

POLICYBRIEF

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Building a Global Minerals Trust for a Just Green Transition

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Executive Summary

- Today, more than 70% of global production for key critical minerals is concentrated in just a few countries, raising serious concerns about supply security, market volatility, and geopolitical risk.
- Achieving a just and sustainable energy transition hinges on fair and reliable access to critical minerals—materials key for low-carbon technologies. However, global supply chains remain environmentally damaging and vulnerable to geopolitical tensions, creating systemic risks for both climate and economic goals.
- A Global Minerals Trust offers a new multilateral model to promote responsible stewardship, fair pricing, and secure equitable access to strategic minerals—balancing national sovereignty with planetary responsibility.
- The Trust can advance a just and circular transition by enabling pooled investment, transparent trade, mineral recycling, and benefit-sharing with resource-producing nations, particularly in the Global South.
- Global cooperation through platforms such as the G7, G20, IGF, and United Nations is essential to coordinate action and build a resilient, inclusive, and future-proof minerals governance system.
- Canada's 2025 G7 presidency offers a strategic opportunity to facilitate early-stage consensus around the Trust, drawing on its strengths in environmental diplomacy and multilateral engagement.

Context

Today, more than 70% of global production for key critical minerals is concentrated in just a few countries, raising serious concerns about supply security and geopolitical risk. At the same time, mining operations often result in deforestation, water scarcity, biodiversity loss, and human rights violations—particularly impacting Indigenous and frontline communities. Recycling remains woefully inadequate: fewer than 5% of lithium-ion batteries are currently recycled. The European Union has already committed to sourcing 15% of its critical minerals from recycled content by 2030. Despite numerous strategies and frameworks, existing policy efforts have not adequately balanced economic imperatives with social and environmental priorities. A Global Minerals Trust can help fill this governance gap by creating a transparent, inclusive framework to manage mineral access, support a circular economy, and ensure shared benefits for producing countries. This proposal is also in synch with a proposal to establish an International Resource Agency, which was presented by the United Nations International Resource Panel at the World Circular Economy Forum in Brazil in May 2025. The Trust could be a key tangible operative entity within the Agency in the long run.

Problem Statement

Critical minerals are essential for clean energy, advanced manufacturing, and economic security, yet their supply chains are increasingly strained. The global transition to sustainable

energy and infrastructure faces a critical challenge: ensuring equitable access to essential minerals while also providing fair and stable income for mineral suppliers and mitigating the serious risk of resource conflicts. As demand for critical energy transition minerals (defined by the United Nations as those necessary for renewable energy technologies) surges, the uneven distribution of these resources threatens to exacerbate geopolitical tensions and cause supply chain disruptions.

The Minerals Trust¹ is proposed as a multilateral mechanism to treat critical minerals as shared planetary assets while upholding states' sovereign rights. By coordinating access, pooling resources, and embedding social and environmental safeguards, the Trust can promote equitable, circular, and conflict-free mineral value chains. This collaborative governance model is grounded in transparency, equity, and sustainability. It seeks to ensure that access to critical minerals—especially those vital for the green transition—is secure, fair, and decoupled from political influence or conflict.

The Minerals Trust: A New Governance Model

The Minerals Trust provides a multilateral framework that harmonizes national interests with sustainable development imperatives. It is grounded in the principle of Permanent Sovereignty over Natural Resources, allowing states to benefit from their resources while contributing to a cooperative global effort.

Mineral laws in most countries already recognize collective ownership rather than individual property rights. Individuals can still benefit from collective ownership by the state. The Minerals Trust builds on the principle of collective resource stewardship: while states retain sovereign control over their mineral assets, the Trust introduces a planetary mandate to ensure equitable sharing of benefits, with a focus on fair returns for communities in producing regions. Countries opting into the Trust retain the rights to develop projects, which are subject to national laws and permitting decisions and would be developed either by private or public entities. Initially, the sale of minerals through the Trust could be limited to existing mines, refineries, and recycling facilities. However, with pooled development funding, the Trust could initiate new projects drawing inspiration from national models such as Japan's Organization for Metals and Energy Security (JOGMEC), which demonstrates how pooled investment can strengthen national supply chains while supporting global collaboration.

