

The Age of Scandium

Historically, scandium applications have flown under the majority of investors' radars since economical deposits are extremely rare. As a result, small quantities of the metal are traded between private entities for undisclosed sums, and as such, the world has no accurate idea of how much is traded and at what price. At the beginning of any market, however, there comes a point when enough material changes hands that people begin to take note; analysts begin to accurately track stockpiles, supply and demand, and the resource may even appear on terminals and futures markets. Right now, the only thing missing to initiate this new age for scandium is decent supply, as unique applications are already widely known.

Scandium International Mining Corp. (TSX: SCY) ("Scandium International") are inching ever closer to a primary supply out of New South Wales, Australia, and things are looking good; the company recently acquired 100% interest in its flagship resource (previously it held 80%) in order to accelerate its development. The project has now received all key approvals, including a mining lease, necessary to proceed with project construction, which comes in at \$87.1million, according to the Definitive Feasibility Study (DFS) completed in 2016.

Scandium has been used in the past to create uniquely strong aluminium alloys that were thought to be utilised by the Russian military in the construction of lightweight parts for their MiG fighters. Russia still sells these historic stockpiles to industry, but it is thought that the coffers are rapidly emptying. Demand for scandium is still an estimated quantity, but it is believed that global consumption is now around 15 tonnes per year. Looking back, annual scandium consumption was always thought to be around 2 – 10 tonnes, so not only have we seen an increase of late, but furthermore, if only a miniscule fraction (0.1%) of the global aluminium

market were to involve scandium in production, we would see demand surge to around 350 tonnes annually. The only missing ingredient here is stable supply of useful quantities.

I firmly believe that, since Scandium International are on-track to bring online the world's first primary scandium deposit, this company could itself be the black swan that initiates the paradigm shift that takes scandium out of ambiguity and into the hearts and minds of traders and analysts. The company's deposit, known as Nyngan, could produce 37,690 kg of scandium oxide each year according to its Definitive Feasibility Study (DFS), with operating costs of US\$557/kg scandium oxide. The DFS also assumes that the price of the finished oxide material is US\$2000/kg, but in reality, this is the very bottom end of the scandium oxide selling price, with 1kg going for as much as three times that today.

It is well known that scandium is difficult to find due to it being a dispersoid; it can't stand to be around itself. The fact that the Nyngan deposit features grades as high as four times what we'd normally see means that the company has a real chance of pioneering mass consumption of a metal, whilst enjoying the protection from competition afforded by its obstinate loneliness. Scandium is a big deal of an opportunity, and since it cannot currently be traded on futures markets, an interested investor would do well to pay close attention to the company closest to initiating meaningful supply.