My colleague, Professor Dudley Kingsnorth, now of Curtin University in Perth, Australia, is arguably the world’s most experienced; up-to-date; and knowledgeable expert in the global rare earths’ markets. To me therefore his keynote address to the Roskill Conference on Rare Earths, two weeks ago in Singapore, was a definitive analysis of the current situation in the global rare earths’ markets. I believe that he and I are very much in agreement on most of the issues in those markets, and on how we got to where we are today. Prof Kingsnorth and I were, I think, both a bit surprised, although he to a lesser extent than I, that we agreed on which non-Chinese rare earth juniors were the best and were most likely to succeed. Both of us heartily agreed that the other had finally come to his senses on that topic.

I think that in order to have a discussion about the global rare earths’ markets we need first to determine exactly what or which problem(s) we are trying to investigate and understand. Perhaps it is best thought of as “What specific
question(s) are we trying to answer?”

For me the ultimate question is “How can I make sure that non-Chinese industrial manufacturers have a secure supply of the rare earths forms that they need that are critical for their products at prices that over a reasonable term will ensure that those products are competitive in their chosen markets?”

For almost all of my readers on InvestorIntel this is an abstract goal, or a statement of the obvious. Most of the readers of InvestorIntel are not procurement officers for global1000 corporations but short term investors who want informed stock tips; they want to know which, if any, of the dwindling opportunities among the junior rare earths “miners” shares are currently the best bet to see a near-term price increase? These small investors are particularly frustrated by the current paucity of “analysis” due to the fact that the herd of “financial analysts” has moved on to their next best target for hot air blasts as their short-sighted uninformed and, in many cases, stupid stuff about the rare earths’ markets has failed to pan out well enough to keep them in consulting gigs.

I am not a financial analyst. Nor do I do not smugly spout “efficient market” theory or judge the relative management or accounting skills of geologists running exploration ventures as sole causes for success or failure. If I need a personal label I call myself a subject matter specialist, and if pressed I admit that the subject matter of which I speak is “the global technology metals supply chain.” First, by chance, and then by choice I have worked in this subject matter area all of my working life, 53 years.

Professor Kingsnorth is also a subject matter expert and has two advantages over me. One is that he has been the hands-on manager of a mining venture (the company that is today called Lynas) and that through his personal marketing skills as well as his published work he has attained both a reputation and a
university professorship that allows him to continue to do extensive research and maintain a data base now as a primary career. Alas, for me, I am envious because no one has asked me to do the same, even though I frequently drop verbal hints at the Starbucks near the University of Michigan’s business school that I sure would like to be an adjunct there.

Putting the sole (above stated) entry on my bucket list aside let’s return to the unspoken “question” that both Dudley Kingsnorth and I think needs answering. It is “**Given the Chinese near monopoly in the supply of rare earths, is the current Chinese monopsony (the ability to control price through being the sole or overwhelmingly largest purchaser of a good or service) of demand inevitably to continue, and, if so, is this really bad for the rest of the [rare earths producing and using} world economy?**” This is a complex question, I know, but what the hell it’s the real question in the air. And it’s a moral and {geo}political question, so the answer is not set in stone, and even more troubling is the fact that the answer is usually colored by one’s political and moral beliefs.

First the trivial stuff: Monopolists and monopsonists have it in common that their actions actually set the prices for those commodities of which they control the supply and/or demand. Sorry, efficient market theorists, but **the global rare earths market is neither efficient nor free**. It is for good or ill controlled today by the central planners of the economy of the Peoples Republic of China (PRC). I think that this state of affairs has come about more by the actions of the non-Chinese rare earths markets than by any nefarious planning by bureaucrats marching to a theoretical (Marxist-Leninist-Maoist-Dengist…) tune. But that is irrelevant because no matter what the cause we are living with the result and no individuals can change that by “discovering” yet another “root cause” or postulating any conspiracy. We need to deal with the “fact” that China completely dominates the global rare earths
Conspiracy theorists please note that when the Chinese march towards dominance of the global rare earths’ markets began there were no military uses for the rare earths other than for pyrotechnic ammunition (tracer bullets/shells) which the tactics of the Peoples Liberation Army do not require in any case. The buildup of the rare earths supply chain was due to a lucky guess by China’s pre-eminent leader (in my opinion) of the last 2000 years or so, Deng Xiaoping. As Professor Kingsnorth emphasized in his talk the rare earths markets 35 years ago (Yes. 35 years!) when the Chinese entered the market was around 2-3% (!) of what it is today. One might even say that there would be no global rare earths markets if it had not been for the Chinese (I am saying this. Professor Kingsnorth neither said nor implied it as far as I can remember).

