the practices of the EU. Then, the author assesses whether the genre of these articulations represents a danger or a risk. It should be noted that the list of keywords provided by the authors is not treated as an exclusive list or a codebook. Their framework is designed to analyse actors’ behaviours in a specific policy field, whereas this study analyses the EU’s behaviour vis-à-vis the policies and actions of an actor. The assessment of whether the EU has developed a set of specific keywords for the subject of this study constitutes a significant contribution to this analysis, which is provided in the concluding chapter of the dissertation.

Analysing Member States’ contestation is relevant for the collective securitisation model as Sperling and Webber (2017 and 2019) assume a recursive interaction between the actor (EU) and the audience (Member States). In order to grasp the perspective of the audience, the author consulted both primary and secondary data sources. The findings concerning the audience response are presented primarily in Chapter 3 to portray the interactions between the actor and the audience. However, in Chapter 4 (Policy Output), the audience response is also used when it is relevant to the policy outputs designed by the EU.

Even though Sperling and Webber (2017: 26) argue that ‘repeated bargaining procedures and substantive exchanges’ should be taken into account, which would require on-site observation and interviews, due to administrative constraints, the author consulted only desk-based research for the audience response. The position of the Member States are primarily deducted from secondary sources such as books, journal articles, newspapers articles, and research reports.

As Bengtsson and Rhinard’s analysis of the health sector and Chritou’s analysis of the cybersecurity sector demonstrate, the audience is not necessarily limited to the

Member States. In climate-related matters, the policy preferences are also informed by the contribution of functional actors. The scientific and work-intensive nature of climate policy requires the contribution of various relevant actors. For example, in 1995, the Environment Ministers warranted the creation of a special preparatory body, the Working Party on International Environmental Issues-Climate Change. This network of experts eventually evolved into the centre of an all-encompassing EU climate policy by supporting and organising relevant Council formations, thereby shaping the EU's domestic and international stance on climate policy (Mergenthaler, 2015: 150-151).

Apart from experts, the EU's decision-making procedures allow functional actors such as industrial circles, trade unions or civil society organisations to participate in policy formation through the European Economic and Social Committee (EESC). According to Article 300 TFEU, through its advisory capacity, the EESC assists the Parliament, the Council and the Commission either upon their request or by submitting its own initiative opinions on matters of European interest. As discussed in the previous chapter, the Raw Materials Initiative is another clear example of this multi-actor structure in climate-related matters. Raw material policies are developed and implemented collaboratively by several European Commission Directorate Generals, public-private partnerships, stakeholder platforms and multi-stakeholder initiatives. Industry, public services, academia and non-governmental organisations contribute to the process guidance (Barteková and Kemop, 2016: 157-158).

Accordingly, in order to present a more comprehensive explanation on the position of the audience, the author used primary documents, particularly the documents issued by the EESC. By conducting a document search in the Eur-Lex registry, the author identified 225 documents that included "China" and "climate" in the title or text and were issued between 10 September 2019 and 01 March 2024. Based on the relevance criteria, the author included 31 opinions and resolutions in the dataset.

Table 4: Summary of the Primary Data for Stage 3 and 4

Period: 10 September 2019 (commencement of the von der Leyen Commission) – 01 March 2024 (end of the desk-based research) Keywords: 'China' AND 'climate' Criteria: relevance			
		No_1	No_2
Securitising Discourse	European Council conclusions	28	14
	Commission communications and SWD	551	81
	Council conclusions	211	9
	Parliamentary resolutions	313	32
	Press material from the Commission Spokesperson's Service	552	136
	Press material from the European External Action Service	360	35
Audience Response	European Economic and Social Committee opinions	225	31
	Total	**2240**	**338**

Source: Created by the author.

Sperling and Weber (2019: 236) argue that governance practices would be comprehensible only when they are associated with a prior 'security logic' deduced from the speech act. Hence, their framework elaborates the collective discourse and the practices, i.e. the outputs, in two different analytical steps. Accordingly, Chapter 4 of this study presents the fifth stage of the model, i.e. the policy outputs derived from the EU's practices including regulatory actions, mechanisms, and initiatives. At this stage, the author again employs Diez, von Lucke and Wellmann's (2016) framework to evaluate whether the policy outputs represent a risk-based logic or a threat-based logic. As shown in Figure 3, the identification of whether these outputs are short-term, exceptional measures for the elimination of a threat or long-term, routine measures for the management of the risk allows the author to assess the EU's practices in line with the predetermined security logic (risk and/or threat). This assessment, together with the findings of the discourse analysis conducted at Stage 3, allows the author to decide on the existence and form(s) of securitisation (threatification or riskification).

CHAPTER TWO
THE STATUS QUO IN BILATERAL RELATIONS AND ITS DISRUPTION

According to the framework developed by Sperling and Webber (2017: 29; 2019: 245), the first step of analysing the collective securitisation process is identifying a status quo. This stage reflects the discussions and accompanying policies upon which the actor (the organisation) builds a notion of security. In the second stage, a single precipitating event or a series of events interrupts the status quo, which then compels the actor to acknowledge that the internal or external security environment has deteriorated. This chapter will first present the status quo of the EU-China relations in the climate realm and then identify the long-term dynamics and the precipitating event that necessitated reconsidering the status quo. Following the brief introduction of global climate governance, the first section initially explains the perspectives and roles of the EU and China within this structure. Then, it describes the historical interactions between the actors with references to their domestic and international policies in the climate realm. The second section describes specific economic and political developments that have taken place since the mid-2010s and describes their implications on EU-China relations in the climate realm.

2.1. THE STATUS QUO IN EU-CHINA CLIMATE RELATIONS

2.1.1. The Structure of Global Climate Governance

As the implications of climate change can be seen at the local, national and global levels, the management of and solutions to these implications require multilevel governance. Multilevel climate governance refers to a continuous process of decision-making and discussions by a diverse group of governmental (national and local) and non-governmental organisations and the private sector (UNICEF and UNDP, 2022: 9). International frameworks, which form the basis of international climate governance, are integral elements of this complex system as they provide the guidelines for the actions to be pursued against climate change (Ibid: 15). At the core of the international governance of climate lies the United Nations Framework Convention on Climate

Change (UNFCCC)[5]. The UNFCCC entered into force on 21 March 1994 and serves as the main framework for international climate governance. It is one of the three conventions the 1992 Rio Earth Summit produced to boost international cooperation on environmental issues. The Convention was ratified by 198 states, which form the Conference of the Parties (COP), the supreme body that regulates the implementation of the Convention and its mechanisms.

The UNFCCC was drafted to realise the ultimate objective of stabilising greenhouse gas (GHG) concentration 'at a level that would prevent dangerous anthropogenic (human induced) interference with the climate system' (United Nations Climate Change, 2024a). Due to their past contributions to GHG emissions, much of the responsibility for emission cuts was initially put on the developed/industrialised countries - the Annex I countries. Accordingly, the members of the Organisation for Economic Co-operation and Development (OECD) countries and twelve Central and Eastern Europe 'economies in transition' agreed under the Convention to reduce their GHG emissions to 1990 levels by 2000. The Annex I countries were also committed to supporting the developing countries in their actions by providing financial aid, 'above and beyond any financial assistance they already provide to these countries', under the Global Environment Facility set up by the Convention (Ibid.)

On 11 December 1997, the Party States adopted the Kyoto Protocol[6] to operationalise the Convention. After a long and complex process of negotiations, the Protocol entered into force on 16 February 2005. Thirty-seven countries in Annex B of the Protocol agreed on a legally binding target of cutting emissions of the six primary GHGs on an average of 5 per cent compared to 1990 levels during the first commitment period (2008–2012) (United Nations Climate Change, 2024b). The second commitment period began in 2013 with the Doha Amendment adopted at the COP18 in 2012. The amendment included new commitments for the Annex I countries, including reducing GHG emissions by at least 18 per cent below 1990 levels between 2013 and 2020 and a revised list of GHG. However, due to the threshold of 144 instruments of acceptance, the Amendment entered into force on 31 December 2020. The climate targets are to be achieved at the national level, but the Protocol was

[5] From here on, the United Nations Framework Convention on Climate Change is called "the Convention".
[6] From here on, the Kyoto Protocol is called "the Protocol".

not designed to prescribe a particular approach for domestic policies and actions (Held and Roger, 2018: 529).

Moreover, it offered market-based flexibility mechanisms to encourage the states in their efforts. These mechanisms included International Emissions Trading (IET), Clean Development Mechanism (CDM) and Joint implementation (JI). IET allows countries that achieve the emissions cut targets to sell their excess emission capacity to those over their targets through the registry systems established by the Protocol (United Nations Climate Change, 2024c). The CDM enables the Annex B countries to implement emission-reduction projects in the developing countries. At the same time, the JI allows the former to earn emission reduction units from emissions-cut projects conducted in another Annex B Party (United Nations Climate Change, 2024d and 2024e).

The most recent legally binding international treaty on climate change was opened to signature at COP21 on 12 December 2015. In Paris, the Parties agreed 'to hold the increase in the global average temperature to well below 2°C above pre-industrial levels' and 'to limit the temperature increase to 1.5°C above pre-industrial levels' (United Nations Climate Change, 2024f). After the ratification of the 196 Parties, the Paris Agreement entered into force on 4 November 2016. In order to achieve the global reduction targets, to which the Parties pledge to contribute with Nationally Determined Contributions (NDCs), the Agreement offers financial, technical and capacity-building support mechanisms (Ibid). The signing of this international treaty was seen as a remarkable development for breaking a *longue durée* stalemate of unfruitful negotiations, even though it did not foresee any sanctions on Party States that fail meeting their reduction targets (Held and Roger, 2018: 532). In addition to the periodic preparatory meetings of national representatives, the Party States gather at the COP meetings, organised as part of the United Nations Climate Change Conferences, to review the implementation of the Convention, the Protocol and the Paris Agreement. The conferences provide a forum for multilateral negotiations on a variety of issues, from mitigation and adaptation efforts to financial and technological assistance (United Nations Climate Change, 2024g).

2.1.2. The role of the EU in the global climate governance

The EU has admittedly been a leading actor in global climate governance since the late 1980s (Schreurs and Tiberghien, 2007). The global context of rising environmental concerns, alongside the development of two significant institutional processes in Europe, prompted the EU to pay more attention to environmental issues. The inclusion of the environment chapter in the Treaty of Rome in 1987, through the 'Single European Act', introduced a qualified majority and co-decision-making with the European Parliament for environmental legislation. Following the Intergovernmental Panel on Climate Change (IPCC) report in 1990, the European Council (Dublin) added climate change to its agenda to discuss its position as a block for the upcoming UNFCCC negotiations. In the Environmental Imperative Declaration (Annex II of the Conclusions), the Council stressed the EU's (then Community) 'special responsibility to encourage and participate in international action to combat global environmental problems' and its 'capacity to provide leadership' (European Council, 1990: 25). Accordingly, the Council urged the Member States to adopt 'targets and strategies for limiting emissions of greenhouse gases' (Ibid.). According to Biedenkopf and others (2022: 100), this notion of responsibility was essentially the result of its historical culpability for precipitating the climate change problem as the economic advancement of the European continent since the Industrial Revolution relied on intensive utilisation of fossil fuels.

The second significant development was the creation of the EU's internal market, coinciding with the expansion of the EU from 12 Member States in 1994 to 27 Member States in 2007. As the European Council stressed, the completion of the internal market by 1992 would require 'a corresponding acceleration of effort to ensure that this development is sustainable and environmentally sound' (European Council, 1990: 25). In those years, the majority of the EU's responses to climate change were primarily driven by its environment or internal market competencies, underscoring the Commission's competences for addressing this concern (Dupont, 2019: 374-375). Upon the European Council's authorisation in Dublin in 1991, the Commission launched the European Climate Change Programme, which brought the Member States and all relevant stakeholders together to coordinate their reduction policies and actions.

From then on, the Commission's role in climate issues has progressively expanded. (Men, 2014: 52).

Together with the rigorous role of the Commission, frequent coordination between the Member States at the Council working groups and ministerial meetings enabled the EU to resolve internal disagreements before engaging in international discussions (Delbeke and Vis, 2021). The European Council conclusions, adopted prior to international climate negotiations, were significant in conveying a cohesive message regarding the EU's position in global climate governance. With the motivations mentioned above, the EU repeatedly urged the international community to implement robust measures against climate change, demonstrating a 'rhetorical leadership' (Dupont, 2019: 375).

At the 1992 Earth Summit in Rio, the EU was the only non-governmental signatory urging the participant states to establish binding targets for GHG reductions (Ibid). It was and has been one of the distinct negotiation blocks within the UNFCCC since its adoption. After the first COP in Berlin in 1995, the EU announced its targets regarding the maximum amount of emissions of carbon monoxide, hydrocarbons, oxides of nitrogen and particulates (European Commission, 1996). That is why, during the negotiations of the Kyoto Protocol in 1997, the 15 EU member states were already available to offer a more rigorous target (8 per cent) for GHG emissions reduction, compared to 1990 levels, between 2008 and 2012, which would be redistributed among themselves (United Nations Climate Change, 2024h).

While the EU's consistent and exemplary initiatives have increased in the 2000s, its ability to speak with one voice and decades-long experience in international negotiations have consequently influenced its capacity to act internationally. Additionally, in the early 2000s, the Council and the European Council evidently employed a securitising language concerning climate change due to an external shock in global climate governance. In 2001, George W. Bush, then-President of the United States of America (USA), announced that the USA would not ratify the Kyoto Protocol, leaving the EU with a hard decision: either abandon the Protocol or advocate its entry into force. It became evident that the EU would proceed with the latter choice when the Council shifted its discourse from 'risk' to 'threat', referring to climate change 'as a major threat' in various statements (Dupont, 2019: 378). Upon the

Council's iteration, the EU adopted several legislative documents, such as Directive 2001/77/EC to support the use of renewable energies and Directive 2002/91/EC to improve the energy efficiency of buildings. Among them, the most prominent was the Directive 2003/87/EC establishing the Emissions Trading System (ETS), which allowed the GHG emission allowance trading within the EU based on the cap and trade principle. The Directive became effective in 2005 and was the cornerstone of the EU's climate change policy (Official Journal of the European Union, 2003). The EU's engagement in climate diplomacy with Russia was another remarkable moment. Russia was convinced to ratify the Protocol in exchange for the Union's support of its candidacy for the World Trade Organization (WTO) membership. This was seen as an example of the EU's 'structural leadership' in global climate governance (Bäckstrand and Elgström, 2013: 1376).

The year 2007 witnessed momentum regarding climate actions at both the EU and the global level. In March, the European Council endorsed a 'firm independent commitment to achieve at least a 20 per cent reduction of greenhouse gas emissions by 2020 compared to 1990' and 'a binding target of a 20 per cent share of renewable energies in overall EU energy consumption by 2020' (Council of the European Union, 2007: 21). In September, the IPCC released its Fourth Assessment Report and shortly after, the UNSC was convened for its first-ever debate on climate change. The EU immediately tuned up with this momentum when the Commission announced the 20-20-20 Package endorsed by the Council in January 2008 (Commission of the European Communities, 2008a). In March, the High Representative and the Commission issued a joint report entitled Climate Change and International Security, which described climate change 'as a threat multiplier'. They stressed the EU's 'multilateral leadership to promote global climate security' (European Council, 2008a: 2, 10). Likewise, the 2008 Report on the Implementation of the European Security Strategy put climate change at the core of the EU's ambition of effective multilateralism (European Council, 2008b: 12).

The inability of the international community to settle a new binding agreement during the 2009 Copenhagen Conference considerably influenced the EU's attitude towards global actions. Its failure to convince the US and the developing countries created a sense of self-isolation and prompted the EU to reconsider its 'directional

leadership' (Bäckstrand and Elgström, 2013: 1378). The Union has actively engaged in efforts to revitalise the multilateral process since then and securing the Paris Agreement on climate change in 2015 is a revelation of these fruitful engagements. However, the EU has attained a more pragmatic attitude and shifted its position from a leader to a 'leadiator' (Ibid: 1383). Furthermore, the global geopolitical shifts - discussed in the second section- incentivised the EU to embrace a more strategic attitude and integrate climate- and energy-related goals into its domestic policy agenda (Oberthür, 2016).

2.1.3. The role of China in the global climate governance

In the last two decades, China has drastically changed its position from a participant to a critical player in international climate change negotiations. According to Yang (2022), this reflects the transformation of China's international identity. From the 1990s to the early 2000s, China's commitment to energy conservation and emission reduction was primarily motivated by an internal demand to transform the country's economic development strategy. China is frequently stricken by various natural disasters, primarily climatic in nature. The annual average population affected by natural disasters caused by climate change in the world from 1990 to 2007 was 210 million, with China accounting for 110 million or 52.4 per cent of the total (Angang, 2011: 11). The amount of economic loss accumulated in these years due to disasters considerably changed the development mentality of China. That is why, during the 14th Congress in 1995, the Chinese Communist Party (CCP) proposed to transform China's economic growth model (Ibid: 12). Moreover, China's economic growth not only elevated the living conditions of the nation but also resulted in substantial socio-ecological damage at the local, national, transboundary and global levels. Air pollution, for example, was a pressing problem that attracted policymakers' attention to gradually eliminating the utilisation of coal burners in residential areas (Yeophantong and Goh, 2022: 77).

China was both the 'perpetrator' and the 'victim' of climate change (Yeophantong and Goh, 2022: 71). Under the Presidency of Hu Jintao, China portrayed itself as a 'major developing country' with a lack of material capacities to

undertake international responsibilities; hence, positioned itself a 'participant' in international affairs (Yang, 2022: 361). Using a victimhood narrative, China frequently emphasised the past global inequities and the need for climate justice. With this perspective, China framed climate change as a North-South issue and viewed international climate discussions as a conflict between them. Accordingly, China depicted the North's emissions as 'luxury emissions' whereas the emissions from the South were seen as 'survival/development emissions' (Ibid: 364). In the Draft Provisions of the International Convention on Climate Change, prepared for the intergovernmental negotiations in 1991, China proposed that states should have 'common but differentiated responsibilities' (CBDR) in combating climate change. Since then, China has reiterated the principle of CBDR in several meetings (Yan and Torney, 2016: 223).

Even in the first decade of the 2000s, despite the expectations from a rising economy with booming carbon emissions, the Chinese administration stood firmly against revising its identity. It stuck with the argument that China 'cannot blindly accept that protecting the climate is humanity's common interest' (Yang, 2022: 357). Although China became more acquainted with the adverse implications of climate change and framed it as a 'threat' at the domestic level, at the international level, Chinese officials insisted that climate change was 'an issue of sustainable development' (Bo, 2016: 99; Scott, 2012: 225). During the UNSC debate in 2007, China was under mounting pressure to reduce its emissions as part of the developing nations' climate commitments. However, China did not consent to assume legally enforceable obligations under the international agreements even though the Chinese administration had initiated mitigation and adaptation measures at the domestic level (Bo, Biedenkopf and Chen, 2016: 111).

In the last decade, however, Chinese foreign policy has shifted from 'Tao Guang Yang Hui (keeping a low profile) to Fen Fa You Wei (striving for achievement)' (Yang, 2022: 358). After Xi Jinping came to power, China abandoned its low-profile identity in international affairs while still maintaining its traction at the domestic level. Accordingly, China embraced the role of a '*yinlingzhe*' (a leading state)' in international affairs. In this matter, international climate negotiations, particularly those on climate justice, have become a 'discursive battlefield' for China

to represent its ‘shared leadership’ (Ibid: 359, 363). Immediately after he came to power, Xi endorsed ecological civilisation as one of the five national development goals of China. The concept of ecological civilisation (shengtai wenming), also called eco-civilisation, was introduced to the Communist Party’s manifesto in 2007. The concept refers to ‘a vision of a society characterised by ecologically sustainable modes of resource extraction, production and trade, inhabited by environmentally conscious and responsible citizens’ (Hansen et al., 2018: 195). The early interpretations of this concept envisioned ‘a cultural ethic of complete harmony (…) between humankind and nature’ (Ibid: 197).

Following Xi Jinping’s endorsement, science and technology have become integral elements of this vision. During the 18th National Congress in 2012, the ecological civilisation concept became one of the governing policies of the Party. Since then, Xi Jinping’s ecological ideology has turned into an ‘overall ecological outlook’ for the party-state (Joseph and Karackattu, 2022: 13062). Gradually, eco-civilisation has evolved from a primarily philosophical pursuit to a sociotechnical *imaginary* backed by the highest political power. This imaginary serves to create a green future, that is, a level of industrial development compatible with the imaginary of eco-civilisation. Such an image requires economic growth based on scientific and technological innovations to use clean technologies efficiently (Hansen et al., 2018: 198-199). During the announcement of his new security outlook at the 2014 New National Security Council meeting, Xi Jinping incorporated non-traditional security challenges into policy considerations and listed ecological security as one of these considerations. In 2018, eco-civilisation was incorporated into the Constitution and it has remained a core principle of Chinese policies while the country has strengthened its position as a global climate actor (Joseph and Karackattu, 2022: 13062).

2.1.4. History of the EU-China Bilateral Relations in the Climate Realm

In the 1990s, the climate relations between China and the EU were confined to their interactions at the multilateral fora and largely shaped by the dynamics of the UN climate regime. Both actors participated in negotiations and discussions to tackle global climate concerns; however, as briefly discussed in the previous sections, both

had different motivations. As a burgeoning economic power, China prioritised industrialisation and progress, resulting in a surge in carbon emissions. Conversely, the EU was trying to establish itself as a frontrunner in climate action and sustainability. The differences in their economic and political agendas were clearly reflected in their positions within the international negotiations (Yan, 2019: 158).

2.1.4.1. From the 1990s to 2003: the acquaintance

In the period leading up to the UNFCC, climate discussions were primarily conducted among three main parties: the EU (then European Community), the United States and developing countries, including China. The negotiations were interrupted mainly by the divergences between the two main camps. The EU and other developed countries often downplayed the connection between their historical responsibility for climate change and promoted the shared responsibility of all nations to address it. On the other hand, developing countries like China and India contended that developed nations should take the lead in tackling climate change due to their significant historical contribution of emitting more GHGs (Bo and Chen, 2013: 453). In this sense, China's approach to global climate governance was seen as 'highly defensive' (Belis and Schunz, 2013: 192).

During the negotiations of the Kyoto Protocol, the EU was not openly against the claims of historical responsibility. Still, its position was more in line with the US, which was sceptical about those claims and emphasised the need for developing countries' active participation in binding reduction targets (Mergenthaler, 2015: 147). In an effort to keep its engagement with China despite these divergences, the EU, particularly the Commission, followed 'a functional logic'. The Commission assumed that extensive technical collaboration, along with financial and technological incentives, would enhance cooperation with China on global climate matters and create market prospects for European enterprises in the renewable energy industry. Hence, it made an effort to establish technical collaboration with China, financed principally by the EU's development cooperation budget and supplemented by other sources, including EU research funding. For example, in 1994, the Commission's Directorate

General for Transport and Energy and the Chinese Ministry for Science and Technology initiated the EU-China Energy Conferences (Ibid: 155).

This functional logic reflected its broader intention to support China's engagement with the international community and integration into the world economy. This intention was evident in the EU's new China strategy, the Communication on a Long-Term Policy for China-Europe Relations, issued by the Commission in 1995. The document acknowledged that the rise of China was 'unmatched amongst national experiences since the Second World War' and that the EU had 'much to offer to help China in its difficult process of transition' (Commission of the European Communities, 1995: 1, 8). In this long-term strategy, the Commission stated that China was necessary for the EU's interests in terms of regional security, global economic stability, competitiveness (a larger share in the Chinese market) and other global issues such as the protection of the environment and the global resources (Ibid: 1-2). Along with political and economic issues, the Commission mentioned two areas of future cooperation: environmental and scientific and technological cooperation. With regard to environmental matters, the Commission proposed to 'make best use of EU expertise in environmental policy-making and technology, including clean energy technology' (Ibid: 14-15). As a concrete example of this offer, the scientific communities in the EU and China engaged in a series of cooperation projects. In 1998, for example, energy experts from the EU and China collaborated on a research project to provide information for China's energy policy in its 5-year plan from 2001 to 2005 (Mergenthaler, 2015: 156).

In the post-Kyoto years, China steadily grew as an economic power, becoming a member of the WTO in 2001. The Chinese administration was more willing to transform its relations with the international community and become a 'responsible stakeholder' in global politics (Fox and Godement, 2009: 9). China's energy production and consumption rapidly escalated alongside its economic growth. In 2002, it was the second-largest emitter in the world. The sharp rise in its energy consumption and consequently in its GHG emissions made China a key actor in international climate governance. As a major emitter and economic giant, China started confronting growing demands to adopt international obligations. This included adopting a legally binding target and dismantling the division between developing and developed

nations, as represented by the CBDR principle outlined in the Convention (Belis et al., 2018: 88). Even though China did not assume binding commitments under the Convention and the Protocol, the government undertook some responsibilities in line with its Initial National Communication on Climate Change in 2004 (Yan and Torney, 2016: 218).

In the early 2000s, the nature of EU-China climate relations started to see substantial changes. While China's expeditious economic expansion resulted in a heightened need to tackle its surging carbon emissions, the EU persistently advocated for rigorous climate action and sustainability, further consolidating its status as a prominent global frontrunner. Throughout this period, the EU endeavoured to involve China in more extensive climate discussions, acknowledging the need to reconcile the divergent viewpoints of historical accountability. Consequently, the Chinese administration faced an urgent challenge in reconciling economic expansion with environmental conservation, adopting a more assertive position in international climate governance (Dupont et al., 2023). This signified a significant shift from the defensive stance witnessed in the 1990s to a more assertive and collaborative strategy in tackling climate concerns.

In the meantime, an external shock substantially affected the EU-China climate relations. In 2001, the Bush administration withdrew from the Protocol, significantly undermining the global climate governance framework. The EU emphasised its dedication to the Protocol and played a crucial role in facilitating its implementation by executing a vigorous diplomatic campaign (Mergenthaler, 2015: 147). The US withdrawal triggered the rapprochement between China and the EU. The joint efforts of the EU and other developing nations, including China and India, in international climate change negotiations during COP7 resulted in the successful adoption of the Marrakesh Accords, which set the details on the implementation of the Protocol (Bo and Chen, 2013:454). Carrapatoso observes that environmental and climate change issues were hardly mentioned in the EU-China bilateral statements before 2001. However, this significantly changed after 2002, which shows how striking the external shock was. Indeed, after China enforced the Protocol in 2002, the EU and China enhanced their bilateral cooperation in the climate area.

2.1.4.2. From 2003 to 2009: the ‘marriage’

The establishment of the China-EU Comprehensive Strategic Partnership in 2003 was a watershed moment in their relations. Following their official statement for a progressive and more vital partnership at the 2002 EU-China Summit, both actors released their prospective documents in 2003. On 10 September 2003, the Commission issued a policy paper setting the framework for EU-China relations (European Commission, 2003). One month later, the Chinese Foreign Ministry released its policy paper on the EU foreseeing the political, economic, social, cultural and other aspects of a strategic partnership (Embassy of the People’s Republic of China, 2003). Finally, the EU declared China as one of its five strategic partners in the European Security Strategy (A Secure Europe in a Better World) released in December 2003 (European Commission, 2003: 14).

Following the establishment of a strategic partnership in 2003, China and the EU launched the Environment Policy Dialogue, which is held alternately at the ministerial level in Beijing and Brussels. This high-level dialogue still serves as a platform for discussions on possible bilateral cooperation and common environmental challenges. In 2004, their collaborative effort resulted in the introduction of the EU-China Energy and Environment Programme, which aimed to enhance China’s energy efficiency through projects related to energy conservation, the development of renewable energy sources and the utilisation of natural gas (Chinadaily, 2004). One of the significant outcomes of the 2005 EU-China Summit was the announcement of the Partnership on Climate Change. The partnership was the declaration of their joint intention to cooperate on climate change and energy, particularly their commitment to the implementation of the UNFCCC and its Kyoto Protocol. The partnership covered the ‘China–EU Action Plan on Clean Coal’ and the ‘China–EU Action Plan on Industrial Cooperation on Energy Efficiency and Renewable Energies’, which were agreed by the Commission’s Directorate General Transport and Energy and the Chinese Ministry of Science and Technology (MOST) in March. Although the partnership’s focus was stated as ‘the development and deployment of clean energy technology’, it also included the goal of developing advanced zero-emissions coal technology by 2020 to capture CO2 emissions from coal-fired power plants and store

it in underground facilities such as exploited oil or gas fields. The partnership also foresaw increased dialogue and joint research activities on the Clean Development Mechanism of the Kyoto Protocol (European Commission, 2005).

According to Yan (2020: 159), the Partnership on Climate Change was a "marriage" between China and the EU in the climate sphere. To fulfil their declared goals, the EU and China carried out several activities, such as joint seminars and workshops, including signing a Memorandum of Understanding between the Commission and the MOST on 20 February 2006. During the 2006 EU-China Summit in Helsinki, the leaders confirmed their commitment to the partnership and agreed on the Rolling Work Plan as the framework for their cooperation. As part of the Plan, the leaders agreed to establish a Bilateral Consultation Mechanism to provide political guidance to the Partnership (Ministry of Foreign Affairs of the People's Republic of China, 2006).

'Saving the Kyoto Protocol' became more than an environmental goal for the EU as it strongly associated its *responsible* foreign policy with its commitments under the Protocol (Yan and Torney, 2016: 215). That is why, for the EU, the post-Kyoto period was marked by far-reaching domestic commitments and intensive climate-focused diplomatic activities to secure the implementation of the Protocol. The EU intensified its climate change-related initiatives at the domestic level with the introduction of the ETS in 2003, which was linked to the Protocol's flexible mechanisms. The ETS entered into force in 2005. Simultaneously, China changed its initially resistant position and participated in the CDM. In 2002, China established the National CDM Board. After the Protocol came into force in 2005, China became a territory for EU-financed CDM projects. In 2007, the EU-China CDM Facilitation Project was launched to strengthen the CDM 'as a central pillar within China's path to sustainable development' (UK Parliament, 2010: 1). As the largest European–funded project addressing CDM-related activities, the project was to be implemented by the Chinese and European stakeholders and funded by the EC (Ibid). In 2009, China emerged as the leader in attracting CDM projects and has maintained its dominant position in this arena ever since (Hong et al., 2013: 152). This signalled the beginning of a closer relationship between China and the EU, stemming from the EU's growing expectations from China to adopt reduction measures and China's reciprocal desire for

the EU to fulfil its commitment to lead in this endeavour (Belis and Schunz, 2013: 193).

Apart from domestic motives and international obligations, interregional dynamics have also influenced EU-China relations in those years. For example, environmental issues such as sustainable development, climate change and energy security were on the agenda of the 6th Asia-Europe Meeting Summit held in 2006. The summit was held right after the Ninth EU-China Summit and was essential as it took stock of the decade-long intraregional dialogue. During the summit, the two regional blocks discussed energy security, climate change and other security issues. The ASEM6 Declaration on Climate Change was a concrete outcome of their intention to strengthen cooperation on climate change measures, from adaptation to technology and investment solutions (ASEM6, 2006). Hence, despite the lack of binding commitments, as in other policy areas, ASEM served 'as a dialogue facilitator, a policy-making laboratory and a tool' to manage growing interdependence between two blocs (Carrapatoso, 2011: 183-184).

2.1.4.3. The Copenhagen Summit: an 'earthquake' in relations

The cooperation trend in the EU-China climate relations was interrupted in 2009. The interruption reflected the divergences in their presumption of global responsibilities and the political row that occurred in 2007. In September 2007, German Chancellor Angela Merkel met with Dalai Lama, Tibet's spiritual leader, who was exiled for standing against the Chinese communist regime's dominance over the people in Tibet and surrounding regions and explicitly criticised the regime since then. Upon their meeting, China halted a series of high-level meetings with Germany and the EU. Despite then-French President Nicolas Sarkozy's visit to China in 2008, the Chinese government cancelled the EU-China Summit as a retaliation. The tension in their relations was felt in the climate and other policy areas. So, when the EU called for 'a global and comprehensive agreement in Copenhagen that builds on and broadens the architecture of the Kyoto Protocol' during COP14, China responded that any attempt 'to deviate from, breach or redefine the Convention, or to deny the Kyoto

Protocol, or to merge the Convention process with the Kyoto Protocol process' would lead to a fruitless Conference (Bo and Chen, 2013: 455).

The 2009 Copenhagen Summit (COP15) posed a critical juncture in terms of the expectation gaps between developed and developing countries. The EU had high expectations from the summit, such as a global commitment to reduce GHG emissions by 50 per cent by 2050. During the negotiations, the EU clearly distinguished China from other developing nations, designating it as an 'economically more advanced developing country' that should assume more international obligations (Yang, 2022: 365). However, its vigorous attempts to persuade China and the US to make binding numerical commitments did not succeed. Their refusal even resulted in some degree of convergence between the US and the BASIC group, which was formed by the more industrialised members of the G77 –namely Brazil, South Africa, India and China- ahead of the Summit (Bo, Biedenkopf and Chen, 2016: 116).

Given their status as major polluters and rising economies, BASIC provided a venue for discussion for these rising nations, particularly to address issues of equity and justice in response to the demands of developed nations. The Copenhagen Summit witnessed its rising prominence as a negotiation block as it took on a significant role in creating the Copenhagen Accord (Bo, Biedenkopf and Chen, 2016: 224). Without any binding emission targets, in the last hours of the negotiations, the heads of states agreed on a political statement known as the Accord. The Accord foresaw voluntary pledges of the participating states 'to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius' (United Nations, 2009: 2). The Annex I Parties would 'commit to implement individually or jointly the quantified economy wide emissions targets for 2020' while the non-Annex I countries would implement mitigation actions under the Accord (Ibid).

The summit was seen 'as a political earthquake for global climate diplomacy' due to the inability of the states to reach binding targets (Bäckstrand and Elgström, 2013: 1377). According to analysts, China intentionally wrecked the negotiations 'to avoid the risk that it might be called on to be more ambitious in a few years' time' (Lynas, 2009). In terms of the EU-China climate relations, the failure to find common ground left both actors with unmet expectations and a sense of frustration. After the summit, it was evident that most of the anticipated benefits from the EU's technical

collaboration with China on international climate change negotiations did not occur. Hence, the summit demonstrated that the EU's functionalist logic was short of meeting the expectations (Mergenthaler, 2015: 155).

2.1.4.4. Post-Copenhagen: co-opetition

The experience of being side-lined by the US and BASIC countries at the Copenhagen Summit made the EU reconsider its position. That is why, in the post-Copenhagen years, the EU abandoned focusing on the 'targets and timetables' and advocated for legally binding carbon reduction targets (von Lucke, 2023: 436). With a renewed focus on addressing climate change, the EU expanded its diplomatic efforts and implemented a negotiation strategy emphasising coalition building, mediation and bilateral collaboration (Bo, Biedenkopf and Chen., 2016: 109). Likewise, China noticeably revised its position after the Copenhagen Summit. First, feeling as if it was being 'scapegoated' for the failure of the Summit, China adopted a more positive and proactive approach to international negotiations. China realised its potential as an economic power and intended to utilise its influence to establish bilateral relationships with the major Western powers to foster a consensus that would underscore its prominence on the global scene. Second, its consumption-oriented economy and over-dependence on the coal-dominated industries alarmingly increased the demand for coal. Hence, the Chinese authorities acknowledged the need to curb this demand and transform its economic structure. With this recognition, together with the self-confident and proactive manner of the regime (particularly after President Xi Jinping came to power), China assumed a more ambitious role in climate governance. Therefore, China opted to aggressively promote its ideas and seek compromises with the EU and the US to display its leadership. The realisation that the EU shifted its strategy from 'being a moral power exporting GHG limitations' to a more pragmatic and bottom-up approach, as articulated by China and the US, created a reconciliation between the two actors (Belis et al., 2018: 88-89).

With this perspective, the EU-China maintained their dialogue on climate change. During the visit of a high-level delegation of the EC to China in April 2010, they released the Joint Statement on Dialogue and Cooperation on Climate Change,

reaffirming the principle of CBDR and their commitment to the full implementation of the UNFCCC and the Protocol (European Commission). The renewed partnership foresaw a ministerial-level dialogue and exchanging views to achieve concrete outcomes at the Cancun Conference (COP16). The dialogue was strengthened by a Climate Change Hotline to facilitate 'an expedited exchange of views and sharing of information on new developments related to climate change' between the chief negotiators (Bo and Chen, 2013: 461). The visit also witnessed the opening of the China–EU Clean Energy Centre at Tsinghua University, Beijing. The centre was the outcome of a cooperation project to facilitate technology transfer in clean coal, renewable energy and biofuels to develop clean energy technologies and hence support China's transition to a low-carbon economy (Carrapatoso, 2011: 186).

In November 2010, the Parties gathered in Cancun, Mexico (COP16), to discuss their emission reduction in the second commitment period of the Protocol. As they failed to reach an international binding agreement at the Copenhagen Summit, the meeting was an attempt to 'rescue the United Nations' negotiation mechanism' (Dong, 2013: 92). With the Cancun Agreements, the Parties confirmed their non-binding pledges and agreed to establish a registry and a fund for the Nationally Appropriate Mitigation Actions, which was proposed at the COP13 (2007) to address the national mitigation actions by both developed and developing countries. In this sense, the Cancun Agreements were called the 'Copenhagen Accord plus' (Bäckstrand and Elgström, 2013: 1380). The Agreement resulted from the reconciliation between major players based on their pragmatic motivations (Bo and Chen, 2013: 457). It was also a positive signal to the international community to rejuvenate the multilateral process, even though it left emission reductions vague.

In December 2011, the states convened for the COP17 in Durban, South Africa. The aim of the Conference was to reach 'a decision by Parties to adopt a universal legal agreement on climate change' by 2015 (United Nations Climate Change, 2024h). Even though some of the industrialised countries, including Japan, refused to commit to the second implementation period of the Protocol, major powers such as the EU and developing countries such as China and India emphasised that it was 'the cornerstone of any international action on global warming' and kept their commitment for its survival (Bo and Chen, 2013:457). The EU successfully convinced the Parties to adopt

its proposal, the Durban Platform, to serve as the negotiation stage for a new legally bounding agreement to be adopted by 2015 and enforced by 2020 (Belis and Schunz, 2013: 195). The EU's success in brokering a positive outcome was seen as 'a triumph for European climate diplomacy and a recovery of the EU's leadership after Copenhagen' (Bäckstrand and Elgström, 2013: 1380).

