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# From National Law to Global Ambitions: China's Rare Earth Regulation in Domestic and International Law

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**Abstract** Rare Earth Elements (REEs) underpin green, industrial, and defence technologies and are increasingly governed following security logics. This article traces the evolution of REE governance in China, articulating it in a four-stage periodisation: horizontal reciprocity, state-led transactionalism, securitisation, and then the current phase of neo-securitisation. It will show how Chinese environmental and mineral resource laws, and their interaction with international economic law, centralise production and relocate geopolitical rivalries into legal arenas that encompass WTO disputes to EU tariffs and international arbitrations.

**Keywords** Rare Earths (REEs). Chinese law. Environmental law. Mineral resources law. International law.

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## 1 Introduction: The Periodisation of the Chinese Rare Earth Governance

Rare earth elements (REEs), also known simply as rare earths (REs), have become one of the most contested topics in contemporary debates over technology and security (Gangul, Cook 2018, 2-3). Their growing global relevance stems from two intertwined dynamics: the rising need for essential materials used in green technologies and the ongoing efforts to securitise their supply chains. This article bridges these dynamics to offer a critical, multidisciplinary account of how China's REE policy operates at the intersection of environmental governance, industrial strategy, and international law. It will also show that the securitisation dynamics linked to REEs are not merely a recent phenomenon but an ongoing trend.

In this paper, we will trace how China has consistently framed REEs as strategic resources rather than ordinary commodities and a key state industry. We argue that the sector is witnessing emerging trends of heightened regulatory securitisation, in which legal frameworks are increasingly used as instruments to protect national strategic interests and meet industry requirements. Building on Shen et al.'s temporalisation of China's REE policy evolution (2017) and the broader scholarship on REE security, namely: Ting, Seaman 2013; Hurst 2010; Medeiros, Trebat 2017; Andrews-Speed, Hove 2023; Chen et al. 2018; Sahai 2025; Butler 2014; Chapman 2018; Park, Tracy, Ewing 2023; Zhang 2015; Shuai et. al, 2023; Yu 2024; Yang 2025; Lewis, Hao 2011, this article will present a new four-stage temporalisation of China's REE governance:

1. Horizontal Reciprocity (1950s-70s), a period marked by socialist cooperation, marked by Sino-Soviet and Sino-Japanese technological cooperation and exchanges.
2. State-Led Transactionalism (1980s-90s), when foreign investments by Western countries and, consequently, technology transfers became central to China's industrial upgrading.
3. Securitisation (2000s-10s), the consolidation of state control over the sector and the formalisation of domestic priorities through export quotas, stricter environmental regulation, and international disputes.
4. Neo-Securitisation (2020s-), the externalisation of China's securitised logic as REEs became instruments of international power projection and the object of transnational legal contestation.

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To develop this temporalisation, we have examined the Copenhagen School of Security and its relationship to legal research. The Copenhagen School, primarily associated with Buzan, Wæver, and de Wilde, presents a constructivist framework for understanding how non-military issues can become security threats warranting extraordinary measures. Buzan and his colleagues contend that security is not an objective fact but a social construct shaped through discourse and practice. Securitisation becomes a 'speech act', i.e., a passage where an actor declares an existential threat to a referent object and then claims legitimacy for extraordinary measures outside routine political procedures (Wæver 1995; Buzan, Waever, De Wilde 1998). Yet, this passage is not analitally neutral, as framing an issue as security does not merely identify a threat. It instead produces a justificatory vocabulary through which exceptional governance becomes normalised within the legal order (Charrett 2009).

Salter applied this approach in his analysis of the Canadian Air Transport Security Authority, using Buzan's concept of securitisation, which involves framing an issue as a threat based on the recipient state's perception and the severity of the threat (2008, 323-4; Buzan 1991, 133-4; Buzan, Waever, de Wilde 1998, 25). Hanrieder and Kreuder-Sonnen examined the "ambiguous effects of securitization in global health" (2014, 3), demonstrating how presenting an issue as a security threat can justify extraordinary governance measures. Building on Williams's (2003) earlier work linking the Copenhagen School to Schmitt's theory of the state of exception, this scholarship underscores how securitisation resonates with Schmitt's friend-enemy distinction and with his definition of sovereignty as the authority to decide on the exception (Schmitt 1985, 5; 2007, 50-1; Huysmans 1998). Although not primarily focused on legal aspects, Sahai's work on natural resource securitisation followed a similar pattern: when scarcity is framed as an existential threat, extraordinary regulatory measures become politically and legally justifiable (2025, 328-9).

As REEs are increasingly recognised as strategic assets underpinning economic development, security rationales have ultimately been codified within environmental and mineral resources law. Statutory amendments, quota systems, licensing regimes, and export controls were increasingly institutionalised to recalibrate authority within the sector, while formally grounded in objectives of environmental protection and sustainable development. This article seeks to present this regulatory shift and its articulation through our proposed four-stage periodisation. We will demonstrate that this trajectory marks a structural transformation, in which resource regulation is now embedded within national security frameworks, consolidates state control over market access, while triggering disputes in international economic law.

## 2 From Fragmentation to Formation: From Colonial Asymmetries to Horizontal Reciprocity and the Early Industrial Planning (1920s-70s)

The definition and valuation of rare earth elements (REEs) in China have developed significantly since their initial utilisation in the late nineteenth century, particularly given that their more systematic applications were established later. The lanthanide series (REEs are all lanthanides in the periodic table) was conclusively identified in 1914 by Henry Moseley, whose work also contributed to rare-earth separation and early nuclear research (Klinger 2015, 574-5). By the time of the First World War, the phosphoric properties of certain REEs had already found military applications in fuses and explosives, revealing their potential beyond laboratory chemistry. In the interwar period, the Chinese nationalist government under the Guomindang began its own geological research, initiated systematic mineral surveying in 1922, albeit with limited funding, and pushed for strategic mineral extraction from the late 1920s onward (Klinger 2015, 575).

In these same years, China signed barter agreements with Germany to exchange tungsten, antimony, and other minerals for military purposes, and engaged with German, Swiss, and Danish geologists to map mineral deposits in Inner Mongolia and Xinjiang (Klinger 2015, 576). It was during a 1927 mission that what would later be discovered as the world's richest REE deposit was discovered in Baotou, and its abundance persists to this day. However, large-scale production did not begin at the site until 1957, when it was integrated into the Baotou Iron and Steel (BIS) industrial complex (Chen et al. 2022, 126). This delay was not merely technological; it reflected the erosion of Republican sovereignty in Northern China following the Japanese invasion of 1931 and the establishment of Manchukuo. In the invasion period, the Chinese iron, coal, and REE resources were seized by the Japanese army for its own rearmament and war economy. Furthermore, Japan conducted extensive geological surveys in the region, primarily through the South Manchuria Railway Company and the Manchurian Industrial Development Corporation, and appropriated much of the infrastructure established during earlier joint mapping missions (Shen 2019, 123-7; Stewart 1941, 202-3).

