

The rare earth 'basket price' business model fantasy

Jack Lifton sent me this piece early today with what appears to be 3 title candidates: 1) Breaking the Laws of Economics and Thermodynamics 2) Why have so many rare earth junior ventures failed? and 3) What does the future hold for the rare earths?

Jack Lifton: They have failed because they were based on a triple fantasy:

1. That there is an infinitely growing demand for all of the rare earths, which was incorporated into business models that said that if we just dig out the rare earth bearing ore and beneficiate it to a "mixed concentrate" then "they" will buy it, because
2. The separation and purification of the individual rare earths by "traditional" methods is easy and, in any case, everyone producing PLS concentrates would be faced with the same costs of downstream separation and purification so the playing field would be level, and
3. Producers of high-tech products such as rare earth permanent magnets, alloys, lasers, and catalysts would race to non-Chinese producers of their raw materials and invest billions to be assured of a reliable non-Chinese supply.

That the above premises were widely believed was obviously from the very beginning of the recent rare earth run-up. In addition I noticed that the same ventures that were based on internal predictions of a dramatic and continuing growth of demand also predicted that prices would rise at the same time. I then, as now, refer to this fantasy as the "breakdown for rare earth juniors of the law of supply and demand."

I also noted that none of the REE juniors seem to  understand that the rare earths were technology-enabling-metals, which had to be separated, purified, and sometimes blended to achieve usefulness. In the overwhelming inability of the managers of junior REE ventures to understand basic chemical thermodynamics; they did not comprehend or contemplate that the extraction of the rare earths as a mixture from their minerals gave a product that was NOT the same value as the separated and purified rare earth metals, alloys, and chemical compounds. They completely failed to take in account (or, most likely, understand) the costs and processes needed to transform mixed concentrates of the rare earths and other metallic elements, which were mixed with them in nature, into individual purified rare earth commercial products with the highest value. This led to the adoption of a set of terms commonly used in mining, which were only meaningful when applied to the extraction of the mixed rare earths from their ores and inappropriate in the context of refining the rare earths, and which masked ignorance. I am speaking of the common term, "metallurgy" which should be only used to mean the extraction of the desired element(s) from ore concentrate at economical levels, and the absurd term, "basket price," which assumes that the mixed concentrate can be priced as if it is already separated and purified into individual rare earths in commercially (customer specified) forms and formats (blends) each and every one of which can be marketed into the infinite demand space in which the marketing plans were located.

It's very easy to blame the "Chinese" for the failure of a non-Chinese rare earth production sector to gain the traction necessary for investors to fund it to actual production of individual rare earths in customer specified commercial forms . But, in fact, the failure to begin producing the suite of rare earths outside of China that are currently deemed to be critical is due to the fact that doing so would require accepting the consequences of the breaking of laws; those of

economics and those of nature.

Please log into InvestorIntelReport to access the full article...