Thakadu's $20m nickel sulphate refinery starts production

A new $20m nickel sulphate refinery in South Africa is poised to become a global supplier of battery-grade product to the growing markets for electric mobility and stationary energy storage.

Thakadu Battery Materials nickel sulphate refinery

Thakadu Battery Materials uses proprietary process technology to purify crude nickel sulphate extracted from a platinum group metal concentrate, which would otherwise be sold as a lower value product, from its long-term supply agreement with Sibanye-Stillwater and other supplemental feed sources. The targeted production for 2021 is 16,000tpa with ramp up to steady state production of 25,000tpa.

“This is a huge milestone for our team, and we are pleased to bring this nickel sulphate refinery to production at a time when high nickel cathode chemistries are set to dominate battery and electric vehicle production,” says Thakadu chief operating officer, Danie Smit.

Nickel demand from the automotive sector is growing rapidly with electric mobility expected to represent the single-largest growth sector for nickel demand over the next 20 years. According to commodity research firm, Roskill, nickel sulphate consumption has grown at 20% a year since 2014 and that has primarily been driven by the rapidly growing EV battery sector. Demand is expected to grow from around 90,000-100,000 tonnes contained nickel in 2020 to 2.6-million tonnes by 2040.

“We see enormous value in having a battery materials platform with a producing asset and we are pursuing synergistic merger and acquisition opportunities to leverage that into a clean and reliable source of battery materials for the global market.

“We are excited about leading Africa’s contribution to a cleaner planet. We believe that investing in value addition of battery raw materials at source is not only developmental but creates logistics and supply efficiencies that are a net positive for a greener future," ,” says Thakadu chief executive officer, Ruli Diseko.