The Minerals Trust, therefore, is based on a multilateral framework that acknowledges minerals as shared planetary

assets, while upholding Permanent Sovereignty over Natural Resources—a principle enshrined in international law affirming states' rights to control and benefit from their own natural resources. While countries participating in the Trust would retain full sovereignty over decisions to develop mineral projects within their borders, participation would also include a commitment to transparency, environmental stewardship, and benefit sharing with local and Indigenous communities. As demand surges for critical materials, it is vital to address the mounting competition, supply chain vulnerabilities, and environmental degradation tied to current extraction models. The Minerals Trust offers a pathway from extractive competition to collective stewardship, aligning the right of states to control their resources with the global imperative for equitable, secure, and sustainable access to minerals critical for the energy transition.

An Opportunity for the G7

The G7, while small in population share, wields significant influence over global trade, finance, and clean technology development, and is well-positioned to lead coordinated action on mineral governance. The relatively compact structure of the G7 allows for coordinated leadership among advanced economies, which can serve as a foundation for broader global cooperation. If designed inclusively, the Trust could help prevent the weaponization of mineral trade, ensure fair pricing, support mineral recycling, and promote benefit-sharing with resource-producing nations. This layered strategy enables the G7 to act as a catalyst for broader global cooperation, while ensuring that the perspectives and priorities of emerging economies and resource-rich developing countries are integrated into the Trust's long-term governance model.

Canada's 2025 G7 presidency provides a strategic opening to build consensus around this model. With its strong record in multilateral environmental governance and transparent mining practices, Canada can play a facilitation role in aligning the G7 toward this shared goal. Canada's active role in global institutions such as the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF), the G20, UN, and OSCE offers natural channels for such global outreach. In particular, the IGF offers a neutral and globally recognized platform for inclusive policy development and the exchange of best practices with producer nations.

However, any minerals governance framework must be globally inclusive to achieve legitimacy and effectiveness. Many of the most impacted countries lie outside the G7, particularly in the Global South, including in regions such as sub-Saharan Africa, Southeast Asia, and the Pacific Islands. The G7 can serve as a launchpad, with expansion through

engagement with the G20, ASEAN, the African Union, and United Nations platforms.

A Practical Framework for Cooperative Governance

The Trust would function akin to an asset protection mechanism, where an individual or organization would assign a third party (or trustee) to manage their assets as a beneficiary. The beneficiaries are the mineral producers (state or private mining companies); and the trustees are the countries that both produce the minerals and create the green technologies that need access to those minerals. The functioning of the minerals market could certainly include recycled materials and aspire for a circular economy, including the option to lease metals and thereby have inherent incentives for product reuse and takeback. However, in many industries that rely on newer metallic uses such as for lithium, recycling simply will not be viable for at least two or more decades as there are no stocks of the primary material available.

The green technology producers would pay the market price, and the trustees ensure the necessary minerals are sold to green technology producers through a fair and transparent process. Existing international organizations could manage the trust's key technical decision points. Quotas for mineral producers that are linked to demonstrable needs for green technologies, or eligibility criteria for technology developers to access materials approved for green technologies, are examples in this respect. Industry organizations and key environmental and social vigilance institutions could also

play a role in the decision-making process through various governance committees of the trusteeship. In particular, the International Renewable Energy Agency (IRENA) and the Climate Technology Centre Network (CTCN) could have key roles in this mechanism.

There would also be a stockpile created within the trust if there is a short-term surplus of minerals. This would be managed by the trustees. This stockpile in this mechanism could also facilitate future reuse and recycling by creating a leasing mechanism for metals that have short-term usage. The World Bank has shown interest in such a leasing mechanism for batteries through their Climate Smart Mining initiative². It is worth noting that in 1975, there was an attempt by the United Nations Conference on Trade and Development (UNCTAD) to create a mineral trading platform for the tin industry that could also have a stockpile³. The reason it never flourished was that it was not a trust co-managed by both producing and consuming countries and had rigid production requirements rather than the adaptive system of a mineral trust. Other models include the International Tropical Timber Organization (ITTO), which has been a public-private partnership for more sustainable and reliable sourcing of tropical hardwood. Inspired by the twelfth century Hanseatic trading leagues, The European Coal and Steel Community proposed by one of the intellectual progenitors of the European Union in the 1960s, Jean Monet, followed a similar logic of supply assurance.

