Can the circular economy help embed social licence in the minerals industry?

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ABSTRACT

While there are various definitions of social licence, it is broadly accepted that a mining operation has a social licence when it achieves ongoing acceptance or approval from the local community and other affected stakeholders, both of whom can affect its profitability. Similarly, while there are numerous definitions of the circular economy, one common definition is an economy that is restorative and regenerative by design and aims to keep products, components and materials at their highest utility and value at all times as well as accelerating the transition from a conventional linear economy.

Even though both concepts have emerged from different backgrounds – social licence naturally having a strong social perspective and the circular economy a strong environmental focus – actions or initiatives that embrace the ideals of the circular economy should also strengthen a mining operation's social licence and contribute to improving the social licence of the sector.

A key example is to re-use, recycle or re-process the large volumes of mining waste, namely waste rock and tailings. Such initiatives include waste rock used as backfill, landscaping material; manganese tailings used in agroforestry, or buildings and construction materials; and bauxite residue used as a soil amender or as a raw material for glass, ceramics and bricks. These initiatives would contribute to moving away from the linear 'take-make-dispose' economy and would help reduce both local community and broader societal concerns about the potential long-term environmental legacy issues associated with managing huge volumes of mining waste.

This extended abstract will briefly describe current developments, particularly in Europe, on the circular economy, illustrate examples of applying circular economy thinking that will lead to greater acceptance by stakeholders, and propose key areas of research to progress the circular economy with the mining industry and thereby helping strengthen the industry's social licence.