The impetus in EU-China climate relations persisted after the Conference. China's acceptance of the concept of ecological civilisation contributed considerably to this persistence. Running up to the Paris Summit, Chinese officials repeatedly stressed that China would 'fulfil its due international obligation as a responsible power' and engage in intensive bilateral and multilateral diplomacy with the South and the North (Yang, 2022: 368). As part of the BASIC group, China was particularly proactive in achieving some level of convergence on climate finance issues and the differentiation framework (Ibid: 369). The momentum of cooperation between China and the EU produced several research projects which underscored their shared commitment to environmental issues. In March 2012, following the 6th World Water Forum held in Marseille, the Ministry of Water Resources of the People's Republic of China and the European Council established the China-Europe Water Platform. In September, the EU-China Environmental Sustainability Programme, consisting of nine sub-projects, was launched to introduce 'state-of-the-art technologies and expertise of pollution prevention' to China (Okopol, 2024).

In 2013, following the 16th EU-China Summit held in Beijing, the EU-China 2020 Strategic Agenda for Cooperation was released. The summit was significant not only because it marked the 10th anniversary of the EU-China Comprehensive Strategic Partnership but also because it was the first one that the EU held with the new Chinese leadership under President Xi Jinping. As 'global partners', China and the EU announced their intention to launch negotiations on an EU-China bilateral investment agreement (European Commission, 2013). The agenda set future initiatives in four main themes: peace and security, prosperity, sustainable development and people-to-people exchanges. Particularly with regard to climate change, the EU and China reaffirmed their intentions to 'enhance the implementation of effective international climate change measures under the UNFCCC and its Kyoto Protocol' and their commitment to environmental initiatives 'with a view to maximising the mutual

synergies between China's ecological civilisation and the European Union's resource efficiency agenda' (European Commission, 2013: 9). With this affirmation, they defined green growth as a key area of strategic and practical cooperation (Ibid).

In June 2015, their intentions were reiterated in the EU-China Joint Statement on Climate Change, released soon after the Sino-US Joint Declaration on Climate Change. It was significant for two reasons. First, the statement showed their commitment to promote their cooperation within the multilateral fora, particularly before the UN climate governance regime. Another example of their commitment to global action is the ministerial meetings on climate action. The meetings have been co-hosted by Canada, China and the European Union every year since 2017. They bring together the ministers and other representatives from major economies as well as key climate change leaders to discuss advancing the Paris Agreement's goals (Government of Canada, 2023). The joint statement is seen as 'a clear signal of shared ambition' towards achieving global climate commitments (Mabey and Froggatt, 2015: 2).

The second reason was that the statement showcased their intentions regarding the COP21 in Paris. The Paris Agreement was adopted by 196 Parties at the COP 21, Paris, on 12 December 2015. The Agreement took effect on 4 November 2016 following the ratification of 55 countries that collectively accounted for at least 55% of global greenhouse gas emissions. As a legally binding international treaty under the UNFCCC, the overarching goal of the Agreement is to keep 'the increase in the global average temperature to well below 2°C above pre-industrial levels' and pursue efforts 'to limit the temperature increase to 1.5°C above pre-industrial levels' (United Nations Climate Change, 2024i). On 27 September 2016, the Council endorsed its conclusion to approve the Paris Agreement on behalf of the Union.

The same year, the Commission and the HR/VP issued a joint communication entitled Elements for a New Strategy on China. Until 2016, the EU-China 2020 Strategic Agenda for Cooperation was the highest-level joint document to guide bilateral relations. The 2016 Strategy was drafted as the EU's own strategy 'which puts its own interests at the forefront in the new relationship' (European Commission, 2016a: 2). In this sense, the document was a reflection of 'principled pragmatism', as enshrined in the EUGS, to EU-China relations. Based on the EP's December 2015

report on the EU's relations with China, in its 2016 communication, the Commission proposed to reform the EU-China relations. In its assessment, the Commission projected a 'principled, practical and pragmatic' engagement with China, which would produce 'reciprocal benefit in both political and economic terms' (Ibid: 5).

The Commission was particularly demanding China provide a level playing field and fair competition in areas where the EU had certain business and investment interests. For example, the Commission clearly stated how the overcapacity in the steel industry, when coupled with subsidies and other government support measures, became problematic for the European steel industry. The tone of the document was more favourable in terms of cooperation against global challenges. Concerning climate change, the EU welcomed China's leading role in international climate governance and showed its willingness to cooperate 'on the shared commitment to accelerate the transition to a low carbon/carbon neutral economy' (European Commission, 2016a: 16).

In 2017, due to a political crisis, the EU and China were unable to issue a joint statement after the bilateral summit in 2017. In September 2016, protesting Dalai Lama's visit to the European Parliament in Strasbourg, China cancelled the official visits of EP members to the country. Beijing viewed the visit of Dalai Lama as contradictory to the EU's declared dedication to the "One China Policy" and interpreted it as interference in China's domestic affairs. Hence, China declined to sign the EU-China 2017 Summit Declaration, which had been extensively negotiated by the Commission's Directorate-General for Climate Action and Chinese officials for several months and aimed to enhance collaboration in areas such as climate and energy. China's refusal demonstrated that their cooperation in climate and energy would easily be the 'victim of broader politics' (Bocse, 2018).

Early 2019 marked a shift in the EU's overall approach to China. In March, the Commission and the HR/VP issued a joint communication on the EU-China Strategic Outlook. The document was a milestone as, for the first time, the Commission defined China to be simultaneously 'a cooperation partner with whom the EU has closely aligned objectives, a negotiating partner with whom the EU needs to find a balance of interests, an economic competitor in the pursuit of technological leadership and a systemic rival promoting alternative models of governance' (European Commission,

2019a: 1). In the communication, the Commission and the HR/VP set out ten concrete actions, which were endorsed at the European Council of 21 March.

The EU has generally supported China's engagement in multilateralism since the latter's opening to the liberal market. However, on various occasions, particularly in international climate negotiations, the Union raised criticism against China's selective responsibility. The 2019 Strategic Outlook was a clear reminder of such criticism as the EU stated that 'China's engagement in favour of multilateralism is sometimes selective' and that 'it has not always been willing to accept new rules reflecting the responsibility and accountability that come with its increased role' (Ibid: 2). In terms of fight against climate change, the EU reaffirmed that China was 'a strategic partner on climate change and the clean energy transition' (Ibid: 3). At the same time, the EU reminded that China's construction of coal-fired power stations in other countries was undermining the international commitment and called on China 'to peak its emissions before 2030, in line with the goals of the Paris Agreement' (Ibid).

Despite the tone of the latest China strategy (March 2019), the EU-China summit declaration of 9 April 2019 was not different from the previous ones. As Tusk stated after the summit, it was not a surprise that trade and economic issues were key topics at the summit (European Council, 2019a). The two actors stressed their intention to deepen cooperation in trade and investment, particularly in terms of market access, elimination of discriminatory practices and a balanced investment framework, a fair competition environment and international standards of intellectual property protection. With regard to climate matters, unsurprisingly, the EU and China stressed their commitment to the Paris Agreement and called for domestic and global action against the threat of climate change. The two sides underlined carbon pricing, fossil fuel subsidy reform and green finance as key steps of global action (European Council, 2019b: 5). On the same day, in their joint statement on energy cooperation, the actors reaffirmed their willingness to intensify cooperation on clean energy in line with the 2016 EU-China Roadmap on Energy Cooperation.

Only one week after the adoption of the Strategic Outlook, upon the Chinese Foreign Minister's participation at a Foreign Affairs Council, then HR/VP Mogherini would even state that the level of intensity in exchanges and cooperation between EU and China reached 'an unprecedented level' (European Union External Action, 2019).

In line with the overall pragmatic approach of EU foreign policy, she also stated that 'as pragmatic and good friends in a troubled time for the world', the EU and China had to be 'principled on our principles but pragmatic in the way in which we address our cooperation' (Ibid). Her speech clearly showed that political tensions were still prevalent, but the EU was still willing to cooperate with China in multilateral efforts to address global problems such as climate change. Hence, one can argue that the functionalist logic of the EU's engagement with China in the early periods of their interaction has turned into a more pragmatic yet still principled approach in the mid-2010s primarily due to the differences in their role conceptions in the global climate governance.

2.2. DISRUPTION OF THE STATUS QUO IN EU-CHINA CLIMATE RELATIONS

Bilateral relations, of course, do not occur in a vacuum. Chen and Gao (2022) argue that, since the 2010s, a combination of long-term dynamics and dramatic events served as exogenous shocks to the EU-China relations in general. Europe's declining role in the global economy and politics, in addition to the USA's changing foreign policy towards China, which put EU member states under pressure for a stricter policy against Chinese presence in Europe, can be identified as long-term dynamics. A series of crises, such as trade frictions or investment restrictions, exacerbated the implications of these dynamics (Ibid: 201-202). In the case of the EU-China climate relations, we can identify three long-term dynamics and a precipitating event affecting the internal and external environment in which EU-China relations occur. As the following sections demonstrate, these events have produced significant implications for the EU, resulting in the reconsideration of its position vis-à-vis the rising China and thereby interrupting the status quo in their relationship. The remaining section will describe these long-term dynamics (competitiveness, sustainability, and supply pressures) and the precipitating event (European Green Deal - EGD).

2.2.1. The Competitiveness Pressure

Despite cooperative elements in their relations, China and the EU experienced remarkable tensions, particularly after Xi Jinping came to power in 2013. Deng Xiaoping, who ruled the party and the state between 1978 and 1992, was aware of the global shift towards new technologies and had initiated the opening of China to the outside world through reforms and international engagement (Angang, 2013: 9). The economic and technological outlook of Xi Jinping, however, has considerably increased the pressure that the EU has been experiencing due to its declining economic and political appeal at the global scene (Webber, 2016). The green industrial revolution launched under his presidency presented China with challenges and opportunities. The Chinese leader has successfully seized the opportunities in climate-related fields, mainly through technological advancement in climate change mitigation technologies (CCMT), making China a 'superpower' in renewable energy technologies (Oertel et al., 2020: 8).

Low-carbon economic development heavily relies on the advancement of innovations in CCMT. The three major technology groups for CCMTs are clean energy technologies, transportation and buildings. The majority of inventions in the realm of clean energy are found in renewable energy technologies and their supporting technologies, such as energy storage, fuel cells and hydrogen. An investigation of the global dissemination of patented inventions in CCMT reveals that, between 1978 and 2005, innovation was highly concentrated in Japan, Germany and the US, together accounting for 60 per cent of the total inventions (UNEP and EPO, 2015: 14). Between 1995 and 2011, the number of inventions in clean energy technologies in Europe increased so tremendously that, only in 2011, its number was more than the total of the other sectors (Ibid: 36). However, since 2011, China's performance in CCMT-related inventions has dramatically increased. At that time, China's position was far from Europe, which stood as the 'world leader' in high-value inventions. However, by 2010, China outperformed itself as the CCMT inventions from the China National Intellectual Property Administration exceeded the European number.

As Urban states (2018: 320), China, once a leader in manufacturing, has gradually become a leader in CCMT innovations. Between 1978 and 2005, the share

of Chinese inventions increased by more than 20 per cent. Even though the relative technological advantage of Europe has steadily increased, the share of inventions (high-value and all areas) developed by inventors based in European countries remained stable in this period (UNEP and EPO, 2015: 34). The discrepancy between their shares in global CCMT inventions is a clear sign of the increasing competition between two actors.

China's unparalleled expertise in the massive production and commercialisation of low-carbon technologies relies on the distinctive institutional characteristics of its incentive-based economy. Over the last three decades, extensive financial and technical assistance from national and local authorities has facilitated the flourishing of entrepreneurial manufacturers in these sectors. In 2006, the central government started promoting 'indigenous innovation' to decrease reliance on foreign technologies by increasing domestic research and development endeavours (Helveston and Nahm, 2019: 794). Throughout the 2010s, the state progressed in green transition by implementing a series of development plans, such as the Energy Development Strategy Action Plan (2014), the National Action Plan on Climate Change (2014), the 13th Five-Year Energy Development Plan (2016) and the 13th Renewable Energy Development Plan (2016) (Altun and Ergenc, 2023: 441).

President Xi's Made in China 2025 policy considerably contributed to China's technological advancement in low-carbon technologies. As part of its policy to ensure its strategic independence in critical technologies, in 2015, China included green energy technology in its Made in China 2025 Strategy. The strategy aimed to replace imports of advanced technological products with domestic production by incentivising domestic sectors such as renewable energy and electric vehicles. As part of this strategy, the Chinese administration enacted a Manufacturing Plan in the same year, which prioritised utilising dual-use technologies like information technologies, robotics, aerospace, energy and new materials. Indeed, the Made in 2025 Strategy and relevant programmes accounted for more than half of Chinese investment in Member States between 2015 and 2019, with over 85 per cent of these investments realised through acquisitions of existing European companies in these sectors (Besch, Bond and Schuette, 2020: 10).

The changing balance of competitiveness is also seen in the changing flows of technology transfer. In CCMT, technology transfer means 'all the flows that end up in deployment and diffusion of mitigation technologies' as well as 'all the flows that lead to local production of mitigation technologies' in the destination country (Ueno, 2009: 2). Historically, the flow of technology (hardware) and knowledge (information on how to maintain and run the systems) was from North to South, i.e. from West to China. The flow of technology and knowledge from developed countries significantly influenced the development of renewable energy sources in China, especially wind and solar energy. Thanks to this technological flow, gradually, China shifted away from reliance on foreign technology towards becoming an exporter of technology (Urban, 2018: 320).

Between the 1990s and early 2000s, the Chinese wind and solar PV companies adapted and enhanced the low-carbon technologies obtained from this initial flow into technologies more suitable to the Chinese market. The volume of domestic demand enabled the producers to benefit from large economies of scale. This, in turn, created an uncomparable price advantage in the photovoltaic industry (Kratz and Oertel, 2021: 8). Due to the 'protected home market advantage' of Chinese solar PV producers, the global prices for photovoltaic panels decreased by 80 per cent from 2008 to 2013 (Ibid: 3). In this period, the Chinese government encouraged investments in renewable energy, leading to significant growth in the wind, solar and hydropower industries (Yeophantong and Goh, 2022: 84). The government also implemented various plans to strengthen the solar PV industry for exporting solar consumer items to the US, the EU and other parts of Asia. Except for a short disruption due to the 2009 global economic crisis, the steady increase in the CCMT goods exports since 2001 made China a net exporting country. In 2022, China accounted for 77.8 per cent of the solar PV module production worldwide, whereas Europe accounted for only 0.6 per cent of the total production (Statista, 2024).

In contrast, Europe became a net importer in 2008 (UNEP and EPO, 2015: 54-55). What is remarkable is that the main destination of European exports between 1995 and 2013 was the USA, whereas the primary source of European imports in the same period was China (Ibid: 57). By 2012, Chinese solar companies consolidated their supply chains to the point that the EU imported 75 per cent of solar components and

40 per cent of wind power components from China (Liu et al., 2019: 250). That year, the Commission initiated an anti-dumping and anti-subsidy investigation of solar panel imports from China, resulting in a tariff rise from 11.8 per cent to 47.6 per cent. China retaliated by initiating an anti-dumping and anti-subsidy investigation into wine imports from the EU and threatened to begin a similar probe targeting luxury cars. The dispute was solved with an agreement in 2013. Still, the obstacles compelled Chinese producers to re-evaluate their market preferences and shift their focus to prioritise the domestic market and other regions (Crowther, 2023: 20).

Due to the changing patterns of production and trade in climate and energy-related sectors mentioned above, it was evident a decade ago that the EU had to prioritise investment and innovation in energy resources to support its growth and maintain its competitiveness (Authority of the House of Lords, 2013: 13). However, the EU is still far from keeping up with China in terms of cost-effectiveness even in technologies that some of its members had mastered decades ago. That is why China's assertiveness has been a primary source of concern for the EU's climate-related goals and is becoming increasingly influential in their bilateral relations.

2.2.2. The Sustainability Pressure

According to Altun and Ergenc (2023), the relations between the EU and China, particularly in climate-related issues such as standardisation, green taxonomy and renewables, occur within the green growth paradigm. OECD defines green growth as 'fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies' (2011: 9). Green growth emerged as the subset of a broader aim: sustainable development. Sustainable development ideas became popular in the 1980s. The headlines of the 1980s covered extreme environmental and climatic developments and tragic future projections of non-governmental organisations. The utterance that our evolutionary heritage was disappearing 'on a scale not seen since the age of the dinosaurs' was accompanied by the scholars' call for renewed thinking on security (Mathews, 1989: 165). The scholarship of those years established a correlation

between resource scarcity (due to environmental change) and violent conflicts (Trombetta, 2008).

Environmental limits of growth reappeared in the international political and economic agenda in the early 2000s. In October 2006, a team of economists led by Sir Nicholas Stern, who served as the Head of the UK Government Economic Service then, delivered the Stern Review on the Economics of Climate Change. This seminal study assessed the economic implications of climate change. The Stern Review had a clear message: '(…) anything like business-as-usual will take us into dangerous territory' (Stern, 2006: 2). The Review stated that the level of GHGs in the atmosphere could potentially double from its pre-industrial level by 2035 and that even if we managed to stabilise the emissions around 750ppm[7] $C0_2e$ by the end of the century, we would still face with a fifty-fifty chance to stabilise the temperature rise to 5°C, which would be disastrous for the planet (Stern, 2008: 4-5). Thus, the analysts pointed out the need to cut the global emissions flows 'of at least 30 per cent and probably around 50 per cent, by 2050' (Ibid: 3).

According to the Stern Review, the cost of inaction against climate change would be equivalent to losing at least 5 per cent of global GDP each year -which might rise to 20 per cent with the cost of a broader range of risks and impacts- whereas it was possible to keep concentration levels below 550ppm $C0_2e$ for an expenditure of around 1 per cent of the world GDP (Stern, 2008: 7, 22). Even though the analytical preferences of the Stern Review were later criticised in various studies, the critiques acknowledged that the Review's estimations substantially impacted the policymakers on the economic costs of climate change (Tol and Yohe, 2006 and 2009; Kahn, 2016).

The scholarly debates on green growth soon became influential in the policy-making circles. Policymakers realised that it was imperative for states to take combined action on growth and climate. For example, in June 2009, the Ministers of the OECD member states signed the Green Growth Declaration, giving the OECD a mandate to develop a Green Growth Strategy. According to Allan and others (2021), this emerging trend was partly influenced by China's environmentally friendly industrial policies that started in the 1990s and altered the renewable energy

[7] PPM is the abbreviation of "Parts Per Million", which is a measurement unit used to quantify very small concentrations of a material inside a larger solution.

technology industry. The United Nations Economic and Social Commission for Asia and the Pacific were influenced by the environmental economic development strategies implemented by South Korea and China, while the United Nations Environmental Programme showcased their green investments as exemplary models. In the following years, they argue, the international community learned from these models as China's green industrial policy reconfigured global value chains through its competitive exports facilitated by cost declines and direct domestic benefits (Allan et al., 2021: 10).

Green economy ambition immediately found a place in the EU's mainstream policy discourse. In 2007, the Commission proposed an integrated energy and climate package. In the announcement of the proposal, Andris Piebalgs, then-Commissioner for Energy Policy, described the EU's adoption of this new paradigm with the following words:

> *If we take the right decisions now, Europe can lead the world to a new industrial revolution: the development of a low carbon economy. Our ambition to create a working internal market, to promote a clean and efficient energy mix and to make the right choices in research and development will determine whether we lead this new scenario or we follow others.* (European Commission, 2007).

Shortly after, the European efforts were interrupted by the 2008 financial crisis. Although the real GDP fully recovered from the crisis in the early 2010s, the tendencies of deindustrialisation in Europe deteriorated. The decline in the proportion of wages in national income, coupled with increasing Gini indexes in European countries, has reduced investments in the productive sectors of the economy, so impeding the economic recovery across the continent, particularly in manufacturing industries (Vezzoni, 2023: 10).

The deteriorating economic circumstances of the post-crisis period (and the subsequent sovereign debt crisis) initially forced the EU to lower its environmental policy goals. Yet, the leaders managed to agree upon an exit strategy from this crisis (Webber, 2016: 39). EU's new growth strategy, known as Europe 2020, was both a response to the devastating effects of the global financial crisis on the European economy and a transformative strategy to recover the Union from its gradual decline. Europe 2020 had a specific aim: to ensure smart, sustainable and inclusive growth. As part of its sustainable growth strategy, the EU had three focuses: promoting its competitiveness, combatting climate change and accessing clean and efficient energy

(European Commission, 2010a: 12-13). Under the Resource Efficiency Flagship, in March 2011, the Commission published its roadmap for moving to a competitive low-carbon economy. The communication presented the analysis on how the EU could shift towards a low-carbon economy by 2050. According to the analysis, 'a cost-effective and gradual transition would require a 40% domestic reduction of greenhouse gas emissions compared to 1990 as a milestone for 2030 and 80% for 2050' (European Commission, 2011a: 14).

Today, the green growth paradigm is more relevant than ever. A recent OECD report highlights the correlation between climate change action and economic growth. Its results suggest that integrating economic growth and climate policy efforts can boost the total output by an average of 2.8 per cent by 2050. In comparison, a 2 per cent GDP loss is expected if states do not take any actions until 2025 (OECD, 2017: 7, 9). The International Energy Agency states that achieving net zero CO2 emissions by 2050 in the energy sector, as the largest source of greenhouse gas emissions and limiting global warming to 1.5° requires tripling global installed renewables capacity by 2030 while cutting fossil fuel demand by more than 25 per cent and 80 per cent by 2030 and 2050 respectively (2023: 4-6).

The central tenant of green growth is to decouple the gross domestic product (GDP) growth from environmental pressures (European Environment Agency, 2021: 21). This requires decoupling from the path dependencies which have intensified the economic activity-related pressures on the environment and making resource efficiency a core aim of the economic policies through regulatory interventions (OECD, 2017: 11). Today, the power sector is significantly emissions-intensive due to its heavy reliance on coal and fossil gas for electricity generation. As of 2021, the share of the power (energy) sector in the global GHG emissions was the largest, with 20.7 per cent of the total emissions. 14.4 per cent of this share was caused by electricity and heat consumption, which accounted for a share more than the industry (12 per cent), agriculture (10.4 per cent) and transportation (8.1 per cent) (Boehm et al., 2023: 4). Installation of zero-carbon technologies such as solar and wind power is vital for the decarbonisation of power sector. To achieve the trajectories that limit global warming to 1.5°C, utilisation of zero-carbon power sources must reach 24 per cent; however,

their proportion in electricity generation has only marginally increased (3 per cent) in the last twenty years (Ibid: 35).

The European context is just slightly different from the global trends. Even though European countries have achieved a certain level of decoupling of GDP from environmental pollution and resource use, studies show that the GHG emission reductions are primarily consumption-based, and not production-based. As the observed decoupling rates alone cannot lead to significant and swift decreases in resource use and GHG emissions, European countries need decoupling-focused strategies such as focusing on key sectors (power, industry, transport, buildings and agriculture) for investments (Ibid: 22-23). Of course, decoupling from the path has various geopolitical repercussions for the EU. The first is the potential disruption of the EU's current trade and investment agreements with the oil and gas exporting countries. One side of the coin is that the anticipated decline in the EU's oil and gas imports will cause reduced investment in fossil fuel infrastructure and even reduce maintenance efforts for existing infrastructure. The effect of this decrease is likely to be determined by the volume of oil trade in the overall bilateral trade agreements. The other side of the coin is the projection of green agreements for electricity and green hydrogen trade, particularly with the solar and wind electricity importing countries in the MENA and consequently in new investments (Leonard et al., 2021: 5-6).

2.2.3. The Supply Pressure

A repercussion of the green growth paradigm, particularly relevant for EU-China relations, is that commitment to low-carbon energy investment naturally brings heavy reliance on imported products and raw materials used as inputs in clean energy and technologies (Leonard et al., 2021: 4). In Europe, the discussion on raw material supply security first arose in the late 1970s. However, even though minerals were essential to the European Coal and Steel Community, it took decades for the EU to reach a unified policy and include the security of the minerals supply in its policy agenda (Barteková and Kemp, 2016: 157).

China's masterful approach to using its endowments as leverage triggered the development of unified action on the EU side. China first pursued the growth of its

raw materials industry, including rare earth elements (REE), through a price competition policy. This policy was endorsed a strategic objective by former President Deng Xiaoping for developing competitive market shares in strategic resources. During an official visit to southern China in 1992, the Chinese leader made this statement: 'The Middle East has its oil, China has rare earth' (Kiggins, 2015: 8). In 2003, China designated rare earths as 'protected and strategic materials' in order to secure its industrial progress and reserve these valuable resources for domestic use. This designation implied a protectionist manner to the exploitation and manufacturing of these resources, which resulted in the adoption of industrial policies that restricted foreign access to the Chinese market and regulated domestic production and exports (Barteková and Kemp, 2016: 155). Since 1993, China has marginalised its rivals by implementing a low-pricing strategy for REE. After achieving a dominant position in 2006, China changed its strategy to export quotas that skyrocketed the prices for specific elements (Wellmer et al., 2019: 56).

The EU's reaction was in line with its traditional regulatory approach. In 2008, the Commission launched the Raw Materials Initiative (RMI). RMI was the result of an awareness that the Union had to 'shift towards a more resource efficient economy and sustainable development' and its dependence on critical raw materials (CRM) was becoming a pressing problem in this sense (Commission of the European Communities, 2008b: 2). The initiative aimed to secure 'reliable and undistorted access to raw materials' for the EU's competitiveness (Ibid.). In its proposal, the Commission stated that 'access to primary and secondary raw materials should become a priority in EU trade and regulatory policy' (Ibid: 7). In 2011, the Commission released a list of 14 critical raw materials which were particularly important for the value chain but had a high risk of supply shortage in the next ten years. According to the Commission, 'the concentration of production in a handful of countries and the low political economic stability of some of the suppliers' were significant supply-side risks for climate policy objectives and technological innovation (European Commission, 2011b: 12).

Around the same years, the political instability in its Eastern borders increased the EU's concerns with regard to its energy supply and made it reconsider its energy supply preferences. Climate and energy policies are naturally intertwined. Yet, until

the mid-2000s, the EU generally treated climate and energy matters with separate logic. Climate policy was mainly about implementing carbon pricing, improving energy efficiency and advancing the use of renewable energy sources. On the other hand, energy policy primarily focused on the assurance and diversification of fossil fuel supply and enhancing integration between European energy markets with a slight focus on climate-related goals (Tocci, 2022: 27).

The first concrete efforts to put energy and climate into a single framework came after the Russia-Ukraine tensions in 2006 and 2009. In both crises, the EU was dragged into confrontational situations as Russia cut deliveries to pipelines in Ukraine, which are used for transporting gas to Europe (Mayer and Peters, 2017: 142). Russia's use of energy supplies as a political leverage made energy supply security a critical issue for EU decision-makers. The Union produced various initiatives and strategies to prevent major disruptions in energy supply and to strengthen its ability to 'speak with one voice' on the external dimension of energy matters (Sonnsjö and Bremberg, 2016: 7). In 2007, the Commission proposed an energy and climate change package to integrate EU's climate change measures with energy security and competitiveness efforts. The framework foresaw a range of energy measures to achieve a 20 per cent cut in GHG by 2020 (European Commission, 2007). In 2005, the ETS was launched as a flagship initiative to achieve energy- and climate-related goals. However, the negative opinions of some Member States against Russia did not quickly turn into a single voice. The Member States exhibited significant disparities in reliance on Russian fossil fuels and political ties with Moscow (Tocci, 2022: 24).

In March 2014, during the European Council debate at the Parliament, Commissioner Katainen stated that the geo-strategic dimension of the ongoing tension between Russia and Ukraine increased their concerns about energy security and that 'energy security must therefore be a part of the climate agenda' (European Commission, 2014). In October 2014, the EU leaders agreed on the 2030 Climate and Energy Policy Framework. As part of the framework, the Council endorsed a binding target of at least 40 per cent domestic reduction in GHG emissions by 2030 compared to 1990; set the target of at least 27 per cent for the share of renewable energy consumed in the EU by 2030; and a 27 per cent improvement in energy efficiency in comparison with projections (European Council, 2014: 1, 5).

In order to provide ‘secure, sustainable, competitive and affordable energy’ to EU citizens, the Union launched the Energy Union in 2015. The Commission endorsed the communication entitled ‘Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy’ on 25 February. In the communication, also known as the Energy Union Package, the Commission proposed that the governance system should ‘bring together energy and climate actions as well as actions in other relevant policy areas, leading to more and longer-term policy coherence’ (European Commission, 2015a: 17). The Strategy, in fact, reinforced the regulatory role of the Commission, giving it a central role to ‘pursue an active trade and investment agenda in the energy field, including access to foreign markets for European energy technology and services’ (Ibid: 6). The Commission would realise its role through fifteen action points ranging from enforcement tools to infrastructure, external policy and research innovation. Accordingly, the external policy in the energy and climate sectors was brought under a single title, External Energy and Climate Policy, including diplomatic actions such as information exchange dialogues with third parties (European Commission, 2015b: 7-8).

With the Council's conclusions on energy diplomacy on 20 July 2015, the external dimension of the EU’s energy policy was reinforced. In its conclusions, the Council stated that ‘EU Energy Union should be supported by a coherent EU foreign and energy policy action, taking into account geopolitical developments’ (Council of the European Union, 2015: 2). For this aim, the Council asked the Commission and the HR/VP to establish energy cooperation and dialogues, particularly focusing on ‘Southern Gas Corridor, the Southern Caucasus and Central Asia; the strategic potential of the Eastern-Mediterranean region; the Euro-Mediterranean energy cooperation in the Southern Neighbourhood; the wider Middle East region; new energy sources in the Americas, Africa and Australia, including the potential of Liquefied Natural Gas (LNG)’ (Ibid: 3).

On 27 November 2016, the Commission proposed the package for the implementation of the Energy Union: Clean Energy for All Europeans. With this package, the Commission aimed to pursue three main goals. The first goal was to increase energy efficiency through measures such as setting a target of 30 per cent by 2030, which would be binding at the EU level, proposing energy-saving obligations

for energy suppliers and distributors and launching the European Buildings Initiative. The second goal was to become a global leader in renewable energies. The EU set a target of at least 27 per cent of share for the renewable energy in the overall energy mix. The renewable sector was seen as significant not only for the climate targets but also because of economic concerns such as employment and manufacturing capabilities. At this point, the Commission referred to examples of job losses in the photovoltaic industry around 2014, as the largest employers in the renewables sector were wind and solar energy companies.

The 2016 Clean Energy Package was a clear example of how competitiveness and sustainability ambitions were treated in the same policy framework, with the renewables sector at the centre of all these ambitions. The document was also significant for signalling the Commission's plans, such as supporting 'industry-led initiatives' to promote leadership in clean energy and low-carbon technologies, implementing external and development co-operation policies to support global clean energy transition, and helping partners in neighbourhood countries and developing world. Africa was defined as 'a privileged partner for the EU' for energy cooperation (European Commission, 2016a: 13). It took more than two years for the Council and the Parliament to reach a political agreement on the Commission proposal. In May 2019, the package entered into force.

A few days later, the Commission published its communication entitled 'Accelerating Clean Energy Innovation'. The communication stated that accelerating the transition to a low-carbon competitive economy was both 'an urgent necessity and a tremendous opportunity' for Europe (European Commission, 2016b: 3). Ultimately, it was designed to realise two core priorities of the Union: 'building a resilient Energy Union with a forward-looking climate change policy (…) and giving a new boost to jobs, growth and investment' (Ibid: 3). With regard to the EU's role, the Commission underscored that the EU would rely on its role as 'global climate champion (…) to ensure that it remains at the centre of global value chains, with associated benefits for its manufacturing industry and worldwide exports', particularly in emerging markets, which 'present significant export opportunities for European companies to supply low-emission technologies' (Ibid: 14).

One should note that China was not the primary focus of the mid-2010s climate and energy-related advancements. After all, the EU's primary objective did not involve eliminating its reliance on oil and gas or a radical transition towards clean energy sources. The EU frequently invoked the concept of energy security, but it had not yet adequately established its connection to the broader security and survival of the EU. Instead, its attention remained directed towards Russia as it implemented measures to diversify its supply and strengthen its domestic market. Still, the EU anticipated that reliance on energy imports would exacerbate the energy trade deficit and the political tensions bordering the EU would likely cause supply disruptions. Indeed, in 2019, the EU's net energy import dependency rose to 60.6 per cent, up from 58.2 per cent in 2018 and 56 per cent in 2000, marking the highest level in the last three decades (European Commission, 2021a: 2).

Even though the EU did not make any explicit references to China in its discourse on clean energy, the legal actions (such as anti-subsidy investigations, WTO applications and RMI) signalled that China's resource endowments and technological power would pose a certain level of risk for the EU's clean energy ambitions. The risk became apparent during the trade conflicts that arose between the EU and China at various points in the 2000s.

Trade restriction becomes a significant leverage for states. According to the OECD, export restrictions on critical raw materials have expanded more than five-fold worldwide in the last decade. Moreover, several countries have notably escalated trade restrictions with economic and non-economic motivations. China, India, Argentina, Russia, Vietnam and Kazakhstan have been the leading countries in implementing such restrictions from 2009 to 2020 (OECD, 2023: 6). China repeatedly adopted restrictions on its mineral exports in the early 2000s. Its interference in mineral supply chains received widespread criticism in 2009 when the Chinese government imposed export controls on nine materials, with three specifically related to the low-carbon energy transition: manganese, silicon metal and zinc. The restrictions were taken to the WTO when the US, the EU and Mexico filed a complaint against China. Even though China justified the restrictions with clauses on the preservation of finite natural resources (Art. XX (g) GATT 1994) and safeguarding human, animal, or plant life and

health (Art. XX (b) GATT 1994), the decision was not in China's favour (Andrews-Speed, 2023: 10; Burnay and Wouters, 2016: 121).

Likewise, in September 2010, the Chinese military interfered with the shipment of the REE to Japan due to a disagreement in the disputed waters near Taiwan and Okinawa, which was portrayed as an embargo (Riofrancos, 2023: 27). The panic caused by China's interference led to a renewed focus on the importance of critical minerals for energy transition. After the incident in 2011, Japan dramatically increased its rare earth imports by 400 per cent to boost its strategic reserves (Kiggins, 2015: 12). Together with the EU and the US, Japan also brought the restrictions before the WTO, charging China with trade violations. After a second case in 2014, the WTO decided that the restrictions were inconsistent with its rules; hence, China had to remove the restrictions on rare earths (Schröder, 2023: 17). Again, in July 2016, the EU launched a case against China's restrictions on the export of raw materials including graphite, cobalt, chromium, magnesia, antimony and indium, which were identified as critical materials in 2013. In its decision, the Commission criticised China for not complying with the WTO decisions on former cases (2012 and 2014) (European Commission, 2016).

2.2.4. Precipitating Event: The European Green Deal

Undoubtedly, there was momentum in decarbonisation efforts during the final tenure of the Juncker Commission. This effort is evident in the energy and climate-focused papers such as the communication entitled 'A Clean Planet for All' issued on 28 November 2018. The Communication presented a vision for reaching net-zero greenhouse gas emissions in the EU by 2050. The goal was to ensure that this transition is socially equitable and cost-effective. Even though the Commission established a long-term vision with this communication, it was still far from being an ambitious project as 'the proposed Strategy does not intend to launch new policies, nor does the European Commission intend to revise 2030 targets' (European Commission, 2018: 3). Rather, it was designed to set a direction for the EU climate and energy policy and open up a debate on 'how Europe should prepare itself towards a 2050 horizon and the

subsequent submission of the European long-term Strategy to the UN Framework Convention on Climate Change by 2020' (Ibid).

Hence, it is possible to argue that the progressive acceleration in the development of low-carbon economic growth during his tenure undeniably established the foundation for the European Green Deal (EGD), even though they were mostly the extension of the common energy and climate framework. EGD, on the other hand, is an all-encompassing strategy. This ambitious plan signifies a significant change in the EU's strategy towards climate action beyond the extent of previous energy and climate frameworks. The Green Deal not only reiterates the EU's dedication to sustainable development; rather, it marks the intertwining of environmental sustainability, notably climate-change mitigation, with strategic repositioning.

The signals of the strategic thinking embedded in the EGD came first with von der Leyen's announcement of a geopolitical Commission in September 2019. Later, she would define being geopolitical with this statement:

> *Being geopolitical means understanding the links between our domestic decisions and our external action (…) It means being assertive in defence of fairness, whether through a carbon border adjustment mechanism or a digital levy. The stronger, more assertive we are internally, the more we can achieve in the world. That is how geopolitical power is built.* (European Commission, 2020a).

During the presentation of her team and structure of the new Commission, the President-elect underscored the new Commission's overarching commitment to integrating climate imperatives into its broader geopolitical agenda. In the same speech, von der Leyen mentioned that her team would redefine EU's relations with 'a more self-assertive China' in a European way (European Commission, 2019b). Indeed, she gave Commissioner Maroš Šefčovič, former Vice-President of the Energy Union, a two-hatted role: Executive Vice-President for European Green Deal and the Interinstitutional Relations and Foresight. In her mission letter to Šefčovič, the President stressed that strategic foresight would be the heart of policy-making for the geopolitical Commission (European Commission, 2023a). Shortly after the commencement of his term, Šefčovič gave the message that the EU would act in line with the geo-economic realities:

> *Today's choices are critical. And they require first, an honest assessment of where we stand and second, a clear vision of where we want to go in this new geo-strategic, geo-economic and geotechnological order. It is no coincidence that the President-elect has branded her Commission a geopolitical one.* (European Commission, 2019c)

The Green Deal is based on the EU's Strategic Agenda for 2019-2024, which the European Council agreed on 20 June 2019. The Agenda had four priorities: protecting citizens and freedoms; developing a strong and vibrant economic base; building a climate-neutral, green, fair and social Europe; and promoting European interests and values on the global stage. Concerning the third priority, the European Council announced that, for an in-depth transformation of its own economy and society, the EU would 'accelerate the transition to renewables, increase energy efficiency, reduce dependence on outside sources, diversify its supplies and invest in solutions for the mobility of the future' (European Council, 2019c).

On 11 December 2019, the Commission released its communication on EGD. It was designed as 'a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of GHGs in 2050 and where economic growth is decoupled from resource use' (European Commission, 2019d: 2). As the aforementioned legislative and policy-level actions demonstrate, the EU set becoming a global leader in renewables as a political priority in the early 2000s. However, with EGD, the EU made its climate and energy ambitions the main pillar of its overall growth and development strategy. In other words, with the EGD, 'climate change has arrived at the heart of the EU's policy-making' (Oertel et. al., 2020: 6).

The EGD is the 'world's first public commitment' for climate neutrality, i.e. decoupling economic growth from carbon emissions (Almeida et al, 2023: 1). However, it is more than a roadmap for a greener Europe and greener planet. It serves as a course of actions to realise a much broader aim: to transform the EU. With the EGD, the Union aims to develop a more resource-efficient and technologically sophisticated economy. This would not only strengthen its position as an economic power, but would also bring it a geopolitical power in this increasingly competitive arena. Tocci (2022: 2), later acknowledged the holistic approach enshrined in its design with these words:

> *As it exits years of protracted crisis, a green Europe represents a normative vision to fight the existential crisis posed by anthropogenic climate change; an economic growth strategy that pursues decarbonisation through innovation, job creation, industrial capacity and reduced inequalities; a strategic imperative to ensure energy security; and a route to a political Union by fostering a common cause between Member States and by reconnecting to the European public,*

especially youth. By painting its flag green, the EU has found the recipe to help save the planet while reviving itself politically.