Not only did the war and Japanese occupation hinder the development of the Chinese mining sector, but mining activities also didn't resume promptly due to the civil war between the Guomindang and the Chinese Communist Party. However, when the CCP's attention returned to the region in the 1950s, they found that the Japanese had left behind industrial blueprints, laboratory archives, and infrastructure that laid solid groundwork for the new

People's Republic of China's (PRC) mineral resource policy. Especially since many Chinese geologists who had previously worked under the Japanese or the Guomindang had remained in the mainland. Within just a few years, conditions were ripe for the PRC to launch its new mining policy, marking the beginning of renewed Chinese attention to Bayan Obo (Klinger 2015, 578).

The first Five-Year Plan (FYP) of 1953 marked the beginning of Chinese industrialisation, heavily inspired by the Soviet economic model and thus emphasising heavy and chemical industries. Baotou was already part of this early industrial strategy as one of the key bases for establishing one of the first iron and steel companies, alongside the landmark Anshan Iron and Steel Company and the newer mills in Wuhan and Taiyuan (Matsuaki 1997, 15). When the central government of the PRC established the Baotou Iron and Steel (BIS) Company in 1954 as one of the key projects of the first FYP, it became an example of Sino-Soviet cooperation. Soviet experts were based locally in Inner Mongolia between 1953 and 1960 to provide support on design, resource management, and smelting methods to exploit the unique nature of the Bayan Obo ore, which contained both iron and REEs. The established architecture became a symbol of industrial and geopolitical innovation (Wu, Yi 2021, 74-86).

The first FYP also marked the beginning of horizontal reciprocity. While the pre-PRC period was characterised by asymmetries linked to colonial rule, the PRC's horizontal reciprocity relied on selective forms of cooperation grounded less in equality than in pragmatic solidarity. Namely, it relied on the Sino-Soviet partnership to develop this first model of REE governance, based on cooperation, shared technological development, and a rejection of the dynamics of colonial times. The Baotou complex and the other REE extraction sites became a symbol of self-reliance powered by shared socialist expertise, and what had once been imposed asymmetry turned into mutual development.

During the 1960s, REEs were still treated mainly as byproducts of iron and niobium, but this decade marked the beginning of organised scientific research. The Baotou Research Institute of Rare Earths, established under the BIS in 1963, became China's first specialised institution for REE metallurgy (Li, Yang 2014, 30-2; Tse 2011, 2). In the mid-1950s, Xu Guangxian, a Columbia University-trained Chinese chemist, returned to China right when the PRC was consolidating its heavy industry strategy. Not only did Xu pioneer domestic research on REE separation, but he was also embedded in Baotou's emergent industrial architecture. His application of quantum-chemical methods to solvent-extraction processes significantly improved the efficiency of REE isolation and the purity of final products, ultimately pioneering domestic Chinese separation technologies (Shen et al. 2017, 216).

By the end of the 1960s, China's REE deposits had expanded beyond Bayan Obo: in 1958, geologists discovered the Shandong Weishan deposit (production began in 1975); in 1969, geologists discovered ion-absorption clay deposits in Jiangxi Province, which were later followed by discoveries in Fujian, Hunan, Guangdong, and Guangxi (Li, Yang 2014, 30-2). These southern clays would become increasingly important to the national industrial complex because of their high REE content (Tse 2011, 2). Although production during the 1960s and early 1970s remained limited and largely experimental and academic, it was foundational. The experiences of these early years proved crucial for the subsequent large-scale industrialisation of the 1970s and 80s (Chen, He, Potgieter 2022, 126-7; Shen et al. 2017, 216-17).

## 3 State-Led Transactionalism and the Reform and Opening Up Period (1970s-90s)

During the mid-1970s, and after two decades of Soviet-aided development, China began developing its heavy sector independently. In 1975, it established the National Rare Earth Development and Application Leading Group to promote industrial development, attract foreign investments, and strengthen domestic capacity. While formally presented as a vehicle for sectoral development, the Group coordinated much of the central government's existing economic planning activities rather than actively innovating policy (Shen, Moomy, Eggert 2020, 130). After REEs were recognised as strategic inputs for the high-tech and defence industries, Xu established the Chinese Rare Earth Society in the late 1970s to drive the development of Chinese separation chemistry (Shen et al. 2017, 216; Li, Yang 2014, 30-2). In 1979, a year after the Sino-Japanese Treaty of Peace and Partnership, China and Japan launched their formal foreign technical cooperation through Inoue Japan Research Inc., which was established to undertake Sino-Japanese research and to develop REE extraction technology. They set out to build two facilities: one in Baotou, set to produce 5,500 tons per year, and a second, for which Moore reported that the location was unclear (1979, 750), to produce 1,100 tons per year. In the same years, the Mitsui Metal Mining Company and the Mitsui and Company sent teams to investigate the possibility of extracting REEs from the Poyun iron ore deposit (Moore 1979, 740; Park, Tracy, Ewing 2023; Goldman 2014, 149).

This Sino-Japanese partnership marked the development of 'state-led transactionalism', in which foreign companies leveraged China's natural resource base and comparatively lax environmental oversight, while Chinese authorities used foreign capital and


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technology transfers to advance their development. The scale of this strategy is reflected in MOFTEC data indicating that, between 1979 and 1990, China engaged in more than 4,000 foreign technology projects valued at approximately USD 24.6 billion (Wang 1995, 42). In heavy industry, this model reached a decisive phase in the 1980s, when technology imports became structurally embedded in industrial upgrading.

By the 1980s, foreign partnerships had become structurally embedded in China's heavy industrial development, and the Chinese government actively recruited foreign investments through FDIs and joint ventures to upgrade its technological base. Thus, as REE applications expanded and intensified, permanent magnet production increased due to their greater use in new technologies (Dushyantha et al. 2020, 10). In 1985, China introduced tax rebates (13% for ores and 17% for metals) to incentivise upstream production (Shen et al. 2020, 130-1). In 1986, Japan and China deepened their cooperation through an agreement to jointly extract, refine, and use REEs, which followed the aforementioned transactional model. By the end of the 1980s, Chinese partnerships extended to Western partners. In 1989, the Ningbo-based Ke Ning Da Industry partnered with the US-based Tredas International to produce Nd-Fe-B magnets, modernising their facilities with American Equipment. A similar project was the MPV Lanthanides, a merger of China Metallurgical Import & Export Corporation and two US-based companies (Pacific Chemicals & Engineering and Universal Victory). In 1991, the Canada Rare Earth Metal Company joined with the Ganjian Rare Earth Company in Ganzhou (Jiangxi) to build a facility valued at 3.3 million USD and capable of processing 200 t of mixed REEs per year. Soon after, the Advanced Materials Resources of Toronto became the majority stakeholder in two joint ventures: one operating a 300-t oxide facility in Jiangyin and another producing permanent magnets with Beijing New Precision Alloy Company (Goldman 2014, 149-50).

