Jack-in-the-Stox: In Rare Earths, Bigger Isn’t Always Better

written by Jack Lifton | July 1, 2026

In this ongoing **“Jack-in-the-Stox”** Q&A series, Jack Lifton examines the companies, technologies, and geopolitical realities shaping the global critical minerals economy. Each week, Lifton offers direct commentary and analysis on the questions, claims, and strategic developments driving today’s rapidly evolving critical minerals sector.

The rare earth industry has developed an unfortunate habit. Every new discovery is immediately described as “world class,” every management team wants to become a fully integrated mine-to-magnet company, and every feasibility study seems designed to convince investors that bigger is always better.

Reality is quite different.

The world does not need dozens of billion-dollar rare earth projects producing every rare earth element imaginable. It needs commercially sustainable producers capable of reliably supplying the particular rare earths that modern industry actually consumes.

That is why Australian Rare Earths (ASX: AR3) has caught my attention.

Unlike many of the hard-rock projects currently seeking billions of dollars in capital, Australian Rare Earths is developing an ionic adsorption clay deposit. These deposits have become strategically important because they contain the heavy rare earth elements—particularly dysprosium and terbium—that are

indispensable for the high-temperature permanent magnets used in electric vehicles, industrial motors, robotics, aerospace systems, and modern defense technologies. They are also generally simpler to mine and process than conventional hard-rock rare earth deposits.

More importantly, I believe Australian Rare Earths is simply the right size.

That may sound like faint praise, but in this industry, it is anything but.

Projects that attempt to flood the market with mixed rare earth concentrates frequently become victims of their own ambitions. They require enormous capital investments, long construction schedules, and optimistic assumptions about future prices. Investors have repeatedly discovered that geological success does not automatically translate into commercial success.

Australian Rare Earths appears to be pursuing a more disciplined strategy. Its objective is not to become the largest producer outside China. Rather, it aims to become a dependable supplier of precisely those rare earths that manufacturers actually need.

That distinction matters.

The permanent magnet industry does not consume rare earths in proportion to their abundance in nature. It consumes specific elements in carefully controlled proportions. Neodymium and praseodymium provide magnetic strength, while dysprosium and terbium provide the thermal stability required for today’s high-performance motors and generators. A project capable of supplying those materials consistently can occupy a valuable position in the global supply chain without attempting to dominate it.

Another factor deserves attention.

Neo Performance Materials is an investor in Australian Rare Earths, and it is considering an agreement covering a significant portion of future production. Neo is not a financial promoter chasing speculative mining stories. It is one of the non-Chinese world's most experienced processors of rare earth materials and a major manufacturer of advanced magnetic materials. Its business depends upon understanding feedstock quality, processability, and long-term supply reliability. Neo Performance Materials' investment therefore sends a meaningful signal to the market. The company is effectively putting its technical expertise and capital behind its belief that Australian Rare Earths has the potential to become a reliable commercial supplier.

That does not guarantee success. Mining remains a difficult business, and rare earth processing is among the most technically demanding segments of the mining industry.

But sophisticated industrial companies do not normally invest in upstream projects simply because they like the story. They invest because they believe those projects can eventually become dependable sources of raw materials for their own manufacturing operations.

I also find it encouraging that Australian Rare Earths appears to understand that commercial discipline matters more than corporate ambition. The company is not promising to replace China overnight. It is attempting to become a reliable piece of a diversified Western rare earth supply chain.

That is exactly what the market needs.

Governments have recently announced billions of dollars in support for critical minerals projects. Those initiatives are

welcome, but government money alone cannot create economically viable businesses. Ultimately, every project must produce materials that customers are willing to buy at prices that generate acceptable returns on invested capital.

Australian Rare Earths appears to be pursuing that objective rather than chasing headlines.

In my view, that makes it one of the more interesting companies to watch in the next generation of Western rare earth development.

Sometimes the best investment opportunities are not the biggest deposits or the most ambitious business plans.

Sometimes they are simply projects that are the right size, produce the right materials, and serve the right customers.