As Lee-Makiyama (2021: 3) states, with the amount of political commitment and capital provided, the EGD is 'close to being the whole armada, rather than just a political vessel ferrying the admiral'. Almedia and others (2023, 7-8) even argue that, with the EGD, the EU strategically employs 'greening' to secure its hegemony just as the general nature of its 'green' responses to various crises. They argue that this is the reflection of securitisation of the 'empire', the EU, contextualised within global competition for strategic resources and investment, as access to resources has become crucial for the EU transition to carbon neutrality and overall security (Almeida et al., 2023: 7-8).

With the Deal, the Commission laid down the roadmap for this transformation. In the roadmap, the Commission announced that, as part of its climate ambitions, it would propose an assessment report 'to increase the EU's greenhouse gas emission reductions target for 2030 to at least 50% and towards 55% compared with 1990 levels' and a carbon border adjustment mechanism to reduce the risk of carbon leakage in selected sectors by the summer of 2020 (Ibid: 4-5). The Commission also proposed various actions in the energy, transportation, environment and food sectors. In the energy realm, the proposals included developing a power sector based largely on renewable sources, rapidly phasing out coal and decarbonising gas and decarbonising and modernising critical energy-intensive industries[8] (Ibid:8).

On 12 December 2019, the European Council endorsed the objective of achieving a climate-neutral EU by 2050. At the same meeting, the European Council asked the Council to take forward the work of the Commission so that all relevant EU legislation and policies would be consistent with and would contribute to the climate neutrality objective while inviting the Commission to examine the possible legislative adjustments such as rules on state aid and public procurement. Despite the

[8] There is no officially defined category of manufacturing sectors labelled as "energy-intensive". The criterion commonly employed for distinction is a sector's energy consumption in relation to its value addition. When this metric is applied to economic activities classified under the NACE-2 system, the five most According to the European Commission's 2021 Single Market Report, the Energy Intensive Industries (EII) industrial ecosystem encompasses a range of sectors like chemicals, steel, paper, plastics, mining, extraction, refineries, cement, wood, rubber, non-ferrous metals, glass, and ceramics. For more information, see European Commission. (2021). Annual Single Market Report 2021. https://commission.europa.eu/system/files/2021-05/swd-annual-single-market-report-2021_en.pdf, (12.09.2024).

acknowledgement of the overall objective, in its conclusion, the European Council also acknowledged the Member States' right to decide on their energy mix and to choose the most appropriate technologies (European Council, 2019d: 1-2). A few days later, the EGD was presented to the Environment Council, during which the Ministers discussed how to proceed towards the EU's path to climate neutrality by 2050. The Council endorsed the Deal in May 2021, after a provisional agreement had been reached with the European Parliament in April 2021.

With its broad implications for the EU, the EGD serves as foreign policy guide 'with profound geopolitical consequences' (Leonard et al, 2021: 2). However, as a general strategy, it has limited direct reference to the EU's partners, including China. As part of the actions devoted to the external dimension of the Deal, the Commission states that 'the EU will step up bilateral engagement with partner countries and, where necessary, establish innovative forms of engagement', particularly 'the economies of the G20 that are responsible for 80% of global greenhouse gas emissions' (European Commission, 2019d: 20). The cooperation message is also seen in its reference to China: 'The 2020 EU-China summits in Beijing and Leipzig will be an opportunity to reinforce the partnership between the EU and China on climate and environmental issues' (Ibid.).

However, one should be aware that the strategic alignment of the EU's climate imperatives with its broader geopolitical agenda has become more salient with the EGD. This alignment inherently has implications for the EU's engagement with China, as the two actors have been navigating a landscape marked by competitive dynamics. Indeed, the EGD gives indirect yet clear messages regarding the prospects of EU-China relations in the climate and energy realms. For example, the Commission states that access to resources is 'a strategic security question for Europe's ambition to deliver the Green Deal'; hence it is essential to ensure 'supply of sustainable raw materials, in particular of critical raw materials necessary for clean technologies (…), by diversifying supply from both primary and secondary sources' (European Commission, 2019d: 8). Likewise, in terms of trade policy, the Commission expresses that 'trade policy also needs to ensure undistorted, fair trade and investment in raw materials that the EU economy needs for the green transition' (Ibid: 21). For this reason, in the following section, the author will delve into the EU's post-EGD

(collective) discourse and policies to see whether, in the presence of the dynamics mentioned earlier, the EU has been pursuing a securitising approach towards China concerning their climate-related actions.

CHAPTER THREE

SECURITISING DISCOURSE AND AUDIENCE RESPONSE

This section presents the third and fourth stages of the analysis, i.e. the securitising discourse of the actor and the audience response. The collective securitisation model assumes that the securitising move often takes place in the form of a speech act by authoritative actors, indicating the presence of a threat to a referent object. However, as discussed in Chapter 1, the perception of security is not always based on an imminent threat or danger. The securitising actor may also adopt risk articulations and legitimise the subsequent measures accordingly. In this chapter, the author will present the discourse of relevant actors -the European Council, the Commission, the Council and the Parliament- to understand whether these actors' discourse accommodates a risk or threat articulation. For analytical clarity, the discourse is presented under thematic sections. This section also portrays the position of the audience. The model acknowledges the existence of concurrent interactions between the actor and the audience, although it does not provide clear guidance to analyse this interaction. The empirical studies - discussed in detail in Chapter 1- show that each policy realm has its own unique audience that interacts with the actor(s) in various ways. In this study, the author prefers to analyse the position of the audience from both primary and secondary sources and describes its interaction with the actor(s) under the thematic sections mentioned above. Accordingly, this chapter initially informs the reader about the general implications of the European Green Deal (EGD) on EU-China relations to show how the discussions pertaining to the EU's general climate policies have shaped the EU's overall perception towards China. The following sections presents the risk and danger/threat articulations in the collective discourse of the EU, i.e. the discourse produced by the relevant institutional actors, as a response to the China's climate-related policies.

3.1. THE CONTEXT OF THE BILATERAL CLIMATE RELATIONS AFTER THE EGD

The EGD was expected to deliver the first European Climate Law (ECL). The ECL would enshrine the 2050 climate-neutrality target into EU legislation, extend the Emissions Trading System (ETS) and introduce a carbon border tax. However, the implementation of EGD was interrupted by the outbreak of COVID-19, an infectious disease caused by the SARS-CoV-2 virus, in late 2019 in Wuhan, China. Initially, the scope and spread of the virus were ambiguous. In an unpredictably short period, the disease spread to other countries, resulting in the outbreak of a global health crisis. On 30 January 2020, the World Health Organization declared a Public Health Emergency of International Concern. In March 2020, the crisis caused by Covid-19 was officially classified as a pandemic (World Health Organization, 2021).

The COVID-19 pandemic adversely changed the course of international politics and economics. Its implications led the EU and other actors to shift their focus from their strategic agenda to the management of an acute health crisis and mitigation of its socio-economic damages. Still, despite the political and economic burden of mitigation, the Commission was eager to continue with its climate action commitments. As a clear sign of this commitment, on 04 March 2021, the ECL (Regulation 2021/1119) was endorsed (Official Journal of the European Union, 2021a). Article 2.1 of the ECL enshrines the objective of achieving climate neutrality by 2050. It also sets out intermediate targets for GHG emission reductions. Article 4 foresees a target of at least 55 per cent net domestic reduction in GHG emissions for 2030, while Article 4.3 calls for a Union-wide climate target for 2040 to be set upon the Commission's legislative proposal. With the European Council's conclusion on 11 December 2020, the intermediary targets were raised to 'a binding EU target of a net domestic reduction of at least 55 per cent in greenhouse gas emissions by 2030 compared to 1990' (European Council, 2020a: 5).

The ECL is a legally binding framework which establishes adaptation targets and outlines the procedures for achieving these targets, including monitoring and public. The specific measures are left to be determined in subsequent legal acts. Indeed, the Law establishes a set of directives for the European Commission and the

Member States. These include implementing policies to adapt to climate change, assessment of the advancement of climate adaptation at both national and EU levels, extensive involvement of the public and establishing a scientific advisory body at the European level. The EU has made significant use of its legislative authority by enacting a comprehensive climate law that mainstreams climate change efforts in a range of sectoral policy fields. This regulatory approach is commonly known as policy planning law (Albrecht, 2024: 7). The significance of this legislative action would later be acknowledged by the Commission President during her remarks at the Parliament plenary on the ECL: 'This is the law of laws. This is the law of laws because it will discipline us in the years to come to stay within the boundaries we've set' (European Commission, 2021b).

The ECL entered into force subsequent to its appearance in the Official Journal on 09 June 2021. Even though it was an instrument primarily for climate targets of the Union, one could see that the holistic approach enshrined in the EGD was prevalent in its design. On the following day of the Commission's proposal of the ECL, during her speech at the BusinessEurope Day 2020, von der Leyen would signal this approach:

> *'At the end of last year, 44 of Europe's largest investors, representing EUR 6 trillion of assets, asked us – the European Union, the European Commission – to urgently pass a climate law. Why that? They want reliability! They want clarity! They want us to be dedicated to go towards that goal. And rightly so! (…) Europe needs an industry that remains competitive on the global stage while going green and digital.'* (European Commission, 2020b).

Indeed, the ECL was a product of years of pressure to achieve green and competitive growth, and the efforts to achieve it were suddenly interrupted by COVID-19. The impact of the pandemic on global supply chains has been profound and widespread. Initially, China implemented a nationwide lockdown, which was later replicated by other countries to reduce the transmission of the virus. The lockdowns resulted in border restrictions and suspension of routine deliveries, immensely affecting factories and manufacturing plants, particularly those dependent on imported materials (Allam, Bibri and Sharp, 2022: 5).

The inability to transport materials and products caused disruptions in supply chain operations and global trade movements. The disruptions in the health sector were particularly significant as mass populations affected by the virus became unable to access life-saving medical supplies, notably protective equipment and test kits (World

Health Organization, 2021). The EU's dependence on third countries' imports of pharmaceutical raw materials was the first example of how overdependence may create detrimental consequences. In 2020, 40 medicinal end products marketed in the EU originated in third countries. Moreover, 60 to 80 per cent of the chemical active ingredients were manufactured outside the EU, whereas this percentage was only 20 per cent three decades ago. China and India were the primary suppliers for chemical active ingredients, accounting for 60 per cent of the global production of paracetamol, 90 per cent of penicillin and 50 per cent of ibuprofen (Official Journal of the European Union, 2021b: 5).

In September 2020, in its resolution on the shortage of medicines, the Parliament raised concerns over 'the loss of European independence in the health sector', stressing that 'the disruption of the global supply chain ensuing from the COVID-19 pandemic has highlighted even more the EU's dependency on third countries in the health sector' (Ibid). The Commission echoed the concerns. During the opening speech at the EU Industry Days in 2021, referring to the implications of the pandemic, von der Leyen made the following statement:

> *Another lesson we have learnt is our dependency on certain raw materials sourced from only a handful of producers. (…) Sometimes these producers are exclusively from abroad. This is particularly evident now that we need to produce billions of doses of mRNA vaccines. One of the current bottlenecks is linked to just two synthetic molecules: If we had just 250 grammes more of these molecules, companies say, they could produce one million more doses of vaccine. But it is not just that. Green and digital technologies currently depend on a number of scarce raw materials.* (European Commission, 2021c).

In a highly interconnected economic environment, supply chains bear potential risks, uncertainties, setbacks and interruptions that can take place at any point of the process, starting from sourcing raw materials to delivering final products to customers (Mejean and Rousseaux, 2024: 12). The COVID-19 pandemic revealed previously overlooked vulnerabilities and risks in supply chain systems in all sectors. Massive disruptions of 2020 showed that the reliance on single sourcing and just-in-time inventory management has proven risky during a crisis of this scale, particularly for critical raw materials (CRM). Hundreds of mines, smelters and refineries have been partially or entirely shut down due to the pandemic. In 2020, out of 275 mining operations affected by the disruptions, the gold, silver and copper mines were the most significantly affected worldwide (MacDonald, Lam and Penche, 2020). It is estimated

that the lockdowns in China only disrupted about 50 per cent of the world's battery materials supply in 2020 due to the closure of factories in Wuhan, the initial epicentre of the disease (Akcil, Sun and Panda, 2020: 365).

From an industrial perspective, the disruptions raised awareness of the advantages of reshoring, re-industrialisation and diversification to enhance the resilience of supply chains. Governments started to make regulations and allocate substantial funds to domestic companies to relocate their offshore manufacturing or production operations to the original countries. Due to their significance as key areas for future economic competitiveness, governments specifically focused on supporting investments in industries and technologies that contribute to decarbonisation, strategically positioning themselves in low-carbon technologies (Goldthau, Hughes and Nahm, 2022).

The EU also reassessed its industrialisation strategies and supply chain practices. Upon the European Council's request, the Commission assessed the EU's strategic dependencies and offered its insights regarding the supply-related concerns. The assessment revealed the EU was highly dependent on a number of products - equivalent to 6 per cent of the EU's total import value of goods- required for the green and digital transition, primarily in energy-intensive industries, such as raw materials and health ecosystems. Approximately 50 per cent of imports for these products were imported from China. Out of 34 products that may be more vulnerable due to their limited potential for diversification and substitution with EU manufacturing, 20 products were raw materials and chemicals essential for the ecosystem of energy-intensive industries (European Commission, 2021d: 11).

On 10 March 2020, the Commission issued its proposal entitled A New Industrial Strategy for Europe. In the communication, the Commission stated that the twin ecological and digital transitions that the EU was going through were taking place in 'moving geopolitical plates which affect the nature of competition' (European Commission, 2020c: 1). In this geopolitical context, 'the need for Europe to affirm its voice, uphold its values and fight for a level playing field' was a matter of 'Europe's sovereignty' (Ibid.) With regard to the industrial dimension of climate-neutrality, the Commission stressed that European industry would need a 'secure supply of clean and affordable energy and raw materials' to become more competitive and greener (Ibid:

3). Associating Europe's strategic autonomy to reducing dependence in strategic areas including critical materials and technologies, the Commission contended that 'with the transition of Europe's industry to climate-neutrality, the reliance on available fossil fuels could be replaced with reliance on non-energy[9] raw materials' (Ibid: 14).

During that time, the relationship between the European Union and China was not in the most favourable state. The 22nd EU-China summit took place on 22 June 2020. Due to COVID-19 restrictions, the summit was conducted via video conference. Unsurprisingly, the overarching theme of the summit was dealing with global challenges, primarily with COVID-19. The summit did not produce a joint statement. Moreover, different from the neutral tone of his previous remarks, President Michel stated that the EU and China 'do not share the same values, political systems, or approach to multilateralism' and that they would 'engage in a clear-eyed and confident way, robustly defending EU interests' (European Council, 2020b).

Still, the climate aspect of the bilateral relations was relatively positive. In September 2020, in a video message addressed to the UN General Assembly, President Xi declared a three-step strategy for carbon neutrality: reaching carbon peak level by 2030, rapidly reducing carbon emissions by 2045 and achieving carbon neutrality by 2060. With the carbon neutrality commitment, also known as the '30/60 policy', President Xi integrated low-carbon policy into the overall development model of China (Altun and Ergenc, 2023: 441). The European leaders welcomed China's commitment to carbon neutrality, although they acknowledged that a mix of geopolitical considerations and a domestic effort to promote growth in China's green economy sector possibly motivated it (Oertel, Tollmann and Tsang, 2020: 5).

At the bilateral summit, the leaders reiterated the need to 'reduce emissions in the short term and to set a goal of climate neutrality at the earliest possible date' (Ibid). In their high-level meeting in September 2020, the leaders announced the establishment of a High-Level Environment and Climate Dialogue, although not much detail was shared with the public. In their second meeting on 27 September 2021, the EU and China recalled their commitment to climate action leadership and restated their

[9] Non-energy raw materials include metallic minerals, industrial minerals and construction minerals while energetic raw materials include crude oil, natural gas, brown coal, or hard coal. For detailed information, see Tiess, G. (2011). General and international mineral policy: Focus: Europe. Vienna: Springer.

individual and bilateral actions for the fulfilment of climate targets as set in the Paris Agreement (European Commission, 2021e).

The bilateral statements were a reaffirmation of their intentions to continue cooperation in terms of global climate governance. However, one could observe that the commitments lacked substance, partly due to the political row between China and the EU. On 22 March 2021, the Council decided to impose restrictive measures on various Chinese individuals and entities responsible for human rights violations and abuses, including four individuals and one entity that were found responsible for massive detentions of Uyghurs in Xinjiang. The decision marked the EU's first use of the Global Human Rights Sanctions Regime[10] (European Council, 2021a).

The Chinese administration asserted that restrictions would 'severely harm China's sovereignty and interests and maliciously spread lies and disinformation' and announced counter-sanctions. On the same day, the Chinese regime retaliated with sanctions on ten individuals and four entities, including Members of the EP and the Political and Security Committee (European Parliament, 2021a). HR/VP Borrell criticised the retaliatory measures of China against the European bureaucrats: 'Maybe for Chinese it is difficult to understand what it means for parliamentarians to be free to express their opinions, even if they are strongly criticising anything – even with me.' (European Union External Action, 2021).

Another reason for the inertia in their cooperation was that the EU and China were focused on their recovery strategies. For industrial states, green recovery has become a priority after COVID-19. Most of them have included a substantial environmental aspect in their recovery packages, in addition to digitalisation, healthcare systems and social infrastructure. These packages were promoted as a means to 'build back better' while simultaneously addressing urgent environmental challenges, particularly climate change. The data from recovery trackers revealed that the amount of funds allocated for green stimulus in the aftermath of COVID-19 was

[10] On 7 December 2020, the Council adopted the regulation establishing the Global Human Rights Sanctions Regime. The regulation allows the EU to target individuals, entities and bodies (including state and non-state actors) responsible for, involved in or associated with serious human rights violations and abuses worldwide. It also allows the Council, acting upon a proposal from a member state or from the High Representative of the EU for Foreign Affairs and Security Policy, to establish, review and amend sanctions. For more information, see European Council. (2020) EU adopts a global human rights sanctions regime. https://www.consilium.europa.eu/en/press/press-releases/2020/12/07/eu-adopts-a-global-human-rights-sanctions-regime/, (12.09.2024).

higher than the allocations for the post-2009 global financial crisis (Aulie et al., 2022: 7).

During its Special meeting in July 2020, the European Council announced its recovery package under Next Generation EU (NGEU), 'an exceptional response to those temporary but extreme circumstances' and the Multiannual Financial Framework (MFF). As part of its recovery efforts, the European Council empowered the Commission to borrow funds on the capital markets (up to the amount of EUR750 billion in 2018 prices) to use for loans and expenditures, at least 30 per cent of which would be allocated to mainstream climate actions (European Council, 2020c: 3-6). The volume of allocations was particularly significant, considering that the commissioning of renewable energy projects was stalled due to insufficient funds and supply chain disruptions caused by lockdown measures.

It should be noted that not every Member State was equally supportive of the green dimension of the recovery package. Traditionally, Western members have been more supportive of climate actions as they are net energy importers and tend to have comparative advantages in the advanced manufacturing of energy-efficient products and services. For example, France and Germany have been actively supporting their industries for domestic exploration, extraction and reprocessing of minerals, as well as establishing partnerships in mining projects (Barteková and Kemp, 2016: 157). The Eastern member states, on the other hand, rely on larger endowments of coal and own large fossil fuel production industries and energy-intensive manufacturing; hence, they have generally argued for weaker policies, fearing economic and social repercussions in their carbon-intensive sectors. The Modernisation Fund, for example, was agreed to compensate these states with additional funds set aside from revenues generated under the ETS, thereby helping them modernise their energy infrastructure (Averchenkova et al. 2016: 34).

The Visegrad group (Czechia, Hungary, Poland and Slovakia) had already been outspoken in their opposition to an ambitious green transition before the pandemic. Poland, for example, was the only EU Member State that did not endorse the commitment to climate neutrality under the EGD due to its heavy reliance on coal production. Climate actions inherently impact the redistribution of wealth among regions and sectors. As of 2021, it was estimated that the escalation of climate action-

induced changes in the industry would result in a 40 per cent decrease in production in the coal sector, eliminating around two-thirds of all employment positions by 2030. Hence, the competitiveness of the coal industry and the livelihoods that are reliant on carbon-intensive businesses were severe concerns for the Polish authorities (Lee-Makiyama, 2021: 4). That is why Donald Tusk, then Poland's prime minister, pushed hard for an EU energy union before he became the President of the European Council in September 2014. Writing in the Financial Times on 21 April 2014, Tusk expressed his concerns over the growing threat posed by Russia and warned the EU that excessive dependence on Russian energy was making Europe weak. In order to break the Russian monopoly, he suggested establishing a collaborative framework for negotiating energy contracts with Russia, enhancing the interconnectivity of gas networks, strengthening gas storage capabilities and 'full use' of fossil fuels (Oroschakoff, 2015).

Czechia and Hungary were also sceptical and were given certain concessions in return for their conformity. Andrej Babiš, the Czech government leader, insisted that the priority should have been given to fighting the pandemic rather than the EGD. At the same time, Poland demanded an exemption from the ETS to allocate additional funds to pandemic measures. The vetoes from Hungary and Poland on the EU budget and recovery fund, which threatened the EGD's funding plan, were resolved through a negotiated agreement in the European Council in late December 2020. It was observed that their intention to access EU recovery funds eventually made them support the green transition (Eckert, 2021: 6-7).

In addition to the reluctance of some Member States, there was substantial pressure from the private sector to postpone, delay, or repeal the EGD initiatives. The private sector's contribution to GHG emissions in the EU is around 80 per cent (World Economic Forum, 2024: 5). Moreover, as the Commission stated in its first annual assessment of clean energy competitiveness, the energy sector already lags behind other industries in terms of investment in research and innovation, except oil and gas companies which invest the most within the sector, putting the implementation of EGD ambitions at risk (European Commission, 2020d: 31). In 2019, the share of 'green investment gap' allocated to the transportation, power, industry and grid sectors together was 25 per cent of the total amount needed (Claeys, Tagliapietra and

Zachmann, 2019: 6). Hence, the role of industry as a stakeholder and facilitator of green transition is undeniable.

Due to regulatory hurdles, legal intricacies and market ambiguities, such as the discrepancy between supply and demand, the private sector has been critical towards the climate ambitions of the EGD. That is why, following a brief disruption caused by the epidemic, the EU industry promptly intensified its lobbying efforts to influence the Commission's extensive policy agenda. In March 2020, for example, European automakers requested the Commission to ease CO2 targets for cars and provide additional regulatory relief. In April 2020, BusinessEurope, the umbrella organisation of European companies, sent a letter to Commissioner Timmermans requesting a delay in the EGD agenda. Likewise, the European Association of Plastic Converters sent a letter to the Commission requesting a delay in implementing the Single-Use Plastics Directive, a vital part of the Circular Economy Strategy (Eckert, 2021: 7).

The Commission disregarded the industrialists' call to suspend or remove climate-related targets. In fact, it successfully associated the recovery process with the EGD's ambitions to deter those calls. In the first annual Strategic Foresight Report, the Commission stated that the need to mitigate the economic and social impact of COVID-19 increased the competitiveness pressure on the EU and reinforced the EU's motivation for twin transition (green and digital) (European Commission, 2020e: 17).

The Commission's association of climate targets with the post-COVID recovery of the Union and its overall economic growth resembles its adoption of a sustainable growth paradigm in the aftermath of the global financial crisis. Such an association naturally has implications for the EU-China relations. Indeed, upon acknowledging a need for green recovery, the Commission stated that the EU would use trade as a means of survival when deemed necessary. Referring to the need to overcome its overdependence on China, particularly in CRM, the Commission expressed this intention with the following statement:

> *The COVID-19 crisis has revealed Europe's overreliance on non-EU suppliers for critical raw materials and has highlighted how supply disruptions can affect industrial ecosystems and other productive sectors. While there are alternative sources of supply for most products, Europe is increasingly reliant on a limited number of external suppliers for some critical goods, components and raw materials (…) With escalating global tensions, European supply chains are increasingly vulnerable.* (Ibid: 17)

All in all, the developments following the approval of the EGD significantly influenced the EU's overall strategy towards climate-related issues and its relationship with China in various aspects. The EU's growing emphasis on climate initiatives as a means of sustainable and green growth has been solidified, leading to the mainstreaming of climate-related actions across several sectoral policies, as evidenced by the adoption of the Next Generation EU and the New Industrial Strategy. Secondly, the disruptions in supply chain operations and global trade due to the COVID-19 pandemic have highlighted the EU's over-reliance on third countries as in the case of its 'dependency on certain raw materials sourced from only a handful of producers' (European Commission, 2021c). This situation has exacerbated the Union's vulnerability, underscoring the importance of resilience as a concept. Moreover, the worldwide recovery efforts heightened the importance of the industrial aspect of climate neutrality, leading to a strategic repositioning of actors in decarbonisation and low-carbon technologies. As the next section demonstrates, these events reinforced the strategic approach of the EU, particularly the Commission, which has previously established a risk perspective regarding imports from third countries. The strategic thinking inherent in the Commission's outputs, such as the annual foresight studies reflecting a risk-based logic, has inevitably shaped the EU's overall approach to China. The remaining of this chapter shows in detail how this strategic approach has influenced the EU's perspective vis-à-vis China's climate-related actions and has made it recalibrate its position.

3.2. SUSTAINABILITY-RELATED IMPLICATIONS OF CHINA'S POLICIES

Covid-19 transformed the EU's policymaking approach, pushing it to make a strategic assessment of its current vulnerabilities and its prospects. The 2020 Strategic Foresight Report was a concrete example in this sense. It was significant to show that the von der Leyen Commission, which 'has a strong mandate to put strategic foresight at the heart of EU policymaking', has adopted evidence-based strategic thinking in its policy-making approach, particularly in realising the twin green and digital transition (European Commission, 2020e: 2).

The introductory section of the 2020 Strategic Foresight Report underscores the crucial role of strategic and long-term thinking for the EU to manoeuvre through the evolving geopolitical environment. The report assesses the EU's resilience, 'which has become a new compass for EU policies with the COVID-19 crisis', in four interrelated dimensions: social and economic, geopolitical, green and digital (Ibid). The emphasis on resilience building, i.e. 'the discipline of exploring, anticipating and shaping the future', as an instrument is coherent with the assumptions

of risk literature. With this report, the Commission openly stated that it 'has made use of foresight for many years, but now aims to mainstream it into policymaking in all fields' (Ibid: 4). As the following statement by HR/VP Borrell demonstrates, strategic and long-term thinking has increasingly become influential on the EU's foreign policy-making approach as well:

> *In general terms, I would say that we need a better balance between crisis-management and long-term [planning]. We live in crisis management: "what's happening today?", "what happened yesterday?", "what is happening tomorrow?" Crisis, crisis, crisis. Foreign policy is not just managing crises one after the other. We have to try to think in the medium and long-term. With the pandemic, with the climate, with the energy crisis, we have to think a little bit about what is longer than what is going to happen tomorrow and what [was happening] yesterday. We have to be a little bit out of the crisis mode. This will require thinking more about how technology is reshaping the world and the nexus between energy, climate and raw materials.* (European Union External Action, 2022a)

3.2.1. Raw Material Dependence

Crochet and Zhou (2024: 148-149) categorise CRM strategies as proactive and defensive strategies. Defensive strategies are aimed at controlling one's resources. Resource-rich countries often consult defensive strategies using internal and external instruments such as nationalisation of ownerships, export bans or dual-pricing schemes. Export restrictions often act as an indirect subsidy to domestic firms. The imposition of tax increases the price of raw materials for foreign buyers, limiting the volume of material available in the global market. At the same time, the surplus of materials available for domestic use allows domestic producers to benefit from low input prices, stimulating the expansion of domestic production for final products (Fliess, İdsardi and Rossouw, 2017: 7). For example, China allows duty-free import of rare earth ores, but taxes are imposed on processed materials such as magnets to protect higher-value creation stages from competition (Gauß et al., 2021: 11).

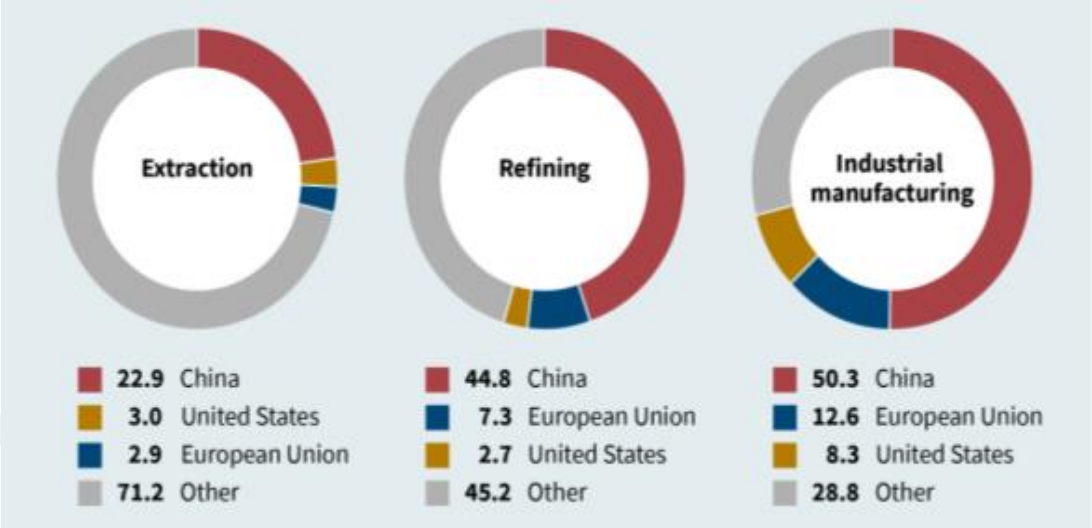
Furthermore, the concentrated geographical distribution of critical minerals enables the extracting countries to exert an asymmetric influence in their relations with the importing countries, particularly in trade. China has effectively leveraged its dominance in the global mineral supply chains, imposing economic pressure on its trade partners. The most recent example occurred in October 2023 when China imposed export controls on graphite. The decision responded to the US's restrictions

on technology sales to Chinese companies. The Ministry of Commerce and the General Administration of Customs stated that companies would need to require special export permits for three grades of graphite (White, Langley and Dempsey, 2023).

When the extractor country also has refining and processing capacities, this flow ultimately provides the resource-rich country with a competitive advantage in exporting processed and higher-value products. Indeed, Leruth and others' (2022) analysis of sources of control over the critical minerals, based on the origin of firms operating in the supply chain, reveals that the extent of Chinese influence on the global value chains of critical minerals and REE is more significant than commonly thought. China's annual mine output accounts for 70% of the world's total despite only having 34% of the identified geological reserves of rare earths. Its strength has two reasons. First, China has increased its capacity through purchases. For example, within the last five years, China has imported large quantities of platinum, pushing the global market into a deficit. Currently, China possesses 85 per cent of the world's platinum reserves (Andrews-Speed, 2023: 12). Second, with its outstanding technical capacity and expertise for processing, China processes the bulk of critical materials used in green technologies such as magnets, batteries, high-performance ceramics and LEDs (Oertel et al., 2020: 17).

As Figure 4 shows, currently, China owns the almost half of worldwide refining capacity and more than half of the worldwide industrial manufacturing capacity in specific metals. China regards the rare earth value chain as crucial for securing a larger market share in important downstream industrial ecosystems. The majority of REE mining and processing enterprises are owned by the government, which provides financial support through a variety of direct and indirect subsidies (Gauß et al., 2021: 11).

Figure 4: National and Regional Shares of Extraction, Refining and Manufacturing for Base Metals (aluminium, nickel, lead, tin and zinc) (%)



Source: Müller, 2023: 184.

Resource-poor countries primarily use proactive strategies to ensure secure and stable access to these materials. As resource-seeking economies, EU member states' CRM strategy is predominantly proactive. European companies mostly function within the third tier of the mineral supply chain (industrial processing and finishing); hence, they heavily depend on imports of minerals and metals (Müller, 2023: 178). As of 2023, the only commercially operating separation facility for rare earths in Europe is in Estonia and owned by Neo Performance Materials, a Canadian company managing through its Estonian subsidiary. This factory was responsible for producing enriched uranium during the Soviet era. Currently, it manufactures niobium and tantalum, as well as light and heavy REE such as cerium, neodymium, praseodymium, samarium, dysprosium and terbium. In 2021, Silmet announced its plans to expand by building a new facility for the production of magnets used in wind turbines and electric vehicles (EVs). Subsequently, its owner announced that the company had secured a grant of EUR 18.7 million from Estonia's government through the EU's Just Transition Fund to support this expansion endeavour (Jüris, 2023: 21). Until the war in Ukraine in 2022, the company heavily relied on Russian feedstock, accounting for 70 per cent of its operations. Then, a 30 per cent balance was achieved by a supply chain arrangement

between the US-based uranium company Energy Fuels and Neo Performance Materials (Kalantzakos, Overland and Vakulchuk, 2023: 14).

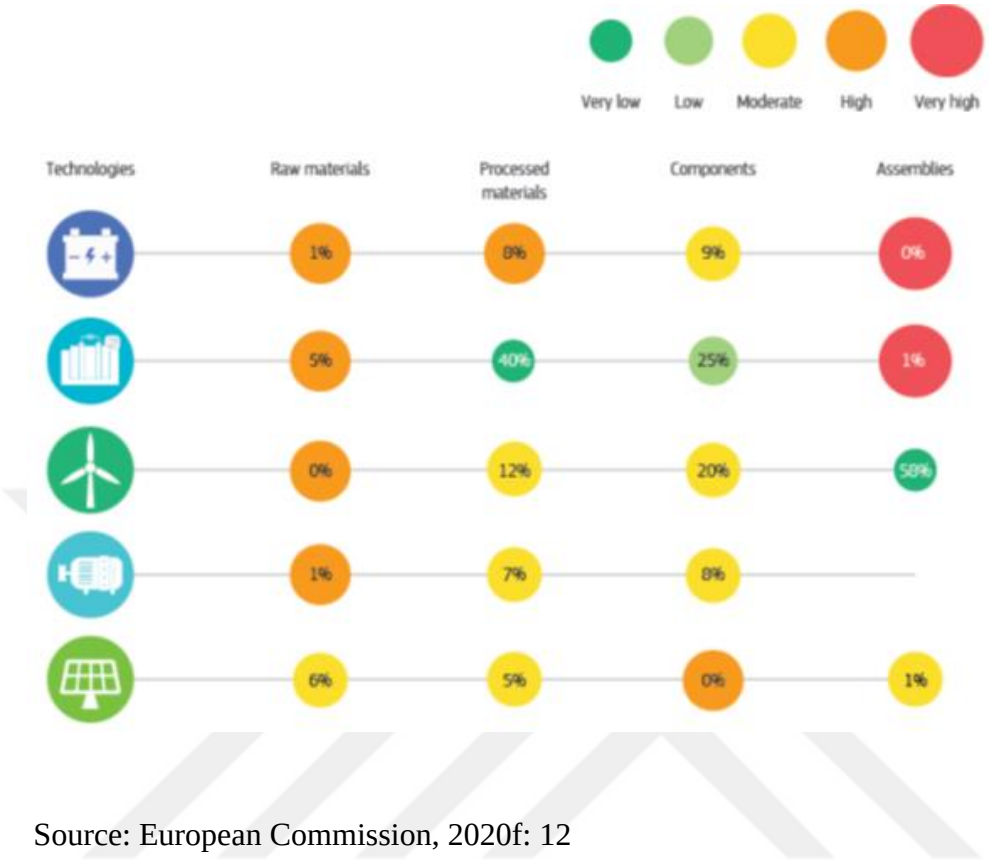
As illustrated above, the control of mineral production (reserve and processing) and its governance is critical, as overdependence on a single supplier for extraction and processing brings geopolitical risks for resource-seeking countries. As illustrated in the preceding chapter, the Commission was well aware of this risk before the EGD. As Maroš Šefčovič, then-Vice President of the Commission in charge of the energy union, stated on 20 November 2018, the Commission's work on raw materials mainly was the outcome of its observations from the mid-2010s:

> *The strategy that we adopted ten years ago had three priorities which are still relevant today. (…) All the focus now in the European Commission is to reduce dependency on fossil fuels. But we want to avoid trading our dependency on oil and gas with dependency on the precious metals and raw materials that we need for the green transition. (…) I really think that, when it comes to the issue of dependency, we could end up in a situation where raw materials become the new oil. We have to be very vigilant that today's dependency on fossil fuels like oil and gas is not replaced by dependency on lithium, cobalt, copper and other raw materials that we need for the green transition, where Europe is leading the way.*(Simon, 2018)

Šefčovič's concern was reiterated by the Commission occasionally. For example, on 09 July 2019, a Commissioner mentioned that Europe faced 'a huge risk' of ending up replacing its dependency on fossil fuels with dependency on (non-energy) raw materials (European Commission, 2019e). Likewise, European industrialists have occasionally vocalised the need to ensure access to raw materials like lithium and cobalt through supplier diversification, as the domestic demand is expected to increase exponentially (Simon, 2020).

After the EGD, however, the EU adopted a more strategic approach with a risk-based logic. In 2020, the Commission issued its first thematic foresight study: the foresight study on critical materials for strategic technologies and sectors in the EU. In this study, the Commission investigated the supply chains of nine technologies used in the strategic sectors (such as renewable energy, e-mobility, defence and aerospace) and identified the supply risks in the various stages of processed materials, components and assemblies (European Commission, 2020f). As shown in Figure 5, the EU's dependence on third countries for the raw materials and assemblies required in strategic sectors are considerably high.

Figure 5: Identified Supply Risks for the EU and EU Shares of Production



Source: European Commission, 2020f: 12

The foresight study on CRM was published ahead of the main foresight report. Even the timing shows how important this issue was for the Commission and how eager it was to frame raw material issues in strategic narratives. Even though the thematic report was based on a study conducted before the crisis, the Commission stressed the relevance of the findings for the post-COVID period. With this communication, the Commission also presented the updated CRM list. The 2020 list included 30 materials, showing a steady rise compared to the 2011 list with 14 materials, the 2014 list with 20 materials and the 2017 list with 27 materials. Bauxite, lithium, titanium and strontium were added to the list.

