## U.S. Rare Earths and Critical Minerals Supply Chain Bolstered as Energy Fuels Completes Acquisition of Australia's Base Resources

written by Russell Fryer | October 2, 2024

As the world pivots towards clean energy and the need for secure critical mineral supply chains becomes more pressing, <a href="Energy Fuels Inc.">Energy Fuels Inc.</a> (NYSE American: UUUU | TSX: EFR) has taken a decisive step to secure the future of U.S. rare earth production and processing. The Denver-based company, a leader in uranium and rare earth element (REE) production, today <a href="announced">announced</a> it has closed its acquisition of <a href="Base Resources Limited">Base Resources Limited</a> (ASX: BSE), an established heavy mineral sands (HMS) and critical minerals company headquartered in Perth, Australia.

The acquisition, valued at approximately US\$178.4 million, is being hailed as a transformational move, bringing Energy Fuels closer to its goal of establishing a fully integrated rare earth supply chain in the United States. By acquiring Base Resources, Energy Fuels secures access to the world-class Toliara Project in Madagascar, a large-scale and low-cost source of rare earth minerals, titanium, and zirconium. The acquisition positions Energy Fuels to become a globally significant player in the critical minerals market.

Energy Fuels' President and CEO, Mark Chalmers, expressed his excitement about the acquisition, stating, "With the Toliara Project, we are now in a prime position to supply advanced rare earth products, titanium, and zirconium to the world, all while

strengthening our current role as a leading U.S. uranium producer. This acquisition is a game-changer for Energy Fuels and the United States as we work to restore domestic critical mineral processing capabilities."

The Toliara Project, recognized for its high-quality titanium, zirconium, and REE minerals, is expected to provide a reliable supply of monazite, a mineral containing both light and heavy rare earth elements. Energy Fuels plans to process the monazite at its White Mesa Mill in Utah, the only facility of its kind in the United States, which recently demonstrated its ability to process rare earths at a commercial scale.

Jack Lifton, Co-Chair of the <u>Critical Minerals Institute</u> (CMI), emphasized the significance of this acquisition for U.S. supply chain security. "This acquisition by Energy Fuels is a monumental step in re-establishing the United States as a global leader in rare earth element production. The Toliara Project, combined with the White Mesa Mill, will allow the U.S. to reduce its dependence on foreign suppliers, especially China, for these vital minerals."

The global demand for rare earths, particularly for use in clean energy technologies such as electric vehicles (EVs), plug-in hybrid electric vehicles (PHEVs), and direct-drive wind turbines, has surged in recent years. Rare earth elements are also critical for various defense technologies, further underscoring the importance of securing a domestic supply chain.

In addition to rare earths, the acquisition strengthens Energy Fuels' position in the titanium and zirconium markets, both of which are essential materials for aerospace, medical devices, and other advanced technologies. Chalmers highlighted the broader impact of the acquisition: "With this acquisition, we are not only securing our future in rare earth production but

also positioning ourselves as a significant global player in the titanium and zirconium markets. These minerals, along with our uranium production, form the backbone of the technologies that will drive the future of clean energy and national defense."

Energy Fuels has long been a leader in uranium production, and this acquisition allows the company to maintain its dominant position in the U.S. uranium market while expanding its portfolio of critical minerals. The company plans to leverage its decades of experience in processing uranium ores to extract rare earths and other valuable minerals from the monazite sands produced by the Toliara Project and other HMS projects.

The acquisition also includes Base Resources' experienced mine development and operations team, which has a successful track record of designing and operating profitable heavy mineral sand projects, including the Kwale Project in Africa. This operational expertise will be crucial as Energy Fuels moves forward with the development of the Toliara Project and its integration into the company's U.S. operations.

Looking ahead, Energy Fuels plans to expand its rare earth separation capabilities at the White Mesa Mill. The company is currently in the process of designing and licensing the expansion, with the goal of increasing its output of neodymium-praseodymium (NdPr), dysprosium (Dy), and terbium (Tb), all of which are essential components of magnets used in clean energy and defense technologies.

Lifton concluded, "The United States' ability to produce rare earths domestically is critical for our economic security and global competitiveness. Energy Fuels' acquisition of Base Resources not only bolsters our supply chain but also strengthens our leadership in the global critical minerals market. This is a significant victory for U.S. clean energy and

national defense." With the acquisition now complete, Energy Fuels is poised to become a major player in the global market for rare earths, titanium, and zirconium, while maintaining its leadership in uranium production. The company's efforts to restore U.S. critical mineral processing capabilities represent a key step towards securing a sustainable future for the country's clean energy, economic, and national security needs.