These agreements can be understood as instances of state-led transactionalism imposed by Beijing. While Shen et al. (2017) argue that this period is characterised by unrestricted openness, and He (2014) by liberalisation, the available evidence also points to a more negotiated dynamic, in which exchanges were grounded in reciprocal arrangements linking resource access to technology transfer. In 1995, Beijing San Huan New Materials High-Tech Inc. and China National Non-Ferrous Metals Import & Export Corporation, together with the U.S. investment firm Sextant Group Inc., acquired Magnequench, a General Motors subsidiary that produced Nd-Fe-B magnets. Although the terms of acquisition required the company to maintain operations in Indiana for a set period. However, once the period expired, operations were closed, and core production was fully relocated to China (Goldman 2014, 149-50). By the mid-1990s, China

had managed to turn its vast mining resources into manufacturing capacity, yet high-end innovation and cutting-edge REE research remained comparatively dependent on foreign technology. This, however, changed with China's accelerated economic growth during the 1990s, the central government's attention to the sector, which was already fairly extensive given that almost all the projects involved state-owned or state-affiliated enterprises, tightened even further.

## 4 From Transactionalism to Securitisation Through Law (1990s-2010s)

In 1990, the state officially designated REEs as protected and strategic minerals, marking the beginning of a decline in the sector's openness and the end of the state-led transactionalism. Foreign investors were now required to enter into joint ventures to invest in the Chinese mining industry, and forming those joint ventures required additional approval from the MOFTEC (and from the Ministry of Commerce (MOC) after 2003). However, even the few private domestic firms involved in mining projects now required the approval of the State Development and Planning Commission (SDPC) to continue their activities (Tse 2011, 5).

At the end of the transactionalism period, China was producing a lot of REE minerals, which were consequently very cheap. Additionally, there are little to no bottlenecks to production linked to environmental and safety standards. This passage changed when China enacted its first Mineral Resources Law in 1986[1] and Mine Safety Law in 1992,[2] both of which imposed stricter conditions on licensed enterprises. However, the laws' impact was limited because restricting licences led to the growth of an informal mining sector, mainly composed of entities that had not obtained the PRC-issued mining licences mandated for domestic mineral extraction.[3] Their emergence warranted greater state action, which sought both to take control of the mining sector (*inter alia* by limiting its transactions with foreign companies) and to eliminate illegal mining, especially by small, informal producers (Shen et al. 2020, 130-1).

In 1994, producers stabilised prices through a cartel, and the central government tightened licensing. Mining and exploration licenses were limited to qualified, often state-affiliated enterprises,

**1** *Mineral Resources Law of the People's Republic of China* (1986) [*Zhonghua Renmingongheguo Kuang Chang Ziyuan Fai*, 中华人民共和国矿产资源法].

**2** *Mine Safety Law of the People's Republic of China* (1992) [*Zhonghua Renmin Gongheguo Kuangshan Anquan Fa*, 中华人民共和国矿山安全法].

**3** Art. 13 Mineral Resources Law of the People's Republic of China.

while all other licenses, especially those held by smaller producers, were suspended. Ionic clay deposits were classified as 'national protective exploitation minerals', which led to their being placed under the direct regulation of the central government. Moreover, licences for smelting and separation activities were given almost exclusively to SOEs (Shen et al. 2020, 130-1). While the 1996 Mineral Resource Law stressed that all companies could apply for a mining license,[4] SOEs received preferential treatment in the licensing process, but limiting licenses did not curb illegal mining, as many smaller producers continued to operate without licenses. Ultimately, annual REE production increased substantially, rising from 16,150 t in 1991 to 65,000 t in 1998, with an annual growth rate of 22%. Ultimately, China's global REE market share rose from 33% to 85% in the same year, supported by increasing international demand (Shen et al. 2020, 131).

Nevertheless, in the early 2000s, the Chinese government reoriented its goals towards its high-tech sector, consequently increasing domestic demand for REEs and byproducts. The central government introduced export quotas in 1999 and began to favour downstream enterprises, especially those with higher-value-added products and better environmental performance. REEs were classified as 'B'[5] in 1997 within the Chinese foreign investment framework, which allowed foreign firms to invest in the sector under close supervision and directed them mainly to downstream activities (MacBride, Bei 2001, 222-3; Zhong 1997, 81-3). The central government began phasing out tax rebates, which were ultimately replaced by export taxes in 2007, and ultimately began to retain increasing quantities of REEs, leading to a decline in exports from 70,000 t in 1999 to fewer than 44,000 t in 2009 (Shen et al. 2020, 132-3; Shen et al. 2017, 217).

With a flourishing REE sector, China was driving its transactionalism as the logic of exchanging resources for technology was gradually abandoned in favour of domestic innovation and technological self-reliance. Following Hu Jintao's developmental theory of 'Scientific Development', which was emphasised in both

**4** *Mineral Resources Law of the People's Republic of China* (1996 Amendment) [*Zhonghua Renmingongheguo KuangChang Ziyuan Fai*, 中华人民共和国矿产资源法].

**5** The Chinese FDI system followed an A, B, C, D approval structure introduced under the *Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment* (*Zhongwai hezi jingying qiye fa*, 中外合资经营企业法, 1979). This system was symplified in 1995 by the *Provisions on Guiding the Direction of Foreign Investment* (*Waishang touzi fangxiang zhidao guiding*, 外商投资方向指导规定), which replaced the administrative letters with substantive policy categories: in encouraged (A), permitted (B), restricted (C), and prohibited (D). The system was discontinued and replaced by a negative list of forbidden systems in 2017 and formalised through the *Foreign Investment Law of the People's Republic of China* (*Waishang touzi fa*, 外商投资法, 2019).


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the 11th (2007-2012) and 12th (2012-2017) Five-Year Plans, innovation and environmental protection were designated as the path to the future of the Chinese economy. The central government furthered its efforts to modernise its REE sector by excluding small artisanal mining companies, which were still yielding very little output despite significant environmental degradation and limited security measures. To tackle environmental degradation, the Ministry of Land and Resources introduced the Provisions on the Protection of the Geologic Environment of Mines in 2009. This regulation introduced the principle of sustainable development in mining governance, and required enterprises to prepare restoration plans and submit 'conservation security deposits', which ensured the restoration of the mined zone upon the completion of their mining activities.[6] Illegal mining was more complex to tackle.

