

# **Regulatory Gatekeeping and Geopolitical Power: How Green Classifications Reshape Energy Security and Conflict Dynamics**

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## Introduction: Green Rules as Strategic Filters

As States rapidly push towards decarbonisation, global actors have been scrambling to secure critical minerals and sources of clean energy. Complex "green" standards, established by powerful actors, now function as gatekeepers. This paper seeks to analyse how climate-driven regulatory frameworks such as the *European Union (EU) Taxonomy*, the *Carbon Border Adjustment Mechanism (CBAM)*, and the *United States (US) Inflation Reduction Act (IRA)* work as gatekeepers that reshape energy security and global hierarchies (BioEnergyTimes, 2025).

The paper addresses four questions. First, who defines what counts as “green” and how do standards translate into power over trade, finance and technology transfer. Second, how are these rules used as informal geopolitical tools that privilege some producers and sideline others, particularly in CBAM and the IRA. Third, how do these dynamics play out in Morocco (Eljehtimi, 2025), Indonesia (*Indonesian Nickel Smelters Face Closure Risk as Ore Supply Tightens: FINI*, 2025), Chile, African mineral exporters (Balona, 2025), China (Baskaran, 2025) and Venezuela (López, 2024). Finally, what trade-offs emerge between environmental integrity, security and development and how might governance be adjusted to produce fairer outcomes.

## Who Sets the “Green” Rules?

The standard narrative presents green rules as neutral tools for aligning markets with climate goals. In reality, they are designed and enforced by a small group of elite regulators belonging to advanced economies, which gives those actors structural power over others European Commission (2025, November).

The EU Taxonomy Regulation defines which activities qualify as “environmentally sustainable” across water, pollution and biodiversity and now guides banks, asset managers and firms to follow their standards (European Union, 2025). By late 2025, more than €816 billion of financial assets had been reported as taxonomy-aligned, making it a de facto filter in European capital markets (European Union, 2025). The legal instruments created in Brussels therefore helps decide which mining or hydrogen projects in Africa or Latin America are seen as investable and at what cost – including the Renewable Energy Directive (RED III).

The US IRA uses domestic rules and ally-shoring to link tax credits for clean technologies to supply chains that meet specific origin and processing criteria. Treasury and the Internal Revenue Service have raised thresholds for US-made contents, pushing firms to locate key stages of production in the US or allied states (Deberdt, 2024). Officially this is about climate and resilience; however, in practice it creates a inner circle of preferred suppliers.

Globally, ISO-aligned ESG (Environmental, Social and Governance) standards and reporting regimes have become benchmarks for sustainable corporate behaviour, but their governance is dominated by high-income states and major financial institutions (Agbakwuru et al., 2024). Hydrogen certification schemes such as CertifHy, the International Sustainability and Carbon Certification (ISCC) and REDcert, widely used in Europe, decide who can market hydrogen as “renewable” or “low carbon” (IRENA, 2024). Producers that lack the data systems or resources to comply are completely disregarded.

Rules that define “green” are thus largely written in Brussels, Washington and a handful of international venues, then applied globally. Therefore, the rule-making capacity itself is a form of geopolitical power.

## Green Standards as Gatekeepers

Green standards now act as mechanisms of market access and financial sorting, not only as climate tools, and this expands the influence of those who set them. The Carbon Border Adjustment Mechanism (CBAM) is a clear example. From 2026, importers of goods which have high levels of carbon such as steel, cement and aluminium to the EU must report emissions and buy certificates if their production is more carbon-intensive than EU benchmarks (Bhatia, 2025). Exporters without carbon pricing or monitoring will either pay a penalty or lose competitiveness. Officially, CBAM is presented as a tool to prevent ‘carbon leakage’, but in practice it acts as a filter on which producers are able to sell into the EU market as per their terms (Bhatia, 2025; European Commission, 2025).

The IRA operates similarly on the supply side for clean technologies. By tying tax credits for electric vehicles and renewables to domestic content, it reduces competitiveness for suppliers outside the favoured network, particularly in states that lack the capacity to adapt quickly to the policies (Deberdt, 2024).

Finance further reinforces this gatekeeping. The EU Taxonomy now shapes how ‘green’ investments are labelled and large investors use it to decide how to put together their investment plans (European Union, 2025). Firms and governments that cannot demonstrate alignment face higher borrowing costs or exclusion from “green” funding windows (Agbakwuru et al., 2024).

At supply-chain level, countries such as Chile, Morocco and Indonesia must adapt to Western rules, negotiate exemptions or look out for alternative routes. Analysts describe this as the geopoliticisation of supply chains, where states choose between strict Western climate-linked regimes and looser networks centred on actors such as China that may demand more in political loyalty than in emissions accounting (Rehana and Qureshi, 2024). Lower-income exporting countries which have weaker regulatory systems, end up carrying most of these extra costs. Standards therefore decide who can access premium markets and affordable capital, and who is pushed towards more risky buyers.

