

**From:** Roger Douglas Keen Privacy of natural  
**Sent:** Monday, 29 July 2024 5:26 pm  
**To:** resourcesfeedback  
**Subject:** Minerals Strategy

Sir,  
The three pillars of the strategy are fine and laudable. However I do have concerns. Nothing is mentioned regarding clean-up and environmental restoration after mining and economic extraction has ceased. It is not acceptable to have a mining version of "slash" leaving toxic and dangerous wastes for taxpayers to clear up. A solution is to require mineral extraction companies to pay into a restoration fund held by the Crown. The return to the Crown seems low, I suggest setting to 7.5% above the rate of inflation. Some of the elements under consideration are extremely poisonous and I believe should not be extracted. These are lead,mercury,arsenic and antimony. I spent a number of years developing methods to clean industrial waste water of these elements when I was employed in the waste industry (senior chemist for Waste Management). Thorium and Uranium,while not extremely toxic,have a particular hazard with the "daughter" decay elements which are very dangerous. The mineral and element survey update is sound but may be duplicating existing reports. As a geologically active country mineral deposits are scattered and fragmented making economic return marginal. Combined with our isolation and small quantities of critical elements it would seem traditional coinage metals will remain our major mining industry. New Zealand does not have the infrastructure to refine and add value to raw minerals apart from the few being processed now. The infrastructure to support mining,extraction and processing is lacking in isolated regions. Who pays for road,rail water,power and communication services as well as housing and social services for workers?  
Yours sincerely  
Roger Keen MSc