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# Sustainable and Ethical Uranium Mining: Opportunities and Challenges

Executive Summary



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Good Energy Collective is a policy research organization building the progressive case for nuclear energy as an essential part of the broader climate change agenda. We develop smart policies at every scale to accelerate the just and equitable deployment of advanced nuclear technologies.

## Authors

Ariel Gould

## Contributions

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Reach out via email: [hello@goodenergycollective.org](mailto:hello@goodenergycollective.org)

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Demand for nuclear energy—and the uranium needed to fuel it—is expected to grow over the coming decades in response to concern for climate change and energy security. Unfortunately, the extraction of uranium has left behind a troubled legacy, particularly for Indigenous communities and other marginalized groups.

For nuclear to be considered a truly clean energy technology, uranium mining must proceed with minimal environmental and public health impacts. Governments need strong regulations on mining, but they also need to invest more resources into remediation. These problems are not unique to nuclear energy, however. The transition to low-carbon energy necessitates a significant expansion of mining activities, often in regions with few environmental safeguards. The Biden administration has projected that global demand for critical minerals for energy production and other industries is set to increase 400–600 percent over the next several decades. For minerals such as lithium and graphite used in electric vehicle batteries, demand could increase by as much as 4,000 percent.

No matter the mineral, government and voluntary standards are necessary to ensure mining companies operate ethically and sustainably and invest in the host community long-term. Smart policies and strong standards can minimize the impacts and maximize the benefits to communities. Mining can be rethought to include cleaning up the dirty legacy of mining's past, protecting the environment, and investing in the community. Policymakers can identify and support activities that reduce demand for new mining, including alternative mineral sourcing options like reprocessing spent nuclear fuel, reprocessing waste at abandoned mine sites, and extracting minerals from seawater. Successful community consultation practices and community benefit agreements can offer a blueprint for mining project developers to earn trust and support for new projects. And wherever possible, Indigenous communities should lead the way in land management to ensure that new extraction activities do not harm cultural and spiritual sites.