### **Energy Security and New Extraction Patterns**

Green gatekeeping is creating new dependencies and vulnerabilities in energy security, while concentrating environmental and social risks in producer regions. The EU’s plan to import green hydrogen from Morocco and the Gulf is a prime example. Morocco has approved about 32.5 billion US dollars’ worth of green hydrogen projects aimed mainly at export to Europe, relying on large solar and wind installations and substantial water (Reuters, 2025; Energy News Pro, 2025). Studies argue that doing this in a semi-arid country would take water away from farming and could make rural poverty and tensions worse (Bouramdane, 2024). The EU counts the emissions savings while most of the water and land strain is felt locally in Morocco.

Critical mineral chains amplify these risks. China currently dominates rare earth processing and has major shares in refining key minerals such as graphite, cobalt and lithium derivatives (Davidson, 2025). Indonesia, after banning raw nickel ore exports in 2020, has become the largest refined nickel supplier for electric vehicle batteries (Merwin, 2022). Most smelters are backed by foreign, especially Chinese, capital; producing high emissions and serious local pollution, with communities reporting contaminated water and respiratory problems (Merwin, 2022; Climate Rights International, 2025).

Given how much energy and water our digital infrastructure now uses, it has quietly become another source of pressure on already stressed regions. Global data centres consumed hundreds of billions of litres of water in 2024 and it is predicted to double by 2030 if trends continue (Wells, 2025). Many regions targeted for green hydrogen, solar projects and geothermal power such as North Africa, the Atacama Desert and parts of East Africa, already face intense water scarcity (Bouramdane, 2024; Wells, 2025; Fetzek, 2015). The overall result is that environmental and social pressure falls on places that are vital for green supply chains, but have little say in how the rules are written.

## **Case Studies and Conflict: Morocco, Indonesia, Chile, EU–Africa, China, Venezuela**

### ***Morocco:***

Morocco highlights how export-led green projects can reproduce uneven power relations. The country is now central to EU hydrogen plans with tens of billions of dollars committed to green hydrogen and related products (Reuters, 2025; Energy News Pro, 2025). Research underlines the heavy land and water demands of these projects and warns that without strong safeguards, diverting water from agriculture and using land could drive rural discontent (Bouramdane, 2024). At the same time, technological and financial control is likely to sit with European and Gulf actors, while Moroccan communities carry most of the local risk.

### ***Indonesia:***

Indonesia's nickel policy illustrates how a move up the value chain can still lock the country into environmentally damaging roles. The ban on raw ore exports pushed companies to build smelters within Indonesia and the country now supplies a large share of the nickel that is used to manufacture electric vehicle batteries (Merwin, 2022). But many of these smelters run on coal and are controlled through foreign-led joint ventures, which has led to local pollution, limited skills transfer, and growing protests over health impacts (Merwin, 2022; Climate Rights International, 2025). Meanwhile, standards in consumer markets mostly assess the carbon footprint of the final vehicle rather than the coal-intensive processing behind it, which makes it easier for this model to continue.

### ***Chile:***

Chile's lithium story illustrates how difficult it can be for a resource-rich country to move beyond the role of raw material supplier. Chile holds substantial lithium reserves in the Atacama Desert, but most exports are still raw or only partly processed, while the more profitable battery manufacturing largely takes place in Asia (Wells, 2025). When the Chilean government has sought to retain more processing domestically, many companies have resisted, preferring to keep high-margin stages close to existing production hubs, and these efforts have also led to disputes with Indigenous communities over water depletion and the use of ancestral land (Wells, 2025). Current green labelling systems tend to reward lithium that appears clean and traceable at the point of consumption, but they do not necessarily ensure that producer regions gain meaningful control over the industry or a larger share of the economic gains.

### ***EU–Africa Minerals:***

EU mineral partnerships with African countries reveal how older extractive patterns persist beneath new “green” language. The EU has signed strategic deals with states such as the Democratic Republic of Congo (DRC), Namibia and Zambia to secure cobalt, copper, lithium and rare earths for European industries (Acheampong & Lartey, 2025). Africa provides over 60% of global cobalt and holds roughly 30% of known rare earth reserves, yet more than 80% of cobalt and manganese exports leave the continent unprocessed, and only about 5% of critical minerals are processed domestically (Acheampong & Lartey, 2025; Pluta, 2024). Civil society organisations criticise the fact that many of these agreements are negotiated with little transparency and point to environmental damage, including river pollution in the DRC (Acheampong & Lartey, 2025). In practice, African states continue to supply raw materials and carry most of the ecological risk, while European and Asian firms capture the higher returns from refining and advanced manufacturing.

