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# Responsibility and opportunity

**Climate action and shifting the frame from  
human rights to human dignity**

Governments and businesses have a responsibility to eliminate forced labor in the supply chains that drive the clean energy transition by applying upstream pressure on critical mineral sources. Bold strategic intervention to not only eradicate these human rights violations but to envision a path towards elevating human dignity will create a frame where people, planet and prosperity may co-exist.

## Introduction

Globally, the transition to clean energy is rapidly accelerating—totaling \$1.1T in clean energy investment in 2022, matching investments in oil and gas for the first time<sup>1</sup>—as countries strive to reduce emissions and mitigate the effects of climate change. However, supply chains for critical minerals that enable clean energy technology are rife with modern day slavery and notably forced labor.<sup>2</sup> There are approximately three million victims of forced labor within manufacturing supply chains globally, including those that produce critical minerals needed in clean energy technology.<sup>3</sup> As the pace of clean energy development quickens, necessitating new and expanded supply chains for critical minerals and other essential inputs, governments and the private sector have an opportunity to protect people and planet by illuminating all parts of their supply chains. Coordinated efforts can identify and eradicate human rights violations systematically.

The nexus between the clean energy transition and forced labor represents a tension between progress and exploitation. As the global economy increasingly depends on critical mineral inputs to scale clean energy systems, vulnerable populations could become prone to dangerous and exploitative labor practices.

Examples include:

- Nearly 70% of the world’s cobalt,<sup>4</sup> an element required in most modern rechargeable batteries, originates in the Democratic Republic of Congo (DRC), where approximately 25,000 children<sup>5</sup> participate in dangerous mining for exploitative wages.
- Approximately 77% of polysilicon production, used to create solar energy products, originates in the Peoples Republic of China (PRC). More than 100,000 Uyghurs and other ethnic minorities are subject to forced labor in Xinjiang where more than half of the country’s solar-grade polysilicon is produced.<sup>6</sup>
- Copper reserves are sourced by child and forced labor<sup>7</sup> in mines in the DRC (9% of the world’s production)<sup>8</sup> and Zambia (6%).<sup>9</sup> Renewable energy systems require up to 12 times more copper than traditional energy systems.<sup>10</sup>

With investment in clean energy development and deployment reaching record highs each year, spurred forward by multilateral commitments to decarbonize the global economy, competitive prices of renewable energy technology, and expanding private sector participation in clean energy development, potential risks of continued or even expanded forced labor in supply chains abound.

# The opportunity to elevate human dignity when making the clean energy transition

Private and public sectors can seize this moment to potentially uncover existing problems in their supply chains, prevent new ones, and reframe the problem statement. Shifting the frame from respecting human rights to elevating human dignity can be profound. Human dignity is an expansion of the stated rights we traditionally consider under the United Nation's Universal Declaration of Human Rights that states that all human beings are born free and equal in dignity and rights. By refocusing on dignity, we can uncover why violations are happening to help prevent them for the future.

To protect human dignity, governments have an important role to play by centering on the communities and rights they intend to protect. Governments can craft policies that...

1. Leverage incentives for businesses to monitor supply chains and actively shift away from actors that enable exploitation through incentives
2. Institute regulations that penalize actors that violate standards

There's a spectrum of interventions that can help business comply, but the intention to transition to mitigating harm (not 'doing no harm') and remediating issues as they arise is clear.

Government intervention can help decrease risk in supply chains, promote collective action among consortia of private sector actors, and uphold commitments to human dignity. In parallel, businesses can...

1. Develop sourcing standards and purchase agreements anchored in analytics to continually monitor supply chains
2. Identify opportunities to hear directly from employees of supply chain vendors, putting humans at the center of the analysis
3. Establish protocols to rapidly address violations as they are identified, with resolutions anchored in the communities and cultures they serve

For businesses, bold, preemptive actions to address forced labor in their supply chains represent opportunities to seize market leadership in terms of ethics and sustainability standards, capitalize on emerging consumer demands, and anticipate forthcoming policies. However, with action needs to come an acknowledgement that any solution set will be iterative. There is a need to act now, and learning what works will help inform the next solution, and the one after that. It should be informed by putting humans and their dignity at the center of the solution, listening to their voices, and adjusting course accordingly. Organizations may need to come to their own realization that this isn't just a "requirement," but a moral imperative that requires financial investment, baked into strategic plans and budgets for years to come.

## Looking forward

The clean energy transition represents an opportunity to usher in a new era of economic activity that centers around human dignity. This transition requires leaders to think critically about their organization's vulnerability to human rights violations, especially forced labor, within every phase of the supply chain. To be successful, it will need to be an ecosystem effort to elevate voices from the ground, continuously monitor and enforce supply chains adherence to standards and rapidly intervene in a human-centric way when violations are identified.

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## Endnotes

1. <https://www.bloomberg.com/news/articles/2023-01-26/global-clean-energy-investments-match-fossil-fuel-for-first-time>
2. [Forced Labor and the Clean Energy Transition: Finding A Responsible Way Forward \(state.gov\)](#)
3. [wcms\\_854733.pdf \(ilo.org\)](#)
4. <https://www.statista.com/statistics/339834/mine-production-of-cobalt-in-dr-congo/#:~:text=DR%20Congo%20is%20the%20world's,cobalt%20mine%20production%20in%202022>.
5. <https://www.dol.gov/agencies/ilab/combating-child-labor-democratic-republic-congos-cobalt-industry-cotecco>
6. <https://www.dol.gov/agencies/ilab/against-their-will-the-situation-in-xinjiang>
7. U.S. Department of State. Office to Monitor and Combat Trafficking in Persons. Trafficking in Persons Report. 2019. <https://www.state.gov/reports/2019-trafficking-in-persons-report/>.
8. Talaga, Tanya. "Children as young as 8 working in Congo copper mines" Toronto Star. May 23, 2013. "[https://www.thestar.com/news/world/2013/05/23/children\\_as\\_young\\_as\\_8\\_working\\_in\\_congo\\_copper\\_mines\\_in\\_democratic\\_republic\\_of\\_congo.html](https://www.thestar.com/news/world/2013/05/23/children_as_young_as_8_working_in_congo_copper_mines_in_democratic_republic_of_congo.html) Copper in the Democratic Republic of the Congo (mining-technology.com) World Vision. Child labor: Children reveal horror of working in mines. 2013. <https://www.worldvision.org/child-protection-news-stories/child-labor-children-reveal-horror-working-mines>.
9. [Zambia's Cobalt Economy – Michigan Journal of Economics \(umich.edu\)](#)
10. [Renewable Energy - Copper Alliance](#)

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