Other relevant communications also elaborated on the Commission's concerns over raw material dependence. In the 2020 report on the progress of clean energy competitiveness, the Commission referred to China's production of over 80 per cent of the available REE. It stated that 'while clean energy technologies reduce dependence on imports of fossil fuels, they risk replacing this dependence with on raw

materials', which would create 'a new type of supply risk' (European Commission, 2020d: 5). As the statements illustrate, the Commission already had a perception of risk concerning the EU's dependence on China's CRM supply to advance its clean energy production and storage. Accordingly, in its communication on CRM, which was based on the foresight study mentioned earlier, the Commission raised the same concerns:

> '*Access to resources is a strategic security question for Europe's ambition to deliver the Green Deal. The new industrial strategy for Europe2 proposes to reinforce Europe's open strategic autonomy, warning that Europe's transition to climate neutrality could replace today's reliance on fossil fuels with one on raw materials, many of which we source from abroad and for which global competition is becoming more fierce*.' (European Commission, 2020g: 1)

Parallel to the pre-EGD period, the Commission's concerns were acknowledged by the EESC. In its opinion on the Commission's communication on CRM resilience, the EESC admitted the significance of 'reliable and unhindered access to mineral raw materials' as '30 million jobs in downstream manufacturing industries' were dependent on a secure and sustainable supply of these materials. The Committee also stated that the 'EU must act in order to reduce external dependency, to diversify its supply chains and to invest in recycling facilities' for the 'survival of European jobs and industries' (Official Journal of the European Union, 2021c: 3).

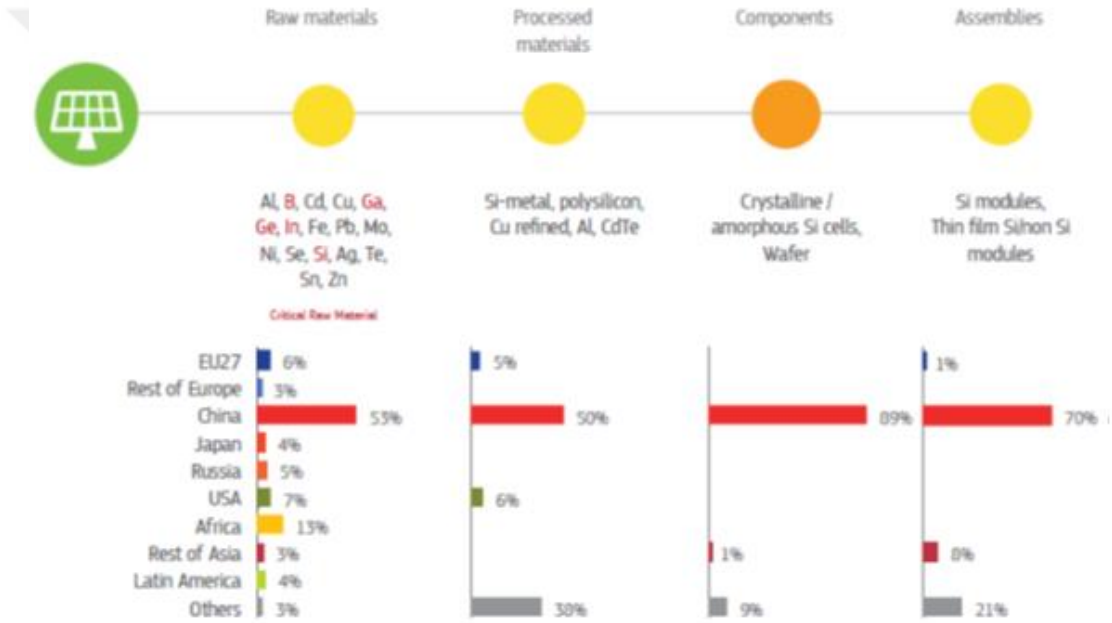
3.2.2. Renewable Energy Production and Storage

The repercussions of the EU's overdependence on China for CRM supply substantially affect its capacities for renewable energy production and storage. This is particularly relevant for the solar and wind energy sectors because their share in the EU's energy production is considerably high (23 per cent) and because meeting the EU's climate targets requires higher deployment rates in these sectors (Eurostat, 2024a).

The EU's cumulative solar power capacity hit 134 GW in 2019 and is expected to reach 370 GW by 2030 and 1051 GW by 2050 (European Commission, 2020d: 18). Despite the projection of growth in PV capacity, as Figure 6 demonstrates, the EU depends on China at each step of the PV supply chain. This is a natural consequence of China's dominance over the CRM market and global PV manufacturing. Even the distribution of solar energy to consumers is a matter of dependency as the anticipated

growth of electrical grids for the distribution of solar energy requires significant quantities of metals and minerals, primarily aluminium and copper. It is estimated that the global demand for copper will quadruple while the demand for aluminium will rise from 9 Mt. to 16 Mt. in 2040 and roughly 50 per cent of this rise will be demanded by high-income regions such as the EU for low-carbon energy infrastructure (Vezzoni, 2023: 5).

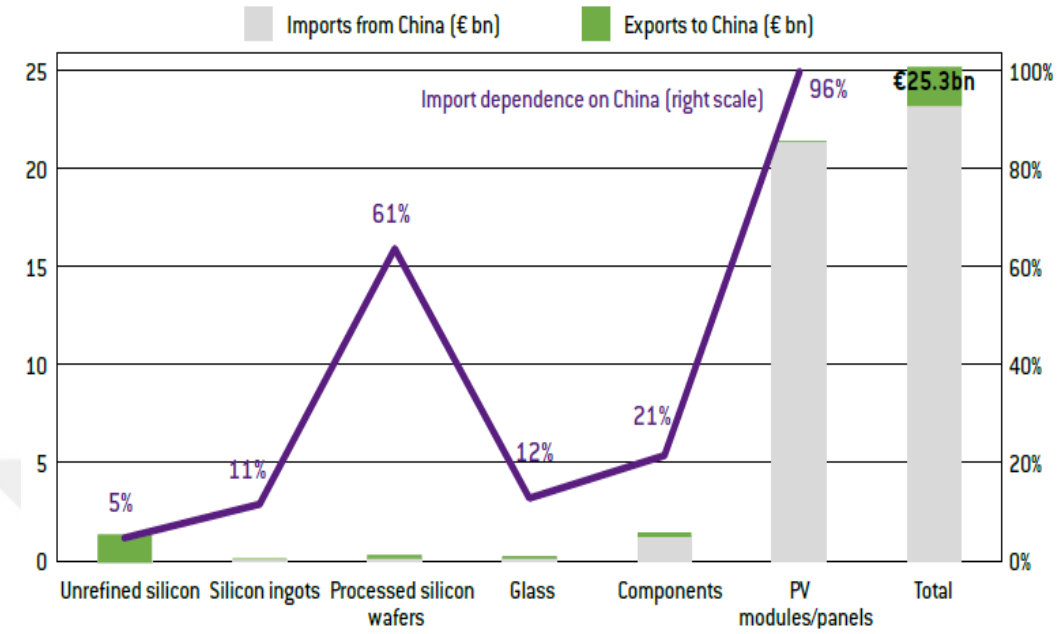
Figure 6: Overview of Supply Risks, Bottlenecks and Key Players Along the PV Supply Chain



Source: European Commission, 2020f: 39.

A recent Staff Working Document states that 'the high dependence on imports from China in ingots & wafers, cells and modules manufacturing poses a risk for EU's security of supply and the economic viability of its solar industry, with potential adverse repercussions on its energy system resilience and decarbonisation objectives' (European Commission, 2023a: 4). Figure 7 affirms the observations presented by the Commission.

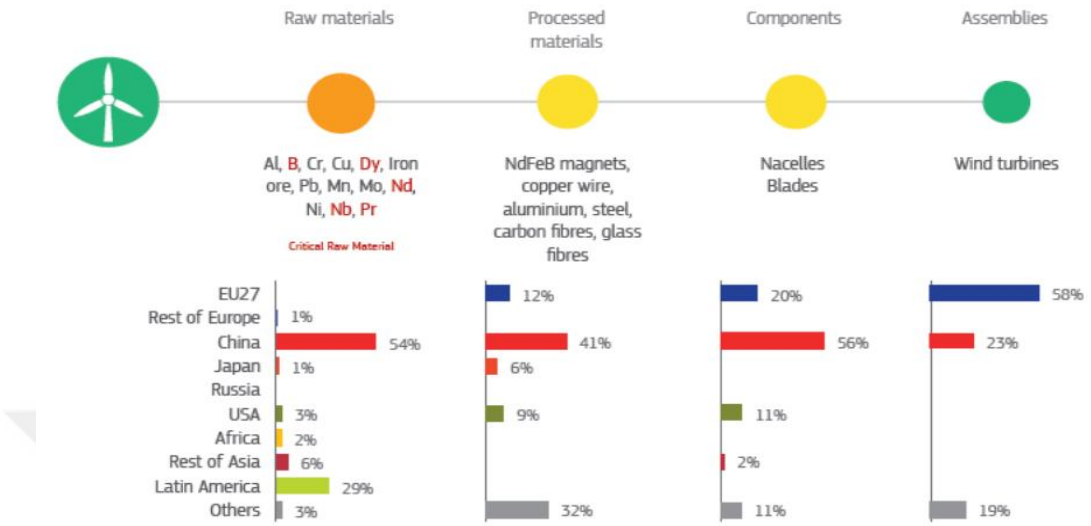
Figure 7: EU's Dependence on China in the Solar PV Supply Chain (2022)



Source: García-Herrero, Grabbe and Kaellenius, 2023: 6.

Similarly, the bottleneck assessment for wind turbines indicates that the most significant risk within the supply chain is the availability of raw materials. The EU provides only one per cent of the raw materials used in wind energy production. There are significant concerns regarding the availability of rare earths for producing permanent magnets, essential components for wind turbine generators. China holds a quasi-monopolistic position in this industry (European Commission, 2020f: 11, 30).

Figure 8: Overview of Supply Risks, Bottlenecks and Key Players in the Supply Chain of Wind Turbines



Source: European Commission, 2020f: 30.

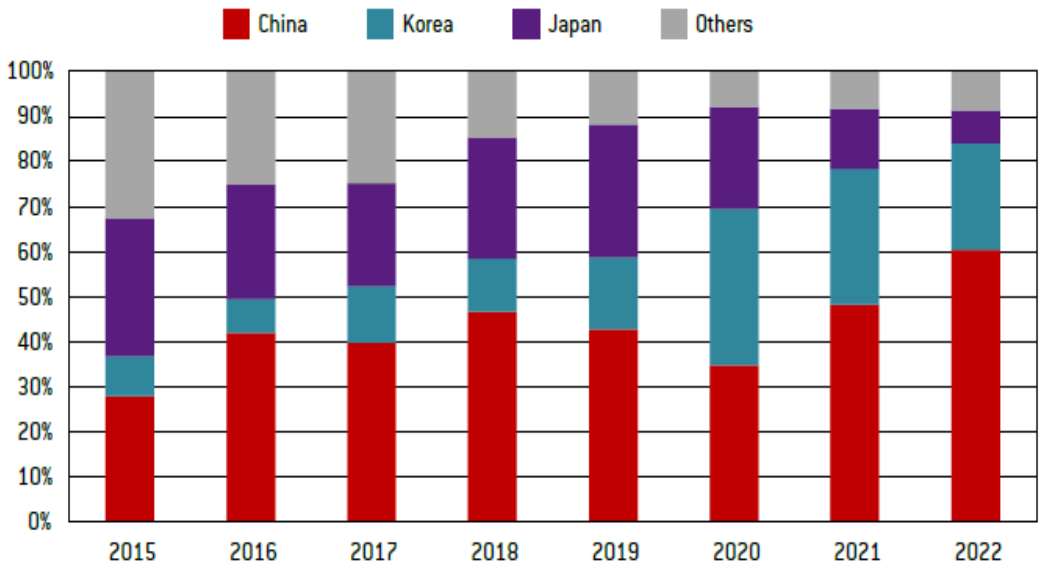
Increasing its energy storage capacity is also crucial for the EU to meet its climate targets; the opinion of the EESC demonstrates this significance: 'Renewable electric power production is erratic: the wind does not always blow and the sun does not always shine when the EU needs high amounts of energy; thus any increase in wind and PV-power generation capacities within the EU has to be accompanied by a build-up of huge energy storage facilities' (European Economic and Social Committee, 2022: 8). This brings us to dependencies in the battery sector.

Li-ion batteries and fuel cells are essential in developing a low-carbon electrical system. They store the energy generated from renewable sources such as solar and wind. The global trade of critical materials has grown at a higher rate (38 per cent) than overall merchandise trade (31 per cent) between 2007-09 and 2017-19, with the lithium trade experiencing the highest increase among all critical raw materials at 438 per cent (OECD, 2023: 5).

The increasing volume of trade does not necessarily ensure the availability of materials. According to the Commission's 2020 foresight report on critical raw materials, with regard to batteries, the critical matter for the EU is that it accounts for only 8 per cent of the overall supply. While China, Japan and South Korea collectively

contribute 86 per cent of the processed materials and components used in Li-ion batteries worldwide, China dominates the manufacturing of Li-ion cells, accounting for 66 per cent of global cell production, leaving minimal margin for supply diversification (European Commission, 2020f: 11, 20). In terms of their market share, half of the top 10 battery companies in the world are Chinese companies. Among them, the Chinese CATL and BYD hold the top positions by a wide margin. Currently, less than 10 per cent of the battery manufacturing capacity in Europe is owned by a Chinese company and this figure is expected to rise to 13 per cent when the Gotion High-Tech facility in Germany becomes operational in 2024. If we add future projects, such as plants under development and those declared, into the equation, the Chinese investments will account for 23.5 per cent (Mazzocco, 2023: 8-9).

Figure 9: Market Share of Lithium-Ion EV Battery Production by Country



Source: García-Herrero, Grabbe and Kaellenius, 2023: 8

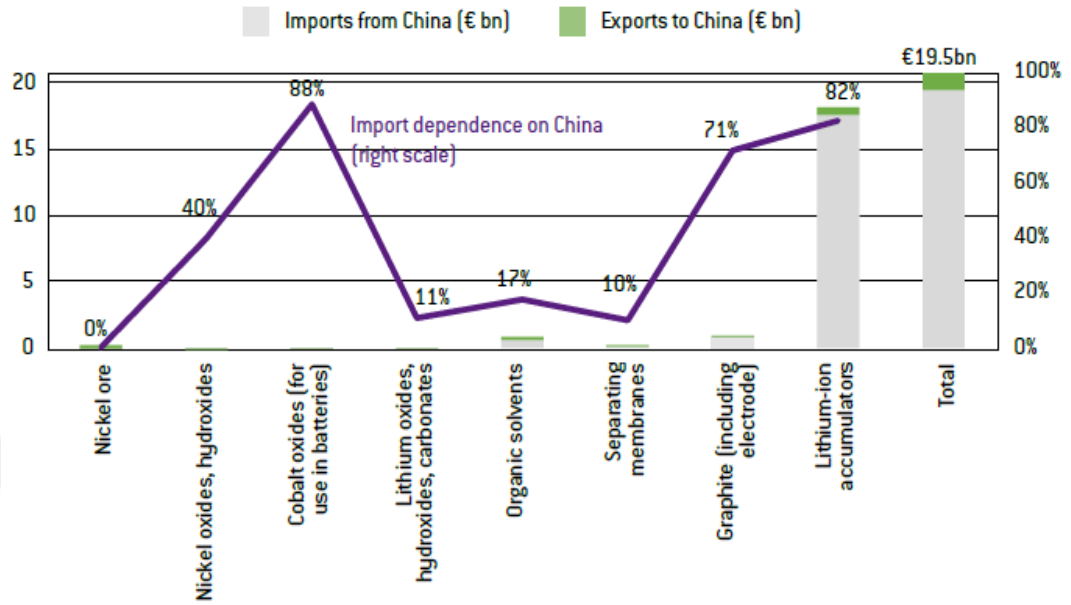
As the Commission once acknowledged, its approach to batteries has been ‘a test case for the EU's twenty-first-century industrial strategy’ (European Commission, 2019f: 15). Since the mid-2010s, the Commission has considered battery production as a ‘strategic imperative for Europe in the context of the clean energy transition and is a key component of the competitiveness of its automotive sector’ (European

Commission, 2018a: 1). In October 2017, the European Battery Alliance (EBA) was launched. It was the result of a collaborative effort between the Commission, the European Investment Bank (EIB), EU state authorities, regions, industry research institutes and other players involved in the battery value chain. The alliance aims to strengthen battery technology and production capacity in the EU, which is pivotal for supporting low-emission transportation, energy storage and Europe's economic objectives. Currently, EBA consists of 440 industrial and innovation actors in total. The Commission is responsible for administering the functioning of the Alliance and implementing the Strategic Action Plan on Batteries, which was adopted in May 2018 (European Commission, 2024a).

The Commission's observations are shared by some Member States as well. For example, in 2019, Bruno Le Maire, then-French finance minister, stated that domestic battery production was 'a matter of sovereignty' and that 'Europe risks losing the value-added part of the production chain and the technological knowhow that stems from it' (Hall and Milne, 2019). Le Maire's statement was critical as it demonstrated the association of battery production with the EU's "sovereignty", eliciting a perception of danger from a core Member State. Indeed, the French and German governments are eager to support the establishment of a European battery industry. They have been actively supporting industrial initiatives and seeking assistance from EU programmes such as the Important Projects of Common European Interest, which grants exemptions from the usual EU state assistance and competition regulations for multinational projects that are considered strategically significant (Ibid).

Figure 10 demonstrates the level of the EU's dependence on China for materials required to produce battery cells. Due to its significance in the battery sector, in 2020, the EU added lithium to the 2020 CRM list. The figure is significant because it shows that even if the EU establishes its own production facilities, the risk of dependence would still be relevant. As Peter Carlsson, who set up the EU's first European-owned battery production line at Northvolth in Sweden, once stated, whether a European battery factory would be the satellite of Asian manufacturers or part of a genuine European battery ecosystem is a choice with significant implications on the whole European industry (Hall and Milne, 2019).

Figure 10: EU Dependence on China in the EV Battery Supply Chain (2022)



Source: García-Herrero, Grabbe and Kaellenius, 2023: 8

Along with the widespread deployment of existing renewable technologies, the path to climate neutrality also involves advancing and adopting emerging technologies such as green hydrogen. Green hydrogen production, made by electrolyzing water with zero-carbon electricity, is a promising way to lower emissions. Many industries currently depend on carbon-based materials to power high-temperature processes. Green hydrogen, which can produce high-temperature heat and serve as a feedstock, shows promise as a technology for transitioning to more environmentally friendly production methods (Boehm et al., 2023: 66).

Green hydrogen production is still an emerging technology. In 2021, green hydrogen production was still about three times more expensive than grey hydrogen (made out of natural gas through steam reforming). It accounted only for 0.03 per cent (0.027 Mt) of overall hydrogen production. However, meeting the global climate targets would require rapid advancement of this technology, allowing production of 58 Mt in 2030 and 329 Mt in 2050 (Boehm et al., 2023: 66; Cervantes et al., 2023: 11).

The majority of patents filed for hydrogen, electrolyser and fuel cell technologies between 2000 and 2016 came from Asia, with China, Japan and South Korea leading the way (European Commission, 2020d: 21). China's hydrogen policy is primarily motivated by the recognition that it might fall behind the Western technology leaders in several crucial aspects of hydrogen technology. Given the escalating geo-economic rivalry with the US and concerns about Western countries' restrictions on the flow of critical technologies and expertise to China, acquiring expertise and technology is of outmost urgency for China.

In March 2022, China released its Mid-and-Long-Term Hydrogen Industrial Development Plan (2021–2035). That year, China already owned the largest electrolyser manufacturing capacity, with 7.6 GW per year, compared to Europe (4 GW) and the US (1.6 GW). In line with the Catalogue of Industries for Encouraging International Investment 2022, which categorises the domestic hydrogen economy as a priority sector, China encourages foreign investments in several areas of renewable hydrogen generation, refuelling, transportation and storage (Quitzow and Gong, 2023: 23). For example, in 2023, Energy China International Construction Group signed a MoU with Saudi Arabia's Ajlan Bros and Morocco's Gaia Energy to build a green hydrogen project with a capacity of 1.4 MT of ammonia per year (Rikabi, 2024: 10).

Currently, the total production capacity for electrolysers in Europe is below 1 GW per year. Reaching the strategic objective of 40 GW electrolyser capacity by 2030 would require scaling up hydrogen production technologies such as solar and wind-based electricity as well as carbon capture use and storage (European Commission, 2020h: 12). It is estimated that the EU needs to invest around $1.5 trillion in clean hydrogen production facilities in domestic and overseas projects to reach its net zero targets by 2050 (Rikabi, 2024). In 2021, Commissioner Timmermans stated that producing renewable hydrogen, using mainly wind or solar energy is a long-term priority for the EU to achieve a fully decarbonised economy. He also stated:

> *'Let's not forget the painful experience in solar PV manufacturing, which was developed in Europe at high cost only to later move abroad. Let's not take any chances with hydrogen. Let's be open but competitive, let's be ambitious but not naïve. Let's reach out, be proactive and daring, the time is right for Europe to tap into the potential of hydrogen in a clean, secure and affordable energy future for all.'* (European Commission, 2021f).

Likewise, Commission President von der Leyen acknowledged clean hydrogen is ‘a perfect way’ to reach EU’s climate targets and that making clean hydrogen commercially available would be ‘a game changer’ (European Commission, 2020i; European Commission, 2021g). Yet, the EU’s renewable hydrogen production goal is intrinsically related to its dependence on raw materials. Building an economy on renewable hydrogen requires access to large amounts of materials. Due to its cost advantage in materials, electrolysers manufactured in China are priced at around 25 per cent lower than those produced in the EU (European Commission, 2023b: 12). Although Europe is technologically advance in electrolysers, a recent Joint Staff Document shows that ‘higher cost of production in comparison to third countries and dependence on concentrated supplies of critical raw materials pose a risk for the resilience of the supply chain related to electrolyser production’ (Ibid: 12). The statement was a clear evidence that the Commission has expanded its risk perception beyond traditional renewables sectors (solar and wind energy) to include emerging sectors, where China dominates in critical resources and technologies.

3.2.3. Energy Supply from Third Countries

China’s emergence as a strategic actor in non-EU territories also contributes to the growing tensions in bilateral relations. Regarding climate-related aspects of their relations, it is possible to contend that China’s low-carbon technology investments in the South –particularly in Africa- and energy-related claims in the Arctic are sources of considerable concern for the EU.

3.2.3.1. Africa

Due to its economic progress, in the mid-2010s, China became the world's second-largest energy consumer. Initially, the Chinese authorities negotiated oil exploration and energy development agreements with the oil-producing nations Libya, Algeria, Sudan and Egypt. The primary motivation was to diversify China’s oil suppliers by extending its cooperation with these states (Zhang, 2010: 55-56). Around 2010, Chinese oil companies in North Africa built a fully integrated industry network

encompassing all stages of the industry, from drilling to oil selling. Thanks to these energy investments, China procured 30 per cent of its total imports from Africa. These countries welcomed Chinese infrastructural investment as they were still in the early phases of industrialisation and urbanisation; hence, they were in need of infrastructure development (Ibid: 61).

Apart from securing the crude oil and gas supply, Chinese investments in Africa have recently focused on the green energy sector. The African continent is endowed with rich renewable energy sources such as bioenergy, solar energy, geothermal energy, hydropower, ocean energy and wind energy. This endowment is promising for the continent's energy self-sufficiency and for drawing in energy-related investments and technology flows. The falling costs of electricity generation from green energy sources, notably wind and solar, in the global market reinforces the expectation of utilising these sources. However, despite this endowment, many African countries still have low electrification rates, resulting in diverse livelihood impacts (Chrimbao, 2014).

For over a decade, North African countries have used solar and wind endowments to attract investments in renewables. Moreover, these countries, notably Egypt, are strategically positioned as major energy corridors; hence, they also have the opportunity to circumvent their southern European counterparts and negotiate more favourable agreements directly with the EU (Aboushady and Onbargi, 2023: 52). Recently Morocco, Algeria and Egypt have become significant producers of green hydrogen. Morocco distinguishes itself with its geographic proximity to the EU, which would significantly reduce shipping costs. There is also the possibility of repurposing the existing pipelines between Morocco and the EU, another advantage regarding logistic costs (Rikabi, 2024: 7).

The Belt and Road Initiative (BRI) is a key platform for China's engagement in Africa's green energy sector, facilitating infrastructure development and investment in renewable energy projects. Previously known as the “One Belt, One Road”, BRI refers to two separate projects, the Silk Road Economic Belt and 21st Century Maritime Silk Road, initiated by President Xi Jinping in 2013. Inspired by the Silk Road established during the Han Dynasty, with BRI, the Chinese President aimed to rejuvenate China’s trading power by establishing a network of trade routes that would

connect China to the rest of the world. It is designed as a substantial programme of investments in infrastructure development for ports, roads, railways, airports, power plants and telecommunications networks (Belt and Road Forum, 2023). The scale of the project is so massive that it is considered 'the largest infrastructure project in history, affecting around 60 per cent of the global population' (Politi, 2021: 1).

BRI encompasses various sectors such as energy, transportation, trade, services and finance. Among these, energy is seen as a priority due to the heavy reliance of the modern Chinese economy on energy. In March 2015, the National Development and Reform Commission, together with the Ministries of Foreign Affairs and Commerce, announced that 'strengthening the green and low-carbon construction and operation management of infrastructure' would be part of the BRI vision and action (Li, Li and Yu, 2018: 3). Through the BRI, China lays the groundwork for long-term collaboration with African nations, leveraging their renewable energy potential and critical materials reserves to forge a mutually beneficial partnership. Since its launch, the administrators of BRI have increased their investments in renewable energy and the transition to low-carbon practices through the BRI International Green Development Coalition. Indeed, in 2021, the Chinese State Council's climate action guidance required the BRI to enhance collaboration with BRI nations in areas of green infrastructure, green energy and green finance to enhance the environmental sustainability of overseas projects (Qi and Dauvergne, 2022: 7).

China's interest in sourcing its energy from African states collides with the EU's green growth ambitions. For the EU, the continent's renewable energy potential is critical to reach its renewable energy targets and thereby achieve its net-zero emission targets. As Vice-President Frans Timmermans stated during his opening speech at the Africa Energy Forum in 2022, the EU is eager 'to play a role in offering Africa the possibility to be masters of their own energy resources, in a sustainable way' (European Commission, 2022a). The following statement shows that the EU is also eager to benefit from the consequences of this assistance:

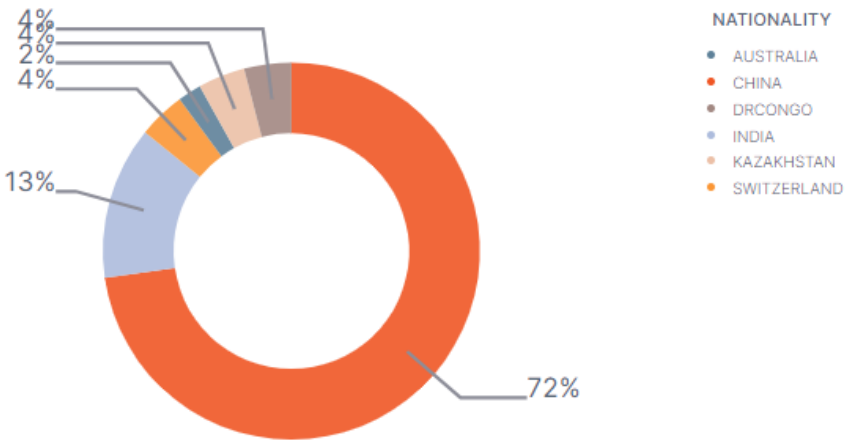
> *'(...) if we do this right, with the right sharing of technology, with the right incentives for investment, the renewable energy that we produce goes way beyond Africa's own electricity needs. It becomes a commodity. And when stored correctly in hydrogen or ammonia or other storage facilities, it can be a commodity that can be sold to other parts of the world, especially also in Europe. (...) Where are the analogies where we reinforce each other's measures? Where are our destinies linked? I believe it's in renewables, it is in bringing electricity*

to every part of Africa, it is in creating a new global market for hydrogen and other clean gases.' (Ibid.)

China also set an eye on the critical mineral reserves in Africa. According to the projections, the continent possesses 4 million tonnes of REE reserves, including fourteen reserves actively explored or developed for mining. The majority of them are situated in the eastern and southern regions of the continent. Nevertheless, the exploitation of mineral resources depends on manufacturers from other continents. Currently, no company in Africa is engaged in developing Phase 3 of the value chain, which involves the downstream manufacturing of consumer items like magnets and electronic components (African Natural Resources Centre, 2021: 15-18).

China emerged as the top destination for African minerals, with exports reaching USD 10 billion in 2019 (Risi and Doyle, 2023). Since then, China has sought to utilise mineral reserves in the continent to secure a sustainable supply chain for its growing technology and energy sectors. In addition to the domestic lithium reserves, China imports premium lithium from Africa and South America. Chinese businesses have been strategically acquiring cobalt and lithium assets. For example, the Chinese mining company Molybdenum acquired the rights to the Tenke mine in the Democratic Republic of Congo for a sum of USD 2.6 billion. Tenke mine is known to have the highest concentration of cobalt in the world (Pigato et al., 2020: 96).

Figure 11: Countries Present In the Copper and Cobalt Sector in the DRC (2022)



Source: China Global South, 2022.

One of China's recent investments is the opening of a USD 300 million lithium processing plant in Zimbabwe, which has the largest lithium reserves in Africa. The amount of reserves in the country has been attracting investors from other countries such as Canada, the UK and Australia, yet China has remained the dominant player. The government of Zimbabwe has banned raw lithium ore exportation, encouraging foreign investors to process the lithium in Zimbabwean territories. The investment of the Chinese mining company is the consequence of this ban. (Mutsaka, 2023).

The EU was already under the pressure of its overdependence on China for CRM. China's acquisition of reserves in third countries caused further considerations. As the following statement of Maroš Šefčovič illustrates, such considerations were evident even before the EGD was put into force:

> *Today, 50% of cobalt mines in the world are managed by China. And we see there is a strategic drive by China to have primary access to these precious metals and materials. Unfortunately, we don't have the best history in dealing with access to these mines once they're under Chinese control. (...) This is why we are also looking at Africa. We want to use the new drive for a new EU-Africa partnership to promote sustainable mining and establish fair trade relations when it comes to raw materials.* (Simon, 2018)

When reminded of the Chinese presence in Congo, he also said that 'Congo is a challenge' and that the EU would diversify its supply and look for European opportunities (Ibid). The climate and energy targets adopted with the EGD led the EU to reconsider its energy relations with the African states. Referring to the challenges in global competitiveness and access to critical raw materials as the primary challenges, Šefčovič occasionally reiterated the EU's position on the issue:

> *Let's face it. There is a huge risk that we end up replacing our important dependency on fossil fuels by one on (non-energy) raw materials. We currently produce a single-digit percentage (between 1-8%) of the world levels for cobalt, natural graphites, lithium and rare earths. These are indispensable for e-mobility (rare earths), renewable energy technologies, batteries (lithium, cobalt, graphite), information technology (rare earths). And in many cases we have no refining capacity (e.g. for lithium). Unless we invest. Meanwhile, we are witnessing China capturing third market sourcing, in addition to exploiting its own, moving up in the value chain and possibly resulting into new dependencies.* (European Commission, 2019g)

Šefčovič's statement illustrated that the prevailing risk perspective in the Commission's discourse concerning the EU's reliance on a single supplier, namely China, was broadened to encompass the interactions of these two actors with third parties, specifically African nations, as China extended its energy-related objectives in this area, which inevitably and subtly intensified the tensions surrounding resource exploitation in the region.

3.2.3.2. Arctic

The EGD has significant implications for the EU's Arctic policy. The Arctic is the world's second-biggest carbon sink after the Amazon. Together with the Antarctic region, it is known as the 'Earth's iceboxes' as the frozen landscape and the surrounding oceans regulate the atmospheric temperatures (National Snow and Ice Data Center, 2024). Yet it is under dire pressure of climate change-induced threats such as melting permafrost, extreme weather events and biodiversity loss. With EGD and subsequent proposals, the EU targets a notable reduction in GHG emissions. Despite all the efforts, the EU is still the fourth most polluting entity in the world and its emission reduction targets will positively affect the sustainability of the Arctic region (Friedrich, Pickens and Vigna, 2023).

The Arctic has been an exceptional venue for undisputed international cooperation against climate-induced threats. Due to this exceptionalism, this region has long been 'a zone of peace', as Gorbachev termed it in his famous speech in 1987 (World Ocean Review, n/a). The contestations between major powers over the economic and security-related potentials of the Arctic, however, seem to transform this region into a future Middle East.

The Arctic holds a unique position not only for its geographical features but also for its governance. The sovereign rights and jurisdiction in the region are held by the eight-circumpolar states, also known as the Arctic States or the Arctic Eight. Those bordering the Arctic Ocean, namely Canada, Denmark (Greenland), Norway, the Russian Federation and the United States of America, are considered coastal or littoral Arctic states. Iceland, Finland and Sweden are territorial Arctic states. There is no particular legal system designed for the governance of the Arctic, as the region does not have an exclusive legal status. The rights and obligations of the Arctic states concerning the continental shelf, freedom of navigation, protection of marine resources and scientific activities are provided primarily by the UN Law of the Sea. Bilateral and multilateral agreements between the Arctic states are other legal sources for the region's governance. For example, under the framework of the Arctic Council, the states established a set of legally binding regulatory instruments, such as the 2011

Arctic Search and Rescue Agreement, the 2013 Arctic Oil Spill Agreement and the 2017 Arctic Scientific Cooperation Agreement (Sarris, 2024).

Due to its geographical position, the EU's policy preferences are naturally and closely linked to the developments in its northern neighbourhood. Nevertheless, the EU acquis communautaire has a peripheral role in Arctic governance. The legislative actions of the EU are applicable to Finland and Sweden and to some extent to Iceland and Norway through the European Economic Area. In addition, the Arctic states and actors are traditionally hesitant to acknowledge the EU as a prominent actor in regional affairs. Even though the EU has a presence in the Arctic Council through its member states –with Denmark, Finland and Sweden as constituents; France, Germany, Italy, Poland, the Netherlands and Spain as observers-the Arctic states tend to give the Union a lesser role in debates concerning the region, except when it comes to the European Arctic. Therefore, the Union's regulatory influence, known as the Brussels effect, is entirely restricted in Arctic affairs (Chuffart et al., 2021: 287). Raspotnik and Østhagen (2021: 1160) argue that for the first time, in its immediate neighbourhood, the EU is encountering a region where it cannot assert its dominance or extend its internal setup and policies but remain a part of the regional system that is shaped by the national interests of powerful state actors.

According to Biedermann (2021: 468), three critical junctures led the EU to revise its Arctic policy. The first critical juncture was in 2007 when a Russian submarine placed the Russian flag on the Arctic seabed at the North Pole, extending beyond Russia's recognised exclusive economic zone. The headlines with a picture showing the Russian flag at the bottom of the Arctic Ocean kicked up the EU -and the international community- against possible security implications of an ice-free Arctic as an accessible strategic region (Raspotnik and Østhagen, 2021: 1154). In its resolution of 9 October 2008 on Arctic governance, the Parliament expressed its concern 'over the ongoing race for natural resources in the Arctic, which may lead to security threats for the EU and overall international instability' and called on the Commission to 'include energy and security policy in the Arctic region on its agenda' (European Parliament, 2008). Shortly after, the Commission issued a communication concerning the Arctic region. The Commission stated that the Arctic offshore resources, notably the hydrocarbon reserves, could 'contribute to enhancing the EU's

security of supply concerning energy and raw materials' (Commission of the European Communities, 2008c: 6).

Until the early 2010s, the EU and China disregarded each other in the Arctic due to the absence of a functional relationship. Cooperation in the Arctic was not a priority; hence, their relations concerning the region were mostly indirect (Conley et al., 2024). China's interest in the region started in the 1990s, primarily through scientific engagements. In 1996, China joined the International Arctic Science Committee. Three years later, Chinese vessel Xue Long (Snow Dragon) was sent to the region for scientific research, marking China's first official Arctic expedition. To this date, Xuelong has completed nine expeditions. In 2004, the Arctic Yellow River Station in Ny Alesund on Svalbard was constructed and since then, it has served as the main research site for scientific missions. From 1999 to 2017, China conducted nine Arctic research expeditions, solidifying its position as a key player in Arctic research (The State Council Information Office of the People's Republic of China, 2018).

In 2012, Iceland and China signed an agreement on Arctic Cooperation, paving the way for the Polar Research Institute of China and the Icelandic Centre for Research (RANNIS) to collaborate on building a joint aurora observatory at Kárhóll in northern Iceland (Arctic Observatory, n/a). In those years, China maintained a low-key political approach, avoiding conflicts with the coastal states. By steering clear of sensitive topics like resource exploration, China was able to engage in constructive cooperation with these states (Biedermann, 2021: 471).

The second critical juncture was particularly important for the EU to understand the implications of Chinese presence in the Artic. It was in 2013 when the Arctic Council granted China -together with Italy, Japan, South Korea, India and Singapore- the Observer State status. At the same meeting, the final decision on the EU's application for observer status was deferred 'until the Council ministers agreed by consensus that the concerns of Council members, addressed by the President of the European Commission in his letter of 8 May, are resolved' (Arctic Council Secretariat, 2013: 6).

The decision of the Council was attributed to various reasons. For some, it was the member states' doubts about the EU's fading multilateralism towards the region. The EU's trade preferences were also seen as sources of tension behind the Council

decision. For example, Canada and Norway began dispute settlement processes at the World Trade Organisation in response to the European Union's prohibition on seal imports. The EU's leading international coalition against Iceland to stop whaling adversely affected the EU-Iceland relations, leading to Iceland's decision not to join the EU. Denmark was also critical of the EU's approach for failing to consider Arctic societies' traditions, cultures and needs. Even though Sweden and Finland were more supportive of the EU policies, the deferral of the Arctic Council downgraded the EU's image (Biedermann, 2021: 473-475).

This development coincided with the geopolitical shift of China's Arctic priorities towards the Barents, known to be the most prosperous sub-Arctic region in terms of resource endowment. Alarmed by China's activities and the general conditions of the global material market, the EU has set an eye on the Arctic region for its resource needs. Accordingly, the Commission added resource-related ambitions to the traditional pillars of its Arctic policy (fighting against climate change, scientific research and sustainability). In 2012, in its joint communication on the Arctic region, the Commission stressed that the changing landscape in the region would open up new transport lanes and present new opportunities for exploiting natural and mineral resources. Hence, it proposed that 'as a priority, within the scope of the external pillar of the Raw Materials Strategy, the EU will actively pursue a raw materials diplomacy with relevant Arctic states to secure access to raw materials notably through strategic partnerships and policy dialogues' (European Commission, 2012: 10).

