

[We're really not running out of resources you know](#) [1]

Written by [Tim Worstall](#) [2] | Wednesday 27 November 2013



Despite what various people like George Monbiot tell us, no, we're really not running out of minerals. He tells us today [that](#) [3]:

To service this peculiar form of mental illness, we must wear down the knap of the Earth, ream the surface of the planet with great holes, fleetingly handle the products of that destruction then dump the materials into another hole. A report by the Gaia Foundation reveals an explosive growth in the pace of mining: cobalt production up 165% in 10 years, iron ore by 180%, a 50% increase in nonferrous metals exploration between 2010 and 2011.

So I go and look at the Gaia Foundation report where I am told the following:

As can be seen, the main metals have a remaining lifespan of between 12 and 50-odd years. However, there is no doubt that new technological developments will allow access to new areas in the future, deeper in the ground, and with likely increased consequences for ecosystems and communities ? as can be seen with oil and gas. Recycling policies will also largely determine how much reserves are available. One can argue that the huge amounts of metals contained in discarded electronic items constitute reserves in themselves (the so-called ?urban mining?). Contrary to fossil fuels, metals are never consumed, they are merely dissipated and they have an endless recyclability.

And this is, to use the precise technical term appropriate here, entire bollocks. For example, they tell us that the mineral reserves of bauxite, the ore from which we extract aluminium, have a remaining life of 27 years. This is true, they do. But this does not mean that bauxite will only last 27 years. For they have entirely misunderstood what mineral reserve means. It is not the amount of a mineral that is left. It is not even the amount of a mineral that we know about that is left. The best definition, in everyday language, of a mineral reserve is the working stock of mines currently in production.

The correct phrase to describe the minerals that we know about, where they are, how we would process them, that we can process them using current technology and at current prices is mineral resources. Please note, this doesn't require new technologies, nor higher prices. This is just the stuff that we know where it is but we've not got around to mining yet. And the really annoying thing is that the Gaia Foundation is indeed using the correct data source, the US Geological Survey, but they seem to have forgotten to read the document properly. After all, it is an entire [two pages long](#) [4]:

World Resources: Bauxite resources are estimated to be 55 to 75 billion tons

Or about three hundred years' worth. And even that's not the correct figure of total availability either. As the USGS goes on to point out:

the United States and most other major aluminum-producing countries have essentially inexhaustible subeconomic resources of aluminum in materials other than bauxite.

For example, I could get you alumina (the aluminium oxide that we extract from bauxite) from the fly ash left over from burning coal. And there's even a producer in China that does exactly that.

My apologies but this is something that really does bug me about the ecocatastrophists. They continually use mineral reserves to mean all that is left. That's nonsense: reserves are what is left in the mines we're currently operating. Resources are vastly larger than this and total availability is some orders of magnitude larger than this again. I am unable to identify a single mineral or metal that we have any chance of running out of for the next half a millennium. And I do wish that the environmentalists could grasp this point.

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