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Critical Minerals: Key to Our Low-Carbon Future

Many critical minerals vital to the global energy transition are found in USAID-presence countries. USAID is well positioned to advance just and responsible mining practices in partner countries, which can offset associated supply-chain risks in the face of booming global demand.

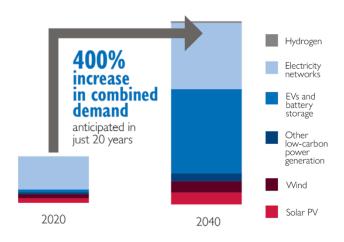
The growing demand for critical minerals

Critical minerals are defined as minerals essential to the economic or national security of the U.S. and that are vulnerable to supply chain disruption. Among the most important of these is a set of minerals vital to renewable energy technologies (also known as "energy transition minerals" or "green energy minerals").

To create a low-carbon economy that will reduce the threat of climate change, the world must shift from a fossil fuel-based economy towards renewable energy technologies such as solar panels, wind turbines, and electric vehicles. These technologies rely on several dozen minerals, including cobalt, nickel, lithium, and rare earth elements. Global demand for these key minerals is projected to increase by as much as 400 percent by 2040 compared to today's levels (see figure below). These minerals are mined in more than 70 countries, including many where USAID operates.

A global and cross-sectoral challenge

While an international mining boom could foster economic growth and local development, it also carries with it the potential for significant adverse environmental, governance, and social and human rights impacts. The impacts of extraction could exacerbate existing inequities and further disenfranchise the most marginalized communities. Failure to address these risks could lead to increased fragility, poverty, and conflict that, in turn, would cause supply chain disruptions with wide-ranging repercussions. In contrast, responsible mining will contribute to climate change mitigation, energy independence, and national security objectives while also creating new opportunities for our partner countries and communities.



SOURCE: International Energy Agency

What USAID is doing

USAID has more than 20 years of experience supporting responsible supply chains for diamonds, gold, and other conflict minerals. More broadly, it has deep expertise promoting transparent resource governance, protecting the environment, preventing conflict, improving benefit sharing, and other development goals that intersect with mining. The Agency is well-positioned to build on this work in the context of today's increasing global demands for minerals, simultaneously working to support our climate mitigation goals, contribute to economic development, and avoid a new "resource curse."

To this end, USAID's <u>Land and Resource Governance</u> (<u>LRG</u>) <u>Division</u> supports Missions to promote more responsible mining. The LRG Division provides technical analysis of mining issues specific to each country, support with private sector and civil society engagement, facilitation for integrating mining considerations into other programs, and other services. Through these efforts in collaboration with host countries and other stakeholders, USAID programs can influence the direction mining takes—mitigating negative impacts while helping to achieve development goals.

Opportunities for action

We know that the increasing demand for renewable energy is driving increases in mining. How can we influence mining for the better?

Critical mineral supply chains intersect with a wide range of development and national security themes. The sectoral issues below represent some of the opportunities to promote responsible mining where USAID operates:

Environment

Mining almost always causes some environmental harm. While these impacts can be difficult to mitigate, programs can focus on improving the quality of environmental impact assessments, reducing greenhouse gas emissions in the mining process, and supporting water resources management in stressed areas.

"We can't let [critical] minerals become the source of the next resource curse."

USAID Administrator Samantha
Power at COP27

Conflict & Human Rights

Mining can be linked to conflict, human rights abuses, and broader social inequalities, often disproportionately affecting Indigenous Peoples and local communities. Efforts to mitigate these issues include promoting free, prior, and informed consent, protecting human rights defenders, and supporting women's empowerment.

Mining Governance

Given the multisectoral nature of mining impacts, improving governance can lead to a range of better outcomes. Programs can promote better civic engagement on mining issues, reduce opportunities for corruption, support community and stakeholder dialogue, and work with local and national governments to develop responsible mining policy.

For more information about critical minerals, visit: https://www.land-links.org/issue/critical-minerals