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Rare Earths: Separating The Wheat From The Chaff

Dear Energy & Scarcity Reader:

Everything is good on my end. I hope the same is true with you. Other than that, I have no further preliminaries today. Let's get down to business.

Rare Earths: The Coming Year of Deals

The whole rare-earths (RE) sector pretty much got slaughtered last month. I know that it worried some readers who wrote in, but I sure hope you didn't panic and sell out. Things are about to get a whole lot better. Still, what happened in December?

Well, unlike what the poet T.S. Eliot once said about April, it's more like December is the cruelest month for many junior resource stocks. That is, December is tax-loss selling season, especially in Canada. Indeed, I've heard it said that the time to buy Canadian shares is at the end of August, after the Canadian brokers have been on holiday for a month, and right after December, when the Canadian investors sell for tax-loss reasons.

Right now is buying season for the RE guys, in my view. We're already seeing some life in RE shares that were beaten into the dirt.

Former ESI holding Molycorp hit the \$23 level in December, and has recently clawed its way back into the \$27 range. There's no particular news driving the share price. It's just that Molycorp is big, with high visibility within the RE market space.

Great Western (which I don't cover in ESI, but which I watch) was a 40-cent stock not long ago and now is up around 55 cents. Of interest, Great Western just this week announced a "deal" -- of sorts -- with the Chinese to cooperate on developing a RE play in South Africa. I mention this Great Western news because I believe that 2012 will be the year of many more such deals.

Deal or Die

Not to put too fine a point on it, but the only way that most small RE players can stay in business is to achieve the credibility they need from making some sort of deal with larger players. It's deal or die.

What larger players? The downstream RE refiners and users -- everybody from light bulb makers to magnet makers to electronics makers to battery makers and much more.

As I've discussed before, RE "ore," right out of the ground, is mostly good for road gravel, railway ballast and harbor riprap, absent complex crushing, separation, concentration, refining and chemical upgrading. So if someone controls a RE deposit, they need to marry up their ore deposit with midstream and downstream users.

Let's put it another way. If I mine gold, I can sell the output to a bazillion end-users. I don't care if the end use for my gold is a gold bar in the SPDR Gold Fund or a gold coin in your safe-deposit box or a gold filling in one of your teeth or a gold wedding ring on your finger or on a gold replica of King Tut or as part of the electronics in some fancy gadget that is -- as the saying goes -- "designed in California and assembled in China." Gold is gold is gold.

But if I'm mining RE ore? The end use matters. Indeed, when the rock comes out of the ground, I need to know where those little RE atoms are going to wind up. I need to get down into the nitty-gritty of refining and production, all the way to the end use.

That is, will my RE atoms become lighting phosphors? Or oil refinery catalysts? Or part of a cell phone (and it matters whether it's a Samsung or a Nokia)? Or magnets in a windmill? Or a traction motor for an automobile? Or an advanced battery (again, it matters what kind of battery -- car or computer -- and who the battery maker is)? You get the idea.

The end use will determine how I crush the RE ore -- so as to separate certain RE minerals in certain quantities and sizes -- early on. End use determines how I'll dissolve and concentrate the ore -- which of many acids? -- so as to get

the best recovery of certain RE atoms (and I may leave other RE atoms for the tailings pile).

End use will determine precisely how I separate out certain preliminary RE constituents, and then how I refine them into an intermediate crystal structure. That is, if I make the wrong intermediate RE crystal, I might not be able to refine it to the proper end state.

The point is this RE mining-refining-production cycle is all super-complex chemistry and engineering. Which is why any RE company that's worth its salt had better be making deals with the downstream refiners and users. In 2012, we'll see a lot of wheat get separated from the chaff.

Ucore Rare Metals

When it comes to a U.S.-based RE play, Ucore Rare Metals (UCU: TSX-V) also took a share price swoon in December, down into 35-cents territory. It's now trading in the 45-cent range.

Ucore recently announced the appointment of Ken Collison as chief operating officer. I've met Ken on a couple occasions, and he's a solid, outstanding, super-savvy mining guy. He knows what has to happen to turn Bokan Mountain, Alaska, into a working mining operation. So that's a very positive step for Ucore.

Meanwhile, I previously reported on my visit to the Hazen Research laboratory near Denver. There, the world-class Hazen technical staff is working on processes and procedures for turning the Bokan ore into useful RE atoms. That too is positive.

Finally, I should mention that Ucore has another team of world-class chemistry guys working on the RE separation issues. I've met them and discussed the space-age technology that they're bringing to bear. But I agreed not to give away any identifying information. All I can say is that they're unbelievably good.

Thus, I expect to see further good news from Ucore as the year moves on. Ucore is a buy at the current pricing.