In the same year, the EU initiated discussions with Greenland over the extraction and utilisation of natural resources. In June 2012, Antonio Tajani, then-Vice President of the Commission and Commissioner for Industry and Entrepreneurship, visited Greenland. During his visit, he proposed providing development assistance on the condition that the government would not grant China exclusive rights to its rare-earth metals. The Commission entered into an agreement in Nuuk, Greenland, to guarantee the continued availability of the island's minerals to open markets. Upon their discussions, the EU and Greenland first agreed on a Letter of Intent and two years later, they signed a Partnership Agreement (Greenland Decision), which included provisions regarding minerals. Nevertheless, these discussions did not yield any tangible advancements (Koivurova et al., 2021: 119; Biedermann, 2021, 473-474).

The third critical juncture was in January 2018 when China announced its Polar Silk Road (PSR) plans. It occurred around the same period that China and Russia established strategic relations concerning the BRI (Biedermann, 2021: 468). In its 2018 White Paper on Arctic strategy, China defined itself as a 'Near-Arctic State'. As 'one of the continental States closest to the Arctic Circle', China reiterated that Arctic conditions would directly affect Chinese ecological, economic and other interests; hence, China would remain an important stakeholder in Arctic affairs. Like the EU, in the strategy paper, China stated that its primary interest is scientific research and expeditions in the Arctic and contributing to protecting the Arctic ecosystem. However, despite the Communist Party's attempts to convince the Western audience, China's engagement is not primarily motivated by efforts to fight against global warming in the region. Chinese objectives also include utilising Arctic resources (oil, gas, minerals and other non-living resources) in a 'lawful and rational manner'. In the 2018 White Paper, Beijing declares its willingness to work with the Arctic states as the region has an abundance of geothermal, wind and other clean energy resources (State Council Information Office of the People's Republic of China, 2018).

In recent years, Chinese policymakers have focused on mineral sources while encouraging Chinese enterprises to explore and utilise Arctic resources. Their cooperation with Greenland is an example of this. Kvanefjeld, situated in Southern Greenland, is home to one of the most notable REE projects in the Arctic. The mining operations are conducted by Greenland Minerals, an Australian firm, in collaboration with Shenghe Resources, a Chinese company with a significant share and primary partner. In August 2018, the two firms signed a memorandum for further collaboration. Apart from the Kvanefjeld, there are plans for other mining endeavours in the northernmost region of Greenland. Specifically, a zinc mine in Citronen Fjord is being proposed, with oversight from Ironbark in collaboration with China Nonferrous Metal (Koivurova et al. 2019: 49).

The 2018 White Paper was significant to show Chinese ambitions in the region. It was a declaration of the Chinese intention to make the Arctic region the "new Africa" as the declaration linked China's Polar Silk Road project to the Silk Road Economic Belt and the 21st-century Maritime Silk Road (jointly known as the BRI) to 'facilitate connectivity and sustainable economic and social development of the Arctic'. Just a

few months later, the Australia-based Greenland Minerals and Chinese company Shenghe Resources signed an MoU to cooperate on the Kvanefjeld project in Southern Greenland, which is one of the most notable REE projects in the Arctic. Shenghe Resources holds a significant share and serves as a primary partner. Apart from the Kvanefjeld mining project, there are plans for other mining endeavours in the northernmost region of Greenland, such as the zinc mine in Citronen Fjord, which would be managed by Ironbark in cooperation with China Nonferrous Metal (Koivurova et al., 2019: 49).

China's 'near-Arctic State' argument is poorly received by the EU. The EU's ambitious (internal) climate and energy policies are likely to have significant consequences with regard to its growing need for minerals essential for renewable energy technologies, batteries and the overall move towards more environmentally friendly operations. It is anticipated that there will be a substantial increase in the demand for numerous minerals extracted in the Arctic (Chuffart, Raspotnik and Stępień, 2021: 295-297). Besides its undiscovered potential for mineral sources, the massive energy potential of hydropower plants in the Arctic already provides the EU with a considerable advantage in industrial production. For example, in 2017, the European-owned Northvolt declared that it would construct a USD 4 billion facility in the Arctic Circle. The location is far from the main automobile manufacturing plants, but the region benefits from abundant and affordable hydropower potential. In 2018, Northvolt obtained €52.5 million in financing from the European Investment Bank (EIB) for its Vasteras project. The following year, Northvolt secured €350 million again from the EIB for its Skelleftea project. The Skelleftea plant is projected to have up to 40 gigawatt hours capacity by 2024, corresponding to approximately 2 billion individual battery cells sufficient to produce around 500,000-600,000 EVs annually. The plant benefits from significantly lower energy costs compared to China, thanks to the availability of cheap hydropower supply (Hall and Milne, 2019).

The EU officials have occasionally raised concerns over the 'continued tensions and adverse competition (including from China and Russia)' in its neighbourhood as well as potential tensions that could 'arise from competition in contested areas, such as space or the Arctic' (European Commission, 2021h: 6). Likewise, in its resolution of 7 October 2021 on the Arctic, the Parliament noted that

‘one of the factors driving Beijing to gain control over the Arctic’s reserves is the desire to maintain a dominant position in the supply chains of vital resources and key components of emerging technologies’(European Parliament, 2021b: 16). In this vein, the Parliament contended that China’s far-reaching projects and initiatives in the region, ‘declaring itself a “near-Arctic state”, with the ambition of becoming a “polar power”, was ‘cause of great concern’ (Ibid: 8). In this sense, the Parliament was:

> *‘(…) of the opinion that the Arctic should play a central role in the European Raw Materials Alliance, boosting Europe’s output of critical minerals, cutting dependence on China for rare-earth metals and developing opportunities for green economic growth, which is key for the further development of green technology and the fight against climate change, which constitutes the main threat to the region’* (Ibid: 16).

A few days later, the EU’s new Arctic strategy was released. The tone of the joint communication reflected the EU’s security-related concerns over the presence and claims of other actors in the Arctic region. The communication starts with acknowledging that ‘intensified interest in Arctic resources and transport routes could transform the region into an arena of local and geopolitical competition and possible tensions, possibly threatening the EU’s interests’. Referring to the ‘upturn in the activities of other actors, including China and growing interest in areas like ownership of critical infrastructure’, the Commission contends that ‘full engagement in Arctic matters is a geopolitical necessity’ (European Commission and High Representative of the Union for Foreign Affairs and Security Policy, 2021: 1). The document also referred to the Arctic’s potential for renewables (geothermal, wind, green hydrogen and hydro energy) and raw materials. In this regard, the EU made clear that ‘access to sufficient resources is key for the EU’s open strategic autonomy’ and that it must ‘diversify sourcing from outside the EU to meet the growing demand’ just as ‘other global players are already moving fast to secure supplies’ (Ibid: 10).

Looking at the resolutions of the EESC and the European Committee of the Regions (ECR), it is possible to infer that, to some extent, the audience echoed the calls of the Parliament, the Commission and the High Representative. In its opinion on the new Arctic Strategy, the ECR touched upon the business activities and ‘investment potential of around EUR 150 billion’ in carbon-neutral steel, battery manufacturing, mineral extraction and wind energy sectors, ‘a large part of which is linked to delivering on the green transition’ (Official Journal of the European Union, 2022a: 4).

Referring to the Arctic's vast reserve of rare-earth minerals, 'which would help the EU to reduce its dependency on China', the ECR warned about 'the increased interest of third countries in the region, such as China's growing interest' and argued that 'large-scale projects in the Arctic by third parties can be avoided' (Ibid: 5).

The EESC agreed with the ERC concerning the business and investment potentials in the region. The information report issued by the EESC in 2023 stated that countries of the European Arctic were calling for an industrial plan 'to ensure better funding opportunities for mining and renewable energy projects as well as for energy infrastructure to improve the conditions for transporting renewable energy to the rest of Europe' and to 'realise its potential to become a hub for critical raw materials, energy-intensive industry and green energy for the EU' (European Economic and Social Committee, 2023: 10). Yet, it should be noted that the EESC was politically cautious. The report clearly acknowledged the spheres of influence in the region and differentiated between the European and Russian Arctic. As the report was adopted after the Russian invasion of Ukraine in February 2022, the EESC stated that 'the main sphere of influence and responsibility for the EU is the "European Arctic", stretching from Greenland to the northwest of Russia' (Ibid: 5).

3.3. COMPETITIVENESS-RELATED IMPLICATIONS OF CHINA'S POLICIES

Energy-intensive industries in Europe have already been facing competitive pressure. In the last three decades, the share of manufacturing in the EU's gross domestic product has declined to 15 per cent from 20 per cent (Lee-Makiyama, 2021: 6). One reason for that is the higher cost of energy that Europe bears compared to its competitors, which pertains to import dependence and divergences between Member States' domestic policies (Ibid: 32). Another reason, particularly with regard to China, is the subsidisation that their counterparts have been receiving. The steel industry is a clear example in this sense. As Commissioner Bieńkowska once stated, the EU has been clearly standing against the subsidies of the Chinese state on the steel industry for a long time: 'We will not stand for subsidies that tip the scales against those who are competing on their merits. We will push for a world based on private firms out-

competing and out-innovating. Not authorities out-subsidising and out-manipulating.' (European Commission, 2016c).

Various actors raised the implications of declining competitiveness on various occasions. For example, in its opinion on the reconciliation of energy and climate, the EESC stressed the strategic importance of European resource- and energy-intensive industries for EU industrial value chains. The committee argued that the high cost of achieving climate goals was adversely affecting the external competitiveness of these sectors while they were trying to 'align with the low or even non-existent price of external competitors' (Official Journal of the European Union, 2019: 1). The European industry was facing the 'risk of carbon or investment leakage (production or investment being carried out where ETS does not apply)' (Ibid). That is why the EESC called for a reconciliation of industrial and energy policies with climate policy and proposed promoting 'a single, global ETS to set a worldwide price for GHG emissions' (Ibid: 3).

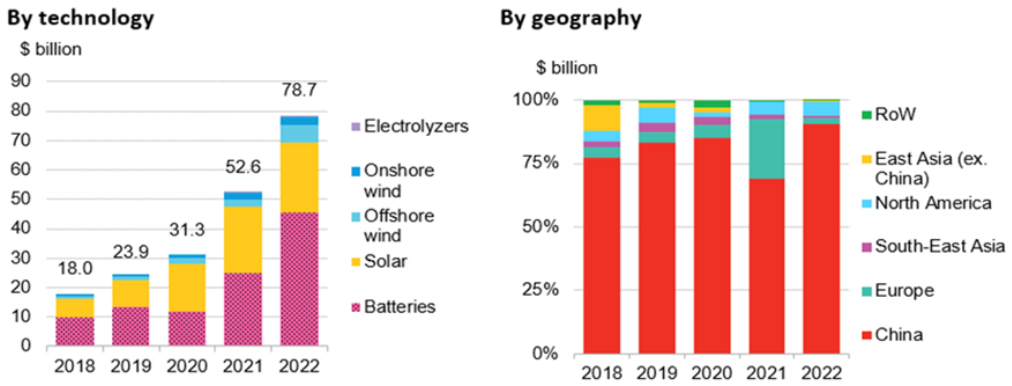
As mentioned earlier, with the impact of the green growth paradigm, since the mid-2000s, states have prioritised their investments in clean technologies in order to increase their competitiveness. The EU defines competitiveness in the clean energy sector as 'the capacity to produce and use affordable, reliable and accessible clean energy through clean energy technologies and compete in energy technology markets, with the overall aim of bringing benefits to the EU economy and people' (European Commission, 2020d: 3). In the light of the EU's new growth strategy, competitiveness in clean technologies has become even more critical apart from its significance to achieve climate targets. As the preceding sections of this chapter outlined, the industrial dimension, hence competitiveness, is intrinsically intertwined with the climate ambitions of the EU's green growth strategy. The 2023 State of the Union Address by von der Leyen clearly reveals this link:

> *The European Green Deal was born out of this necessity to protect our planet. But it was also designed as an opportunity to preserve our future prosperity. We started this mandate by setting a long-term perspective with the climate law and the 2050 target. We shifted the climate agenda to being an economic one (…) From wind to steel, from batteries to electric vehicles, our ambition is crystal clear: The future of our clean tech industry has to be made in Europe.* (European Commission, 2023c).

Clean energy transition has significant prospects for economic expansion and job creation in emerging industries. The implementation of energy and climate commitments by governments is expected to create a global market opportunity for mass manufacturing of clean energy technologies, worth around USD 650 billion per year by 2030, which would mean an increase of more than three times of the current level. Moreover, the employment in clean energy manufacturing industry is expected to double by 2030, more than half of which would be in the manufacturing of EVs, solar PV systems, wind energy and heat pumps (IEA, 2023a: 20). That is why, the business circles have been calling on the EU to adapt a more strategic industrial policy to safeguard its competiveness vis-à-vis China in key technological sectors including climate and energy-related industries such as batteries, low-carbon industries, hydrogen or cybersecurity (Business Europe, 2020: 124).

Nevertheless, the EU is currently facing a mix of technological and non-technological obstacles, including high energy costs, disruptions in critical raw materials supply chains and a shortage of skills. Furthermore, its competitors, particularly China, heavily invest in these technologies. Figure 12 shows that China is a major investor in clean technologies, whereas Europe has a considerably small share of global investments in clean energy technologies. Clearly, the investments in batteries and renewables (solar and wind energy) make a big part of the total investments. That is why the remaining of this section focuses on these technologies.

Figure 12: Investments in Manufacturing of Clean Energy Technologies

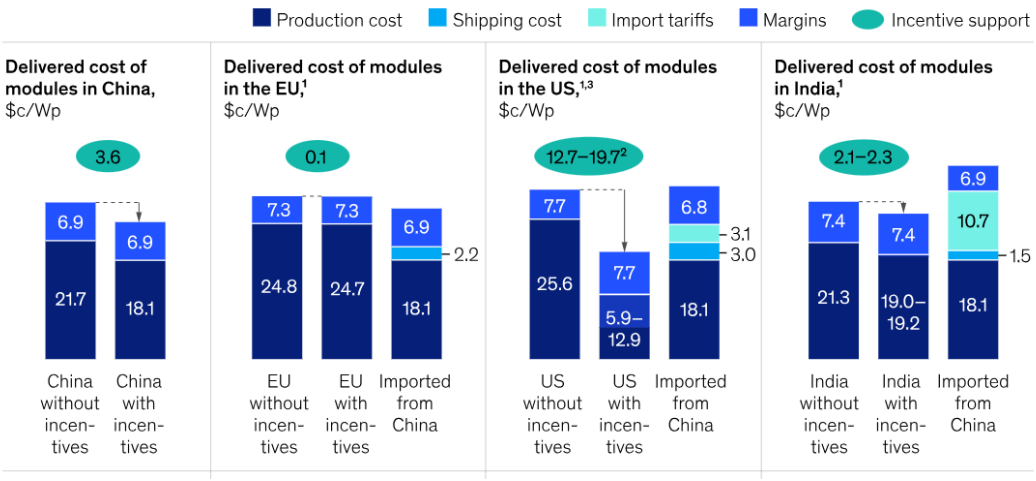


Source: European Commission, 2023b: 7.

3.3.1. Production of Clean Energy Technologies

As discussed in the preceding chapter, the success of Chinese producers in solar PV manufacturing exemplifies its shift from being a recipient to an innovator and an exporter of clean technologies. Through the end of the 2000s, the Chinese solar industry received substantial assistance from the government and local authorities. This assistance included financial support such as loans provided at advantageous interest rates and other supports such as special tariffs for manufacturers, all of which were accompanied by cheap labour. The Made in China 2025 strategy, introduced in 2015 and the subsequent development prioritised the solar industry as a key sector and reinforced support mechanisms (Voïta, 2024: 3).

Figure 13: Impact of Direct Support Mechanisms for Supply Chain Investments on Solar Manufacturing



Source: McKinsey and Company, 2022.

The favourable circumstances enabled China to establish itself as a prominent participant in the global solar sector. The rapid growth of the Chinese solar industry led to overcapacity, resulting in market distortions and unfair competition. Eventually, European innovators, primarily from Germany, were forced to shut down their manufacturing facilities. Indeed, it was the EU ProSun consortium led by Solar World, a German company, that demanded an anti-dumping investigation of Chinese solar PV

exports to the EU in 2013, alleging that Chinese exporters were selling solar modules and essential components (such as cells and wafers) at prices below the market value. The Alliance for Affordable Solar Energy (AFASE), consisting of European downstream enterprises that used Chinese components for solar panels, strongly disagreed with the implementation of trade restrictions on China. The AFASE was accompanied by the VDMA PV, which represented the solar sector of the German Engineering Association and functioned within the global supply chain that sold tools and machinery to Chinese makers of solar cells and modules. When the Commission intended to launch legal action against China to establish a more competitive landscape for European enterprises, the German government, together with 16 other Member States, influenced the decision of the EU by opposing trade measures and proposing negotiations instead. In the end, the Commission declared temporary import tariffs. After the negotiations, the EU and China agreed on a 'price undertaking' in which the Chinese exporters agreed to maintain prices above a certain level (Meckling and Hughes, 2018: 92-97).

Currently, the estimated worth of global manufacturing of PV panels is approximately EUR 57.8 billion, with the EU contributing EUR 7.4 billion (12.8 per cent) to the market. Solar energy enterprises in the EU are mostly competitive in the downstream part of the value chain. They have successfully maintained their competitiveness in the monitoring, control and balancing of system segments, hosting top firms in inverter manufacture and solar tracker technology. However, the enterprises in the upstream part of the production chain, such as solar PV cells and modules, have experienced a decline in their market dominance (European Commission, 2020d: 18). The EESC is particularly critical of the lessons learnt in the solar sector. In its opinion of 26 October 2022, the Committee made the following observation:

> *The case with solar glass, an essential element for locally produced PV panels, is a perfect showcase of the short-sightedness of EU trade policy, whereby the defensive trade tariffs for the final products (solar PV panels) coming to Europe from China were lifted, exposing European producers to harsh competition from overseas, but similar defensive measures for the intermediate products, like solar glass, remained in place. That made solar glass sourced from Europe by European PV producers disproportionately overpriced compared to peer producers in other regions of the world. That in turn also led to pricing pressures for imported solar glass.* (Official Journal of the European Union, 2023a: 7).

The statements of the various officials show that the Commission reciprocated EESC's criticism of the loss of competitiveness in the solar sector. In her 2023 State of the Union speech, von der Leyen touched upon the risks of China's growing presence in the field of renewable/clean energy technologies through the experience in the solar sector:

> *Our industry and tech companies like competition (…) But competition is only true as long as it is fair. Too often, our companies are excluded from foreign markets or are victims of predatory practices. They are often undercut by competitors benefitting from huge state subsidies. We have not forgotten how China's unfair trade practices affected our solar industry. Many young businesses were pushed out by heavily subsidised Chinese competitors. Pioneering companies had to file for bankruptcy. Promising talents went searching for fortune abroad. This is why fairness in the global economy is so important – because it affects lives and livelihoods. Entire industries and communities depend on it. So, we have to be clear-eyed about the risks we face.* (European Commission, 2023c).

There is a parallel story in the wind energy sector. Wind turbine manufacturing and the production of related equipment started in Europe in the late 1980s. Supported by the state policies that were specifically designed to promote the growth of renewable energy sources, the wind energy sector quickly flourished. However, in the early 2000s, the pressure from international competitors on the EU manufacturers increased as Brazil, China, India and South Africa started to expand their wind energy production capacities. China initiated the development of its wind power sector by acquiring technology from European companies via licencing agreements and joint ventures. For example, collaboration between Germany and China in the field of technology involved working together on research and development initiatives, which led to the creation of large-scale wind turbines. However, Chinese companies quickly leveraged their own expertise and resources to develop wind turbines that were specifically designed to meet the unique conditions of the Chinese market. This included the creation of low wind-speed turbines that could operate effectively in desert regions characterised by intense heat, aridity and sand exposure (Pigato et al., 2020: 90).

As discussed in Section 4.2.2, China plays a dominant role as the provider of raw materials and components to the wind energy sector in the EU. However, it is also emerging as a significant rival in the global market, which holds great significance for European enterprises. The competitiveness of Chinese enterprises stems mostly from its cost advantage, a natural consequence of having shorter supply chains owing to its

dominance in steel production and raw materials and abundance of financial support. The cost advantage results in lower output prices, on average 20 per cent lower than those of their European and US counterparts. This creates a trade imbalance between China and the EU. In 2022, the EU experienced a significant trade imbalance with China in the wind sector, resulting in a record deficit of EUR462 million (European Commission, 2023d: 4).

Battery and EV production is where the race for competitiveness has become harsher. As discussed in Section 4.2.2., the Commission's strategic approach to battery production was prevalent before the Green Deal. Apart from its climate and energy-related ambitions, the Commission paid attention to the battery sector for competitiveness reasons. In its communication on the Implementation of the Strategic Action Plan on Batteries, the Commission stressed the risks of losing competitiveness in this sector:

> *If no action is taken to support the creation of a viable battery manufacturing sector, there is a risk that Europe falls irreversibly behind its competitors in the global batteries market and becomes dependent on imports of battery cells and raw materials used in the supply chain. To prevent a technological dependence on our competitors and capitalise on the job, growth and investment potential of batteries, Europe has to move fast in the global race to consolidate technological and industrial leadership along the entire value chain.* (European Commission, 2019e: 1-2)

Likewise, the Parliament was drawing attention to the Asia-Pacific Region for hosting the largest battery producers and China and the US for controlling the EV market, calling for efforts 'to stimulate innovation and further promote competitiveness and growth of the European industry in the increasing global markets for clean vehicles and associated technology infrastructure' (Official Journal of the European Union, 2020a). In its revision of the proposal for a directive on the promotion of clean and energy-efficient road transport vehicles, the Parliament even made a specific amendment to integrate these concerns into the Commission proposal (Ibid.)

In addition to its essential function in the renewable sector, particularly in energy storage, battery production has a critical place in the EU's competitiveness in the automobile sector, particularly in EV production. EV production is a significant advancement in low-carbon transportation. It gained momentum in the late 1990s due to the energy crises of the 1970s and the growing awareness of environmental pollution in the 1980s. California's efforts to promote fuel-efficient and environmentally friendly

automobiles, for example, was one of the earliest examples of such awareness (European Commission, 2020f: 34).

China possesses the majority of materials required in the EV industry and its trade network allows Chinese firms to acquire resources that are not available domestically. Today, the majority of hybrid and electric vehicles utilise synchronous motors equipped with NdFeB magnets. China has a monopoly on the production of NdFeB magnets, accounting for 85 to 90 per cent of the global production. The remaining magnets are manufactured in Japan, the United States and the EU. The NdFeB magnet family comprises REEs such as neodymium, praseodymium and dysprosium, which are characterised by a high concentration of supply (European Commission, 2020f: 34). The Chinese EV manufacturers also take advantage of a highly interconnected automotive industry, which comprises more than 10,000 companies that manufacture auto parts. Local suppliers have the capability to produce all the essential components for electric EVs, including batteries, motors and electric control systems. Furthermore, the EV industry in China benefits from a flourishing domestic automobile market, which is supported by the government's support through measures such as the directive mandating that 20 per cent of new vehicles would be plug-in EVs by the year 2025 (Pigato et al., 2020: 95-98).

It is estimated that Chinese EV brands will make up 11 per cent of the electric vehicle market in the bloc by 2024, with the possibility of reaching 20 per cent by 2027 (Teer and Trakimavičius, 2024). Obviously, this did not happen overnight. China has been progressively rising in EV production since the mid-2010s, which resembles the EU's tragic experience in the solar industry. However, the automotive industry is considered strategically more important for the EU economy. Europe's manufacturing capacity is significantly large and approximately 2.4 million individuals are directly employed in automobile manufacturing in Europe, with the total number of jobs rising to over 3 million when indirect manufacturing positions are considered (Mazzocco, 2023: 8). Therefore, the Commission was already working on the future of EU's competitiveness in this sector. For example, referring to the clean energy package of 2016, then-Commission President Juncker made the following statement at the 2018 Conference on Energy Security:

> *We are doing this because it's the right thing to do, it is an imperative to fight climate change, address air pollution and related economic losses. But we are*

> *also doing this because it's the smart thing to do. The European automotive industry is a major contributor to economic growth and employment in the EU. Yet, it is faced with difficult international competition. In some aspects we are falling behind (…) This must change. Don't get me wrong. I welcome the fact that other global markets are ambitious about their energy transition. I welcome the efforts taken by authorities like those of California or China on electric mobility. But I would like to make sure Europe does not lag behind. We must continue paving the way rather than following others!* (European Commission, 2018b).

In the same speech, Juncker also stated that clean energy initiatives would 'help industry to regain consumers' trust' (European Commission, 2018b). In fact, he was referring to what is known as "the Dieselgate scandal".[11] The cheating of VW, which adopted a marketing strategy based on trumpeting low emission rates of its cars at that time, was a blow to the market. The company was accused of changing the software in various VW-manufactured models. VW admitted that it discovered some 'irregularities' in its emission assessments, which might have impacted around 800,000 cars in Europe and announced that it would repair all affected cars by autumn 2017 (Hotten, 2015).

Already concerned about the future of the European automakers' competitiveness, the Commission took the scandal very seriously and took steps under the Consumer Protection Cooperation as well as in coordination with the European Court of Justice. In 2016, the Commission President made the following statement:

> (…) *the car manufacturers said that it was only VW. An isolated issue. But then we hear about other manufacturers. And now we hear that it covers thermo windows. And what will we find out tomorrow? Look at the impact of the banking crisis on the financial sector. And 8, 9 years on, it still hasn't fully recovered. Is that what we want in your sector? If we don't, it is time to put all the cards on the table. Now. We need to regain credibility. (…) We have made some progress, but not enough. And the reason for that lack of progress is very simple. Denial by car manufacturers. Lack of determination by too many authorities. Too little honesty about the situation, too little cooperation* (European Commission, 2016d).

The Commission was decisively pushing for clean energy targets to keep up with the competitiveness race while the automobile industry, particularly the German manufacturers supported by the German government, were resisting such

[11] In 2015, the United States Environmental Protection Agency found out that a significant number of Volkswagen (VW) vehicles sold in the United States were equipped with a software installed in diesel engines that could identify when the vehicles were undergoing testing and could change the emission performance of the vehicle. Under controlled laboratory conditions, the device seemed to engage a safety mode in which the vehicle's engine operated at reduced power and performance levels; hence at lower emission levels. Upon commencing travel, the engines transitioned out of this test mode. For more information, see Hotten, R. (2015). Volkswagen: The scandal explained. *BBC News*. https://www.bbc.com/news/business-34324772, (15.09.2024).

commitments. In 2017, then-Foreign Minister Sigmar Gabriel expressed Germany's disapproval of the Commission's proposal to increase European car emissions targets by 2025, emphasising the potential job losses and interruption of economic growth and stated that the 'overly tight EU legislation' might hinder the innovation capacity of the automotive industry. He added that 'any forms of quotas for electric vehicles (EVs) as well as a toughening of the EU's car emissions goals by more than 20 per cent by 2025 would be dangerous' (Wacket, 2017). Even though the Commission clearly stated that investing in clean vehicles was the only way to regain trust in the industry, which had already fallen behind China and the US, the critics argued that the Commission's preference for softer measures, such as incentivising the production and use of clean vehicles by public transport authorities and citizens instead of mandatory zero-emission rules was the result of lobbying by German auto group VDA (Morgan and Radosavljevic, 2017).

At that time, the market share of European automakers was still substantial. However, they seemed to neglect the advancements in battery technology, both in the production of cars and buses, allowing Chinese companies to dominate the EV market (Oertel et al., 2020: 15). In December 2019, Commissioner Sefcovic moaned over the 'complacency' in European industry with these words: 'We discovered two years ago an assumption in the motor industry that the shift to EVs would come much later and that batteries would be a commodity' (Hall and Milne, 2019). He stated that the motivation behind the European Battery Alliance was to overcome the challenge of persuading the European battery makers to scale up their production and reassuring them that the European carmakers would, in turn, make long-term purchases. At this point, the Commission needed to use its 'convening power… to get the right people in the room' (Ibid.). In other words, it could be argued that the Commission's dedication for a more competitive European industry, stemming from its prior insights, was reflected in its efforts to push the European car manufacturers to adapt new and "greener" production technologies that China has already adapted.

3.3.2. Standardisation

Under the growing pressure of Chinese dominance in the market, the scale of production has become more critical than ever for the EU. However, the analysis of Bettoli and others shows that even if the European industry attains the scale and excellence effects, the EU would still experience cost disadvantages against the current lowest cost levels in the global renewables market. The disparity is estimated to be around 25 per cent in solar PV manufacturing. In order to thrive, European companies must develop high-quality products that possess a strong brand identity based on sustainability and a low-carbon footprint (Bettoli et al., 2022). This brings us to the standardisation of clean energy technologies.

Technical standards are universal requirements that guarantee interoperability and fundamental safety. They facilitate the utilisation of items and technologies without being limited by the manufacturer or geographical boundaries, serving market integration at the global level. Hence, standard-setting processes should be inclusive and transparent (Rühlig, 2023: 104). However, in the last decade, the technical standard-setting has become an instrument of rivalry for competitiveness-seeking countries. To quote Shapiro (2020:6), in the current geopolitical context, 'who owns the technologies of the future, who produces them and who sets the standards and regulates their use have become central to geopolitical competition'. As the following statement by von der Leyen illustrates, Shapiro's argument very much reflects the EU's current approach to standardisation:

> *Who defines the rules of the game? High-tech is great – but what is the purpose you use it for? Who is setting the standards? Who is setting the standards that will govern and protect our societies? Is it the market? Is it the government like in China? Or is it the human-centric approach that is our European approach?* (European Commission, 2022i)

In the past, standardisation decisions were taken mainly by the private sector without direct political influence, reflecting primarily the private sector's interests. However, China's state-centric approach to standardisation, particularly since the beginning of reforms in 2015, has created a new geopolitical reality. After years of engagement, China not only learnt the Western practices of standardisation but also became fully aware of its strategic importance. Even though the Chinese standardisation system has always been state-controlled compared to the industry-

dominated systems in the USA and the EU, the incumbent party-state in China has increased its involvement. For example, in 2017, out of 277 standardisation institutions in China, 192 institutions were affiliated with the state (Seaman, 2002: 11-12). In 2018, as part of the China Standard 2035 strategy, China established a two-tier standardisation system and launched formal and informal mechanisms to control the actors and processes in critical sectors, particularly telecommunications (Rühlig, 2020: 104).

Besides its active presence in standards development organisations (SDOs) such as the International Telecommunication Union, China has invested significantly in standardisation initiatives beyond the established organisation. China often employs domestic standards that deviate from international standards in terms of their content or supplement them with extra-national criteria. As of 2020, its implementation of international standards has seen a decline, with the percentage dropping from approximately 45 per cent in 2008 to a range of 20-25 per cent (Business Europe, 2020: 85). China has remarkably introduced its domestic standards to countries that owe a significant portion of their economic activity to China. The Belt and Road Initiative (BRI), for example, aims to promote Chinese technological standards through mutual standard recognition agreements with the participating countries (Seaman, 2020: 26). In the same vein, Chinese international investment in renewable energy has significantly increased since 2013 due to the BRI (Yeophantong and Goh, 2022: 84).

The EU has long been a well-positioned actor in the global standard setting. Its legislative frameworks are mature, inclusive towards the stakeholders and designed to create high-quality standards. In 2012, the EU reformed its system with the endorsement of Regulation 1025/2012, which put transparency and public-private partnership at the core of the standardisation processes (Bjerkem and Harbour, 2020: 12). Also, European companies have long had a considerable influence in the international standard-developing organisations (Rühlig, 2023: 103). However, China's growing presence in international standardisation creates significant challenges for them. In climate-related sectors, the competition in international standardisation is a scene for increasing tensions mainly because of the global confrontations in technological and digital transformation. Since 2020, the Chinese

government has considered new energy and materials as crucial technological fields for international standardisation (Altun and Ergenc, 2023: 449).

As Thierry Breton, Commissioner for the Internal Market, puts it, 'technical standards are of strategic importance' and 'Europe's technological sovereignty, ability to reduce dependencies and protection of EU values' relies on its ability to remain a global standard-setter (European Commission, 2022b). In the 2021 Strategic Foresight Report, the Commission acknowledges that China is taking 'more assertive actions in terms of standard-setting', trying to impose its technology on countries participating in the BRI, even though they are 'not always compatible with open global regulation, human-centred standards and sustainable values' (European Commission, 2021h: 12). The report also states that 'the international acceptance of EU standards is crucial for its influence in the global order and leadership on climate change, sustainability and protection of consumers, personal data and rights at work' (Ibid: 13).

The liberal emphasis on human-centrism and values is frequently addressed in the EU's discourse on standards. In fact, the EU has been meticulously framing the European approach to standardisation as a "superior" approach while portraying the Chinese standardisation efforts as 'dangerous' to these liberal values. The following statement by HR/VP Borrell is a clear illustration of this framing:

> *There are three competing visions in the world today: an American vision that is basically in favour of regulation by the market, so it will push for international regulation to be as light as possible – 'Let the market do it.' A Chinese vision that wants regulation by the State. China will push for global regulation where every one remains in control at home and we know how dangerous it can be. And, finally, a European vision that wants data to be protected for the benefit of citizens in Europe and around the world. This brings us to a battle of standards that has only just begun. Multilateralism is a good instrument to protect our humanist and liberal vision. We, Europeans, we have been norm setters because we have been technological leaders. If we lose the leadership of technologies, we will not be able to continue being the norm setters.* (European Union External Action, 2020)

HR/VP Borrell also stressed the power of standard-setting at the 2022 Munich Security Conference, one of the most significant security conferences, which shows the significance of this issue for the EU. In his speech, Borrell mentioned 'the battle for standards'. He continued with these words: 'It is no exaggeration to say that who sets the rules, will rule the world. And to Europeans who love to talk about 'the Brussels effect', I say that we will not be a leader on setting technology standards tomorrow if we are not a leader on developing technology today' (European Union

External Action, 2022b). The Parliament displayed a similar approach and called on the Commission 'to pay particular attention to the role of international standard-setting' while warning 'against the nationalisation of standard-setting approaches, particularly in the context of China's Belt and Road Initiative and other connectivity-enhancing strategies' (Official Journal of the European Union, 2021d: 5).

3.3.3. Exportation of Clean Energy Technologies

Trade policy is one of the main instruments that the Commission has intended to use to achieve its green growth ambition. Commissioner Breton's statement of 06 September 2023 demonstrates this intention:

> *Global trade accounts for 25% of our GDP. Trade in goods represents almost 70% of the EU's exports and we remain the second world exporter after China and consistently ahead of the United States. The point is, we want it to remain thus! (...) So, be it chips, batteries, solar panels, or hydrogen, we want the EU to remain an industrial leader that exports European products and technologies – but not our jobs.* (European Commission, 2023e).

China's trade and investment relations with the South, particularly in Africa, in the realm of clean technologies, are another source of concern for the EU. In the early 2000s, Chinese intellectuals proposed in their scholarly discussions that China should pursue its 'dynamic comparative national interest' by expanding its global influence through transnational direct investments to other countries and conducted various analyses concerning investment plans of Chinese enterprises in Africa (Zhang, 2010: 51-52). The primary objective was to explore and capture the African market, the growth of which would naturally become a pushing factor for the growth of Chinese foreign trade. The breakout of the US financial crisis in 2008 presented a unique opportunity for China in this sense. Chinese enterprises were prompted to increase their international economic cooperation through more active and extensive global engagement. In 2008, a significant portion of China's foreign direct investment (FDI) was directed towards various African countries, with a remarkable increase of 249 per cent compared to the 2007 level. Provision of loans and grants through infrastructure cooperation, particularly, opened up new markets in Africa, allowing China to absorb its excess manufacturing capacity (Ibid: 46).

Chinese FDI has gained profound momentum with the launch of the BRI. In the aftermath of the 2008 financial crisis, the Chinese government released a ¥4 trillion

recovery package, awarding Chinese firms contracts for the construction of airports, bridges and railroads. The recovery efforts, reinforced by the existing manufacturing-based industrial development strategy, resulted in oversupply in the Chinese market. BRI would offer China's state-owned enterprises an alternate market outside of its territorial boundaries. Accordingly, China's exploration of solar and wind markets abroad has primarily been motivated by its surplus manufacturing capacity compared to domestic demand. The state, primarily the state-owned banks that align with government policies, has been extensively encouraging overseas renewable investments (Zhang, 2010: 46).

Before the launch of BRI, Chinese solar and wind energy investments were mostly concentrated in the North. The analysis of Tan and others reveals that, between 2002 and 2012, the United States remained the leading destination, attracting eight wind and 24 solar investments. Italy, Spain and Germany have been particularly attractive to Chinese investors due to their significant solar energy penetration. Among the developing countries, South Africa, Bulgaria and Pakistan emerged as the top three developing destinations to attract a significant number of Chinese investments (Tan et al., 2013: 3). For example, the South-South Climate Cooperation Programme (SSCCP) has served as a key platform for sharing China's technology and expertise in climate action with developing countries. Between 2015 and 2020, the programme provided financial support for the establishment of 10 low-carbon demonstration zones and 100 projects and taught more than 5000 technical professionals about climate action and ecological conservation (State Council, 2021a). In 2021, the SSCCP granted over ¥1 billion to initiatives in 35 developing nations, with a focus on lower- and middle-income countries in Africa and Asia. These programmes enabled China to transfer its knowledge and expertise in large-scale ecosystem management and restoration (Qi and Dauvergne, 2022: 6).

BRI became the driver of technology transfer to Africa through targeted investments in renewable energy projects, including solar, wind, hydro and geothermal energy initiatives. The “green” investment strategy of the BRI aligns with China's strategic focus on integrating renewable energy sources into its overseas infrastructure projects. The initiative has provided avenues for collaborative efforts, facilitating the flow of clean/renewable energy technology from China to African nations. The

successful implementation of technologies relies on having both the physical technology, like solar panels and the necessary skills and knowledge to use and adjust the technology. Achieving the desired development benefits of low-carbon energy production in the South, hence, requires the integration of technological solutions into the local environment. That is why many African countries find themselves caught in a problematic situation, torn between the need to expand energy access using the limited fossil-based technologies and funding they have and the long-term impacts of climate change. Unfortunately, without adequate international support, this dilemma persists. This pattern gives rise to a potential issue of a disparity in the distribution of knowledge and expertise required to customise technologies to suit local conditions and establish energy-efficient systems on a global scale (Weko and Goldthau, 2022: 2).

In the last decade, China has taken on a prominent role in bridging this technological gap for Southern countries. Since the early 2010s, China has decisively increased the scale and scope of its technology transfers to underdeveloped countries. For example, in 2015, China announced the establishment of a US$3 billion South-South Cooperation Assistance Fund and an extra US$3.1 billion fund to assist other developing nations in climate change mitigation (Ibid). In the end, the technological rise of China, as well as other emerging economies, has created four geographical flows: from North to South (from EU to China), from South to North (from China to EU), from South to South (from China to Asia or Africa) and from North to North (from EU to US or vice versa) (Urban, 2018:321).

