



GEOINTELLIGENCE

FOR INNOVATION, RESILIENCE, AND COMPETITIVENESS

Future Scenarios regarding China's Rare Earth Export Controls

| Scenario | Description & Triggers | Likelihood (Mid-term) | Impact & Consequences |
|---|--|---|--|
| 1. Status Quo (Strategic Restraint) | China continues its cautious approach. No direct ban on rare earth exports, only incremental tweaks (tightening licensing, anti-smuggling crackdowns, slight quota adjustments). Triggered by a desire to avoid economic loss and WTO conflicts, and if US-China relations don't dramatically worsen. | High (China benefits from current trade and avoids provocation unless pressed). | <i>Impact:</i> Global markets remain supplied, albeit nervously. Prices stay relatively stable, giving other countries time to develop alternative sources. China maintains its image (to some degree) as a reliable supplier, slowing the rush to diversify away from it. However, dependency on China stays high, keeping importers strategically vulnerable. |
| 2. Gradual Squeeze (Stealthy Tightening) | China doesn't announce a bold ban, but quietly reduces export allocations over several years – for example, lowering annual export volumes, delaying export licenses, or raising export taxes. It might cite environmental rules or resource depletion. Triggered by prolonged tech tensions short of war. | Medium (China may opt for a slow squeeze to minimize backlash). | <i>Impact:</i> A slow-burn supply crunch. Importing nations face creeping shortages, forcing industries to pay more or find substitutes. This scenario could catch some off-guard because it lacks a single dramatic event. Over time it would still push accelerated mining projects in other countries and possibly trade disputes in the WTO or other forums. |
| 3. Full Export Ban (Geopolitical Crisis) | China weaponizes rare earths in a flash – an embargo on exports to specific countries (e.g. the | Low in peacetime; High if a major conflict erupts. | <i>Impact:</i> An immediate global supply shock. Defense and tech industries in the target |



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| | U.S. and allies) or a complete halt, as a retaliation in a severe confrontation (such as a military conflict over Taiwan or extreme sanctions). Triggered by a geopolitical shock that threatens China's core interests, where economic costs are secondary to strategic outcomes. | | countries would face production shutdowns within months if stockpiles deplete. Prices for rare earth materials would skyrocket worldwide. This "nuclear option" would likely backfire long-term: it would irreversibly drive decoupling, cause allied retaliation against China, and incentivize a crash program to build alternate supply chains (including potentially expensive recycling and substitution). China's dominance would erode in a few years as a result, but not before causing chaos in the interim. |
| 4. Diversification Breakthrough (Late 2020s) | Due to heavy investment and cooperation, non-Chinese rare earth supply chains significantly expand by the later 2020s. Multiple new mines (in Australia, North America, Africa) and processing facilities come online, reducing China's share of global production and processing markedly . This isn't a direct result of China's actions but a response scenario. | Medium (expected over a longer term if current plans succeed). | <i>Impact:</i> By 2030, China's leverage could diminish as global markets have alternatives. In this scenario, China might actually lose by <i>waiting too long</i> . If it hasn't used its rare earth "weapon" by this point, it may no longer be effective. China could then pivot to competing in value-added products (e.g. magnets, electric vehicles) and perhaps become an importer of certain rare |



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| | | | earth feedstock itself (as it already has started doing to feed its refiners. This scenario represents a strategic loss for China's coercive power but could lead to a more stable, diversified market benefitting consumers worldwide. |
| 5. Cooperative Governance ("Resource Truce") | A more optimistic but less likely scenario: China and other major powers strike agreements through forums (like the G20 or a new critical minerals club) to refrain from drastic export restrictions and to collaborate on scaling up production sustainably. Triggered by recognition that supply chain shocks hurt all sides and derail climate goals. | Low (Given the current strategic rivalry, cooperation is unlikely short term). | <i>Impact:</i> Would defuse the rare earths issue as a weapon. China would still profit as a top producer but with agreed limits or transparency on export policies. Importers would feel more secure, though they would likely still pursue some independent capacity for insurance. Such an agreement could involve environmental standards and recycling initiatives to reduce demand pressure. While ideal, this scenario would require a significant thaw in geopolitical tensions or mutual dependence strong enough to override conflict. |