Excluding smaller informal mining companies, however, proved extremely complex; smaller provinces relied on these producers too much for revenue and local production to completely exclude them from the sector (Wübbeke 2013, 386-90). Therefore, the central government introduced the Interim Measures for the Administration of the REE Mandatory Production Plan and the Measures for the Administration of the Total Mining Quota (2010-2012), to tighten oversight of quotas, combat smuggling and illegal activities, and stabilise supply. In 2014, the State Reserve Bureau began strategically stockpiling resources to consolidate the government's pricing power, and that same year, China amended its Environmental Protection Law (EPL) to further streamline economic development while protecting the environment.[7] This increased protection can be read both as China's commitment to deepen its environmental obligations and as an instrument to proper state control by excluding smaller firms and informal actors from strategic sectors. The EPL amendment introduced a tougher penalty regime that removed the ceiling on fines and expanded enforcement powers (Zhang, He, Mol 2015, 2-3), to ultimately signal that environmental compliance had become a tool of industrial discipline as much as ecological protection.

Thus, even if China had joined the World Trade Organization in 2001, WTO rules quickly revealed their own limitations. Global REE producers who had invested in China were now concerned about the gradual asymmetric securitisation state and resorted to restarting domestic production or sourcing from alternative suppliers. Between

**6** *Provisions on the Protection of the Geologic Environment of Mines* (2009) [*Kuangshan Dizhi Huanjing Baohu Guiding*, 矿山地质环境保护规定].

**7** *Environmental Protection Law of the People's Republic of China* (2014 Amendment) [*Zhonghua Renmin Gongheguo Huanjing Baohu Fa*, 中华人民共和国环境保护法]; *Environmental Protection Law of the People's Republic of China* (1989) [*Zhonghua Renmin Gongheguo Huanjing Baohu Fa*, 中华人民共和国环境保护法].

2008 and 2014, China significantly reduced export quotas and the number of firms allowed to export REEs. The MOFCOM introduced stricter quota allocation mechanisms that distinguished between light and heavy REEs and further prioritised high-value-added exports. The quota-attribution system was now based on bids, favouring state-related enterprises and marginalising private and foreign-invested actors. All of this was also complemented by additional export taxes (ranging from 15% to 25%) to encourage domestic processing and the export of final products. The existing reforms were consolidated in the 2009-2015 Development Plan for the Rare Earth Industry, which capped the export of REE oxides at 35,000 t while reinforcing environmental-preservation and technological goals (Mancheri 2015, 267-8).

What we have presented so far is the evolution of horizontal reciprocity into state-led transactionalism, but we have not yet tackled the external response to the Chinese situation and the securitisation responses. As we have extensively presented, the early years of the Chinese REE sector during the period of horizontal reciprocity saw close collaboration between Chinese producers and foreign investors, many of whom remained in the country and retained primary interests in Chinese REEs to support their domestic high-tech sectors. This aspect clashed with the state-mandated transactionalism, which was now highly asymmetrical, leading to a further step in RE's regulatory evolution: securitisation.

## 5 Securitisation, Neo-Securitisation, and the Consolidation of State Control During the 2010s

A prominent example of REE securitisation emerged in 2010 during the Diaoyu/Senkaku Islands dispute. The contested islets in the East China Sea were claimed by China, Japan, and Taiwan,[8] and have long been associated with potential hydrocarbon reserves in the surrounding seabed (Grieger, Claros 2021, 2; Fravel 146). While the territorial dispute itself predates the REE issue, the conflict escalated when a Chinese fishing boat collided with a Japanese Coast Guard vessel, leading to the temporary detention of the Chinese captain (Tseng 2014, 84). In the aftermath, China suspended high-level diplomatic relations, and reports emerged that it had halted rare-earth exports to Japan. Although Beijing later denied the existence of any

**8** While Japan claimed the ownership of the islets in 2012, their ownership still remains contested. Yet it must be acknowledged that the Japanese-Chinese relations over this matter have quieted down since then (Duan, Hao 2025).


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formal embargo, the episode demonstrated how control over REE supply could be mobilised as a tool of strategic pressure (Robinson 2010).[9] This was especially true since the disruption caused panic in Japan's internal market and led the country to reorganise its REE sector and diversify supply chains by funding alternative sources and investing in substitution technologies, which proved to be quite costly (Yang 2025, 393-4; Vekasi 2018, 7-10).

This disruption also occurred at a pivotal moment in history, marked by a surge in the global high-tech sector, during which companies' reliance on REEs reached an unprecedented level. Therefore, having to rely on an unreliable partner for the development of a key sector for many of China's trading partners led countries to reconsider their investment strategies. Some countries had REE resources in existing ores and geological formations, which they had extensively used before turning to China (Goldman 2014, 153-4; Vekasi 2018, 4), like the French Rhône-Poulenc, which relocated its operations to China in the late 1980s after being denied a license due to stricter environmental requirements (Shen et al. 2020, 130-1), so they considered restoring their domestic productions. However, completely reverting to the domestic market was extremely difficult, since China had secured not only extraction but also smelting and the production of key intermediate products. Consequently, even nations such as the United States, which possessed domestic resources but had outsourced certain critical stages of the extraction process to China (Golev et al. 2014, 58; Van Gosen, Verplanck, Emsbo 2019), were unable to simply recommence production.

The 2010 episode did not inaugurate the securitisation of the REE sector; rather, it marked a visible intensification of an ongoing process. Over the preceding decades, China had gradually tightened export quotas and reoriented policy to prioritise domestic high-tech industries over the export of raw materials. In this sense, the diplomatic crisis exposed and accelerated a regulatory trajectory that was already underway. Therefore, when Japan, the United States, and the European Union raised the issue of increased sectoral closures with the World Trade Organization (WTO), it stemmed from an ongoing policy trend rather than from bilateral friction. In 2012, the United States, the European Union, and Japan initiated three joint WTO disputes (DS431, DS432, DS433) alleging that China's REE export quotas and taxes violated China's WTO Accession Protocol and the broader WTO framework. The complaints invoked, *inter alia*, §§ 5.1 (on quotas imposed through restrictive conditions), 11.3 (on the

**9** Bradsher, K. (2010). "Amid Tension, China Blocks Vital Exports to Japan". *The New York Times* [A1.1]. https://www.nytimes.com/2010/09/23/business/global/23rare.html.

imposition of export taxes beyond those imposed in the Accession Agreement), and the General Agreement on Tariffs and Trade (GATT) Article XI:1 (quantitative export restrictions). It should be noted that this was not China's first dispute on mineral exports, as another joint dispute "China- Raw Materials" (DS395, DS398, DS399) had already been brought up in front of the WTO by the EU, the US, and Mexico in 2009 on the export restrictions on *inter alia* bauxite, coke, and magnesium. Both cases also followed the same pattern: the country had given domestic firms unfair advantages through export duties, quotas, and restrictive licensing (Burnay, Wouters 2016, 119-23; Burnay 2018, 164-5; World Trade Organization 2016, 833-4).

