

Incompetent Experts: For Critical Minerals, this is not an Oxymoron.

written by Jack Lifton | July 28, 2023

I am often asked to introduce technology metals based ventures to the sourcing/purchasing activities of the OEM automotive industry, based in Detroit, where I have lived for most of my 83 years, and for which I was a supplier of production parts and engineered materials for more than 30 years.

I find an almost complete lack of understanding of marketing and sales to the OEM automotive industry to be common among technology metals miners and refiners, who are of course the anchor companies of any and all production parts' supply chains.

In the past this has been of little interest to the OEM automotive industry due to its standard operating procedures of choosing preferred vendors, known in the industry as Tier One Vendors, who then became responsible for choosing their own vendors of parts and services, subject to the acceptance of the Tier One product by the end-use customer's internal Production Part Acceptance Protocol (PPAP), and even then, subject to on-time delivery, in the agreed quantities, to the customer's specification at the agreed pricing. Failure in any one of these required categories could, at the discretion of the OEM, result in the "desourcing" of the (approved otherwise) vendor. To ensure security and continuity of supply, the end-user normally would have a primary Tier One vendor and at least two alternates, each of which would normally get a small percentage of the total "buy" to keep it in the game. The alternates would be required to have the capability and the capacity to supplement or even replace the primary in the event of partial,

or even total, non-performance by the primary.

Such Tier One Vendors are of course operating companies with an existing output or capability to produce the parts in question. They will have positive cash flow and, typically, are public companies with a listing on a major exchange and a substantial market cap. The core competency of each and every company in the total supply for the part chain would be required and it is understood to be guaranteed to the OEM by the Tier One.

Nowhere is the decay of proven, verifiable, competence as the sine qua non “standard” more apparent than in the, most likely to be, disastrous exemption of the PPAP standard in the OEM automotive industry for lithium-ion battery manufacturing. Rare earth permanent magnet motor manufacturing may soon be compromised by the same decay of standards.

The pathetic and jejune industry “experts” who not only analyze but, even worse, advise the OEMs on the sourcing of production parts based on critical metals are unified by their almost complete lack of practical experience, education and knowledge of the origin, processing, fabricating and manufacturing engineering at commercial scale of the **total** supply chains for the critical metals enabled devices upon which the motive power, “engine” management, and supply of information for the drivers of EVs depend.

Last week we were told by this “expert” class of journalists and advisors that both [germanium and gallium](#) were “rare earths” and that they were used in batteries. Both “expert” statements were completely wrong and misleading.

Earlier this year we were told and continue to be told by an “expert” firm that the economy needs “only 300” more lithium mines to meet the needs of a zero-carbon economy. Apparently, these fools think that there is not only a standard size lithium

mine, but also a standard predictable demand for lithium. Mining engineers and mining company CFOs will be delighted to find out about this development.

I'm going to try from now on to list the Erroneous Critical Minerals Supply and Demand statement of the Week each Friday.

Attention manufacturing executives and policy makers: You need to do a due diligence review of your "experts," before you act on their advice.

Hint: Make sure that their jobs don't depend on always agreeing with you.

A final comment: Germanium and gallium are critical to chip manufacturing, LEDs, and military optics. The "CHIPS" act and the "IRA" pledged more than \$50 billion in subsidies for domestic chip manufacturing and battery manufacturing, but not ONE CENT for domestic gallium or germanium production.

Is this how policy experts in Washington think we can become independent of Chinese dominance in critical minerals production and processing?