My preamble is finished, so at this point let me describe for you my understanding of what Professor Kingsnorth said in Singapore. I am not going to quote him; I am going to, I hope, paraphrase what he said, and I’m sure that if I stray too far from his meaning he will send us his comments and corrections. I am going to refer to him as “Dudley” for the rest of this essay, because that is easier for me to type than “Professor Kingsnorth.”

First of all Dudley and I agree that China has not only the largest proportion of the total global rare earth resources in production but also the most extensively developed total supply chain for rare earths, and perhaps most important of all the overwhelming majority of rare earths R&D on the planet implemented by the largest group of scientists and engineers devoted to rare earths studies and manufacturing on the planet. I personally believe that 90-95% of all rare earth R&D today takes place in China.

Thus it is clear that the rare earths industry is much more
important to China than it could ever be, or ever has been, in any other nation.

Dudley emphasized in his keynote speech that the large percentage of illegal mining and refining in China is primarily driven by the growing demand for Pr/Nd for use in manufacturing rare earth permanent magnets. He pointed out that this is obvious from supply/demand data provided by the Chinese industry itself. For 2015 the estimated Chinese domestic demand for Pr/Nd for magnets alone is 30-35,000 tons yet the production quota is capped at 20,000 tons. Thus, he pointed out that, the driver for continuing illegal production appears to be the government itself or at least its inaction.

He reaffirmed what I had also noted in March 2013 at a conference in Ganzhou at which I spoke. The Chinese, he said, have approached the ISO (International Standards Organization) to suggest (and promote) the formation of a technical committee to establish some rare earth standards. The Chinese objective seems to be on standards for ores and concentrates, which would help to maintain their (the Chinese industry’s dominance, but such an approach opens a window of opportunity, Dudley suggests, to work with China to establish environmental and OHS standards, which standards could well mark beginning of the restriction of illegal activities.

On a local level Chinese bureaucrats and party officials are conflicted about the definition of “illegal mining and refining” especially as it impacts (negatively) the core directive of the Chinese Communist Party, which is to provide jobs for everyone and to lift all of China out of poverty and towards a shared prosperity.

Dudley emphasized, and I think this point cannot be emphasized enough that China has for the first time begun forecasting its domestic demand for rare earths and identifying areas of growth (in China) for rare earths usage. The increasing demand thus projected by the Chinese themselves shows a
dramatic need to increase overall production and improve mining and refining efficiency. These last factors will require getting illegal and polluting production under strict control. This means, I believe, that it is most likely not possible for China to be both self-sufficient and manage health and safety issues. Thus there is a market for non-Chinese production, and I think, refining and fabricating. This market will not need light rare earths so much as mid-range and heavy rare earths. But even so the increasing growth of the Chinese domestic consumer market for rare earth enabled components for consumer goods means that there will always be a need for light rare earths production outside of China as well as a critical need for heavy rare earths produced outside of China not just for the Chinese market but to support independent markets in Europe, the Americas, and India where a baseline of self-sufficiency is seen as critical at least for security purposes.

Dudley and I agree that the necessary diversity of rare earths production outside of China by 2020 strongly implies that the world needs production from Alkane, Northern Minerals, Peak Resources, and Rare Element Resources. We did not discuss any other juniors, but I want to add Texas Rare Earths, Ucore, and Tasman to the list.

Chinese domestic costs are rising rapidly as the Chinese standard of living improves. This means the right-sized junior rare earth ventures outside of China can be profitable.

The Chinese domestic rare earths markets are on a significant uptrend. For the rest of the world its time to maintain at least a foothold. The window is closing.