

Innovative Approaches to Creating Value and Reducing Impacts from Orphan and Abandoned Mines

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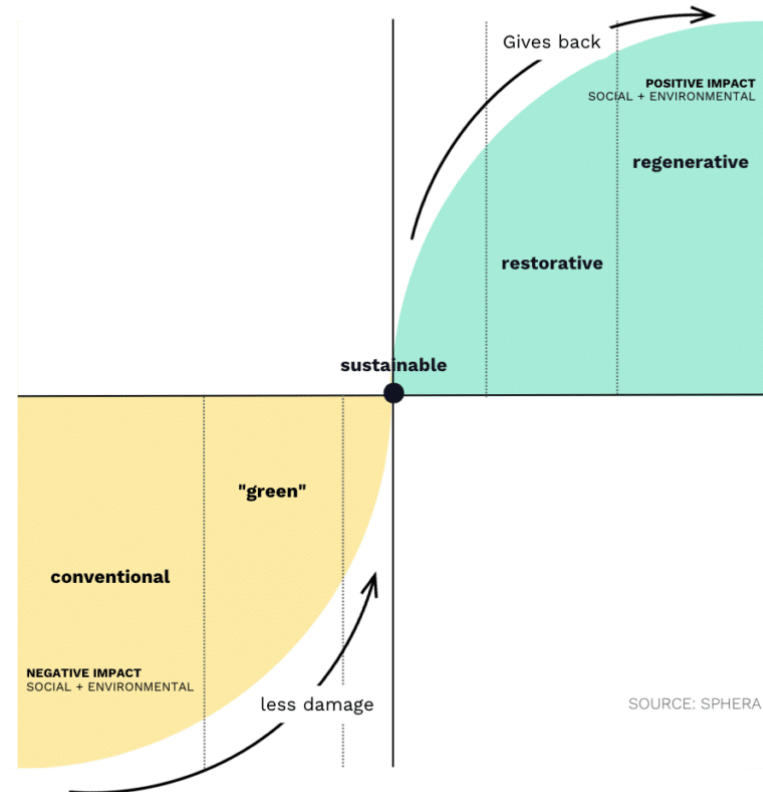
OAMs - from Liability to Resource

- Canada's inventory of over 10,000 OAMs represent major liabilities but also potential opportunities for value creation
- The shift from liability to resource requires a change of paradigm and innovation on technical, policy and market fronts in an integrated way
- The convergence of market demand, land use pressures on new developments, technological progress and policy evolution potential creates an unprecedented moment for realizing greater value and reducing ongoing liabilities from OAMs

Paradigm Shift: “Less Damage” to “Value Generation”

FROM CONVENTIONAL DESIGN TO REGENERATIVE DESIGN

- Paradigms are important because they define how one perceives reality and how one behaves in it
- A paradigm shift is a change in the perception of how things could be done and what is possible
- What may be possible with a paradigm shift from “less damage” to “value generation”?



SOURCE: SPHERA 2021

Opportunities, Challenges and the Need for Innovation

- Potential opportunities include (but not limited to):
 - Clean energy transition (critical minerals, energy generation and storage)
 - Diversification of local economies and new revenue streams
 - Physical infrastructure development
- Challenges include: data on reserves, scalable technologies for extraction, need for changes to ownership and liability policies, processing and development partners, financing and market incentives
- OAMs could represent a substantial set of untapped potential opportunities and innovative approaches on several fronts will be required to unlock these