In its reply, China asserted that the restrictions were intended to curb illegal mining and environmental degradation, and that the general exception outlined in Article XX of the 1994 GATT could justify potential violations of § 11.3 of the Accession Protocol. China also argued its REE export duties could be justified under Article XX(b) of the GATT, which allows measures necessary to protect animal or plant life, conserve natural resources, and prevent environmental degradation resulting from over-extraction of materials. Additionally, China argued that the imposed export quotas were permissible under Article XX (g) of the GATT, which allows restrictions on the protection and conservation of natural resources, provided that the same restrictions are applied in the domestic market as well. Finally, China claimed that its trading rights commitments under § 5.1 of the Accession Protocol did not prevent the country from implementing existing or pre-WTO export measures and minimum registered capital requirements as criteria for managing export quotas (World Trade Organization 2016, 853).

Nevertheless, the WTO panel ruled against China. Twice. Dispute Settlement Body (DSB) ruled that the export duties imposed were inconsistent with its obligations under § 11.3 of the Accession Protocol and violated China's broader commitments. Even after China appealed, the Appellate Body confirmed the initial decision in 2014, rejected China's attempt to justify its export duties under the general exceptions granted by Article XX(b) and (g) of the GATT, and found that export quotas were inconsistent with Article XI:1 on quantitative restrictions. The Chinese actions were also found to be in breach of § 1.2 of the Accession Protocol. Finally, it ruled that the discriminatory manner in which China administered its quota systems and trading rights, including its opaque licensing and discriminatory favouring of state-participated firms, was in breach of Article 5.1 of its Accession Protocol. Thus, China was found to be in complete violation of its WTO commitments (World Trade Organization 2016, 289; Trujillo 2015, 617-19).

The WTO ruling affected only China's formal regulatory framework, but did not reverse the ongoing securitisation strategy. The central

government outwardly complied with the ruling, but maintained state control under the guise of reform. In 2014, the central government eased internal conditions to facilitate mergers among the largest REE SOEs in the country, namely China Minmetals, Chinalco, Baotou Steel, Xiamen Tungsten, Ganzhou Rare Earths, and Guangdong Guangsheng Rare Earths. The main aim was still to reduce the power of smaller, artisanal (and sometimes illegal) producers and to further centralise governance, and by the mid-2010s, these large groups accounted for about 90% of domestic production (Mancheri 2015, 267-8). Rather than focusing solely on ores and minerals, China expanded into midstream and downstream production, as permanent magnets became the focus of the securitisation strategy, especially neodymium-iron-boron (NdFeB) and samarium-cobalt (SmCo) magnets. China also pushed domestic firms such as Zhongke Sanhuan and China Northern Rare Earths (formerly Baotou Steel) to the global market, while keeping the door open for selected foreign companies, such as the Japanese company Hitachi Metals, through joint ventures. This calibrated combination of outward expansion and controlled foreign collaboration contributed to China's emergence as the world's leading producer of permanent magnets (Mancheri 2015, 268-9; Kalantzakos 2017, 120).

In 2016, the central government released the 2016-2020 National Mineral Resource Plan, which underscored the strategic value of REEs and REE-related products and the need to maintain a strategic mineral inventory to support its economic and military sectors. It also encouraged global cooperation with Africa, Latin America, and other regions reached by the Belt and Road Initiative (BRI) to supplement domestic ore sources.[10] The 14th Five-Year Plan (2021) reaffirmed this commitment to maintaining control over strategic mineral resources.[11] In the 2020s, the central government's control over the sector became even more evident, and the industry grew more securitised. Although the 2020-2025 National Mineral Resource Plan has not been publicly released due to security concerns (Andersson 2024; Brusse, von Carnap 2024, 21), the securitisation of REEs has become widely recognised in this sector, as demonstrated through other policies.

By this stage, the structural characteristics of the Chinese REE sector were completely securitised. The sector is now dominated

**10** *National Mineral Resource Plan (2016-2020) of the PRC* (2016) [*Quanguo Kuangchan Ziyuan Guihua (2016-2020 nian)*, 全国矿产资源规划(2016-2020年)].

**11** *Five-Year Plan (2021-2025) for National Economic and Social Development and Vision 2035 of the People's Republic of China (2021)* [*Zhonghua Renmin Gongheguo Guomin Jingji he Shehui Fazhan di Shisi ge Wunian Guihua he 2035 nian Yuanjing Mubiao Gangyao*, 中华人民共和国国民经济和社会发展第十四个五年规划和2035年远景目标纲要]. https://www.fujian.gov.cn/english/news/202108/t20210809_5665713.htm.


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by two conglomerates: the China Rare Earth Group; which was established in 2021 through the merger of the 'three giants' China Minmetals Corp, Aluminum Corp. of China Ltd, and Ganzhou Rare Earth Group Co. This mega conglomerate was placed under the direct supervision of the State-owned Assets Supervision and Administration Commission of the State Council (Yu 2024, 1). In 2022, the China Northern Rare Earth Group, now the country's biggest producer, merged with several subsidiaries: the Baotou Huaxing Rare Earth Technology Co. and Baotou Keri Rare Earth Materials Co. This passage brought the group to control about 74% of light rare-earth mining, 67% of total REE extraction, and 64% of smelting capacity under one group. At the same time, China expanded its global reach by entering into collaborations with global partners through share acquisitions: Shenghe Resources Holdings Co. acquired a 19.9% stake in Peak Rare Earths Ltd, an Australian company. In contrast, Chinalco entered into a collaboration with the Australian Ionic Rare Earths Ltd (Moon 2025, 5).

The central government also imposed export controls on gallium and germanium as of August 1, 2023 (People's Daily 2023), and on selected graphite items as of December 1, 2023 (MOFCOM 2023), ultimately banning the export of REE extraction and separation technologies in December 2023 (Ministry of Commerce and Ministry of Science and Technology 2023; Andersson 2024). In 2024, the State Council of the People's Republic of China published its first RE-specific regulation, the 'Rare Earth Management Regulation' (*Xitu Guanli Tiaojie*, 稀土管理条例). The regulation, drafted to address the increased geopolitical relevance of REEs, ultimately classified REE policy as within the scope of national security.[12] In the same year, China drafted a new amendment to the Mineral Resources Law, which was revised to match the evolving conditions of the Chinese mining landscape, ensure mineral resource security in the country and align mining and environmental goals.[13]

This final consolidation of the Chinese REE sector marked the onset of a phase of neo-securitisation, where rare earths were no longer treated merely as critical resources but as integral components of China's national security. Unlike the initial securitisation period, this phase is marked by a strategic internalisation of control and a deliberate use of REEs to project external influence. In this environment, REEs have become a token of multilateral diplomatic

**12** *Rare Earth Management Regulation* (2024) [*Xitu Guanli Tiaojie*, 稀土管理条例].

**13** *Explanation on the "Draft Revision of the Mineral Resources Law of the People's Republic of China"* (2023) [*Guanyu Zhonghua Renmin Gongheguo Kuangchan Ziyuan Fa (Xiuding Cao'an) de Shuoming*, 关于《中华人民共和国矿产资源法(修订草案)》的说明]; *Mineral Resources Law of the People's Republic of China* (2024 Amendment) [*Zhonghua Renmingongheguo KuangChang Ziyuan Fa*, 中华人民共和国矿产资源法].

exchange, occurring not only through indirect regulation, as we have witnessed extensively, but also through further export controls. Namely the exports restrictions of April 2025 on samarium, gadolinium, terbium, dysprosium, lutetium, scandium, and yttrium, which now required special export licenses to be exported, and the one of October 2025 on holmium, erbium, thulium, europium and ytterbium, which caused chaos and panic to automotive and high-tech producers (Jackson et al. 2025; Baskaran, Schwartz 2025; Kynge 2025).[14]

Beyond export controls, neo-securitisation strategies are becoming evident across varied external engagements, with partner responses heavily shaped by the geopolitical environment. To capture these variations, we will now present two contrasting arenas: the EU's tariff measures on electric vehicles and China's strategic involvement in the Kvanefjeld rare-earth project in Greenland. These cases illustrate that the securitized management of REEs functions not only via domestic regulatory measures but also through legally mediated economic engagement.