Trust mechanisms could include:

- A minerals stockpile to stabilize markets
- Leasing systems to promote circularity

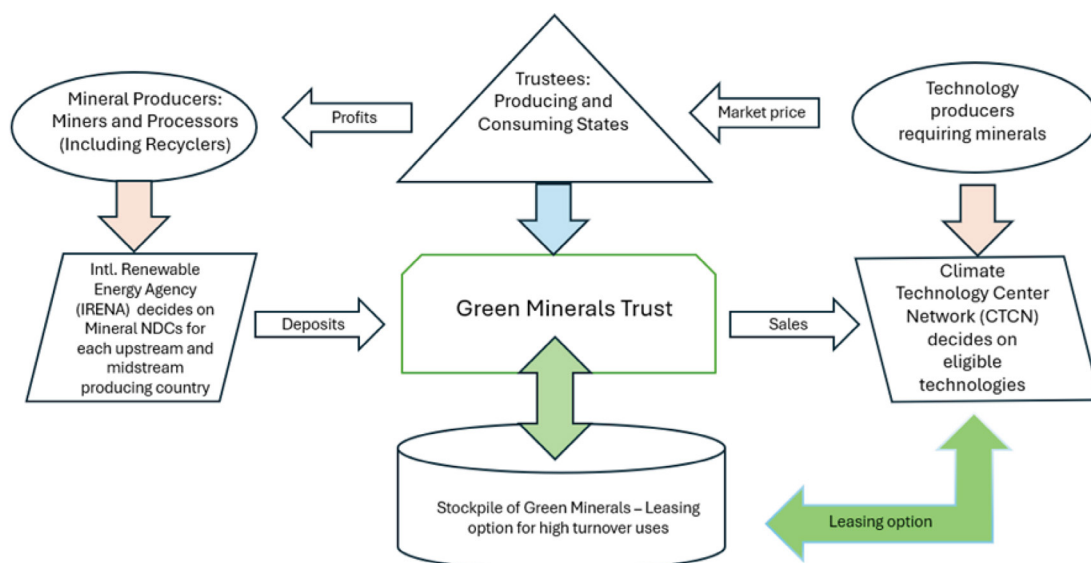


Figure 1. Proposed Structure of a Minerals Trust for the Green Transition

- Eligibility criteria to prioritize approved green technologies
- Independent audit protocols modeled after IAEA standards
- Coordination with IRENA, CTCN, World Bank, and others

A fundamental feature of the trust idea is that countries fairly benefit from their resources. Producers would simply not be allowed to constrain supply for political ends because of the planetary imperative at stake for these specific uses. While exceptions might be allowed in cases where environmental constraints necessitate a reduction in supply, independent audit mechanisms should be established to ensure that such exceptions still comply with the Trust’s terms. Audit protocols modeled on international standards, such as those of the International Atomic Energy Agency (IAEA), could ensure transparency and accountability.

Other uses of the metals in question could be managed independently outside the trust as long as the green transition needs are prioritized for sale through the trust. So, for example, Indonesia which is the world’s largest nickel producer could still go on earning profits from selling metal but would just not constrain supply for green transition projects as part of its NDC. The trust would simply prevent weaponization of mineral trade barriers⁴. The mandate for the trust should instead come from the United Nations Security Council to ensure tough accountability for trustees. The Council has already engaged in climate change matters⁵, but this engagement needs to be expanded to infrastructure and mineral security.

Green technology producers benefiting from the Mineral Trust could also be required to support and invest in technology development in critical energy transition mineral suppliers, particularly developing countries, to make them future green technology producers. This would enable those countries to move beyond being raw material suppliers by adding value to mineral production by upgrading the local value chain. Most consequentially for planetary sustainability, the minerals trust would prevent redundancies in resource extraction and energy usage for processing, and encourage a circular economy.

Scaling and Next Steps

The Trust could initially emerge from a coalition of key producing and consuming countries. To avoid deepening inequalities or enabling resource nationalism, its long-term success hinges on broader multilateral adoption.

Errant mineral development of low-grade ores or developments in ecologically and socially vulnerable

regions can ultimately be protected only if the world’s major producing and consuming countries sign on to this arrangement. For such upscaling to realistically occur, the green transition minerals supply needs to be tracked and decoupled from potential defense industry needs for these minerals. Fortunately, we now have excellent means of tracking mineral supply from mines to markets using a range of analytical tools developed in the emerging field of “forensic geology” as well as much closer regulatory monitoring of mineral trade, particularly from recycled sources.

