Who are the graphite mining leaders as analysts forecast a tight graphite market in 2023 and beyond

written by Matt Bohlsen | January 9, 2023

Reports continue to emerge that the graphite market may be next to boom. This is due to accelerating strong demand from the EV battery sector and limited new supply in the pipeline.

The 2021 International Energy Agency ("IEA") report highlighted that the world will need between 8 and 25x more flake graphite from 2020 to 2040. This is supported by my recent Trend Investing forecast of a 17x increase in flake graphite demand from 2020 to 2037.

In December 2022 Fastmarkets <u>stated</u>: "An impending graphite shortage, driven by phenomenal demand growth from the EV battery sector and delays to new capacity…..will all lead to significantly higher graphite prices in the coming years."

Trend Investing v IEA demand forecast for EV metals

| Increase in metal demand 2020 to 2037 (100% EV and sustainable energy world) | | | |
|------------------------------------------------------------------------------|-----------------------------|-----------------|--|
| | Trend Investing (f) to 2037 | IEA (f) to 2040 | |
| Lithium demand | 35 | 1342 | |
| Cobalt demand | 5.7 | 621 | |
| Nickel demand | 2.8 | 719 | |
| Manganese demand | 1.7 | 38 | |
| Flake Graphite demand | 17 | 825 | |
| NdPr demand | 5.9 | 37 | |
| Copper demand | 2.3 | 23 | |

Source: Trend Investing & IEA

The graphite mining leaders

There are a number of leading Chinese graphite mining companies (Aoyu Graphite Group, BTR New Energy Materials, Qingdao Black Dragon, National de Grafite, Shanshan Technology, and LuiMao Graphite); however, they are not typically accessible to most western investors.

Syrah Resources Limited (ASX: SYR | OTC: SYAAF) is the leading western graphite producer. They source their graphite from their 100% owned and massive Balama graphite mine in Mozambique. Syrah is currently constructing their active anode materials ("AAM") plant at their Vidalia facility in Louisiana, USA. The facility has initial plans for 11.25ktpa of AAM and then to expand to 45ktpa AAM. The first stage 11.25ktpa AAM is targeted to start production in the September quarter of 2023. Tesla (NASDAQ: TSLA) signed an off-take agreement for an initial 8ktpa of AAM which was recently expanded to an additional 17ktpa AAM of offtake (see <u>Dec. 23, 2022 news</u>).

Other graphite producers include Ceylon Graphite Corp. (TSXV: CYL | OTCQB: CYLYF) with production in Sri Lanka, Mineral Commodities Ltd. (ASX: MRC) who own 90% of Skaland Graphite which operates the highest grade flake graphite operation in the world and largest producing mine in Europe, Tirupati Graphite PLC's (LSE: TGR) project in Madagascar, and Northern Graphite Corporation (TSXV: NGC | OTCQB: NGPHF) with their Lac des Iles producing graphite mine in Quebec and the Okanjande graphite deposit/Okorusu processing plant in Namibia.

Some junior graphite miners

There are several junior graphite miners but those with the more advanced stage projects are NextSource Materials Inc. (TSX: NEXT | OTCQB: NSRCF), Talga Group Ltd. (ASX: TLG), Westwater Resources Inc. (NYSE: WWR), Nouveau Monde Graphite Inc. (NYSE: NMG |, TSXV: NOU), Triton Minerals Limited (ASX: TON), (TSXV: LEM | OTCQB: LEMIF), <u>Lomiko Metals Inc.</u> (TSXV: LMR | OTCQB: LMRMF), and Renascor Resources (ASX: RNU).

Closing remarks

The graphite miners have not yet taken off due to subdued graphite prices and ample supply in recent years; however, this looks set to start changing from 2023 onwards especially if the EV boom continues to do well. The flake graphite miners that can also move to make valued added active anode materials (spherical graphite) look set to capture even greater profits. There is also the synthetic graphite producers such as Novonix (ASX: NVX) (Nasdaq: NVX), the future graphite recycling companies such as Elcora Advanced Materials Corp. (TSXV: ERA | OTCQB: ECORF), and the graphene companies such as Zentek Ltd. (NASDAQ: ZTEK | TSXV: ZEN).... but that's for another discussion next time.