## 6 Neo-Securitisation in Practice: The EU EV Tariffs and Greenland's Arctic Governance

### 6.1 The Securitisation of Trade: Electric Vehicles and the Legal Re-Armament of the EU

The wave of ambitious climate pledges elevated permanent magnets to a strategic node in the global REE value chain. Essential to electric vehicles (EVs) and wind turbines, they rely almost exclusively on REEs for their production. As climate pledges were translated into binding regulatory obligations, the green transition acquired a tangible dependency: electrification required magnet-intensive technologies, and magnets in turn required rare earth elements.

This dynamic unfolded in parallel in China and the European Union. China's dual-carbon pledges to peak emissions by 2030 and achieve carbon neutrality by 2060[15] unfolded in parallel with the European Union's climate pledge to reach carbon neutrality by 2050

**14** Jackson, L.; Lv, A.; Onstad, E.; Scheyder, E. (2025). "China Hits Back at US Tariffs with Export Controls on Key Rare Earths". *Reuters*. https://www.reuters.com/world/china-hits-back-us-tariffs-with-rare-earth-export-controls-2025-04-04/.

**15** "For Man and Nature: Building a Community of Life Together. Remarks by Chinese President Xi Jinping at Leaders Summit on Climate" (2021). *Quishi*. http://en.qstheory.cn/2021-04/23/c_613388.htm.

under the new Climate Law and the EU Green Deal.[16] However, this seeming regulatory alignment masked a deeper structural imbalance. While China had now evolved into a permanent-magnet powerhouse, much of the EU's climate strategy remained materially dependent on Chinese supply chains. The adoption of the Fit for 55 package made this asymmetry more visible, as the EU mandated steep reductions in vehicle emissions and effectively phased out internal combustion engine cars by 2035 (Council of the European Union 2022; 2023). The EU accelerated electrification without diversifying its access to critical inputs to the same extent. As demand intensified, so did the legal and geopolitical relevance of REE supply chains, ultimately embedding resource dependency within the architecture of climate law itself.

EU countries had been almost entirely dependent on China for REE materials (estimated at around 98%, Schaus, Lannoo 2023) and for permanent magnets. This concentration unfolded against a backdrop of increased Chinese control over the REE sector and a recalibration of EU-China relations. By 2019, the European Commission had redefined China as a "cooperation partner, an economic competitor and a systemic rival" (European Commission 2019, 1), signalling a shift from pragmatic engagement toward strategic ambivalence. In this environment, material dependency acquired a distinct geopolitical dimension.

As China progressively consolidated control over the REE sector, the EU increasingly internalised a comparable logic of resource securitisation, as the Critical Raw Materials Act (CRMA, Regulation (EU) 2024/1252) formalised this shift. The instrument, which embedded the EU's concepts of strategic autonomy and resilience into the EU legal framework, set binding targets for domestic EU processing (40%), recycling (25%), and diversification, capping reliance on any single non-EU supplier at 65% by 2030.[17] Unlike precedent instruments, such as the Batteries Regulation (Regulation (EU) 2023/1542), which was primarily focused on sustainability and

**16** Recital 2 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No. 401/2009 and (EU) 2018/1999 ('European Climate Law'), PE/27/2021/REV/1, OJ L 243, 9.7.2021, pp. 1-17. https://eur-lex.europa.eu/eli/reg/2021/1119/oj/eng.

**17** Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No. 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020 (Text with EEA relevance), PE/78/2023/REV/1, OJ L, 2024/1252, 3.5.2024, (CRMA). http://data.europa.eu/eli/reg/2024/1252/oj.

circularity, the CRMA was structured around strategic autonomy and supply security, and had clear geopolitical references.[18]

Beyond securing mineral supply, the EU's EV strategy also unfolded in direct competition with China's deeply institutionalised EV regime. Since the Tenth FYP (2001), Beijing has integrated New Energy Vehicles, a broader category that includes, *inter alia*, EVs, into its energy security agenda, using the sector to advance technological self-sufficiency and global market leadership.[19] In 2012, China issued the Energy-Saving and New Energy Vehicle Plan (2012-2020) with two goals: reducing energy dependence and promoting environmental and economic development.[20] The Plan was followed by the 2014 Guiding Opinions of the General Office of the State Council on Accelerating Promotion and Application of New Energy Automobiles, which committed to broad technological and infrastructural reforms. In particular, it committed to expanding technological and infrastructural reforms and set a target of having 30% of public transport fleets composed of NEVs by 2016.[21] In 2020, the Development Plan of the New Energy Vehicle Industry (2021-2035) further consolidated these efforts, positioning China as the global centre of EV innovation and production.[22]

By 2015, China had become the world's leading EV manufacturer, and its dominance was underpinned by a combination of state subsidies, a technology-driven industrial policy, and the strategic coupling of REE extraction and smelting (Howell et al. 2014, 6; Fappani, Marabini San Martín 2023). Therefore, when the 2024 Draghi report on EU competitiveness highlighted that global demand

**18** Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC, (Regulation 2023/1542, Batteries Regulation) PE/2/2023/REV/1, OJ L 191, 28.7.2023, pp. 1-117. https://eur-lex.europa.eu/eli/reg/2023/1542/oj.

**19** National People's Congress of the People's Republic of China (2001). *Report on the Outline of the Tenth Five-Year Plan for National Economic and Social Development (2001)*. http://www.npc.gov.cn/zgrdw/englishnpc/Special_11_5/2010-03/03/content_1690620.htm.

**20** *Notice on the Printing and Distribution of the Energy Saving and New Energy Vehicle Plan (2012-2020)* (2012) [*Guowuyuan Guanyu Yinfa Jieneng yu Xinnenyuan Qiche Chanye Fazhan Guihua (2012-2020 nian) de Tongzhi* 国务院关于印发节能与新能源汽车产业发展规划(2012-2020年)的通知].