During the current G7 presidency cycle, consensus on the terms of a Global Minerals Trust could be negotiated among the advanced industrialized democracies. The OECD should also be consulted in this process, given its longstanding role in extractive governance and responsible sourcing initiatives. The UNECE has proposed the creation of a “Mineral Resource Bank,” which could complement the trust mechanism, and G7 consensus could be extended to other multilateral bodies such as UNECE and UNCTAD. The latter has been tasked by the UN Secretary-General to act on the

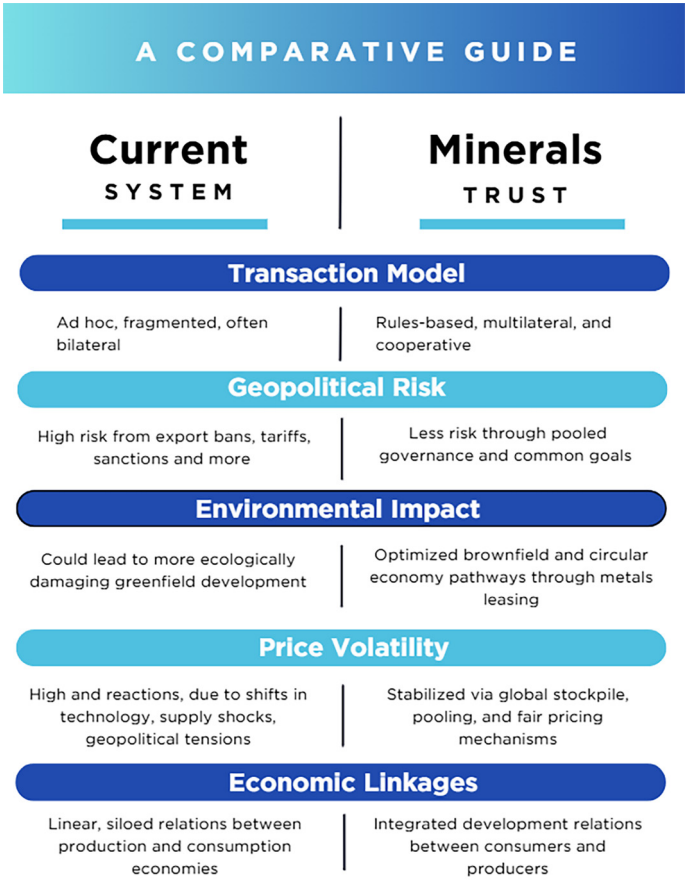


Figure 2. Comparison of the current global critical minerals system and proposed Minerals Trust

recommendations of the Panel on Critical Energy Transition Minerals. Eventually, this consensus could be brought before the G20 to ensure broader alignment among major mineral producers and consumers.

Policy Recommendations

1. Launch the Minerals Trust through multilateral leadership. G7 and G20 countries can jointly initiate a pilot initiative around the governance of critical minerals with transparency, benefit-sharing, and sustainability as core principles. Long-term leadership should involve a broader coalition of producing and consuming nations from both the Global North and South.
2. Treat critical minerals as planetary assets with sovereign rights. The Trust should balance respect for national ownership with global stewardship responsibilities, supporting the principle of Permanent Sovereignty over Natural Resources (UNGA resolution 1803) but using the principle of subsidiarity to justify this in congruence with the World Charter of Nature.
3. Include developing and resource-rich nations from the outset. Expand the Trust through international forums such as the Intergovernmental Forum on Mining (IGF), African Union, ASEAN, and the G20 to ensure inclusive participation.
4. Establish a strategic mineral stockpile and leasing mechanism. Develop a centralized stockpile of critical minerals to buffer supply shocks and incentivize circular economy models through leasing and take-back systems.
5. Link access to minerals with green technology cooperation. Require green tech beneficiaries of the Trust to invest in local value addition and technology transfer in producer countries, helping them move up the

value chain.

6. Embed environmental and social accountability mechanisms. Use independent audits modeled after agencies like the IAEA to monitor compliance with environmental and community benefit standards.
7. Coordinate with existing institutions. Work with UNEP, IRP, IRENA, CTCN, UNECE, UNCTAD, and the World Bank's Climate Smart Mining Initiative to build technical capacity and ensure institutional coherence.

Final Remarks

The Minerals Trust represents a forward-looking governance solution for a rapidly changing resource landscape. It responds to the global urgency for fair, sustainable mineral access by promoting shared stewardship over extractive assets. Given the concern about Global Tipping Points around planetary boundaries that have been articulated by the Earth Commission, there is a narrow window of action to ensure we can build the needed infrastructure for the Green Transition in the most ecologically and economically efficient ways. circular economy.

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