It is observed that China's provision of financial aid in the form of grants and concessional loans empowers the African leaders to be more selective in their decisions as recipients of foreign aid, partially decreasing the bargaining power of other major donors. Swedlund (2017) argues that African governments often show a preference for Chinese finance over traditional donors because not only does Chinese assistance provide a new source of income, but the African governments also find Chinese financing appealing due to its speed and lack of bureaucratic hurdles. Particularly when China is in direct competition with other donors on massive investments such as infrastructural projects, it stands as 'a fierce competitor' (Swedlund, 2017: 405).

The Chinese example made the EU pursue a similar strategy to be able to stand out in this competition. Between 2014 and 2020, EU institutions and Member States (Team Europe) provided a total of EUR 15.1 billion towards energy initiatives in Africa, with an average yearly contribution of EUR 2.16 billion. In 2019, the amount of allocated funds (grants and loans) reached a peak of EUR 2.8 billion. In 2020, under the Team Europe framework, the EU committed EUR 1.93 billion to SDG7 projects in Africa, which primarily targeted renewable generation (RE) (EUR 1.1 billion) and transmission and distribution (T&D) projects (EUR 778 million). The allocations were in parallel with the overall targets of the study period (2014-2020). European donor efforts have been predominantly directed towards renewable generation and T&D, with 55 per cent and 34 per cent of total commitments, respectively. Among RE projects, the highest commitments were allocated to renewable energy generation, specifically grid-based solar and multiple technologies, while T&D projects were mainly directed towards large-scale grid projects (AEEP, 2023: 33-41). On the other hand, between 2010 and 2018, the Chinese state and commercial banks extended nearly USD 148 billion in loans, primarily for infrastructure ventures throughout Africa, with about USD 37 billion allocated for the energy industry (Chiyemura, Shen, and Chen, 2021: 2). From 2010 to 2020, Chinese investments in renewable energy in Africa increased at an average annual rate of 26 per cent, with solar, hydroelectric, and wind as the predominant technologies (Omolere, 2023).

The initial approach of the EU towards BRI was moderate. In 2017, the Commission stated that BRI would be complementary to the EU's Trans-European Networks policy or the EU-China Connectivity Platform, which might help manufacturers and businesses lower their transport costs and open into new markets (European Commission, 2017). However, around the same time, the EP, being critical towards the growing influence of China in Europe and the global market, was raising its doubts about Chinese influence, 'which is not just economic but has strategic and security-related dimensions' (Official Journal of the European Union, 2020). Since then, the EP has constantly raised its concerns about the 'emergence of new and resurgent political and economic regional players such as Russia and China*'* in the region and has occasionally called on the Commission to adopt a more substantial commitment to make the EU a central player (European Parliament, 2019). In its

resolution on the 2021 EU-Africa Strategy, the Parliament frankly stated its dissatisfaction with the rivalries over the potentials of Africa, ‘which has become a new arena of great power competition’ and that ‘other players, especially China and Russia, are advancing their geopolitical interests (…) at the expense of the sovereignty of African countries and European security’ (Official Journal of the European Union, 2021e).

The Parliament is particularly critical of BRI loans provided by China to developing countries of the South and the ‘debt-traps’ experienced by these states (Official Journal of the European Union, 2021f: 6). As a massive investment project, since its launch, BRI has been criticized for various reasons. In the context of Sino-African relations, much of the criticism focuses on the 'debt distress' of African nations (Ferreira, Critelli and Johnson, 2020). Even though the factors contributing to the emerging debt crises have been prevalent for some time, the situation is exacerbated by ‘China's debt-trap diplomacy’ (Ibid). It is widely argued that the economic vulnerability of these nations allows China to exert its influence and provide them with financial relief in return for access to their mineral resources. Resource-backed loans are provided to a government or a state-owned enterprise, with repayment being paid either by the direct provision of natural resources such as oil or minerals or through future income generated from resource-related activities. The Sino-Congolais des Mines (Sicomines) agreement of 2007 is a prominent example of this resource model. The agreement provided Chinese enterprises (Sinohydro and China Railway Engineering Corporation) with access to cobalt, copper and other minerals in return for infrastructure investments. These enterprises were granted mining rights to resources worth $93 billion near Kolwezi, DRC, in exchange for China's investment of approximately $3 billion in infrastructure development (Baskaran, 2023).

In 2020, China was the largest creditor in the region, holding more African debt than the total amount held by the subsequent ten creditors. A significant number of Sub-Saharan African countries with REE reserves are currently facing the risk of defaulting on their international debts. In other words, they have excessive amounts of international debt and are currently at a considerable risk of not being able to repay it (Heitzig, Ordu and Senbet, 2020: 3). The possibility of a debt crisis in Africa also found a place in the HR/VP Borrell’s statements as well:

> *If tomorrow there is a debt crisis and there is a big restructuring of the developing countries' debts, China is the greatest creditor. The biggest creditor in the world today not being member of the Paris Club is China. The biggest bank of the developing world is no longer the West, it is China* (European Union External Action, 2023a).

The EESC has a similar position concerning China's 'pursuing its Silk Road project, occupying strategic positions step by step, making countries in Africa and Asia politically dependent on it by offering large loans that are only outwardly bounteous, but that in reality leave them shackled' (Official Journal of the European Union, 2022b:3). The EESC is concerned that 'Europe is losing ground in Africa in comparison with other global players like China, investing billions in the continent' and that 'Member States (…) will find themselves relegated to the second league' (Ibid: 5). For this reason, the Committee called on the EU to use various instruments including the diplomatic dimension of the civil protection mechanism, which was established to improve prevention, preparedness and response to disasters and for the protection of civilians during disasters, to reduce the influence of China and Russia in the region (Ibid: 4).

It should be noted that not every member state was equally concerned about such a possibility. In another speech in May 2023, Borrell acknowledged that different interests unavoidably make EU-China relations more complicated (European Union External Action, 2023a). It is commonly known that Chinese investments in strategic sectors of the economy or the hope of securing money to address investment shortfalls have been the main determinants of Central and East European (CEE) Member States' (particularly Greece, Hungary and Italy) approach towards China, making them more passive to the Chinese policies in Europe and other parts of the world. Member States with a higher GDP per capita, on the other hand, tend to take a more active and vocal position against the infringement of core political values (Seaman et al., 2018). Greece's veto of a unified European action in the UNHRC in 2017 concerning China's human rights violations or Hungary's prevention of a joint letter condemning the illegal detentions in China the same year are examples in this sense. Apart from economic motivations, CEE countries are also motivated by their desire to redefine their domestic and international roles. In other words, the diversification of trade and investment partners is also a political statement for these countries (Kavalski, 2020). The proclamation of being independent of the EU's political "impositions" was

evident when Czech President Miloś Zeman stated that Czechia was ‘once again an independent country’ and was no longer ‘submissive to the pressure from the US and the EU’ during Chinese President Xi Jinping’s visit to the country in 2016 (Ibid: 13).

3.4. RUSSIA’S WAR OF AGGRESSION IN UKRAINE AND (TRADITIONAL) SECURITY IMPLICATIONS OF CHINA’S POLICIES

The EU’s association of climate targets with its growth has gained a security dimension after Russia’s war of aggression against Ukraine in 2022. As discussed in the preceding chapter, until the mid-2010s, the EU’s energy policy was market- and sustainability-oriented. Even after the Ukrainian crisis in 2014, the Member States exhibited significant disparities towards the Union’s energy policies due to their reliance on Russian fossil fuels and political ties with Moscow. The war of 2022 was a game-changing development in this sense. Member States could align their views towards adopting a more stringent approach against Russia and agree on sanctions, with the option for limited cooperation with Moscow in certain areas (Tocci, 2022: 24; Mayer and Peters, 2017: 141). The European Council immediately declared ‘its unwavering support for the independence, sovereignty and territorial integrity of Ukraine within its internationally recognised borders’ (European Council, 2022a: 2). At their meeting in Versailles in March 2022, the Heads of States and Governments again expressed their solidarity with the Ukrainians against ‘Russia’s unprovoked and unjustified military aggression’ (European Council, 2022b: 1).

Russia’s war against Ukraine ‘caused the biggest energy shock to Europe since the oil crises of the 1970s’ (Falkner, 2023). In the first quarter of 2022, wholesale gas prices in Europe were five times higher than the previous year, culminating in a historic peak in August 2022. The soaring energy prices adversely affected the manufacturing costs in energy-intensive sectors (European Commission, 2022c: 3). As a response, the leaders agreed to phase out the EU’s dependency on Russian gas, oil and coal imports through various measures and asked the Commission to work on a plan (European Council, 2022b: 5-6). The declaration also addressed critical dependencies in raw materials, semiconductors, health, food and digital spheres (Ibid: 7).

The EU made a great effort to quickly diversify its gas supply by deepening the existing partnership with its main gas suppliers, such as the US. The Commission and the US administration agreed on an additional delivery of liquefied natural gas (LNG) to the EU for at least 15 bcm[12] in 2022 and approximately 50 bcm annually until at least 2030. Furthermore, the Commission reached Canada for LNG and hydrogen deliveries, Norway, Algeria and Azerbaijan to increase their pipeline gas deliveries to Europe and Qatar to facilitate swaps with Asian countries (European Commission, 2022g). In June 2022, the EU signed an MoU with Egypt and Israel to supply LNG (European Commission, 2022d). The EU invested in the construction of new infrastructure for importing LNG. In September 2023, a new LNG terminal, with a capacity of up to 13.5 bcm of gas per year, was inaugurated at Mukran on Ruegen Island in the German Baltic Sea. The terminal was operationalised after the project received operating permission in April 2024 (Reuters, 2024).

Initially, the European governments were compelled to make decisions that would jeopardise the EU's net zero emission target. Germany, France, Austria, Italy and the Netherlands declared their intention to prolong or reinstate the operation of coal-fired power plants as a substitute for Russian gas in the production of energy. The German government, for example, prolonged the operational period of numerous nuclear power reactors that were originally scheduled for decommissioning. Simultaneously, European countries diverted to alternative sources of energy, primarily from North America, North Africa and the Middle East, regardless of the need to establish long-term energy agreements with authoritarian regimes in the Middle East (Falkner, 2023).

In the long term, however, the perils of depending on imported energy prompted the EU and the Member States to accelerate their climate policies with an effort to increase their domestic energy production and thereby substitute imported fossil fuels. Hence, fighting against climate change has become increasingly associated with security after the Russian invasion. In February 2023, Margrethe Vestager, Executive Vice-President of the Commission, stated that the EU's energy system was 'weaponized' by Russia and continued with these words:

> *Had we forgotten we were reminded that there is also a security dividend in fighting climate change. The more self-sufficient we become when it comes to*

[12] "BCM" is the abbreviation for "billion cubic metres".

> *providing energy, the safer we are. This is where a lot of different interests come together. We want to accelerate what we do now to fight climate change. We need to accelerate the deployment of renewable energy in order to be more self-sufficient than today.* (European Commission, 2023f).

In 2022, wind and solar power accounted for 22 per cent of the EU's electricity generation, surpassing both natural gas and coal for the first time. The increase in clean energy production and supply, with the efforts to diversify fossil fuel suppliers, resulted in the reduction of the share of Russian gas in EU imports from 45-50 per cent to below 10 per cent (European Commission, 2023f). However, the dependence on Russian imports was more than a matter of energy security for the EU. On 14 September 2022, during her annual State of the Union Address speech, von der Leyen made the following statement:

> *This is not only a war unleashed by Russia against Ukraine. This is a war on our energy, a war on our economy, a war on our values and a war on our future… Our friends in the Baltics have worked hard to end their dependency on Russia. They have invested in renewable energy, in LNG terminals and in interconnectors. This costs a lot. But dependency on Russian fossil fuels comes at a much higher price. We have to get rid of this dependency all over Europe.* (European Commission, 2022e).

Upon the Council's request, on 08 March 2022, the Commission proposed REPowerEU to phase out dependence on Russian fossil fuels before 2030. In its proposal, the Commission stated that 'the case for a rapid clean energy transition has never been stronger and clearer' (European Commission, 2022f: 1). In May, the Commission issued another communication entitled EU External Energy Engagement in a Changing World. Referring to the dependence on imports of minerals, the Commission reiterated that the EU was determined to avoid new dependencies in the future just as it was determined to end its dependence on Russian energy. In this vein, the communication included proposals such as 'mutually beneficial raw material value chain partnerships in Africa (e.g. Namibia), Latin America, Western Balkans and with Australia, via trade agreements or Memoranda of Understanding' (European Commission, 2022g: 16).

In November 2022, the Commission expressed that delivering REPowerEU objectives would require massive scaling-up and speeding-up of the deployment of clean energy technologies, which were already critical for achieving the EU's climate goals. For that, the EU would need to make an additional cumulative investment of EUR 210 billion between 2022 and 2027 (European Commission, 2022c: 1). Referring to China's 'near monopoly in mining and processing the rare earth elements crucial

for clean energy technologies', the same document included the following observation by the Commission:

> *The EU heavily relies on supplies from third countries and the twin green and digital transition will be fuelled by access to raw materials. The recent trends in the global supply chains of materials and resources have highlighted the urgency to strengthen the EU's resilience and its energy supply security through materials and resources independence and technology sovereignty. (…) An emerging challenge is to avoid replacing fossil fuel dependency with a dependency on imported raw materials and the technological expertise for their processing and for manufacturing components.* (Ibid: 5-6).

Some of the leaders echoed the Commission's warnings. For example, in October 2022, Emmanuel Macron, the President of France, stated that the EU 'cannot substitute one dependency by another' (European Union External Action, 2022c). As two major European economies with advanced levels of industrialisation, France and Germany have already been pursuing active policies against challenges in mineral supply chains. Within the Member States, only France and Germany set up institutions to oversee the supply of critical raw materials for their industry to monitor the global raw materials market and identify the risks affecting domestic raw materials consumers (European Commission, 2023a: 14). In particular, Germany is highly dependent on metal imports for its manufacturing industry. It was the first EU member state to announce the aim of becoming a net-zero emitter by 2045 as early as 2000. That is why the German leadership has been establishing partnerships for long-term supply contracts in line with its national raw materials strategy. It is believed that the European raw materials initiative was a result of the German proposal, which came in the aftermath of China's imposition of export restrictions on REE (Rech, 2015: 67-73).

After the war, the reliance on China became a much more serious concern for the EU for three reasons. Obviously, the first reason is that China's dominance over the extraction and supply chains of minerals gained more significance. Indeed, as the war revealed the potential risks to the energy supply chain, the EU leaders paid closer attention to supply-chain distractions in renewables (Mayer and Peters, 2017: 140). To illustrate, an interruption in the KA-SAT satellite network during the Russian invasion of Ukraine resulted in the inability to maintain and remotely control 5,800 wind turbines in Germany, which have a combined power output capacity of 11GW (Kratz et al., 2022: 5). Hence, apart from its traditional concerns over energy supply, the war

in Ukraine heightened the EU's considerations over the emerging geopolitics around the global value chains. Rather than solely focusing on procuring raw materials, they adopted a broader geopolitical perspective on supply chains, with an effort 'to achieve resilience and reduce dependencies from unreliable partners' (European Commission, 2024b: 1).

On 29 June 2022, in its second annual strategic foresight report, the Commission stated that 'Russia's military aggression against Ukraine has increased the importance of the geopolitical aspects of the clean energy transition, highlighting the need to accelerate it and to join forces to achieve a more resilient energy system and a true Energy Union'. In that context, the Commission also acknowledged that securing access to critical raw materials would be paramount for the EU's twin transitions and that 'EU's dependence on third countries, including China, for a number of critical raw materials, is even greater than that on Russia for fossil fuels' (European Commission, 2022h: 8).

The tone of the document was a clear reflection of the geopolitical developments of 2022. Whereas the tone of the first strategic foresight report was more technical and was focused on the EU itself, the second report was clearly designed to give a geopolitical message to the EU's domestic audience and the international community. Different from the first one, this report had references to 'rivalries based on values and societal models' and values such as democracy (Ibid: 9-10). Since then, EU officials have frequently referred to issues of security, sovereignty and even independence when they deliver a speech on Russia. Using the binary of dependence vs independence, on 10 October 2022, von der Leyen said:

> *(...) if you look at the dependency and the price tag that is coming with the dependency, it is much more needed to get rid of this dependency, invest in renewables and find your independence. Every kilowatt-hour of electricity or energy that we receive from solar or wind is not only good for our climate – it is also good for our climate and it is necessary – but it is good for our independence and our security of supply.* (European Commission, 2022i)

Most of the time, the official statements also touched upon China and the EU's strategic dependencies, which brings us to the second reason why the EU has become more concerned about China's position. The EU had been concerned about the strategic rapprochement between Russia and China, particularly since Xi Jinping entered into an informal alliance with Russian President Vladimir Putin. For example,

in December 2021, the EESC was critical of China, ‘a country ruled by a dictatorship with a peaceful foreign policy’ and its claims to be a new global power, particularly its aggressive military actions in Asia. Hence, the committee proposed that the EU ‘should stand shoulder to shoulder with the world’s democracies and the USA to form a strong and credible global force and pursue a ‘strategy of cooperative containment’ towards China’ (European Economic and Social Committee, 2021).

Concerns over the “reliability” of China as a partner reached a new level when Russian and Chinese leaders issued a joint communique right before Russia invaded Ukraine. In their joint declaration, Russia and China referred to the bilateral relations as 'no-limits friendship' (European Parliament, 2023a: 1). The “no-limit friendship” between Russia and China ‘has advanced the EU’s appetite to rebalance EU-China relations’ (Ferenczy, 2022: 109). The Russia-China joint statement of 04 February was seen as ‘a clear challenge to the post-war order, built on the core values of the UN Charter’ (European Commission, 2022j). During his speech at the Munich Security Conference on 20 February 2022, HR/VP Josep Borrell defined it as the ‘culmination of a long-standing campaign’, ‘an act of defiance’ and ‘a revisionist manifesto’ (European Union External Action, 2022b). Consequently, the EU’s dependence on China in strategic sectors has gained a more geopolitical meaning. For example, on 05 May 2022, Commissioner Thierry Breton made the following statement during his speech on sovereignty and geopolitics:

> *‘Our collective security is at stake. Energy security. Food security. Health security. Military security. Cyber security. Security of supply of the products and components we need, both in our daily lives and to remain an industrial leader, a major trading partner and a destination of foreign investment. (…) And in all of this, our dependencies are being used as a weapon against us. (…) Our dependencies in areas like energy and raw materials weaken us economically and politically. (…) It is time that we confront our paradoxes, where we pursue an ambitious Green Deal yet prefer to source lithium in Chile, process it in China and then have it shipped back to Europe, rather than investing in smart mining and processing in our back yard (…) We need secure and sustainable supply chains. (…) Europe must now be ready for what I call the geopolitics of supply chains’* (European Commission, 2022k).

Just a few days later, Vice President Maroš Šefčovič made a similar statement, stressing the security aspect of the EU’s CRM dependence:

> *‘We can quite clearly see the danger of our dependencies not only on fossil fuels – something being magnified by the Russian invasion – but also on critical raw materials. (…) They are the basic elements we need to make things like batteries, electric motors and photovoltaics, to drive the twin green and digital transitions. Critical raw materials are also necessary for strengthening Europe's military and*

> *defence capabilities, from communication systems to guided missiles and from satellites to night vision equipment. Our dependency on imports of critical raw materials is therefore dangerous not only for our industry but also for our societies'* (European Commission, 2022l).

Third, the war in Ukraine also affected China, making its external environment 'more dangerous' (Lin and Blanchette, 2022). Particularly regarding the issue of Taiwan, China became even more concerned about the US support of the Taiwanese administration. For example, in order to deter a potential third-party intervention in the region, the People's Liberation Army has conducted military exercises near Taiwan. Hence, following a short period of confusion at the beginning of the invasion, China reassumed its offensive attitude vis-a-vis the Western interference against the 'indivisible security' of sovereigns and reassured its strategic alignment with Russia. Realising that the 'European democracies' are not likely to support China when they are forced to choose, China has also enhanced collaborations with nations outside the Western alliance after the Ukrainian crisis. China's effort to enhance and deepen its relations with the BRICS as a rival to the Quad, the G-7 and the G-20 is exemplary in this sense (Ibid). Therefore, it is possible to argue that the Ukrainian crisis also affected China-EU relations from a power balance perspective, which put external pressure on their climate relations.

After a year of not engaging in a constructive meeting due to reciprocal sanctions over human rights issues, the 23rd EU-China summit virtually took place on 1 April 2022. Expectedly, beyond the usual topics of discussion, the leaders addressed Russia's military aggression against Ukraine. The two sides failed to agree upon a joint statement. The European leaders underlined that the Russian aggression, 'the gravest security crisis in Europe since World War Two', was a violation of international law and raised concerns over China's circumvention of sanctions against Russia (European Council, 2022c). The EU was disappointed by China's obscurity. During his brief at the EP plenary, HR/VP Borrell expressed this frustration, saying that 'it was not exactly a dialogue, maybe a dialogue of the deaf' (European Union External Action, 2023).

On 4 July 2023, at the fourth meeting of the China-EU High-Level Dialogue on Environment and Climate, the EU and China discussed their domestic implementations as well as bilateral and multilateral cooperation against climate

change. The two sides reaffirmed their international commitments once again (European Commission, 2023g). Likewise, during the 24th EU-China Summit on 7 December 2023, the leaders confirmed their usual positions towards global challenges such as climate change, global health and food insecurity. The war in Ukraine remained the focus of the discussions, whereas the EU also stressed the attacks by Hamas and the Israeli government, as well as the tensions in the Taiwan Strait, as other security-related concerns (European Council, 2023a).

It is not surprising to observe that despite their usual messages, the EU-China relations have not recently produced practical cooperation in the climate field. In fact, EU officials have been quite critical of China in their discourse on climate-related matters. It is possible to argue that the EU is now more vocal than before in its association of Chinese policies and actions with the EU's security. For example, just the day before the Russian invasion of Ukraine, Vice-President Šefčovič stated that 'securing supplies of critical raw materials is a strategic security question for Europe' (European Commission, 2023h). One needs to remember that, at that time, the EU was already disappointed by the Russian-Chinese friendship agreement and was in expectation of Russian aggression on the Ukrainian borders.

Likewise, the Commission started to frame the contested issues between the EU and China within the security framework and has shown a clear tendency to work with 'like-minded partners'. For example, during her speech at the College of Europe in December, von der Leyen proposed establishing an EU-US alliance for standard-setting and a raw materials club:

> *'So we, the US and the EU, have a vast common interest to preserve our industrial leadership. (…) But it is not just about investment – it is also about setting standards and joining forces where it makes sense. Take for example the charging infrastructure for EVs: if Europe and the United States agree on common standards, we will shape global standards and not leave it to others. Or take critical raw materials for clean tech: Today, the production and processing of some of these critical raw materials are controlled by one single country, China. Europe and the US can build an alternative to this monopoly by establishing a critical raw materials club. The idea behind it is simple: Cooperation with partners and allies on sourcing, on production and on the processing gives us the ability to overcome the monopoly.'* (European Commission, 2022m)

The difference in the EU's tone is obviously the consequence of an awareness that the EU's area of manoeuvre has become more limited. After all, the war became a wake-up call for the EU to shift its focus from sustainable and competitive growth to a traditional and existential threat on its border. Parallel to the security framing of

the energy-related matters on the Union's agenda, the climate policy and actions of the EU were also influenced by this shift. As the following statement by Borrell shows, issues of trust and reliability have become visible on the agenda of EU-China climate cooperation, which had been a more practical relationship in the early periods of their interaction:

> *Finally, the restoration of trust must ultimately translate into cooperation between the EU and China on all of the critical global challenges on which any decoupling is not only undesirable but also impossible! This is clearly the case when it comes to climate change – an issue where the commitments made in Paris in 2015 must be honoured.* (European Union External Action, 2023d).

The awareness on the EU's side has also fuelled the discussions on the revision of the EU's overall strategy towards China. The EP, for example, stated on its resolution of 16 September 2021 on a new-EU China strategy that the 'the future EU strategy on China should provide the necessary tools and data to address the political, economic, social and technological threats stemming from China' and that the implications of Chin's policies 'for the Union's open strategic autonomy and for the multilateral rules-based order' should be taken into consideration (Official Journal of the European Union, 2022e: 6). Likewise, in his statement on the need for a coherent strategy, HR/VP Borrell stated that the EU's China strategy 'needs to be recalibrated to adapt to the current circumstances' (European Union External Action, 2023b).

In the next chapter, the author will discuss the implications of such framing on policy outputs to understand whether the security articulations in the collective discourse have affected the measures, and if so, how.

CHAPTER FOUR
POLICY OUTPUTS

This section presents the fifth stage of the collective securitisation model: the policy outputs. For analytical purposes, the collective securitisation model illustrates the securitisation process as if it consists of sequential stages. However, the authors remind that these stages may not always follow a strict chronological order. In fact, they frequently overlap (Sperling and Webber, 2017: 30). Indeed, this section demonstrates that the securitising discourse presented in the preceding chapter and its execution, i.e. the policy outputs, have not followed a strictly sequential manner. Even though the stages are analytically differentiated, the securitising discourse of the actors, the response of the audience and the policy outputs of the organisation are interrelated.

In her speech at the World Economic Forum on 17 January 2023, von der Leyen identified four pillars of the European Green Deal (EGD): the regulatory environment, financing, skills and trade. The first pillar concerns increasing the speed and access by establishing a regulatory environment through key packages such as NextGenerationEU, RePowerEU and the Net-Zero Industry Act, which are to be implemented hand in hand with the Critical Raw Materials Act. The second pillar, financing, is for boosting investment in clean-tech production through the adaptation of the current state aid rules, making European manufacture as competitive as the third countries' offers. The third pillar is about developing the skills required for green and digital transitions. The fourth pillar is to create an open and fair trade environment through the establishment of new bilateral and multilateral partnerships (European Commission, 2023i).

Obviously, all of the policies and actions pursued under these pillars are interrelated and they jointly create the necessary environment for the EU's ambitions. Yet, for analytical clarity, the outputs will be presented in line with these pillars except the third one (skills), which is not relevant to the topic in question. The public/state dimension of the financial pillar will be elaborated as part of the regulatory outputs as it is closely related to the legislation on standardisation and taxonomy. The private sector dimension, on the other hand, will be explained as part of the trade-related

outputs, given that financial support to private actors encompasses both investment and trade aspects. The rest of the chapter is structured accordingly.

4.1. REGULATORY OUTPUTS

As discussed in Chapter 3, the EGD serves a broad aim: a just and ecological transition of the European economy to make it a more sustainable and competitive one. Lee-Makiyama (2021: 6) argues that the transition to decarbonisation is an industrial policy in its own right. That is why, from the very beginning, EGD would be accompanied by a new industrial strategy to make the EU 'a world leader in circular economy and clean technologies' and by a new investment plan for green financing (Directorate-General for Communication, 2020: 5-6). In February 2023, the Commission presented the Green Deal Industrial Plan for the Net-Zero Age. The plan aims to foster a more supportive ecosystem for the growth of the EU's manufacturing capacity in net-zero technologies needed to fulfil ambitious climate targets. More specifically, the plan serves to address 'the need to massively increase the technological development, manufacturing production and installation of net-zero products and energy supply' in the EU, which has become increasingly difficult due to 'the global competition for raw materials and skilled personnel' (European Commission, 2023j: 3).

In the introductory part of the plan, the Commission stated that 'trade and competition on net-zero industry must be fair' whereas actions of certain trading partners create 'undesired collateral effects' on European net-zero industries (European Commission, 2023j: 2). Explicitly referring to China, the Commission stated that 'China's subsidies have long been twice as high as those in the EU, relative to GDP', which 'has distorted the market and ensured that the manufacturing of a number of net- zero technologies is currently dominated by China' (Ibid). For this reason, the Commission expressed its commitment to 'make full use of trade defence instrument' to protect the Single Market against unfair practices (Ibid). Furthermore, again directly referring to China, the Commission stated that, with this plan, it aims to avoid replacing the dependence on Russian fossil fuels with other strategic dependencies that could obstruct green transition (Ibid: 3).

In order to materialise the first pillar of the Green Deal Industrial Plan, in March 2023, the Commission presented the Net Zero Industry Act (NZIA). As Commissioner Breton once stated, NZIA was the outcome of efforts to reconcile climate neutrality policy with industrial competitiveness policy. During his speech on the new geopolitical order, he explained the need for such reconciliation with the following statement:

> *'With our Green Deal programme, Europe wants to be the first climate-neutral continent by 2050. This means a largely electrified continent relying on nuclear power and renewable energies such as solar and wind power. It also means new ways of storing electricity: batteries or hydrogen. And what do all these technologies have in common? Raw materials. (…) It is high time to reconcile climate neutrality policy with industrial competitiveness policy. (…) Now Europe must also develop its own policy approach to secure its industrial clean tech basis. And we are doing just that: In March, we will adopt a Net-Zero Industry Act, as announced by Commission President von der Leyen.'* (European Commission, 2023j).

The EESC's call for reconciling energy and climate policies with competitiveness policies demonstrates the audience's readiness for such an act (Official Journal of the European Union, 2019: 1). This call was welcomed by the Commission. In November 2022, the Commission held a high-level discussion and a series of consultations with Member States and net-zero sector stakeholders.

Von der Leyen announced NZIA at the World Economic Forum in Davos in January 2023. The Parliament and the Council reached a political agreement over the Act in February 2024. Once formally adopted, the Act will enter into force. Acknowledging that 'net-zero energy technologies are at the centre of strong geostrategic interests and the core of the global technological race', with NZIA, the EU aims to strengthen the resilience and competitiveness of net-zero technologies manufacturing in the EU (European Commission, 2023k: 2). The Act is significant to explicitly associate 'the security of supply of key energy-related technologies' to EU's general security, as it is 'crucial both for supporting the development of other sectors of the economy and for public order and security' (Ibid: 4).

NZIA encompasses an array of measures to create an investment environment for the EU's manufacturing capacity of crucial clean technologies. To this end, the Act differentiates strategic net-zero technologies and other net-zero technologies (including sustainable alternative fuels technologies, advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle, small

modular reactors, and related best-in class fuels), covering all items, components and equipment that are essential for the production of such technologies. The strategic technologies are determined according to the following three criteria: technology readiness level, contribution to decarbonisation and competitiveness and security of supply risks (Ibid: 15). The annexe of the Act lists eight strategic net-zero technologies: solar photovoltaic and solar thermal technologies, onshore wind and offshore renewable technologies, battery and storage technologies, heat pumps and geothermal energy technologies, electrolysers and fuel cells, sustainable biogas/bio methane technologies, carbon capture and storage technologies and grid technologies (European Commission, 2023k: 1).

While all net-zero technologies are eligible to benefit from the provisions of the NZIA, strategic net-zero technologies are to receive additional support, such as benefiting from the resilience criterion in auctions or from reduced timescales. The Act also gives these technologies top priority and requires Member States to 'grant net-zero strategic projects the status of the highest national significance possible, where such a status exists in national law and be treated accordingly in the permit-granting processes, including those relating to environmental assessments and, if national law so provides, to spatial planning' (Ibid: 44). For governance, the Commission proposes to establish a Net-Zero Europe Platform, which will be composed of Member States and the Commission and be chaired by a representative of the Commission (Ibid: 55).

The NZIA was a product of negotiations and compromises between the Member States. For example, a group of countries led by France and, to a lesser degree, Spain and Italy advocated for a 'buy European act' to protect domestic manufacturers. Others had a more subtle approach. In Germany, for example, there were clear divisions within the ruling coalition as well as the public. The Social Democratic Party advocated for further support to the industry, while the Free Democratic Party opposed such measures. The Scandinavian members kept their positions against trade restrictions. SolarPower Europe and Eurelectric, two prominent business associations in the renewable sector, also expressed their opposition to trade restrictions. Their main concern was the possibility of retaliation from China, which might result in export

restrictions for components for which China enjoys a quasi-monopole role, such as wafers and ingots (Voïta, 2024: 6).

One of the significant provisions in the NZIA is the clause on public procurement. The relevant clause states that 'public procurement bids using products from a country with more than 65 per cent EU market share would be downgraded'. The provision is considered to directly target China and the overdependence of the Union on Chinese imports, particularly in green technologies (Jetin, 2023: 16).

A majority of pundits state that the EU's NZIA resembles the US Inflation Reduction Act (IRA), which came into effect in 2023. As the name suggests, the IRA is aimed at reducing the inflation rate by withdrawing excess purchasing power from the economy through increased taxation. However, it is more than an inflation reduction strategy. IRA was designed as part of a broader plan to protect and support the US domestic industry vis-à-vis the competitiveness challenge from emerging economies, notably China. IRA is complemented by the CHIPS and Science Act of 2022, which aims to 'strengthen American manufacturing, supply chains and national security' in nanotechnology, clean energy, quantum computing and artificial intelligence sectors and the Defense Production Act, which aims to accelerate domestic production in five key clean energy technology sectors (European Parliament, 2023b).

IRA 'represents the largest effort into addressing climate change in US history' as it targets around 40 per cent reduction in GHG emissions in 2030 compared to 2005. To achieve this target, under the IRA, the US administration incentivises investments in domestic clean energy production through targeted tax breaks and subsidies, such as reduction of sales taxes in EV purchases. The Act has various protectionist measures. For example, it contains a target of battery components that should be sourced from either the US or free trade agreement countries. Likewise, the EV purchases are subsidised on the condition that the battery does not contain 'any critical minerals that were extracted, processed, or recycled by a 'foreign entity of concern'—presumably including China' (Andrews-Speed, 2023: 13).

The European approach differs from 'the subsidies-heavy American approach' as the former is focused on administrative support. For example, thanks to subsidies provided under the IRA framework, solar manufacturers in the US could offer their products at a price equal to or below their Chinese counterparts, which is around 30

per cent cheaper than the ones manufactured in Europe (Voïta, 2024: 7). The US's imitation of China's subsidisation policy caused concern for the European manufacturers. In its own-initiative opinion, the EESC cautioned that subsidies and local-content requirements for climate-friendly technologies might distort the market and push the competitors to follow the same approach. For this reason, the EESC stated that the 'fight against climate change should not be allowed to degenerate into a subsidies war' (Official Journal of the European Union, 2024a: 3).

NZIA does not offer such subsidies. The complex bureaucratic nature of the EU and the limited budget of the Commission are considerable factors in this matter. Therefore, the European Act aims to facilitate the creation of a framework where Member States can independently develop subsidies and tax incentives, with the Commission playing a supportive role (Xiaoying, 2023). Therefore, it is possible to say that the institutional barriers to subsidisation determine the EU's preferences of measures, which the industrialists often criticise for not providing enough financial support (Voïta, 2024: 7). For example, in its opinion on the NZIA, the EESC complains that the EU has been suffering from its competitors that 'are subsidising and favouring their own industries' (Official Journal of the European Union, 2023b: 2).

As part of the regulatory framework foreseen in the Green Industrial Plan, with an effort to reinforce the resilience of its supply chains, the Commission also proposed the regulation known as the European Critical Raw Materials Act (CRM Act) on 16 March 2023. The CRM Act was designed to complement the NZIA, which was announced on the same day. The Act aims to guide the EU's actions to ensure its access to a secure and sustainable supply of listed critical and strategic raw materials as well as to strengthen its capacities throughout the value chain. Although the Commission previously made efforts to ensure its raw material supply through the 2008 Raw Materials Initiative and the 2020 Action Plan, the CRM Act is the first EU legislation designed to protect the security of CRM supply, strengthening the EU's capacities throughout the value chain. Acknowledging that the unlawful aggression of Russia against Ukraine showed 'how untrustworthy suppliers can exploit and weaponise such dependencies', in its communication, the Commission raised the concern that excessive dependencies on single suppliers may disrupt entire supply chains,

‘particularly as export restrictions and other trade-restrictive measures are increasingly used amid intensifying global competition’ (European Commission, 2023l: 2).

The Staff Working Document accompanying the communication reiterated the Commission’s previously stated observations. Directly referring to China’s control over the global production of CRMs, particularly lithium, cobalt and manganese, the document restated the significance of these materials for the EU’s green and digital transition. In addition to the concerns of supply concentration, which ‘poses a risk in itself’, the document drew attention to how ‘some actors have expanded their dominance of the global value chain by gaining control over economic activities and assets in third countries, such as China controlling cobalt mines in Congo’ (European Commission, 2023m: 11, 12). In the annexe of the document, the Commission identified the following risk that the EU’s reliance on highly concentrated imports would pose:

- Risk of geopolitical vulnerability
- Risk of adverse environmental and social adverse effects
- Risk of unforeseen disruptions to industrial supply chains
- Risk of high and volatile prices delaying the green transition (Ibid: 13).

Based on the arguments mentioned above, in its proposal, the Commission offered a three-pillar mechanism. The first pillar aims to develop the critical raw materials value chain in the EU through various measures, including a regulation dedicated to CRMs, financial support and standardisation. The second pillar aims to diversify supply through bilateral agreements, strategic partnerships and multilateral initiatives such as a Critical Raw Materials Club. The third one aims to foster sustainable sourcing and promote circularity. In March 2024, the Council adopted Regulation EU 2024/1252 establishing a framework for ensuring a secure and sustainable supply of CRMs (Official Journal of the European Union, 2024b).

It should be noted that the Parliament, which has long been critical of China’s dominance in supply chains and presence in Africa and Europe, amended the proposal directly concerning China. In the amendment, the Parliament proposed to include its observation that ‘the security situation in Europe and around the globe requires urgent reflection on how to strengthen supply chain resilience, including in the defence sector’ (Official Journal of the European Union, 2023c: 2). In order to stress the risks

that China poses, the Parliament proposed to add the bold sentence in the following statement:

> *For some raw materials, the Union is almost fully dependent on a single country for its supply. Such dependencies create a high risk of supply disruptions, and, in the case of the People's Republic of China, increases the Union's vulnerability and security risks. To limit such potential risk and increase the Union's economic resilience, efforts should be undertaken to ensure that, by 2030, it is not dependent on a single third country for more than 65 % of its supply of any strategic raw material, unprocessed and at any stage of processing, giving however special consideration to countries with whom the Union has established a Strategic Partnership on raw materials giving rise to greater assurances regarding supply risks.* (Ibid: 4).

The Parliament's amendment was a reflection of how the EU's risk perception has become more robust. Indeed, shortly after the Commission proposed the CRM Act, during her speech at the European Parliament Plenary, von der Leyen defined the EU's dependence on China as a 'threat':

> *We all know that critical raw minerals are vital for our twin transition – that is decarbonisation, as well as digitalisation. While the demand for these raw materials is projected to increase drastically, we know that Europe heavily depends on imports. And of course, this dependency that we have on imports threatens not only our climate and digital objectives, but it also weakens our industrial base.*(European Commission, 2023n).