**21** *Guiding Opinions of the General Office of the State Council on Accelerating Promotion and Application of New-Energy Automobiles* (2014) [*Guowuyuan Bangongting Guanyu Jiakuai Xinnenyuan Qiche Tuiguang Yingyong de Zhidao Yijian*, 国务院办公厅关于加快新能源汽车推广应用的指导意见].

**22** *Notice on the Printing and Distribution of the Energy Saving and New Energy Vehicle Plan (2021-2035)* (2020) [*Guowuyuan Bangongting Guanyu Yinfa Xinnenyuan Qiche Chanye Fazhan Guihua, (2021-2035 nian) de Tongzhi* 国务院办公厅关于印发新能源汽车产业发展规划(2021-2035年)的通知].


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for lithium, cobalt, and nickel has skyrocketed since 2017 – mostly due to the growth of EVs and green technologies (2024, 45) – the EU was not only years behind its targets but also trailing the Chinese framework, which had foreseen this trend over a decade earlier. The EU's push for decarbonisation changed how dependency was viewed, emphasising resource security and strategic independence in its industrial and trade policies, though dependency itself was not fully eliminated.

In 2023, the European Commission launched an EU-wide anti-subsidy investigation into Chinese BEVs in its internal market, alleging that state support to Chinese producers was distorting competition in the EU internal market. The investigation culminated in provisional measures and, ultimately, in countervailing duties ranging from 7.8% to 35.5% on BEVs (European Commission 2024). A year later, the Commission opened another inquiry into four Chinese-linked wind turbine projects across Europe (Fappani, Marabini San Martín 2024). Taken together, these measures exceeded traditional trade defence responses and reflect a broader integration of security considerations into the EU's industrial policy through legal instruments. In this respect, the EU approach begins to mirror, albeit with a different legal framework, a manner similar to the securitised regulatory logic previously deployed by China in the REE sector.

The countervailing duties did not, however, remain confined to unilateral trade defence measures, as it quickly migrated into the multilateral legal framework that had previously constrained China's own export policies. In August 2024, the Chinese government requested WTO consultations with the EU over the provisional countervailing duties on Chinese BEVs. China alleged procedural and substantive violations of the WTO law to which the EU is a party, including Articles 4.4 of the Dispute Settlement Understanding, Article XXIII of the 1994 GATT, and Article 30 of the Subsidies and Countervailing Measures (SCM) Agreement. The complaint characterised the EU's *ex officio* investigation as a protectionist measure unsupported by evidence.[23] A second request in November expanded on the previous one, focusing on the EU's alleged misclassification of Chinese financial institutions and suppliers as "public bodies". China referenced the EU studies, highlighting irregularities such as non-transparent sampling and insufficient consultation with Chinese counterparts, and singled out these behaviours as inappropriate benchmarking practices and procedural irregularities.[24]

**23** European Union - Provisional Countervailing Duties on New Battery Electric Vehicles from China (WT/DS626/1).

**24** European Union - Provisional Countervailing Duties on New Battery Electric Vehicles from China (WT/DS630/1).

These exchanges demonstrate how securitisation has seeped into the procedural grammar of international law. The EU anti-subsidy investigations and China's recourse to the WTO framework do not merely contest market distortions; they stage geopolitical rivalry within juridical form. The EU's countervailing duties, justified as corrective mechanisms to safeguard the internal market, and China's WTO complaints, framed in the language of procedural fairness and compliance, articulate parallel claims to regulatory sovereignty. The EV dispute illustrates neo-securitisation, where industrial policy, resource strategy, and legal frameworks come together to reshape global economic governance.

### 6.2 The Securitisation of Environmental Governance: Greenland's Rare Earths and China's Arctic Reach

As previously presented, China's REE policy had been primarily focused on domestic production and control. By the mid-2010s, the internal securitisation of production expanded to encompass external mineral reserves, signalling a shift from resource protection to resource projection. The 2016-2020 National Minerals Resource Plan explicitly encouraged partnerships in mining for critical materials within countries along the Belt and Road Initiative (BRI) and related strategies. It even reached the Arctic, where China had developed its Polar Silk Road (PSR) in 2017 to integrate the region's maritime and resource corridors, primarily via the Northern Sea Route, into its global supply network. This outward-looking logic was reflected in the 2018 White Paper on China's Arctic Policy,[25] which positioned the Arctic as one of the next frontiers for China's mineral diplomacy. Whilst this strategy suffered minor setbacks due to the COVID-19 pandemic and the Russian invasion of Ukraine, Chinese interest in the Arctic and its mining resources remained consistent (Lamazhapov, Stensdal, Heggelund 2023; Andersson 2018, 127-9; Marabini San Martín 2023).

Within this Arctic reorientation, Greenland emerged as a particularly consequential site of Chinese external resource engagement. The island's rare earth and uranium endowment became strategically consequential after the 2009 Self-Government Act redefined the allocation of mineral authority, embedding Greenland more directly within transnational investment circuits. In the aftermath of the 2008 financial crisis and its subsequent downturn, Greenland sought to diversify its economy, and Chinese

**25** *China's Arctic Policy. White Paper* (2018). `https://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm`.

investments entered this landscape during a period of limited Western engagement, positioning themselves within key mineral projects. One notable project was the Citronen mine, a lead-zinc deposit initially developed by Australian Ironbark Zinc, with a long-standing investment from the Chinese Nonferrous Metal Mining Group (CNMM). The Sino-Australian collaboration lasted until 2020, when a competing financial package from the U.S. Export-Import Bank effectively displaced Chinese participation, signalling a broader geopolitical recalibration of Arctic investment flows (McGwin 2020). Similar dynamics unfolded at the Wegener Halvø copper project, which was initially tied to Jiangxi Copper Corporation but later abandoned due to security concerns (Rizo Ortiz 2020).

Chinese involvement in Greenland was not limited to mineral extraction but also expanded to include infrastructure-related assets, heightening political sensitivity for the Danish government. The China Communications Construction Company had expressed interest in building a series of airports on Greenland's west coast, but the project was ultimately awarded to Danish financing after the Prime Minister offered a favourable state-backed loan.[26] A similar dynamic unfolded when the General Nice Group, which is China's largest importer of coal and iron ore, was granted an opportunity to acquire the Isua mine (LSE Ideas 2021). However, the project was soon abandoned due to a steep drop in global iron prices and increased security concerns by Denmark over the growing Chinese presence in the independent territory. Those same security concerns led the Danish Defence Ministry to withdraw an offer to sell a naval base in Greenland's southwest after General Nice had expressed interest.[27] This trajectory culminated in the Kvanefjeld project, arguably the most emblematic case in which mineral development, foreign investment, and geopolitical rivalry converged in the Arctic.

Controlled by the Australian-based Energy Transition Minerals Ltd (formerly Greenland Minerals and Energy Ltd), the site attracted significant Chinese involvement when Shanghai-based Shenghe Resources acquired a 12.5% stake, becoming its largest shareholder (Wishnick 2020). In 2018, a Memorandum of Understanding gave Shenghe a dominant role in processing and marketing the rare earths extracted at the site, and in 2019, Shenghe announced a partnership with China National Nuclear Corporation to manage the

**26** "China Withdraws Bid for Greenland Airport Projects" (2019). *Reuters*. https://www.reuters.com/article/us-china-silkroad-greenland-idUSKCN1T5191.

