

# Slow mining could be a solution to overconsumption in an increasingly fast-paced world

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A "fast" approach to business—characterized by overconsumption across supply chains—has become almost ubiquitous in recent years.

Fast fashion is one of the most [polluting industries globally](#), often relying on synthetic fibers that have an ultimate origin in fossil fuels.

At the same time, the links between [corporate fast-food](#) entities and [poor health](#) and deteriorating [environmental conditions](#) are well established. Likewise, fast technology brands [design for obsolescence](#) to boost sales,

requiring that more and more mineral wealth is extracted from the ground. Almost all of these activities require [mining](#) in some form along the supply chain.

Mining is also increasingly fast, with a focus on the creation of wealth for a select few and meeting global demand, not on the needs of local communities. Since the 1970s, global material footprint [has quadrupled](#). While circular economy strategies, such as [recycling, can play a role](#) in meeting the increasing demand for [raw materials](#), [mining cannot be completely offset by recycling alone](#).

The [slow fashion](#) and [slow food](#) movements are an antidote to overconsumption, promoting sustainability by emphasizing the value of quality, origin and production. New research suggests that a slow, small-scale mining movement could maintain supply, yield similar sustainability outcomes and [provide a range of other benefits](#).

## Out of this Earth

The central premise of slow mining is to give control over production levels to those who work at the mine site itself. The concept recognizes that meeting global demands for raw materials requires local solutions and was evolved out of research into [small-scale mining in Yukon](#), Canada. Additional [research in Ghana](#) has also shown how slow mining efforts led by small-scale miners can supply vital materials while also taking care of both local communities and the environment.

Small-scale mining is the gradual harvest of a resource by a [community \(known as a rural collective economy\)](#) using [more bespoke technologies](#) (such as [sluicing](#) equipment) that miners are able [to purchase—or build—and maintain themselves](#). Small-scale miners can also be owner-operators of their mines where they have control over production rates to protect local communities and extend the life-of-mine for continued and

secure steady income.

Small-scale mining activities are relatively common throughout the Yukon where [108 active small- to medium-scale placer mines](#) work to [produce around 72,464 crude ounces of gold annually](#). By comparison, a single large-scale hard-rock gold mine can generate approximately [200,000](#) ounces annually in the same territory.

Yukon stands out as one of the few active small-scale mining industries in the Global North.

Artisanal and small-scale mining employ more than [40 million people](#) in the Global South. "Slow" small-scale mining operations in Ghana have persisted despite shutdowns by a government that has [favored large, often multi-national, mining enterprises](#) under the [banner of environmental protection](#).

## Supportive structures

There are significant similarities and differences between the experiences of small-scale miners [in Canada](#) and Ghana. Notably, in both the Global North and the Global South, governance and regulation can hinder the existence of smaller mining enterprises.

Important regulatory frameworks, such as the Canadian [National Instrument 43-101, are designed to protect markets, not communities or environments](#). This framework can make it difficult for small-scale mining enterprises to enter the sector. The dominant focus on large mining enterprises, tied to stock markets and globalization, overshadows the potential benefits of small-scale mining.

However, the Yukon government's [Placer Mining Act](#) has helped to incubate and protect small-scale mining. Meanwhile, a [floating pool of](#)

[professionals](#) who work with Yukon mining practitioners to develop place-based solutions that promote positive outcomes for mining practitioners and the environment has helped the Yukon become a global leader in slow-mining.

The resulting embrace of slow, small-scale mining has enabled rural communities to gradually adapt and grow with the industry. This approach enhances community resilience to boom-and-bust commodity life cycles, facilitates the development of integrated rural value chains and promotes local ownership and management, all of which can curb urban migration and create [meaningful work](#).

## **Sustainable production-consumption ethos**

The insights in small-scale mining from the Yukon have implications for a growing array of globally in-demand mineral and metal resources. [Sustainability concepts in the mining industry](#) have advanced towards holistic understanding, rooted in strong sustainability. [Mining need not be an inherently colonial activity](#), and working with Indigenous people and incorporating Indigenous ways of knowing into the mine life cycle are key to overcoming sustainability challenges.

We need [new mining business models](#) anchored in local communities. [Modern small-scale mining](#) and [switch-on/switch-off](#) mining are being considered in Europe. Artisanal and small-scale mining in medium- and low-income nations [produce a significant amount of critical minerals](#).

Who owns a mine is important and research has shown that decentralized, locally owned mines [positively correlate with high human development index outcomes](#) and can help resist [state-corporate mineral ownership](#).

In Canada, [community-owned small-scale mining of critical minerals](#) is

economically and socially viable.

## Better alternatives

This comes at an important juncture in the expansion of raw material extraction activities that are needed to sustain the low-carbon transition but can potentially cause excessive stress to the natural environment and communities.

Slow mining illustrates how widespread global consumption is tied to the experience of mining communities, and the expectations of local stakeholders for sustainable livelihoods in sustainable environments.

Alongside slow fashion and slow food, slow mining demonstrates that the responsibility for better environmental and social outcomes lies with both a truly responsible mining industry, and a responsible culture of moderate consumption.

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