Policy Brief:

Reclaiming Mines and Queries in Lebanon – Gradual and Smooth Transition

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Regulating Extraction, Reclaiming Territory

An Impartial Transition Strategy for Quarrying and Cement Landscapes in Lebanon

Key insights

North Lebanon's quarrying and cement extraction sector poses both an environmental and a governance crisis. In Chekka and Badbhoun, extraction has caused severe landscape degradation, public health risks, water stress, road damage, and fiscal losses, while also creating economic dependence on a destructive industry. The central policy challenge is not the absence of laws but weak and selective enforcement. This brief recommends a combined strategy based on four priorities: stronger enforcement, recovery of unpaid public dues, phased rehabilitation of quarries, and a circular territorial transition that protects livelihoods while moving the regional economy away from extractive dependency.

Policy problem or background

The primary issue is inadequate environmental regulation of quarrying and cement-related extraction in North Lebanon. This is not only an environmental problem but also a failure of legality, territorial planning, and state capacity. Available evidence points to widespread illegality, high rehabilitation costs, and significant unpaid dues to the treasury. The policy problem should therefore be framed as both an environmental emergency and a governance failure.

The issue can be placed on the political agenda more effectively if it is communicated through visible indicators and lived experience. The Y4G figures are especially important because they translate diffuse damage into measurable indicators such as quarry numbers, environmental losses, and public dues. At the same time, the issue should remain grounded in the daily realities of nearby communities, including dust, blasting, degraded landscapes, road deterioration, and health concerns. This makes the problem harder to ignore and broadens the coalition for reform.

However, the issue should not be framed as an immediate total shutdown of quarrying. That approach would likely provoke strong resistance from politically protected interests and from communities economically dependent on the sector. A more feasible and politically strategic framing is to call for legal extraction, transparent enforcement, revenue recovery, and a phased local transition.

Recommendations

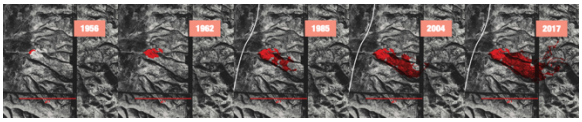
The most effective strategy combines stricter regulation with a realistic territorial transition.

First, strengthen enforcement.

Lebanon already has an environmental legal framework, including Law 444 of 2002, Article 61 of the 2019 budget, and Decree 6569 of 2020. The problem lies in weak enforcement and fragmented authority. A dedicated environmental enforcement task force should coordinate the Ministry of Environment, prosecutors, security forces, and local authorities. Licensing, renewal, sanctions, and dues recovery should follow fixed rules rather than be subject to ad hoc bargaining.

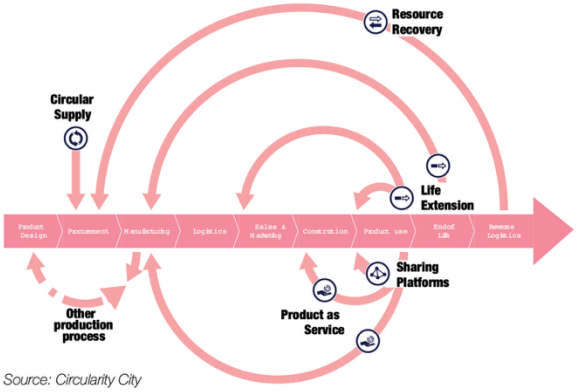
Second, adopt a monitor, notify, and sanction model.

Satellite monitoring, AI-assisted mapping, and GeoJSON-defined quarry boundaries should be used to detect illegal expansion, monitor rehabilitation, and trigger inspections and sanctions. This approach is particularly suitable for low-capacity governance settings because it reduces reliance on irregular field inspections and improves transparency.



Third, recover public revenue and ring-fence rehabilitation finance.

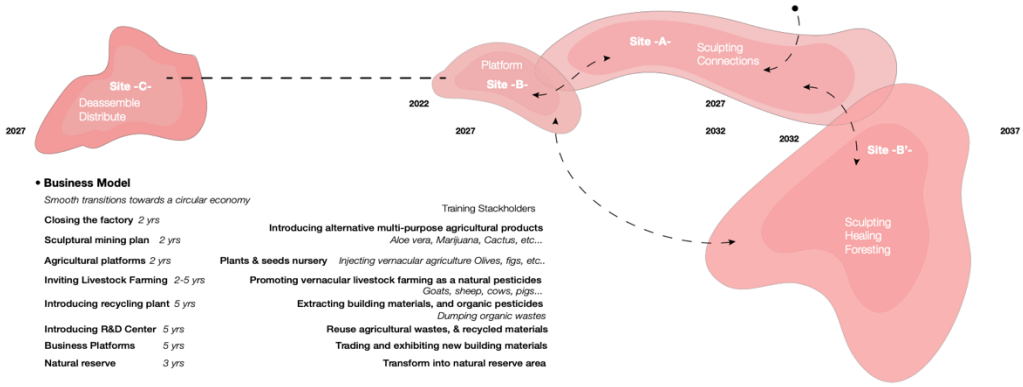
Recovered dues should not be lost to general fiscal leakage. A protected rehabilitation fund should be established, and a share of recovered revenue should be directed back to North Lebanon for road maintenance, school protection, and local health mitigation.



Source: Circularity City

Fourth, implement a phased circular transition.

The Beyond Cement model offers a strong rebuttal to the argument that stricter regulation will destroy jobs. It proposes a gradual transformation rather than abrupt closure. The process begins with final extraction, with the site shaped into terraces, then shifts to agriculture and livestock to rebuild soil and microclimates, and later to timber-based production, recycling, circular construction materials, research platforms, nurseries, and, eventually, a nature reserve. This gives the policy a just transition logic rather than a purely punitive one.



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