

US Defense ban on rare earths directs attention on Alkane Resources

The US Defense ban prevents the purchase of rare earth magnets from China, which currently produces 85-90 per cent of the world's rare earth magnets. Some 90% of rare earths magnets consumed by the US military are produced by China. This law is designed to reinvigorate rare earth magnet manufacturing outside of China.

Multi-commodity explorer and miner, Alkane Resources Ltd. (ASX: ALK | OTCQX: ANLKY), sees this as a boost for their A\$1.3 billion Dubbo project (which contains deposits of rare earths, hafnium, niobium and zirconium), since it will represent an independent supply source outside of China. A principal use for rare earth metals from the project is magnets, used across the automobile, renewable energy, aerospace, robotics and telecommunications industries globally.

Alkane Managing Director Nic Earner stated: "Alkane's Dubbo project is one of the few in the world which does not have a major Chinese shareholding or off-take committed to China. This US development also opens the door for Australia in the downstream value adding manufacture of rare earth magnets."

The Dubbo Project

Alkane Resources' most significant development is the Dubbo Project situated in central west New South Wales, Australia. Scheduled for construction during 2018-2019, it is owned by Alkane's subsidiary, Australian Strategic Materials (ASM). The Dubbo Project plans to supply many future industries (such as clean energy, electric vehicles, artificial intelligence and modern health care) relying on zirconium, hafnium, niobium

and/or rare earths with essential components. It is the most advanced poly-metallic project of its kind outside of China. The Dubbo Project stands to become a strategic and significant world producer of these critical materials.

Alkane's Dubbo project has an estimated mine life of over 70 years, is construction ready with approvals in place, and is awaiting financing. ASM is now consulting with the market to refine product specifications. The global market for the Dubbo's products is undergoing considerable change and continues to evolve rapidly. The demand for rare earth magnets are forecast to grow at a 6-10% compounded annually through to 2030, primarily driven by demand for electric vehicles.



Tomingley Gold Operations

The Tomingley Gold Operations, a wholly owned subsidiary of Alkane, produces 50,000 to 70,000 ounces of gold poured per year, the proceeds of which provide a revenue stream for Alkane to fund corporate and exploration expenditures, and to help fund the nearby Dubbo project. Current activities are focused on three deposits, with additional exploration opportunities such as underground mining being evaluated for potential development in 2018.

Tomingley Gold Operations (TGO)

- 2018 'Mining Operation of the Year' (NSW Mining)
- Construction on-time and on budget. No debt.
- Excellent operational performance
- Full year cash flow \$60.1m FY18
- FY18 initial guidance exceeded
- 78,533 oz gold
- A\$1,002/oz – ASIC
- Total gold production to 30 June 2018: 305,506 oz
- Total cash flow to 30 June 2018: \$146m



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Resourcing tomorrow's technology



Australia has the world's largest resources of gold, iron ore, lead, nickel, rutile, uranium, zinc and zircon as well as the second largest resources of bauxite, cobalt, copper, ilmenite, niobium, silver, tantalum and thorium. Australia's resources of black coal, brown coal, magnesite, tungsten, lithium, manganese ore, rare earths and vanadium are ranked in the top five in the world. The population density in Australia is only 3 persons per square kilometre with only 10.0% of the population being rural. So basically the country is empty apart from Kangaroos, a few Koalas and lots and lots of mine sites. Not only is Alkane in a safe and friendly environment in NSW, it is also in a safe and traditional historic mining country.

Alkane Resources was founded on May 13, 1969 and is headquartered in Burswood, Western Australia. It has a market cap of AU\$ 93.6 m. In today's changing global landscape Alkane Resources represents a significant, long-term, reliable and independent supply option for many critical materials.