Another significant regulatory measure is the adoption of the new Batteries Regulation, which came into effect in August 2023. It is the first European legislation that adopts a whole life-cycle approach -encompassing sourcing, production, usage and recycling- in alignment with the circularity goals of the EGD. The legislation mandates that batteries must be produced with progressively higher amounts of recycled material and must include carbon footprint labelling (Official Journal of the European Union, 2023d). A careful reading of the regulation shows that the EU has both environmental and geopolitical concerns behind this legislative action. Under the new regulation, firms are obligated to detect, prevent and handle social and environmental hazards associated with the acquisition, processing and trading of raw materials like lithium, cobalt, nickel and natural graphite used in their batteries (European Commission, 2023o). Issues of environmental damage, transparency and labour conditions have long been an integral part of trade relations. With the adoption of EGD, sustainability and security nexus have become more salient than ever (Riofrancos, 2023). In this vein, the regulation is considered a balancing manoeuvre between environmental stewardship and keeping pace in the global competitiveness race. After all, with this regulation, the EU has built an explicit barrier to entry into the

market by establishing sustainable sourcing of raw materials as a requirement for the production of batteries.

A new regulation on the production and circulation of batteries was already on the agenda of the industrial actors. In its opinion on the 2020 State of the Energy Union report, the EESC stated that considering the need for 'active industrial policy initiatives to end China's market dominance', the Commission's preparations for batteries regulation was 'a step in the right direction' (Official Journal of the European Union, 2021g: 9). In fact, the industrial actors were already involved in the process. The regulatory environment foreseen in the EGD is established mainly through legal actions such as regulations. Yet, the Commission, together with the involvement of industrial actors, have sought to reinforce this environment through industrial alliances. In this matter, the most well-known example is the European Battery Alliance (EBA), which was established in 2017 with the involvement of relevant actors in the battery sector. Since then, EU officials have frequently referred to the EBA as a 'successful approach' (European Commission, 2020k; European Commission, 2020l).

Industrial alliances are one of the instruments used to execute EU policies in a joint manner, i.e. with public-private partnerships. This mechanism allows the participation of relevant actors –not necessarily from the private sector- in a process primarily managed by the Commission with the approval of the Council and the Parliament. As the EBA proved to be a successful initiative, the Commission replicated this approach in other areas. On 3 September 2020, the Commission presented the Action Plan on Critical Raw Materials and the 2020 List of Critical Raw Materials. The same day, the European Raw Materials Alliance (ERMA) was announced as part of the Action Plan. Referring to similar measures by China, the US and Japan, the Commission explained the reason behind ERMA as an 'urgent' need 'to ensure a secure, sustainable supply of raw materials, pooling the efforts of companies, sub-national and national authorities as well as the EU institutions' (European Commission, 2020g: 6). During his speech at the launch of the ERMA, Vice-President Šefčovič elucidated this reason with the following statement:

> *As we have done with the European Battery Alliance, we need to be able combine the objective of strong environmental standards with increased competitiveness across value chains, as well as the creation of sustainable jobs and growth. Today, we are largely dependent on unsustainable raw materials from countries*

with much lower environmental and social standards, less freedoms or unstable economies. This has to change. (European Commission, 2020k)

ERMA was launched as an 'industry-driven' platform open to all relevant stakeholders, including trade unions, research and technology organisations, investors and civil society organisations (European Commission, 2024c). Within the first six months after its launch, ERMA has discovered investment opportunities in many sectors, including rare earth mining, urban mining and magnet production. These projects are located throughout Europe and have a combined investment amount of €1.7 billion. If these projects were implemented, the European Union could meet 20 per cent of its rare earth magnet demand by 2030, which is 15 times higher than the current level (Gauß et al., 2021: 7)

As part of ERMA, the stakeholders created a Raw Materials Investment Platform, which aims to identify and realise raw material investments in Europe and third countries based on European interests. Currently, the priority investment areas include materials efficient motor designs, the recovery of rare earths from end-of-life magnets and processing waste, magnet manufacturing, rare earth refining, extraction of primary rare earth ores and recovery from mining waste. So far, 14 specific investment proposals from various European regions, with a combined investment of € 1.7 billion, were proposed. The proposals include magnet-making and recycling (France, Germany, Slovenia and Belgium), REE metallurgy and magnets (Estonia), separation (Poland) and mining (Norway, Finland and Sweden). The projects are expected to ramp up magnet production in Europe from 500 tonnes to 7,000 tonnes annually by 2030, which means that 20 per cent of Europe's rare earth magnet needs will be sourced domestically (Gauß et al., 2021: 19)

As part of its efforts to create a facilitative regulatory environment, the Commission also issued various strategies. One of the earliest examples of these strategies is the EU's hydrogen strategy. In July 2020, the Commission released the hydrogen strategy for a climate-neutral Europe. The report foresaw the gradual introduction of renewable hydrogen into the EU's energy mix. For the first phase, from 2020 to 2024, the aim is to decarbonise existing hydrogen production by installing at least 6 GW of renewable hydrogen electrolysers and producing up to 1 million tonnes of renewable hydrogen. In the second phase, from 2025 to 2030, renewable hydrogen is expected to become an essential element of the EU's overall energy system by

installing at least 40 GW of renewable hydrogen electrolysers by 2030 and the production of up to 10 million tonnes of renewable hydrogen. For the third phase, from 2030 towards 2050, the EU aims to achieve widespread implementation of renewable hydrogen technologies, which requires that, by 2050, about a quarter of renewable electricity would be used for renewable hydrogen production (European Commission, 2020h: 5-7). In order to support the investments envisioned in the 2020 Hydrogen Strategy, the Commission also launched the European Clean Hydrogen Alliance.

With an effort to scale up domestic renewable hydrogen production, in October 2023, the Commission announced that it would launch the first-ever EU-wide auction, offering Member States a platform to use their resources on their territories. The auction would award up to €800 million to renewable hydrogen producers in the European Economic Area. The Innovation Fund would fund it under the umbrella of the European Hydrogen Bank, which was established in March 2023 to stimulate and support investment in sustainable hydrogen production (European Commission, 2023p). In November, the auction was opened as 'the first pilot auction under the European Hydrogen Bank' along with the EU's 'largest call to date' with €4 billion available for allocation to innovative decarbonisation and clean-tech proposals (EY Global, 2023).

The EU also issued strategies concerning the established renewable sectors, such as the solar and wind energy sectors. Although European manufacturers have experienced a decline in their competitiveness, the EU aimed to provide clear guidance to investors and manufacturers to rejuvenate competitiveness in these sectors. Therefore, the Commission issued the EU Solar Energy Strategy and the European Wind Power Action Plan, which were released as part of the REPowerEU plan on 18 May 2022 and 24 October 2023, respectively. The aim of the EU Solar Energy Strategy is 'to bring online over 320 GW of solar photovoltaic by 2025 (…) and almost 600 GW by 2030' (European Commission, 2022n: 1). With this strategy, the Commission proposed massive deployment of PV via the European Solar Rooftops Initiative; introducing shorter and simpler permitting procedures; and establishing a European Solar PV Industry Alliance (ESIA) for 'a resilient industrial solar value chain in the EU, in particular in the PV manufacturing sector' (Ibid: 2).

ESIA aims to accelerate the implementation of solar PV systems in the EU by increasing the annual production capacity of solar PV to 30 GW in Europe by 2025. This will be achieved by promoting investment, de-risking sector growth and assisting Europe in achieving its decarbonisation goals. Currently, the secretariat of the alliance is led by EIT InnoEnergy, which was initiated by the Commission in 2022 to spearhead the industrial value chains battery storage, green hydrogen and solar photovoltaics. SolarPower Europe and the European Solar Manufacturing Council have joined the alliance's steering committee (Solar Alliance, 2022). On 09 December 2022, the Commission formally launched the ESIA at a high-level conference hosted by EU Internal Market Commissioner Thierry Breton. During the opening speech at the event, Commissioner Breton mentioned a 'green paradox':

> *On the one hand, solar energy is essential for our decarbonisation and energy independence efforts (…) A huge business opportunity, no doubt! But for who? In 2021, the world produced 450 gigawatts of photovoltaic modules. European-based companies? Less than nine. In 2022, it is almost 40 gigawatt of solar PV that is expected to be installed in Europe. A new record! How? Thanks to a more than doubling of imports of PV panels from China. So, on the other hand, while our continent has been an innovator in the photovoltaic sector since day 1, we lost our market shares and are struggling to tap into the job potential – 1 million jobs by 2030 –of this sector (…) So, we are facing a major risk here: to replace one dependency – on Russian fossil fuels – by another, on Chinese PVs (…) And we should not rely on anyone else to sort out our fate for us. Because we are all engaged in a global race for the technologies and the manufacturing of the future.* (European Commission, 2022o)

As discussed in the preceding chapter, the global rivalry to become the standard setter in emerging (clean) technologies is a significant matter for the EU. That is why the Commission proposed the EU Strategy on Standardization in February 2022. The communication acknowledged that 'Europe's competitiveness, technological sovereignty, ability to reduce dependencies' depends on its ability to set the standards at the global level and that its ambitions for a resilient, green and digital economy would prove inadequate if the EU fails to meet 'standardisation urgencies'(European Commission, 2022p: 1-3). Hence, based on the analysis of strategic dependencies accompanying the new Industrial Strategy, the Commission identified the strategic areas in need of standards development. The strategic areas include standards to support the recycling of CRM, standards to support the roll-out of the clean hydrogen value chain and standards supporting low-carbon cement, as well as standards for digital transition such as chips and data security. The Commission proposed working

with the relevant stakeholders to identify standardisation needs, setting up a high-level forum to help the Commission identify upcoming standardisation priorities and revising the existing standards (Ibid).

Standardisation and taxonomy are interrelated, as the latter requires the presence of established standards. In the light of the EGD, taxonomy serves as a framework for identifying which economic activities are sustainable, facilitating the decision of which activities should be supported within the broader aim of carbon-neutrality (European Commission, 2024d). As von der Leyen once stated, it is important not only for the EU to allocate its funds efficiently but also for the investors to know whether an investment can be classified as a green investment (European Commission, 2021i). As von der Leyen stated during her opening speech at the EU Industry Days in February 2021, the significance of taxonomy lies in the predictability and confidence it provides to private investors through common rules applicable to every investor (European Commission, 2021c). That is why, in June 2021, the EU also adopted Regulation (EU) 2020/852, establishing the technical screening criteria for determining which economic activities qualify as substantially contributing to climate change mitigation or climate change adaptation (Official Journal of the European Union, 2021h).

Transition to a climate-neutral economy requires large-scale changes in the existing production and energy infrastructures as well as the establishment of new facilities. Estimations show that meeting the 2030 climate, energy and transport targets would require an extra EUR 390 billion of annual investment, with an additional EUR 130 billion per year allocated for the previously estimated environmental objectives (Official Journal of the European Union, 2022c: 8). However, the financial burden of such changes should not hamper the competitiveness of the businesses in relevant sectors As discussed in the preceding chapter, the Chinese government's subsidies to private and state-backed enterprises already creates an uneven playing field. Hence, supporting the economic activities required for the industry's green transition is essential for the EU to reach its climate targets. Indeed, the provision of support, particularly to the private sector, is frequently raised in the EU officials' speeches. For example, in November 2022, Vice-President Šefčovič explained this need with this

statement: ‘ (…) we must secure adequate financing, not least because our competitors, such as China, do not shy away from using heavy subsidies and protective measures.’

With regard to public investments, the Commission identified two main problems. First, the existing rules on state aid were rigid and complex, preventing the states from offering support to domestic investors. Therefore, as von der Leyen once stated in her speech on state investments in clean tech, the Commission aimed to adapt these rules to create a simpler and more predictable investment environment. Second, not all Member States had the same financial capacity to invest in strategic sectors or to support investments in these sectors (Kurzycz, 2022). Indeed, the Commission’s 2021 report on energy subsidies shows that Member States use different subsidy schemes, which contribute to the EGD differently. For example, in 2019, Latvia allocated 2 per cent of its GDP to support energy efficiency initiatives, becoming the top spender among all Member States. Germany allocated approximately 0.9 of its GDP for approximately 0.9 while Italy, Czechia and Spain each dedicated 0.8 per cent of their GDP to renewable energy subsidies. Meanwhile, some others, such as Bulgaria, Hungary, Greece and Belgium, allocated a larger portion of their budget towards fossil fuels rather than investing in renewable energy (European Commission, 2021a: 4).

For all these reasons, in February 2022, the Commission proposed Guidelines on State aid for climate, environmental protection and energy. According to the guidelines, eligible activities for aid are economic activities that are designed for the reduction and removal of polluters, including GHG, improvement of the energy and environmental performance of buildings, acquisition and leasing of clean vehicles as well as deployment of recharging or refuelling infrastructure for these vehicles, provision of electricity supply and construction and upgrading of energy infrastructure such as pipelines and storage facilities (Official Journal of the European Union, 2022c: 10). Considering the aid for energy infrastructure, the Commission stated that it would carry out a case-by-case assessment of the need for State aid for projects that are partially or fully exempted from the EU’s internal energy market legislation. Apart from the project’s possible contribution to the climate neutrality objectives of the Union, in its assessment, the Commission would also consider ‘the extent to which the infrastructure is open to third party access’ and ‘whether the third country or countries

involved have a high level of regulatory alignment and support the overall policy objectives of the Union, in particular as they relate to a well-functioning internal energy market; security of energy supply based on cooperation and solidarity; an energy system on a trajectory towards decarbonisation in line with the Paris Agreement and the Union's climate objectives; and avoiding carbon leakage' (Ibid: 71).

4.2. TRADE-RELATED OUTPUTS

The fourth pillar of the Green Deal Industrial Plan consists of global cooperation and making trade work for the clean transition. Trade-related outputs of the EU's securitising discourse vis-à-vis China's actions are two-folds. On the one hand, the EU has been making an effort to level the playing field for European manufacturers of green technologies. These outputs include trade defence measures such as anti-subsidy investigations and additional charges. On the other, the EU has been establishing strategic partnerships and alliances. The EU has two motivations for these partnerships. The first one is to diversify its suppliers to decrease its dependency on China. The second one is to work with "like-minded" resource-seeking countries to be able to use the scale of their demand as a leverage against China.

4.2.1. Trade Defence Measures

Concerning the fourth pillar of the EGD, China's unfair practices stand as a major source of concern for the EU. Referring to such practices, von der Leyen once stated that the EU intended to use all available tools, including the new Foreign Subsidies Regulation. She added: 'We will not hesitate to open investigations if we consider that our procurement or other markets are being distorted by such subsidies' (European Commission, 2023i). The new Foreign Subsidies Regulation (FSR), Regulation (EU) 2022/2560, was adopted by the Council and the Parliament in December 2022. The regulation addresses the foreign subsidies, the financial contributions provided by either private or public entities in third countries, that actually or potentially distort the EU internal market (Official Journal of the European Union, 2022d).

The FSR entered into force on 12 July 2023. In October, the Commission launched an anti-subsidy investigation into the battery electric vehicles (BEV) imports from China to decide whether BEV value chains benefit from illegal subsidisation and, if so, to what extent this subsidisation affects BEV producers in the EU (European Commission, 2023q). Unsurprisingly, the decision strained the EU-China relations. At the COP28 Conference in October, China's ambassador to the EU criticised the EU for its 'unjustified and regrettable' decision (Euractiv, 2023). Cautioning that the decision would jeopardise climate cooperation between the two actors, Ambassador Fu Cong added that 'one should not seek political confrontation on the one hand and expect unconditional cooperation on the other' (Ibid). At the same conference, EU's Climate Action Commissioner Wopke Hoekstra stated that global climate cooperation 'has never been harder' than it is now in these 'geopolitically very challenging times' (Ibid).

The Commission's proactive decision to launch an investigation instead of waiting for an official complaint was seen as the result of regret that the EU had felt in the solar PV industry (Mazzocco, 2023: 6). Indeed, during his visit to Beijing in November 2023, Commissioner Breton made a similar comparison:

> *We recently launched an anti-subsidies investigation into electric vehicles coming from China to establish whether an uncompetitive behaviour is taking place and if so, to act upon it. (…) And we will remain vigilant in other clean tech sectors and carefully assess allegations of unfair practices. I am of course thinking of the solar industry, where China's massive economies of scale, access to raw materials and cheap – but not always clean – energy, has led to extreme overcapacity of solar photovoltaic modules in Europe. Not to mention increasing concerns about the possible presence of forced labour in supply chains. I am also concerned about the wind industry, with reports of Chinese equipment manufacturers offering European project developers 15-55% lower prices than European wind turbines, with deferred payments of up to 3 years and allegedly refusing to sell components to EU competitors.* (European Commission, 2023r)

Following the investigation, the EU announced additional tariffs on the Chinese EVs. In June 2024, The Commission notified the Chinese carmakers that it would levy additional duties ranging between 17 to 38 per cent on the EVs imported to the EU. China's major EV manufacturers BYD, Geely and state-owned motor company SAIC are to be the most affected by this decision, while European brands exporting EVs made in China, such as Mercedes and Renault, are also faced with additional charges (Bounds, Hancock and Li, 2024).

Apart from these trade defence instruments, one of the most compelling measures of the EU was the launch of the Carbon Border Adjustment Mechanism (CBAM). CBAM is part of the EU's 'Fit for 55' package, which refers to the 'target of reducing net greenhouse gas emissions by at least 55% by 2030' (European Council, 2024). The Fit for 55 package comprises a series of recommendations aimed at amending and modernising EU legislation, as well as implementing new initiatives, in order to align EU policies with the climate objectives agreed upon by the Council and the European Parliament. In addition to CBAM, the package encompasses the revision of the EU emissions trading system, which was launched in 2005 as a cap-and-trade mechanism for emissions allowances in energy-intensive industries and the power generation sector within the Union. It also includes the establishment of the Social Climate Fund, which aims to mitigate the social and distributional consequences of the revised emissions system (Ibid).

A revision of the renewable energy directive was also included in the Fit for 55 package, with the proposal to raise the current EU target of 32 per cent renewable energy in the energy mix to 40 per cent by 2030. On 27 June 2022, the EU energy ministers agreed upon a joint proposal for a revised EU renewable energy directive. In October 2023, the Council adopted the new Renewables Energy Directive, which foresaw increasing 'the share of renewable energy in the EU's overall energy consumption to 42.5% by 2030 with an additional 2.5% indicative top up to allow the target of 45% to be achieved' (European Council, 2023b). As a consequence, the Member States became obliged to realise sector-specific targets. In transportation, for example, they are expected to realise either a 14.5 per cent reduction in GHG intensity in transport by using renewables as an energy source or a share of at least 29 per cent of renewables within the final consumption of energy in the transport sector by 2030 (Ibid).

The idea of a carbon tax at the borders of the EU was present on von der Leyen's climate change agenda when she was a candidate. It was designed as both a measure to ensure competition on a 'level-playing field' and an instrument for ambitious climate targets (European Commission, 2019h). As Vice-President Timmermans speech at Tsinghua University, China, demonstrates, the intention of CBAM was a message to China:

> *Another reason we should all take action is that we want to avoid the risk of carbon leakage. The actions we take inside the EU to reduce emissions should not just lead to emissions ticking up elsewhere. We want to avoid this and we will do so, first, by calling for ambitious climate action. If differences in levels of ambition persist and there is a risk of carbon leakage, the Commission will propose a carbon border adjustment mechanism, for selected sectors, to reduce this risk. (…) If we all move in the same direction there is no need for adjustment at the border. But if we do not and some do apply the rules of Paris Agreement in their national measures and others don't, then adjustment at the border might become necessary.* (European Commission, 2020m).

A few months after the commencement of the new Commission, the Directorate General for Taxation and Customs Union launched consultations with the stakeholders to prepare a proposal. At that time, stakeholders were already demanding that they mitigate the risk of carbon leakage. In its own-initiative opinion of 28 October 2020, the EESC expressed its support for 'a WTO-compatible carbon adjustment mechanism at the EU borders, levelling the playing field for CO2-intensive sectors' (Official Journal of the European Union, 2020c). However, the EESC also proposed to limit the tax to sectors such as cement and steel, 'where the risk of carbon leakage is the highest while the sectoral coverage of the carbon leakage measures has a wider scope', fearing that the tax would increase the cost of raw materials imported from 'third countries which have poor climate policies' and affect the price competitiveness of European manufacturing companies in automotive and construction industries (Ibid).

On 14 July 2021, the Commission announced its proposal for a regulation to implement CBAM. It was designed to complement the EU ETS and enhance its operation on imported commodities by addressing the risk of carbon leakage 'caused by asymmetrical climate policies of non-EU countries' due to the production of carbon-intensive products (Council of the European Union, 2022e: 2). According to the Council conclusions of 15 March 2022, the sectors of cement, aluminium, fertilisers, electric energy production, iron and steel falls under the coverage of CBAM with an exception for consignments with a value of less than €150. With this mechanism, the EU has two aims to pursue: *to* protect European industry 'from countries with less ambitious climate goals' and to push third countries to introduce their own carbon pricing policies to mitigate the effects of climate change (European Council, 2022d).

Unsurprisingly, China has been a solid opponent of the CBAM. The EU officials have repeatedly emphasised that CBAM 'is a climate policy tool to prevent that carbon emissions and pollution more generally, are simply exported from the EU to elsewhere' and 'not a "penalty" for importers to the EU' (European Commission, 2023s). However, for China, CBAM is essentially a strategic regulatory tool used by the EU to enhance its global competitiveness by enforcing its green hegemony in global climate governance through green trade barriers. Moreover, from China's perspective, through CBAM, the EU puts the financial burden of European environmental standards on non-EU firms, aiming to compensate for the cost disadvantage of EU enterprises as a result of the EU ETS. In this sense, CBAM is an extension of the EU's internal market adjustment mechanisms to a global scale. Their main concern is that China, as the EU's main trading partner in relevant sectors, will bear most of the burden created by the implementation of CBAM (Xin and Jinchang, 2023: 13).

Indeed, Chinese officials have occasionally raised their criticisms against CBAM. In April 2021, during a video conference with the European leaders, President Xi Jinping raised his criticisms, saying that 'responding to climate change (…) should not be a bargaining chip for geopolitics, a target for attacking other countries, or an excuse for trade barrier' (Qin, 2023: 36). The BRIC states have also joined China in their approach to CBAM. In their joint statement at the High-level Meeting on Climate Change in May 2022, the BRICS states opposed 'all forms of unilateralism and protectionism […] any measures to restrict trade and investment and setting up new green trade barriers with the pretext of addressing climate change, such as the imposition of Carbon Border Adjustment Mechanisms, which are incompatible with multilateral rules under the World Trade Organization' (Bonini, 2023).

The EU's CBAM mandates that importers of certain goods compensate for the carbon-pricing gap between the producing country and EU countries. The impact of the CBAM on Chinese exporters might be lessened by China's ETS, which was enacted in July 2021 and constitutes an explicit carbon price on Chinese producers. However, the industries affected from the EU's CBAM are only included in certain regional ETS frameworks and are not encompassed by the national ETS, which pertains solely to electricity. The Chinese ETS is scheduled to include the iron, steel

and aluminium sectors before 2025 yet a specific implementation date has not been established. The establishment of an ETS would mean that Chinese exporters might either receive a lesser adjustment tax on the EU borders or be exempt from such tax. However, there is still a problem with the pricing. In 2020, the EU ETS had an average price of USD 28.28, whereas the average allowance prices in China varied from USD 3.28 to USD 12.62. Due to the price discrepancy, the EU might not be able to exempt Chinese enterprises unless it grants China preferential treatment (Munzur, Koch and Winter, 2021: 14).

It should be noted that the decision of whether and to what extent Chinese manufacturers could be exempt from CBAM has more political meaning than before, as the urgencies felt by the Commission have become more prevalent after the Russian war in Ukraine. After the war, the security narrative quickly penetrated all areas of policy-making, particularly in economic matters. That is why, in June 2023, the Commission introduced the EU's Economic Security Strategy. It was the result of the EU's efforts to identify and manage the economic activities that 'can present a risk to [EU's] security' now that 'these risks are both evolving rapidly and merging with national security concerns' (European Commission, 2023t: 1,-2). In its communication, the Commission presented three priorities of the EU's approach to economic security: promoting competitiveness, protecting against risks and partnering with the broadest possible range of countries to advance shared economic security interests. As part of the first priority, the Commission emphasised the resilience of supply chains, particularly those critical for the green and digital transition, such as clean technologies, raw materials, processors and semiconductors. Referring to existing measures such as industrial alliances and new regulatory frameworks –namely Critical Raw Materials Act, Chips Act and NZIA-, the Commission stated that these initiatives would have a direct impact on securing supply chains and access to resources, which have been increasingly challenged by 'strategic competitors' (Ibid: 7). As part of the second priority, the Commission expressed its commitment to use 'de-risking tools' such as Trade Defence Instruments in cases of strategic dependencies on 'third countries that tilt the playing field' (Ibid). Likewise, under the third priority, the Commission pledged to diversify its supply through bilateral and plurilateral cooperation instruments with an effort to reduce critical dependencies in

strategic sectors. Recent partnerships with the US, India and Japan, as well as broader frameworks such as Global Gateway, were mentioned as example cases in this sense (Ibid: 13).

In the face of the priorities mentioned above, the document outlined four risk categories that should be addressed urgently: resilience of supply chains; physical and cybersecurity of critical infrastructure; technology security and technology leakage; weaponisation of economic dependencies or economic coercion (European Commission, 2023t: 2-5). In January 2024, along with its updated version, the Commission adopted five initiatives to realise the Economic Security Strategy. The initiatives include improved screening of foreign investment into the EU, more coordination in the area of export controls, identification of risks stemming from outbound technological investments, supporting research and development in dual-use technologies and enhancing research security at the sectoral and national levels. For the fulfilment of these initiatives, the Commission also presented white papers on outbound investments, export controls and research and development activities, as well as proposals for research security and foreign investment screening (European Commission, 2024e).

The nexus between economic resilience and security was also emphasised in the 2023 Strategic Foresight Report. The Commission stated that, in a global competition that 'economic choices are increasingly driven by security concerns', supporting strategic net-zero technologies and investing in areas of high dependency would be critical for EU's strategic autonomy (European Commission, 2023ab: 10). In its foresight, the Commission reiterated China's position as 'a systemic rival and economic competitor, while being a multilateral partner' (Ibid: 8). Moreover, referring to the initiatives such as the Belt and Road Initiative, the Commission stated that the global order has become a scene for rising geopolitical tensions, in which we see a 'battle of narratives' and a 'battle of offers' (on financing, infrastructure development, or support for the energy transition) (Ibid: 9). This may also be considered as 'a "battle of models" between democratic and authoritarian regimes' (Ibid).

The Economic Security Strategy was seen as 'an EU attempt to position itself as a geopolitical bloc' instead of a mere growth strategy (Benson, Steinberg and Alvarez-Aragones, 2024). Indeed, it was a revelation that the EU has considerably

integrated resilience and risk management, which are prevalent in the economic sector, into its general security understanding. For example, the Commission stated that 'more than ever, (…) security is deeply intertwined with (…) ability to make ourselves more resilient and reduce the risks arising from economic linkages that in past decades (…) viewed as benign' (Ibid). Moreover, it can be observed that, through trade measures, the Commission has increased its influence on economic security, which is part of national security, hence within the exclusive sovereignty sphere of Member States.

It is possible to observe that after the war in Ukraine, the external dimension of economic security has strengthened for the EU. This is particularly evident in the speeches of the HR/VP Borrell. On various occasions, Borrell identified economic security as 'an integral part of foreign and security policy', including its policies towards China (European Union External Action, 2023b). For example, during his speech on the European economic security strategy, HR/VP Borrell made the following statement:

> *The traditional concept of security is being redefined. We can say that war can today be conducted by other means, apart from guns. And among the means to conduct war, aggression, is the economy. That is why we speak about economic security. Even, I would prefer to say 'security through economics'. This is what it is about: how to secure ourselves through economic tools (…) This will be a new paradigm for shaping our foreign policies in the years to come.* (European Union External Action, 2023c)

In the same speech, Borrell also mentioned the security aspect of critical dependencies, including the critical materials needed 'to increase the capacity of production [for] ammunitions', arguing that this dependency weakens the EU's strategic autonomy, 'poses economic risks' and 'threatens' the EU's security (Ibid). He also said that the core of this approach is 'de-risking' (Ibid).

"De-risking" has become the new buzzword for the EU since the release of the economic security strategy. It is frequently used to describe the EU's current approach to China. It was first used by Commission President von der Leyen during her speech on EU-China relations on 30 March 2023. In that speech, von der Leyen stated that the EU needs to 'de-risk – not de-couple': 'Our relations are not black or white – and our response cannot be either' (European Commission, 2023n). Her statement clearly shows an effort to decrease the level of tension between the two actors. This message was reiterated by Borrell later. When he was asked about de-risking, he made the following statement:

> *Today, we have dependencies on China, with respect to the digital transformation, that are bigger than the ones we had with Russia on the hydrocarbons field. I am thinking of solar panels, critical [raw] materials, specific technologies. It is not a matter of considering a danger, but certainly, there is a risk when you depend too much on someone. (…) If the word 'de-risking' has a negative feeling, use another one. Reducing excessive dependencies, that [is what it is] about*. (European Union External Action, 2023d)

The prudent position of the Commission and the HR/VP was based on several motivations. First, the EU was careful about the repercussions that de-coupling would bring. As Borrell stated, 'de-risking carries risks' (European Union External Action, 2023b). He defined these risks with these words:

> *China is not Russia. It is a superpower in the making that is now present everywhere in the world. Its influence is considerable, its political weight is growing and its attractiveness in the countries of the [Global] South is undeniable. (…) as we direct our flows towards Asian countries other than China, we almost automatically see an increase in the trade relations of these countries with China. And this is not by coincidence. These countries are importing more of the products they need from China to export more to Europe or the United States. So our dependence becomes indirect. But in some cases, it can become even more dangerous because these countries are much more vulnerable to pressure from China than we are.* (Ibid).

Second, despite its emphasis on working with like-minded partners, particularly the US, the EU was decisive in retaining its autonomy. That is why, on various occasions, the EU officials stressed that China should not see the EU from the eyes of other actors. During his visit to Beijing in November 2023, Commissioner Breton gave a clear message in this sense:

> *'De-risking our economies is not about self-reliance: it's about resilience. (…) It is not against anybody or any country. It is country neutral. It is for Europe, for its resilience, for its security of supply. (…) Let me be straightforward: Whenever the security interests of Europe will be at stake, Europe will not hesitate to act on its own. Europe will be an actor of its own security and not a mere follower of the decision of others.'* (European Commission, 2023r)

Third, due to the scale of interdependence between two actors, de-coupling would not be feasible. After the release of the economic strategy, the industrial actors, particularly the Bundesverband der Deutschen Industrie (BDI), the German industry union, were quick to react against it. Even though the BDI acknowledged the importance of national security in the strategy, the German manufacturers criticised the tendency toward defensive measures. Likewise, the Italian and French industrialists, as well as BusinessEurope as their umbrella organisation, expressed their reluctance to such measures (Godement, 2024: 29-30). That is why Commissioner Breton emphasised that the aim of the EU's security strategy was not

de-coupling but ‘risk management’ as ‘this is the basis of Resilience’ (European Commission, 2023r).

4.2.2. Strategic Partnerships and Alliances

The EU’s new growth strategy naturally has an external dimension, which is materialised through strategic partnerships and alliances. An overview of the EU’s recent partnerships in climate and energy fields shows that the EU has two primary aims in establishing these relations: diversification of suppliers in strategic raw materials and cooperation with resource-seeking countries.

4.2.2.1. Partnerships with Resource-Rich Countries

As discussed in Chapter 3, supply diversification has been on the EU’s agenda since the export restrictions of China in the mid-2000s. With the launch of the EGD and the integration of strategic thinking into the EU’s policy-making, diversification has become much more significant in overcoming the risks of overdependence on a single supplier. According to the Staff Working Document on CRM, diversification should be done both at the supplier (company) level and in terms of the third countries on which the EU’s economic operators are dependent for their supply. After all, the concentration of supply in a single country –even if the suppliers are different companies in the same country- would still be some form of supply risk. At this point, the document gives the example of energy curtailment in China, which affected the country’s magnesium producers simultaneously and put the EU at risk of an overall supply cut (European Commission, 2023m: 127). Likewise, the CRM Act foresees ‘efforts to strengthen Union capacities along all stages of the strategic raw materials value chain, including extraction, processing and recycling and to increase the diversification of external supplies of strategic raw materials’ (Official Journal of the European Union, 2024b: 3). As part of these efforts, in the Act, the Parliament and the Council stated that the Union would continue its efforts to conclude ‘Strategic Partnerships covering raw materials with third countries in order to implement the 2020 Action Plan on Critical Raw Materials’ (Ibid: 15).

As envisioned in the Action Plan and the subsequent documents, the EU established its first strategic partnership with Canada in 2021 within the general framework of the EU-Canada Comprehensive Economic and Trade Agreement. The partnership resulted in EU investments for cathode active materials and offtakes for lithium, nickel and cobalt used in batteries. Also, Canadian investments relating to critical raw materials have been made in the EU. Upon the endorsement of the EU-Canada Raw Materials Partnership, a Commission official stated that the Union would continue establishing partnerships with resource-rich countries 'to secure a diversified supply of sustainably mined critical raw materials away from a single source – which often is China' (European Commission, 2021j). The focus of these partnerships would be the integration of raw material value chains between the EU and third countries as well as cooperation in research and innovation (Ibid.)

In the same year, the EU established a partnership with Ukraine, which has a major role in the worldwide supply of titanium and can provide more than twenty critical raw materials. In 2022, the European Bank of Reconstruction and Development (EBRD) and the Ukrainian Geological Survey signed a MoU as part of their relationship. In November 2022, the Commission entered into a strategic partnership with Kazakhstan and Namibia (European Commission, 2024f). The following month, negotiations to update the EU-Chile trade agreement of 2003, with the addition of a new chapter on energy and raw materials, were concluded. The new agreement envisions tax-free EU export to Chile, greater access to raw materials and clean fuel – notably lithium, copper and hydrogen- for the EU, provision of equal treatment and improved procurement access for EU enterprises (European Commission, 2022q). So, under the framework of Global Gateway and as part of its Raw Materials Diplomacy, since June 2021, the EU has concluded twelve partnerships with countries having significant mineral reserves through bilateral, regional and multilateral frameworks:

- Uzbekistan: memorandum signed on 5 April 2024
- Norway: memorandum signed on 21 March 2024
- Rwanda: memorandum signed on 19 February 2024
- Greenland: memorandum signed on 30 November 2023
- DRC and Zambia: memoranda signed on 26 October 2023
- Chile: memorandum signed on 18 July 2023

- Argentina: memorandum signed on 13 June 2023
- Namibia: memorandum signed on 8 November 2022
- Kazakhstan: memorandum signed on 7 November 2022
- Ukraine: memorandum signed on 13 July 2021
- Canada: partnership adopted after 15 June 2021 (European Commission, 2024f)

Under the auspices of the EGD, the EU also launched a new type of partnership scheme: Green Alliances. A Green Alliance is a comprehensive form of bilateral engagement in which parties committed to climate neutrality align their domestic and international climate policies to pursue their neutrality goals. The alliances cover partnerships on a range of climate-related issues, such as carbon pricing and carbon border adjustment measures, carbon capture use and storage, climate adaptation policies and sustainable financing (European Council, 2021b).

As of June 2024, the EU has concluded three alliances. The EU signed its first Green Alliance with Japan at the EU-Japan Summit on 27 May 2021. With this partnership, the EU and Japan confirmed that 'climate neutrality is their chosen strategy for growth, jobs and competitiveness, as laid down in the European Green Deal and Japan's Green Growth Strategy' (European Council, 2021b). Apart from the usual reiteration of their commitments under the Paris Agreement, the focus of the partnership agreement was energy security. Acknowledging the pivotal role of low – carbon energy technologies in meeting their climate objectives, they committed to rapidly scale up technologies and policies that would accelerate green transition, 'in particular offshore wind, energy systems integration, energy markets reform, smart grids, energy storage technologies, batteries, hydrogen with a focus on renewable and low carbon hydrogen, industrial decarbonisation, Carbon Capture and Utilization and Storage, fusion energy, nuclear safety, decommissioning and innovation' (Ibid.).

The EU-Japan agreement was followed by the EU-Norway Green Alliance, signed in April 2023 and the EU-Canada Green Alliance, signed in November 2023. These partnerships are significant for establishing a climate and energy partnership with two Arctic states. As President von der Leyen stated during the press conference, the EU-Norway partnership is focused on boosting offshore wind energy production and working on greater strategic autonomy in critical raw materials that are essential

for the construction of wind turbines. (European Commission, 2023v). As part of their cooperation commitment to clean and just energy transition, they also expressed their intention to 'to foster renewable hydrogen production in Europe, create a fully-fledged European hydrogen market based on the common legislation within the European Economic Area' (Regjeringen, 2023). In March 2024, as part of their alliance, the EU and Norway signed a MoU to launch a strategic partnership for the development of sustainable land-based raw materials and battery value chains. The memorandum establishes partnership in five areas: integration of raw materials and batteries value chains; cooperation on research and innovation; application of high environmental, social and governance standards and practices; mobilisation of financial and investment instruments through Invest EU, the European Raw Materials Alliance and the European Battery Alliance; and developing necessary skills for high-quality jobs in raw materials and battery sectors (European Commission, 2024g).

The EU and Canada concluded a Green Alliance agreement during the EU-Canada Summit in November 2023. At the summit, a joint Hydrogen Action Plan was unveiled to promote the hydrogen market development between the EU and Canada. In her statement at the joint press conference, President von der Leyen confirmed the EU's involvement in the Global Carbon Pricing Challenge, which Prime Minister Trudeau launched at COP26 as a global initiative to increase carbon pricing coverage of global emissions to 60 per cent by 2030. As the following statement shows, her speech was a sheer demonstration of the EU's efforts to ensure access to raw materials for green technologies:

> *I want to extend a warm invitation to Canada to join our critical raw materials club, which we will launch at COP28. Canada is indeed in pole position for what critical raw materials are concerned. You are today the only country in the Western hemisphere with all the raw materials required for lithium batteries. Canada exports 90% of its mineral products. And the European Union is Canada's second largest export market. So I would say that this is a perfect match, let us work on that.* (European Commission, 2023w).