**27** Matzen, E. (2017). "Denmark Spurned Chinese Offer for Greenland Base over Security". *Reuters*. https://www.reuters.com/article/uk-denmark-china-greenland-base-idUKKBN1782E2.

REE separation process at Kvanefjeld (Dams, van Schaik, Stoetman 2020, 32-3). However, the venture was very short-lived.

When, in 2021, the newly elected *Naalakkersuisut* passed the Uranium Act (Act No. 1 of 1 December 2021), which prohibited uranium-related activities (Art. 1) and authorised the restriction or revocation of existing licences (Art. 2).[28] Although not formally retroactive, the Act rendered Kvanefjeld commercially untenable by imposing a radiation threshold of 100 ppm, far below the site's estimated 266 ppm concentration. In a jurisdiction where private land ownership is not recognised, and mining activity depends entirely on licensing, this regulatory shift effectively halted the project. In March 2022, Greenland Mineral A/S (GMAS), the group's subsidiary, initiated arbitration proceedings in Copenhagen claiming that its exploration licence had been *de facto* blocked, despite earlier indications of eligibility and longstanding regulatory support. The subsidiary argued that it had been involved in the project since 2007 and had received continuous support from both the *Naalakkersuisut* and the Danish authorities. They further contended that, over time, the legal framework has undergone significant evolution to accommodate the constant presence of uranium by-products, including an *ad hoc* 2012 amendment of the licensing regime. Therefore, GMAS also contended that these developments had generated legitimate expectations of obtaining a full exploitation license, notwithstanding uranium concentrations of approximately 266 ppm, which are well above the 100 ppm limit imposed by the Uranium Act in 2021.[29]

When the Act was adopted in 2021, GMAS claimed that the *Naalakkersuisut*'s proposed uranium ban altogether was a clear indication that its licensing rights were *de facto* revoked. Although the act was *de jure* non-retroactive, it rendered the company's license path unviable. The company initiated arbitration proceedings, alleging that the measure was politically motivated and incompatible with years of regulatory cooperation and assurances.[30] GMAS argued that the act amounted to *de facto* expropriation and violated both Article 73 of the Danish Constitution and international law norms on property protection and the principle of *pacta sunt servanda*. In

**28** Greenland Parliament Act No. 20 of 1 December 2021 to ban uranium prospecting, exploration and exploitation, etc. (2021).

**29** Greenland Minerals A/S. (22 March 2022). Request for Arbitration: Greenland Minerals A/S v. Government of Greenland & Government of the Kingdom of Denmark; Greenland Minerals A/S. (19 July 2023). Claimant's Statement of Claim. Arbitration between Greenland Minerals A/S and the Government of Greenland and the Kingdom of Denmark.

**30** Greenland Minerals A/S. (19 July 2023). Claimant's Statement of Claim. Arbitration between Greenland Minerals A/S and the Government of Greenland and the Kingdom of Denmark.

particular, the company claimed that its legitimate expectations, built through years of official cooperation between the company and the government, had been retroactively and unilaterally erased.

The arbitration, now split into a jurisdictional and a merits phase, remains pending, with a hearing scheduled for 2025 (Energy Transition Minerals 2024; 2025). Even in the absence of a final award, the dispute illustrates a mature phase of neo-securitisation. The Uranium Act, presented as a measure of environmental and public health protection, ultimately operated as a sovereign instrument to block Chinese strategic capital. Furthermore, it shows how neo-securitisation circulates across jurisdictions and is a growing trend transforming global resource governance into a cycle of mutual defensiveness and strategic exclusion. REEs, whether in the Arctic, China, or the European Union. REE governance now has acquired the features of neo-securitisation. It has become a playing field, where law, environmental governance, and sovereignty no longer function as separate domains but as interlocking instruments of strategic power.

## 7 Conclusion: From National Interests to Transnational Securitisation

This article has traced the transformation of China's rare earth governance from early industrial pragmatism to a consolidated paradigm of securitised resource management. What once began as a developmental strategy, first through horizontal cooperation, then through transactional agreements with Western foreign investors, has been gradually expanded into a system in which environmental regulation, industrial planning, and export controls were integrated into a broader security rationale. REEs have been integrated into the logic of economic planning within the broader framework of Chinese heavy industry because the Chinese central government has recognised their relevance to the country's industrial growth and technological processes.

This trajectory, which culminated in the 2024 Rare Earth Management Regulation and the 2025 export restrictions, has revealed an institutional shift that coincides with the securitisation of governance. Mining, processing, and access to mineral resources and byproducts, such as permanent magnets, have been framed as drivers of innovation, self-reliance, and economic development, but ultimately have consequences for security and geopolitical positioning. What originated as economic modernisation has matured into a system of structural securitisation, where the boundaries between market, state, and law are progressively blurred.


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The four-stage periodisation advanced in this paper captured this gradual transformation. The early decades of industrialisation were characterised by horizontal reciprocity, reflecting socialist principles and mutual cooperation. During the Reform and Opening Up era, China introduced state-led transactionalism to attract foreign investments and expertise within a managed framework, balancing openness with governmental control, particularly emphasising transactions involving natural resources and mining technologies. From the 1990s through the 2010s, a third phase of securitisation emerged, integrating environmental, industrial, and export regulations into national security objectives, culminating in the 2014 Environmental Protection Law, and its centralisation of state authority. The current phase of neo-securitisation extends this logic beyond China's borders by codifying resource governance within a national security paradigm and aligning it with global competition over critical minerals, exemplified by the 2024 Rare Earths Management Regulation. This regulation explicitly frames REES within national security discourse and establishes mechanisms for China to exert influence over resource policy through trade, investment, and technological means.

The same securitisation patterns are replicated beyond China. Similar securitisation patterns are visible in the EU CRMA, and in the legal and political resistance surrounding the Greenland projects. What was once a technical matter of geology and metallurgy has now become a global currency of transnational securitisation. This article has traced this evolution as a fundamental structural transformation in the language of global governance, extending beyond Chinese borders.

In this paper, we have demonstrated that the REE industry has transitioned from a developmental and industrial sphere to a dominant governance paradigm in which sovereignty, sustainability, and security are inextricably linked. REEs have acquired the status of tokens through which states assert control, bolster domestic resilience, and shape future geopolitical transactions. The evolution of the Chinese REE governance reflects this shift, and its legal architecture has evolved from a developmental initiative into a robust system of securitised governance that now profoundly influences Chinese foreign policy. Ultimately, REEs embody a broader narrative: that security considerations are now deeply embedded in legal frameworks, extending beyond traditional notions of security to shape a new geopolitical landscape.

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