

NextSource Materials' Modular Graphite Game Plan

With positive results from their detailed engineering study in hand, [NextSource Materials Inc.](#) (TSX: NEXT | OTCQB: NSRC) ("NextSource") have set their sights on creating value. The company announced that the planned demonstration plant will instead be a fully producing mine which will output 15,000 tpa of premium flake graphite concentrate during the initial production phase alone, stepping up to full capacity of 53,000 tpa as the market requires. Battery-grade flake graphite typically sells for thousands of dollars per tonne, and with portable technologies and electric vehicles both in their prime, it's hardly surprising that NextSource have put their foot down.

The plant will take only six months from commencement to construct, and is based on a smart modular design that allows the company to scale-up production as the target markets expand. The inclusion of the option to grow when necessary will protect NextSource from fluctuations that are to be expected in technology-affected marketplaces, making them more likely to succeed in the long-term. The 100% owned Molo graphite project in Madagascar has a projected mine-life of over twenty years, and so the completion of the facility should signal the beginning of a consistent growth period lasting decades.

Having the ability to produce the highest quality flake graphite is the holy grail of any graphite play, as some plots simply lack the standard of raw material that is necessary. The Molo project is one of the largest and highest-purity graphite resources known in the world, and is the first significant graphite discovery in Madagascar in over fifty years. Additionally, the area is remarkably flat and in close proximity to existing infrastructure, including Port Dauphin,

from where the material will eventually be shipped. The graphite-bearing trends at the site are all immediately at surface, meaning a much lower production cost is possible; all this adds up to a relatively low-risk endeavour.

The US, China and Europe have all noted graphite as a critical strategic material as its unique properties serve a multitude of niches. Not only is it an excellent conductor of heat and electricity, but it has the highest natural strength and stiffness of any material, even possessing the ability to maintain its strength and stability in temperatures exceeding 3,600°C. In addition to its powerful aforementioned properties, it is also one of the lightest of all reinforcing agents, meaning that it will likely be demanded by many more industries than just the battery sector.

Of particular interest to scientific, military and technology sectors is the super-material graphene. The material's perfect lattice structure and incredible strength is set to be put to use in advanced microprocessors and even quantum computing. Graphene was discovered in 2004, and is currently graduating from the early stages of development before it is properly harnessed, but many expect a rise in demand over the next five years to bring a ten-fold increase in prices.

There is no doubt that computing must advance past its current abilities, and once a breakthrough in quantum computing brings it to the consumer, companies involved in the graphene supply chain will need to step up or shut up. NextSource is exceedingly well-positioned to reap the benefits of the plethora of emerging graphite demands, and with a prestigious management team that have considerable legal and geological experience, as well as previous successes in bringing exploration projects to fruition, confidence is high that Molo will be in full swing in the very near future.