Parallel to its influence on the overall policy-making strategy of the EU, the war in Ukraine has strengthened the political dimension of the EU's alignments with the third countries. The alliances concluded with Norway and Canada are noteworthy in this sense. The following statement by von der Leyen from her speech weeks before her visit to Canada demonstrates how issues of trust, reliability and working with like-minded partners became a matter of EU's overall policy, including climate:

> *One country dominates the processing. Out of the 30 critical raw materials, today 10 are mostly sourced from China. So we have to avoid falling into the same dependency as with oil and gas. We should not replace old dependencies with new ones. So we must make sure that access to these commodities will not be used to blackmail us. We have to diversify the supply and build new ties with reliable likeminded partners around the globe. For this purpose, for example, I am travelling in two weeks to Canada – like-minded partners with very interesting offers. The power of democracies also depends on building strong foundations with like-minded partners for the economy of tomorrow.* (European Commission, 2022r)

The partnerships with African nations also demonstrate the existence of such influence. As discussed in the preceding chapter, cooperation with African nations is vital for the EU for two reasons: to exploit the supply of raw material reserves and renewable energy capacities and to increase the competitiveness of the European clean technology industry through trade and investment opportunities with the African nations. The significance of this cooperation was evident in the EU's early strategic planning. The Communication on Critical Raw Materials Resilience states that 'strategic partnerships covering extraction, processing and refining are particularly relevant for resource-rich developing countries and regions such as Africa' and that the EU could help these countries 'develop their mineral resources sustainably through supporting improved local governance and dissemination of responsible mining practices' (European Commission, 2020g: 16).

In August 2021, during her annual address on the State of the Union, von der Leyen announced that the EU would launch its new connectivity strategy, the Global Gateway, to strengthen cooperation with Africa:

> *We are good at financing roads. But it does not make sense for Europe to build a perfect road between a Chinese-owned copper mine and a Chinese-owned harbour. We have to get smarter when it comes to these kinds of investments. This is why we will soon present our new connectivity strategy called Global Gateway. We will build Global Gateway partnerships with countries around the world. We want investments in quality infrastructure, connecting goods, people and services around the world. We will take a values-based approach, offering transparency and good governance to our partners. We want to create links and not dependencies!* (European Commission, 2021k)

Global Gateway is based on the EU's 2018 Connectivity Strategy, i.e. Connecting Europe and Asia – Building blocks for an EU Strategy. With this strategy, the Union aimed to increase connectivity between Europe and Asia by establishing trade routes and digital networks and promoting student-centred mobility projects. The strategy was seen as 'an alternative for BRI' (Geeraerts, 2019: 4). The EU mentioned energy cooperation as a pillar of its connectivity strategy towards its Asian partners.

In this vein, the strategy included climate-related goals. For example, as part of its "sustainable connectivity" policy, the EU pointed out that its connectivity effort would 'promote decarbonisation of the economy and respect high standards, based on environmental impact assessments' (European Commission, 2018c: 2). Likewise, in their joint ministerial statement after the recent EU-ASEAN Ministerial Meeting, the leaders underlined the importance of 'open, resilient, efficient and environmentally, economically and socially sustainable global supply chains' and pledged to enhance cooperation in climate-neutral technologies with the following aim:

> *to accelerate the scale-up of renewable energies, renewable and low-carbon hydrogen in particular from renewable energy as well as grids and battery storage, to strengthen the interconnectivity of energy systems, to substantially increase the uptake and system integration of renewable energy and facilitate transboundary flows of renewable energy, to achieve closer integration of open and resilient global supply chains and to significantly contribute to the Sustainable Development Goals (SDGs), particularly access to affordable, reliable, sustainable and modern energy.* (Council of the European Union, 2024: 5).

In 2021, Global Gateway was launched as a strategy to 'support smart, clean and secure connections and infrastructure, as well as health, education and research systems' through an investment budget of €300 billion, half of which would be allocated to projects in Africa, from 2021 to 2027 (European Commission, 2024h: 1). The first result of Global Gateway is the Africa-Europe Investment Package (AEIP), focusing on five areas for infrastructural investments: green transition, digital transition, sustainable growth and decent job creation, health systems and education. AEIP is implemented through the Team Europe initiative, which consists of the joint support provided by the EU, Member States, European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD) in the form of bilateral aid and both grants and loans. The Investment Package targets an increase in the renewable energy generation capacity by at least an additional 300 GW. It is estimated that massive deployments of renewable energy and clean hydrogen production as part of the green transition efforts would produce at least 40 Gigawatts of electrolyser capacity by 2030 (European Commission, 2024i).

The Africa-EU Green Energy Initiative (AEGEI) was launched at the 6th EU-AU Summit in February 2022. AEGEI's objective is to enhance the implementation of a minimum of 50 gigawatts (GW) of renewable electricity generation capabilities, with the purpose of granting power access to a minimum of 100 million individuals

through European and African public and private sector investments. At the COP28 on 02 December 2023, Maroš Šefčovič, the Executive Vice President of the European Commission, declared that Team Europe will contribute over €20 billion to the initiative. The European Commission, as the leader of AEGEI, pledged €3.4 billion in funding for the period of 2021 to 2027 (European Commission, 2023y). Under the AEGEI framework, the EU has signed agreements for the construction of solar plants in Namibia and a hydropower plant in Nigeria, inaugurated solar plants in Ivory Coast and Niger and completed the feasibility study of building electricity interconnection cable linking Egypt to Greece (European Commission, 2024j).

During COP27 in November 2022, Commission President Ursula von der Leyen and President of Namibia Hage Geingob signed a MoU to establish a strategic partnership on Sustainable Raw Materials Value Chains and Renewable Hydrogen. On 24 October 2023, the EU and Namibia endorsed a roadmap for their partnership for the period of 2023-2025. The roadmap has six pillars ranging from integration of value chains to cooperation on research and innovation. Currently, the EU, EIB and Member States (Germany, Netherlands, France, Belgium and Finland) have been supporting various green transition projects in the country (European Commission, 2023z). In October 2023, the Commission organised the Global Gateway Forum in Brussels and forged several agreements during the conference. These agreements covered various areas, including renewable energy cooperation with Bangladesh, Tanzania, Vietnam, Philippines and Senegal, as well as cooperation in critical raw materials with DRC, Zambia and Uzbekistan. Most recently, the EU and Rwanda signed an MoU on Sustainable Raw Materials Value Chains. Rwanda is a major player in tantalum extraction and producer of tin, tungsten, gold and niobium while bearing the potential for lithium and REE extractions (European Commission, 2024k). The Memorandum with Rwanda followed the signature of memoranda with the Democratic Republic of the Congo and with the Republic of Zambia at the Global Gateway Forum on 26 October 2023.

As an emerging low-carbon technology, green hydrogen production offers investors the opportunity to benefit from the first-runner advantage in the ongoing competitiveness race. Given its geographical proximity and potential for cost-competitive renewable hydrogen, Europe has prioritised North Africa as a key supplier

of green hydrogen. That is why the Member States have already been engaged in individual and multilateral projects in this area. For example, in October 2022, France, Spain and Portugal, with the support of the Council, launched the H2med project. The project was designed as a transnational initiative to connect the hydrogen networks of the Iberian Peninsula to North and Central Europe. The goal is to supply around 10 per cent of the EU's green hydrogen demand by 2030 through the new hydrogen pipeline. In December, energy companies in the project countries (Enagás, GRTgaz, REN and Teréga) submitted the H2med project to the Project of Common Interest for EU funding. As of April 2024, the project is supported by the EU (H2med, 2024).

In January 2023, Germany decided to participate in the hydrogen corridor project alongside France, Spain and Portugal. Germany had already displayed its intentions to engage in green hydrogen exploration activities before the project. During his speech at the government-led hydrogen stakeholder conference in Berlin, Germany's Economy Minister Peter Altmaier stated that renewable hydrogen or hydrogen from natural gas in combination with carbon capture and storage (CCS) was a key part of the German energy system. In the same event, Michael Müller, then-state secretary in the education and research ministry, made this statement: 'Green hydrogen is tomorrow's oil, in our view. For Germany, I see huge export opportunities not for hydrogen but for the technologies (Wettengel, 2019). In 2020, the German government signed a partnership agreement with Morocco on hydrogen development. Since then, it has been funding large-scale green hydrogen and ammonia projects as well as the research and innovation centres in Morocco. So, when the European Commission released the EU Hydrogen Strategy in 2020, the German policymakers welcomed the strategy as it largely aligned with Germany's own strategy published just a month before the EU strategy. Likewise, the Federation of German Industries (BDI) was contented with the strategy as the EU would now 'set standards in international hydrogen trade' and would 'play a key role in redefining the global energy landscape' (Appun, 2020).

The engagement of Germany in the H2med initiative underscores the significance of secure access to hydrogen for the country. Indeed, the German government is quite ambitious with regard to green hydrogen investments. With the aim of being the forerunner in this technology, in 2020, the government decided to

allocate an extra EUR 7 billion to fund green hydrogen investments. The allocated budget is to be utilised for large-scale industrial initiatives. It is expected that, by 2040, an additional 5 GW of electricity will be generated from renewable energy sources to be deployed primarily in energy-intensive industries and storage facilities within the industrial and heavy transport sectors. However, despite the substantial investments, it is unlikely that domestically produced green hydrogen would meet the anticipated demand, resulting in reliance on energy imports. That is why Germany focuses on establishing partnerships with European and international partners in green hydrogen development (European Commission, 2020j: 14-15).

In October 2022, the EU concluded a green partnership agreement with Morocco. With Germany's participation, preparations are currently being made for the construction of a Power-to-X (P2X)[13] hydrogen power plant in Morocco. With a grant of up to EUR 100 million, the project aims to encourage private investment and promote the development of a green hydrogen economy in Morocco (European Commission, 2024j). Similarly, following the Joint Declaration on Renewable Clean Hydrogen, the EIB has been encouraging investment in green hydrogen in Kenya. Germany has pledged roughly EUR 112 million to support Kenya in transitioning to a renewable energy industry by 2030.

For some, the Global Gateway marks a 'paradigm shift'. This shift describes the EU's transition from its traditional donor role in its relationship with the South into a partner role based on a strategic mindset. Moreover, this shift is felt 'not just in Brussels, but also in the other capitals of Team Europe' (Lau and Moens, 2022). This strategic mindset, the differentiation of the Global Gateway from the previous engagement of Europe in Africa, was also a reference point for differentiating the EU approach from the Chinese approach. In a sense, the rivalry between the EU and China in attracting the potential of the continent was portrayed as if it had a "moral" dimension. The following statement of von der Leyen from her speech at the EU Ambassadors Conference 2022 explains this differentiation:

> *(…) a 'Belt and Road' debt crisis is no win full swing. Tens of countries are massively indebted with China. Eight of these countries – from Angola to Laos – will spend in 2022 more than 2% of their gross national income to pay their debt*

[13] Power-to-X refers to the utilisation of renewable electricity, such as wind power, to produce an alternative energy source (known as 'X'). This 'X' is an energy carrier like renewable hydrogen, which has the capability to fuel medium- to heavy-duty transport or be integrated into industrial operations.

> *to China. Our Global Gateway is about giving countries a better choice. Global Gateway's investments will be sustainable, not only for our partners' finances but also for the environment and for local communities (…) Global Gateway is the opportunity to end unhealthy dependencies and to invest in partnerships of equals instead.* (European Commission, 2022j)

For some others, the market mechanisms proposed in the EGD and its initiatives, such as the Global Gateway, serve to reproduce its colonial legacy. For example, Almeida and others argue that these are simply attempts for 'greening the empire', meaning that they reproduce 'a colonial and capitalist ecology by deepening the hegemony of resource imperialism and in greening a historically Euro-centered empire' (2023: 2). Similarly Vezzoni argues that these actions consolidate 'the EU's new constitutionalist project of an open market economy based on mercantilist export-led growth, market-based innovation, technocratic governance and alignment of state and corporate interests' (2023: 12).

In the end, regardless of its primary motivation, one can observe that, as in the case of strategic partnerships, the EU now interprets issues of connectivity and infrastructure on the basis of concepts such as democracy and global order. The following statement by von der Leyen is a clear illustration of this association:

> *(…) we want to show the power of a value-driven investment agenda. We know what investment by other countries can look like. Take, for example, Russia. The price to pay for their oil and gas is loss of sovereignty and loss of independence. They do not want partners; they want vassals. And it is not just the Kremlin. Tens of countries are on the brink of default because they cannot pay their debt with China. And a few have already defaulted. The Financial Times calls it 'emerging Belt and Road debt crisis'. Development loans that ignore environmental and social standards, that cut short on risk management and lack transparency? These cannot deliver what countries need. There is a better way. And it is up to us to make it work in all corners of the world. It is not just the future of several countries that hangs by a thread, it is the future of the rules-based order. This is our responsibility as democracies of our day and our age. And I want Europe to live up to it. For our own sake and for the world's sake.* (European Commission, 2022r)

The growing emphasis on side-lining with liberal, democratic and "like-minded" partners can be seen in the new proposal for establishing a Critical Raw Materials Club (CRM Club). In her 2023 State of the Union speech, President von der Leyen confirmed that the EU intends to establish a club that seeks to bring together like-minded states and organisations to join forces in a collaborative effort. The main objective is to establish a collective group of buyers that can work together to pool resources and coordinate market activities. In another speech, explicitly referring to China's control over the production and processing of CRMs, von der Leyen stated

that the EU and the US could ‘build an alternative to this monopoly by establishing a critical raw materials club’ (European Commission, 2022m).

A buyers’ club is an organisation that strategically organises the actions of its members to increase their influence over the market and help them obtain more favourable purchasing terms. Such an organisation would transfer the advantages from producers to consumers. According to Hendrix, the proposed club resembles the EU’s AggregateEU mechanism, which was established as a centralised purchasing mechanism for natural gas. Yet, the proposed club differs from the AggregateEU as the latter was designed as an emergency response to the supply crisis following the Ukrainian war. The Critical Raw Materials Club, on the other hand, is expected to serve as a platform to regulate demand and prices in a market that is ‘thin, opaque and significantly underdeveloped and undercapitalised relative to projected future demand’ (2023: 3). Still, it is commonly argued that this initiative is driven by a shared commitment to addressing geopolitical and economic security issues (Lawler and Shin, 2023). Hendrix (2023: 1) even argues that the motivation behind the proposed buyers’ club to control the CRM supply chains is a matter of ‘national security’ as these materials are essential components for defence technologies.

For these reasons, the stakeholders had already proposed such an establishment. For example, in its opinion of 19 March 2021, the European Committee of the Regions underlined the difficulty for individual businesses ‘to source raw materials in highly consolidated supply markets and in competition with markets where demand is strong (in particular China)’ and called for ‘targeted support to be given to entrepreneurial alliances such as purchasing associations’ (Official Journal of the European Union, 2021i: 7). Acknowledging this need, in its communication on supply of critical raw materials, the Commission stated that it would ‘establish a critical raw materials club with partners to strengthen supply chains and diversify sourcing and reach out to all potential partners to set up this alliance’ (European Commission, 2023l: 8).

At COP28, the EU launched the CRM Club and extended invitations to “allies” that share similar values in order to avoid any potential competition for resources. On 10 March 2023, the EU and the US initiated negotiations for a focused critical minerals agreement, which is to serve as a foundation for progressing towards the establishment

of a more comprehensive and extensive CRM Club. Meanwhile, the EU joined the US-led Minerals Security Partnership, a multilateral cooperation platform bringing together raw material-producing and consuming countries. Currently, MSP partners include 14 states (Australia, Canada, Estonia, Finland, France, Germany, India, Italy, Japan, Norway, the Republic of Korea, Sweden, the United Kingdom and the United States) and the European Union (European Commission, 2024l).

CONCLUSION

This study stemmed from the general observation that, throughout the recent two decades, the cooperative elements in the EU and China climate relations have gradually been replaced by confrontational elements, primarily due to geopolitical considerations. Drawing on another observation that such considerations led the EU to develop a securitising perspective towards China in other policy realms, the author aimed to scrutinise whether the EU has developed a similar perspective in climate-related matters. For this aim, the author analysed the collective discourse of the EU produced by relevant securitising actors, namely the European Council, the Commission, the Council, and the Parliament. Utilising the collective securitisation model (Sperling and Weber, 2017 and 2019), the author analysed the discourse and the policies of the EU to understand whether the EU has adopted such a perspective. In addition, the author employed the threatification vs riskification model (Diez, von Lucke, and Wellmann, 2016) to reveal the logic of securitisation.

The first stage of the analysis presented the status quo in the EU-China climate relations. A careful reading of the primary and secondary sources on the topic in question demonstrates that a functionalist logic initially shaped bilateral relations between these actors. China was ready to open up to the outside world, and the EU was eager to accompany its engagement with the international community. In an effort to keep its engagement with China, the EU -particularly the Commission- followed a functional logic. The Commission assumed that extensive technical collaboration, along with financial and technological incentives, would enhance cooperation with China on global climate matters and create market prospects for European enterprises in the renewable energy industry. It is possible to argue that their eagerness for engagement positively contributed to the development of their relations in the climate realm. Until the early 2000s, the EU endeavoured to involve China in more extensive climate discussions, acknowledging the need to reconcile the divergent viewpoints of historical accountability. In the meantime, external shocks such as the withdrawal of the US from international climate agreements substantially affected the EU-China climate relations, encouraging them to cooperate in tackling this global challenge. The establishment of a strategic partnership in 2003 was a milestone development that

positively affected their climate cooperation, as illustrated in the establishment of the Partnership on Climate Change.

However, the differences in their role conceptions concerning their roles in international climate governance have strained their relations occasionally. While the EU pursued an ambitious role in leading international negotiations, China has remained prudent against the settlement offered by the Western/Northern coalitions. China's victimhood narrative and its assertive developmental policy jointly created this prudency. The 2009 Copenhagen Summit posed a critical juncture in terms of the expectation gaps between these actors.

Still, despite moments of tension, the two actors have managed to attain a problem-solving attitude towards climate change-induced matters and have pragmatically progressed in their bilateral relations. The Commission's 'principled, practical and pragmatic' engagement with China allowed them to keep a certain level of impetus in their relationship (European Commission, 2016a: 2). This impetus resulted in limited yet practical cooperation, as revealed in the EU-China Joint Statement on Climate Change. The reconciliation between major players, including the EU and China, resulted in the adoption of the Paris Agreement in 2015. Even in the aftermath of the Commission's 2019 Strategic Outlook, which described China as a partner, a competitor, and a rival simultaneously, the EU was still willing to cooperate with China in multilateral efforts to address global problems such as climate change. Hence, one can argue that the functionalist logic of the EU's engagement with China in the early periods of their interaction has turned into a more pragmatic yet still principled approach in the mid-2010s primarily due to the differences in their role conceptions in the global climate governance.

The second stage of the analysis affirmed that bilateral relations do not occur in a vacuum. Since the mid-2010s, EU-China relations, specifically in the climate and energy realm, have been considerably influenced by three long-term dynamics. First, China's economic assertiveness, mainly stemming from the economic and technological outlook of President Xi Jinping, accelerated China's technological advancement in climate change mitigation technologies, resulting in mounting competitiveness pressure on the EU. Second, the alarming need to decouple economic growth from environmental degradation, i.e., for green growth, increased the pressure

on the EU to turn its sustainability promises into deeds. The realisation that the European industry would need an overall transformation of the existing production methods led the EU to focus on green industrial policies. Third, parallel to its sustainable growth efforts, the growing concerns over the security of energy supply, mainly due to Russia's leverage as the primary gas supplier, increased the salience of renewable energy for the EU while occasional disruptions in CRM supply heightened the EU's concerns over dependence on single suppliers, primarily China.

These concurrent dynamics have shaped the interactions between China and the EU, leading to a complex relationship characterised by increasing competition. While both parties occasionally expressed their commitment to enhancing bilateral trade and investment in renewable energy sectors, competitive pressures and conflicting interests began to exert greater influence on their interactions. Hence, their pragmatic and mostly cooperative relationship in the climate realm until the 2010s has come under the strain of conflicting interests for competitiveness and sustainability reasons. This strain has necessitated a re-evaluation of the cooperative elements of their relationship and thereby interrupted the overall status quo in their relations. The potential risks of import-reliance on critical raw materials in the post-Ukrainian crisis further prompted the EU to make a strategic assessment and prioritise its self-sufficiency in the renewable energy sector. Consequently, the EU and China have found themselves navigating a delicate balance between competing in the climate and energy technologies and cooperating against climate change-induced challenges.

Despite the dynamics mentioned above, China was not the primary focus of the climate and energy policies in the mid-2010s. Still, even though the EU did not make any explicit references to China in its discourse on clean energy, the legal actions (such as anti-subsidy investigations, WTO applications, and RMI) signalled that China's resource endowments and technological power might pose a certain level of risk for the EU's clean energy ambitions. The adoption of the EGD, however, put China's policies and actions at the core of the EU's climate-related ambitions. As the strategic alignment of the EU's climate imperatives with its broader geopolitical agenda has become more salient with the EGD, the EU has found itself navigating in a landscape marked by confrontations with China more than ever. Therefore, it would be fair to

expect China to become a more significant concern for the EU, not only in terms of its climate policy but also for its overall projections for the future.

Indeed, the third and fourth stages of the analysis revealed that the confrontational dynamics in this relationship have resulted in the development of a securitising perspective towards China. The qualitative analysis of the discourse derived from 307 documents issued by the European Council, the Commission, the Council, and the Parliament between 10 September 2019 and 01 March 2024 reveals that the EU has adopted both risk and threat articulations.

When it comes to the implications of Chinese policies and actions, based on the dominant themes in the EU's discourse, the author observed that these implications are of two kinds: sustainability and competitiveness. Sustainability implications concern the repercussions of China's policies on the EU's own climate and energy targets. To put it more precisely, China appears as a source of concern for the EU due to the latter's over-dependence on China (i) for the supply and refining of raw materials, (ii) for the production and storage of renewable energy, and (iii) the clash of their interests in supplying renewable energy and raw materials from third countries, primarily from Africa and Arctic region. The competitiveness implications concern the repercussions of China's policies on the EU's growth and competitiveness in climate and energy realms, specifically in clean energy technologies, which directly affects the EU's green growth ambitions. Specifically, the EU is concerned about the implications of Chinese policies on (iv) the production of clean energy technologies, (v) the exportation of these technologies, and (vi) the standard-setting power of the EU.

The findings of the discourse analysis show that the EU has adopted risk articulations in all of the six dimensions mentioned above while it explicitly resorted to threat articulations in the dimensions of raw material dependence, renewable energy production and storage, standardisation, and partly in energy supply from third countries.

Table 5: Risk and Threat Articulations in the EU's Discourse

	Risk Articulation	Threat Articulation
Sustainability (Climate and energy targets)	(iii) supplying renewable energy and raw materials from third countries - Africa	(i) for the supply and refining of raw materials (ii) for the production and storage of renewable energy (iii) supplying renewable energy and raw materials from third countries - Arctic
Competitiveness (Clean technologies competitiveness)	(iv) the production of clean energy technologies (v) exportation of clean energy technologies	(vi) standardisation

Source: Author's own compilation.

The existence of risk articulation in all the dimensions is in line with the expectations as the Commission had already framed dependence on Chinese raw materials as a risk since the mid-2000s. The creation of RMI in 2008, the periodic CRM lists issued since 2011, and the establishment of EBA in 2017 were all the products of this framing. Therefore, the Commission's stress on raw material dependence as 'a new type of supply risk' or 'a huge risk' is a reflection of this years-long framing (European Commission, 2019e; European Commission, 2020g: 1). When the EU put climate and energy ambitions at the centre of its new growth strategy with the EGD, the Commission's risk perception was mainstreamed in other dimensions as well. Moreover, the growing emphasis on strategic thinking, long-term policy planning, and resilience, as revealed in the annual foresight studies, facilitated the mainstreaming of risk management as the general policy-making mentality of the EU. That is why, even in relatively new issues such as green hydrogen production and storage, the EU reflected this perception and stressed that 'dependence on concentrated supplies of critical raw materials pose a risk' for its new ambitions (European Commission, 2023b: 12).

In issues where the EU previously assumed a risk articulation, such as raw material dependence, the discourse turned into threat articulations. Particularly, the Commission often and explicitly used threat-provoking terms such as Europe's dependence, security, and autonomy in the context of green and digital transition, associating these terms with reducing dependence in strategic areas, including critical materials and technologies. It should be noted that, apart from the facilitation of previous risk framing on these matters, the adherence of the relevant stakeholders to this securitising discourse, as revealed in the EESC's association of external dependencies to the 'survival of European jobs and industries', was significant to increase the audience's receptivity to the actors' discourse (Official Journal of the European Union, 2021c: 3).

Likewise, the association of strategic dependencies with the 'sovereignty' of the Union by core Member States stands as a clear example of audience approval, reinforcing the threat perception at the collective level (Hall and Milne, 2019). This became more prevalent after Russia's war of aggression in Ukraine in 2022. Prior to the war, the notion of clean energy was regarded as essential for achieving sustainable growth and maintaining competitiveness. So, China's role remained significant, but the primary concerns were limited to the security of the supply of resources to ensure sustainability and competitiveness in the economy. Following the war in Ukraine, the focus shifted to security in its most traditional sense, with frequent references to autonomy, sovereignty, and independence. The EU occasionally referred to Russia and China as a block, highlighting a clear distinction between "us (the EU)" and "them (Russia and China)" based on liberal values. The distinction has clearly included references to trust, friendship, and being like-minded. By presenting a potential threat to democratic values and the future of the EU and the international system, this distinction has prompted member states and other countries in the liberal wing to unite and take collective action against the "the others". To put it simply, although Russia has been the main target of the EU's security-related messages, the recent speeches from the Commission President von der Leyen and HR/VP Borrell indicate that the EU has become increasingly alarmed by its reliance on China, given China's alliance with Russia.

Concerning the topic of this study, the significance of the message conveyed in the EU's discourse is the collective acknowledgement of the 'security dividend in fighting climate change' (European Commission, 2023f). The discourse highlighted the strategic interdependencies that directly influence the EU's climate and energy ambitions. Accessing renewable energy sources is increasingly viewed as a means to achieve strategic autonomy. Therefore, it is possible to argue that the transition from risk articulations to threat articulations is very much related to the EU's security-related priorities apart from its climate and energy-related priorities. After all, climate and energy ambitions have become a tool that is 'good for our [the EU's] independence and our [the EU's] security of supply' (European Commission, 2022i).

Speaking of the security perception of climate-related matters, the EU's discourse on energy and materials supply from third countries is noteworthy. The analysis shows that the EU explicitly adopts a threat articulation in its discourse on the Arctic, defining the region as a source of 'political competition and possible tensions, possibly threatening the EU's interests' particularly when it comes to the exploitation of and access to energy sources and CRMs by China. Whereas the discourse on Africa shows a tendency to risk articulation, as evident in the Commission's adoption of a more risk-focused tone when it comes to considering China's strategic energy investments and acquisitions in Africa. After the EGD, the risk perception became more apparent as China's capturing third market sourcing in energy and materials would result in a 'huge risk' of creating new dependencies for the EU (European Commission, 2019g).

It should be remembered that the divergences between Member States regarding their general approach to Chinese investments would hinder a possible transition from risk to threat articulations. After all, not every member is equally concerned or vocal about these investments, and the Commission is well aware of the fact that different interests unavoidably make EU-China relations more complicated (European Union External Action, 2023a). The opinions of the EESC also show a lack of a specific risk or threat articulation even though the Committee is concerned about Europe's losing ground in Africa in comparison to China (Official Journal of the European Union, 2022b: 3).

At this point, it is worth noting that the Parliament has been more vocal than the Commission, stressing the 'security-related dimensions' of the BRI. This could be partially explained by the general approach of the Parliament towards the exploitation of resources in Africa and its dissatisfaction with the rivalries over the potential of the continent, particularly from China and Russia, which 'are advancing their geopolitical interests (…) at the expense of the sovereignty of African countries' (Official Journal of the European Union, 2021e). Still, it is possible to see that, beyond its traditional sensitivity to sovereignty, the EP has also been concerned with the implications of this rivalry for 'European security' (Ibid).

With regard to the EU's concerns over Chinese involvement in the Arctic, however, the discourse ostensibly shifts from risk articulation to threat articulation. This is understandable as the region borders the EU, with two Arctic states being the EU members, and it has already been a scene for more traditional security concerns, such as territorial disputes between major powers. That is why the EU's threat articulations, as illustrated in its fear that 'intensified interest in Arctic resources' might turn into 'political competition and possible tensions, possibly threatening the EU's interests', differ from its risk articulations on Africa (European Commission and High Representative of the Union for Foreign Affairs and Security Policy, 2021: 1). Therefore, it is possible to argue that China's climate and energy-related ambitions in the Arctic and Africa provokes the security notion for the EU while these two regions refer to two different levels of securitiness.

Whereas the audience has been more receptive to a securitising discourse on the issue of raw material dependence and energy production and storage, it is vice versa regarding China's policies in the Arctic. The Arctic states and actors are traditionally hesitant to acknowledge the EU as a prominent actor in regional affairs, and these states tend to give the Union a lesser role in debates concerning the region, trying to limit the EU's involvement in the European Arctic. Also, the EESC has been cautious of the EU's involvement in the region, acknowledging the spheres of influence in the region and differentiating between the European and Russian Arctic. That is why the Parliament has also been more prudent in its resolutions on the issue, refraining from threat articulations. Therefore, it can be argued that the approach of

the audience, together with the prudence of one of the actors, the EP, downgraded the threat articulations in the collective discourse.

Based on the matrix provided by Diez, von Lucke, and Wellman (2016), the risk and threat/danger articulations in the EU's collective discourse point out three different referent objects across three different levels. At the individual level, which pertains to the citizen level for the topic of this study, the referent object in the EU's discourse appears as citizens' jobs and welfare. The Commission's conclusions and proposals, along with the speeches of the Commissioners, including the President, have explicitly referenced the risks associated with actual and potential job losses in downstream manufacturing firms within the renewables sector, as well as 'the creation of sustainable jobs' in emerging clean technology, raw materials, and battery sectors (European Commission, 2020k). The primary message indicated that China's climate and energy policies have had repercussions on the 'survival of European jobs and industries' (Official Journal of the European Union, 2021c: 3).

At the territorial level, which connotes the institutional/organisational level, the referent object of the risk and threat articulations is ultimately the EU's growth and competitiveness. Since the mid-2010s, the EU has been pursuing a sustainable and competitive growth model, with climate-related initiatives increasingly central to this framework, particularly after the adoption of the EGD. Consequently, China's policies and actions to achieve its climate and energy targets in accordance with its own growth model have increasingly conflicted with the EU's aspirations for green economic growth. Hence, at the territorial level, the EU repeatedly yet sometimes implicitly pointed out the risks and threats posed by China to its ambition of 'secure sustainable and inclusive growth and global leadership in this crucial decade' (European Council, 2023).

Following the Russian war of aggression in Ukraine, risk and threat/danger articulations in the EU's discourse have gained a more "traditional" meaning, pointing to a referent object at the systemic level: the liberal international system. The emphasis on liberal values such as democracy and human-centrism was already employed by the EU, particularly in the discussions concerning Chinese standardisation efforts, as these efforts were seen as 'dangerous' to 'humanist and liberal vision' of the Union (European Union External Action, 2020). After the war, on the other hand, the EU has become more

vocal on this matter, while the tone of the discourse has become more adversarial. The growing emphasis on side-lining with liberal, democratic, and "like-minded" partners against "the others" (Russia and China) was also seen in the climate and energy-related discourse of the EU, as these issues have been associated with the "dependence" of the EU on China. In other words, the of the 'security dividend in fighting climate change' has become more visible for the EU, which adopted a more antagonistic perspective towards China (European Commission, 2023f).

Table 6: Typology of Referent Objects in the EU's Discourse

Level of the referent object	Referent objects in the risk and danger articulations
Individual	Citizens' jobs and welfare
Territorial	EU's growth and competitiveness
Systemic	Liberal international system

Source: Adapted from Diez, von Lucke, and Wellmann, 2016: 42.

Articulations of risk and threat are one side of the coin. The other side is the policy outputs (the measures) that the EU has developed as a result of these articulations. At this point, whether the EU has adopted routine measures with long-term impacts for the management of the risks or adopted exceptional measures with short-term impacts for the elimination of threats helps us determine the form of securitisation. In line with the themes presented in Stage 3 and Stage 4, the expectation is that the EU would produce outputs in two dimensions: reducing dependencies on China and ensuring competitiveness against China. The outputs presented in Stage 5 reveal that the EU has opted for primarily legislative actions facilitative for setting targets, loosening state aid rules, incentivising domestic mining investments, etc. The motivation behind these measures is to provide clarity and predictability, not dramatic changes, to eliminate a specific threat posed by China's policies and actions. This could be partly attributed to the nature of the policy area and the actor. After all, the EU is a regulatory power, using its legislative competencies as the primary instrument. Similarly, the establishment of industrial alliances in the raw material, solar PV, and hydrogen sectors is the extension of a proven method: the European Battery Alliance.

The outputs that differentiate from the others in terms of their content and effects are Net Zero Industry Act and the Carbon Border Adjustment Mechanism. The common feature of these two outputs is that they are designed to reconcile climate neutrality policy with industrial competitiveness policy. As a legislative act, the NZIA grants net-zero strategic projects the status of the highest national significance. More importantly, the Act rules that public procurement bids using products from a country with more than 65 per cent of the EU's market share would be downgraded. The provision of public procurement directly targets China, with an effort to reduce the Union's overdependence on Chinese imports of green technologies in the short term through exceptional limitations.

It should be noted that the NZIA is the product of negotiations and compromises between the Member States and the call of the stakeholders to protect European manufacturers. Therefore, despite the EU's inability to offer more dramatic instruments such as subsidies due to institutional barriers (the complex bureaucratic nature and the limited budget), through the public procurement provision, the EU was able to reflect its threat articulations to policy outputs. Likewise, the content and potential implications of CBAM differentiate this mechanism from other trade-focused outputs. Considering the existence of a vocal audience on the high costs of the EU's climate ambitions, particularly 'the risk of carbon or investment leakage', it is not surprising that the CBAM stands as an exceptional measure among the others, with relatively short-term impacts on the industry in an effort to eliminate the threats posed by China to EU's competitiveness.

Other than CBAM, as part of the trade-focused outputs, the EU has pursued mostly traditional methods. The modernisation of agreements (to include CRM supply chains) and the establishment of new strategic partnerships are traditional or routine policy instruments that the EU has pursued in the realm of common trade policy. The Global Gateway is relatively new, and, for some, promising to change the image of the EU from an aid provider to an equal partner is a new thing. However, the content of the Global Gateway projects does not differ much from the previous project-based engagements of the EU on the continent and does not offer any dramatic or short-term benefits to the EU, which aligns with the definition of risk-oriented measures. Green alliances partly differentiate in terms of the political motivation behind the

establishment. For example, the climate and energy partnership with the two Arctic, particularly the stress on liberal values and democracy during their launch, makes them a political statement more than a practical cooperation. However, we have to remember that, despite the threat articulations, the measures with regard to the Arctic concerns have not gone beyond these alliances due to the low level of audience acceptance.

Overall, looking at the risk and threat articulations in the EU's discourse, together with the risk and threat dimensions in its policy outputs, reveals that the EU has undoubtedly developed a securitising perspective towards China vis-à-vis the latter's policies and actions in climate-related matters. With regard to the form of securitisation, the findings show that for the matters that the Commission had previously developed a risk perspective and where there is a vocal audience with a high receptivity to the matter, the securitisation has taken the form of threatification. The EU's over-dependence on China for the supply and refining of raw materials, as well as the production and storage of renewable energy, are illustrations of this transformation. For the matters that the Commission has refrained from an explicit threat articulation or in which there has been a mismatch between the articulations of the securitising actors and the audience, the form of securitisation has remained as riskification. The EU's discourse and outputs on the matters of energy supply from third countries and clean technologies are examples of this.

The findings of this study contribute to the scholarship on various aspects. First, the findings confirm that a securitisation actor can employ risk and threat articulations at the same time when addressing a topic. Just as the overlapping circles in the threatification vs riskification model, which illustrate the possibility of danger–risk oscillation, i.e. the 'zones of transition', risk and danger articulations may coexist in different dimensions of a specific topic (Diez, von Lucke, and Wellmann, 2016: 40). The existence of risk and threat articulation in different dimensions of climate policy as well as in the discourse on a single dimension is evidence in this sense. Second, the findings confirm that sometimes the actor-audience relationship is not simply blurred but 'co-dependent' (Christou, 2019: 295). The Commission's involvement of relevant stakeholders in the industrial alliances is a demonstration of this blurred line because the Commission not only explicitly entailed the relevant stakeholders into the securitising move but also involved them in the policy output through regulatory

interactions to improve legislation and law enforcement. Third, the study confirms that securitisation does not necessarily happen in the form of extraordinary measures and that a collective securitisation case might be 'subtler than in its original Copenhagen School conception' (Bengtsson and Rhinard, 2019: 347). As mentioned above, this is particularly relevant for the NZIA and CBAM. These two outputs are not different from the routine instruments of the EU if we only look at the form of the instrument. However, their content and possible implications on the EU and China are relatively exceptional. Fourth, the findings align with the widely acknowledged arguments that, in an organisational setting, the audience is often divided and that collective securitisation hardly occurs when there are divergent views on the level of threat (Lucarelli, 2019: 419). Sometimes, securitisation occurs 'only in name and not through policy measures' Hofmann and Staeger (2019). Indeed, the difference between the risk and threat articulations between the Commission and the Parliament, as well as the differences between the actors and the audience (both the Member States and the EESC), explains why the threat articulation of certain actors is not mainstreamed to the general discourse and not reflected to the outputs.

The findings also contribute to the scholarship by pointing out the issues that need further research. One caveat of the framework by Diez, von Lucke, and Wellmann (2016) is that the context is underemphasised. The authors remind us that the keywords they provide are not exclusive, but this study reveals that context is more important than it is estimated. For example, the word "dependence" does not automatically bring a threat articulation because the EU had stressed 'dependency on the precious metals and raw materials that we [the EU] need for the green transition' since the mid-2010s, and not necessarily in a threat framework (Simon, 2018). Moreover, between 2019 and 2022, the Commission has used "(over)dependence" almost interchangeably with "(over)reliance" various times after the adoption of the EGD. Similarly, the words "clear" and "unclear" do not connote a specific articulation unless they are accompanied by more specific words in a clear context. The discourse analysis in Chapter 4 shows that the EU has often associated the risk caused by China's actions with its ambition for strategic autonomy. We should note that strategic autonomy is a matter of survival for the EU. Therefore, even if the EU does not frame

those risks as a matter of security, a threat to its survival, the context allows us to assume that these actions constitute much more than risk.

Another point that further studies could assess is, indeed, the actor-audience interaction. The introduction of the recursive interaction by Sperling and Webber undoubtedly contributes to an under-researched aspect of securitisation theory: the audience response. However, the model does not provide a clear empirical direction to analyse this interaction. Neither does it help the analyst to identify the audience and the level of its receptiveness. Therefore, considerably more work needs to be done to determine the audience, its level of receptivity for affirmation of the securitising discourse, and the forms of its response.

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