### ***China: Rare Earth Leverage***

China's rare earth strategy highlights a different side of resource politics. By 2025, China controlled roughly 70% of rare earth extraction and almost 90% of refining capacity (Davidson, 2025). In response to Western technology

restrictions, Beijing tightened export controls on key rare earth products and high-performance magnets, citing national security concerns (Davidson, 2025; Center for Strategic and International Studies, 2025). These steps pushed up prices and disrupted supply for Western defence and clean-tech industries, prompting stockpiling and new investment in alternative mines (Center for Strategic and International Studies, 2025). China has converted its dominance in a crucial “green” input into a form of diplomatic and economic pressure.

### ***Venezuela: Coercive Hydrocarbon Politics in a Greenening World***

Venezuela provides a stark example of how hard-edged oil politics exists in the age of green gatekeeping. Years of mismanagement and US sanctions have sharply reduced Venezuelan oil production and exports, pushed the state into fiscal crisis and left parts of the oil and gold sectors in the hands of criminals and paramilitary actors, with frequent blackouts and fuel shortages at home (Dialogue Earth, 2024; Allianz Global Investors, 2025). Recent US policy under President Trump has mixed tighter sanctions enforcement with open talk of “fixing” Venezuela’s oil infrastructure and using US power to reshape the sector, which has raised fears of a military operation justified in terms of restoring output and edging out Chinese and Russian influence (BBC, 2026; Brookings Institution, 2025). This is not mainly a story about green standards. It shows that as OECD markets tighten climate rules and slowly move away from heavy crude, some oil-dependent states are squeezed into a position where sanctions, illicit exports and external intervention become the main ways they are managed (Dialogue Earth, 2024; Allianz Global Investors, 2025). In that sense, Venezuela is a warning that gatekeeping, whether through climate policy or sanctions, can generate unstable “energy peripheries” that sit outside the emerging green order but still shape security dynamics and price shocks (Dialogue Earth, 2024)

### **Policy Options and Trade-offs**

Rebalancing standard-setting is one step. Analysts from the Global South argue that current arrangements, including those linked to the Sustainable Development Goals, still marginalise developing countries in economic and environmental rule-design (Adams, 2024). A United Nations-anchored platform for sustainability standards, with stronger representation for producer states, could co-define criteria for sustainable mining and hydrogen that incorporate development needs and local environmental thresholds (IRENA, 2024; Adams, 2024).

Experience around the Extractive Industries Transparency Initiative suggests that publishing contracts and payments can improve scrutiny, even if the practice is uneven (Acheampong, 2025). Ensuring mining, processing and hydrogen export contracts be made available to the public including environmental and social clauses, would allow parliaments and civil society to test whether promises on jobs, technology transfer and safeguards are credible. Independent audits funded by small export levies could monitor compliance and curb greenwashing.

Fairer benefit-sharing and local value addition are essential if producer states are to avoid permanent low-value roles. With less than 5% of Africa’s critical minerals processed domestically, agreements should include staged local processing and manufacturing targets, supported by technical assistance (Acheampong, 2025; Pluta, 2024). Community-level schemes, such as royalties and co-ownership can reduce conflict around projects and give affected areas a tangible stake.

For importing states, diversifying green supply chains and investing in recycling would reduce vulnerability to coercion. Measures such as caps on reliance on any single supplier, strategic stockpiles and support for advanced recycling of battery metals and rare earth magnets would all carry upfront costs, but would also limit the scope for future rare earth-style shocks (CSIS, 2025).

Most labelled green finance still flows to high-income countries, while many developing states face higher borrowing costs and stricter conditions when they try to access it (Pluta, 2024; Adams, 2024). Expanding the use of grants, concessional loans and debt-for-climate swaps, alongside reforms that give producer states more influence

in the governance of major climate funds could help finance cleaner processing, better monitoring systems and a more diversified economy in those countries (Adams, 2024).

## **Conclusion**

Green classifications and standards are not neutral; they are instruments of regulatory power that reshape energy security, industrial hierarchies and conflict risks. Rule-making centres in the EU and US define what counts as sustainable and those definitions travel through CBAM, the IRA, hydrogen certification and ESG frameworks to limit access to markets and capital (European Union, 2025; Deberdt, 2024). Producers such as Morocco, Indonesia, Chile and African mineral exporters bear environmental and social risks while often remaining in low-value segments and China shows how dominance in green inputs can be turned into explicit bargaining power (Bouramdane, 2024; Merwin, 2022; Acheampong, 2025; Davidson, 2025). Venezuela illustrates how sanctions-based gatekeeping produces unstable energy peripheries outside the green order that still matter for global security (Dialogue Earth, 2024).

The core problem is that there is a trade-off between the need for strict standards to drive decarbonisation and the way those standards currently replicate older patterns of unequal exchange. More inclusive standard-setting, greater transparency, fairer benefit-sharing, supply-chain diversification and more equitable climate finance would not fully level the playing field, but they would soften the unequal effects (Acheampong & Lartey, 2025; Adams, 2024). Ultimately, the key issue is not only whether decarbonisation happens, but whose rules govern it and whose security and development priorities are built into the emerging green order.

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