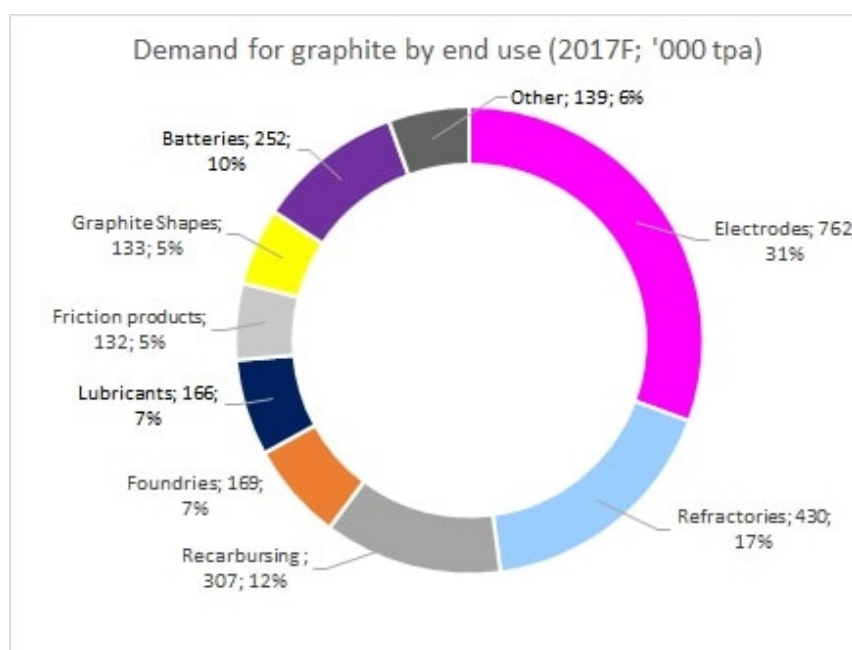


2017: An Opportune Year For Graphite Producers

China may still be responsible for the vast majority of the world's graphite supply, but as demand steadily climbs, the country's ongoing crackdown on polluting industries continues to reshape global markets, creating opportunities for others to enter the supply chain anew. Whereas, steel trends would normally be the main force in graphite, the market stands to be considerably altered by the explosive demand for lithium ion batteries expected over the next decade.



Graphite demand Core Consultants estimate

Even the most conservative forecasts have graphite demand going strong over the next 5 years. The anode market alone, which is almost exclusively served by naturally sourced spherical graphite and synthetically produced graphite, looks set to increase from 80,000 tpa, as it was in 2015, to at least 250,000 tpa by the end of 2020, but in the most optimistic cases, the market could be as large as 400,000 tpa.

In the 90s, China dumped large quantities of graphite product

on the market as a means to earn foreign exchange. Much like with rare earths, this deflated the industry in the west, resulting in very few new graphite plays and leaving us highly dependent on Chinese supply. However, now that China has enough dollars, a booming domestic steel industry and skies thick with smog, it is unlikely the country can repeat the affair, and as such, it seems that it's someone else's turn.

President Xi's serious attitude to environmentally motivated industrial reforms have reduced China's output of graphite electrodes for the manufacture of steel by 30%. One company which survived the closures is now the highest performing stock on the Shanghai Stock Exchange with a 263 percent year-to-date gain, and its first-half net profit surged to 412 million yuan (\$63 million) from just 15 million yuan a year ago. Analysts expect the company's July figures to trump the first half of the year as graphite electrode prices explode.

The recent spate of severe weather, particularly Hurricane Harvey closing refineries up and down the Texas gulf coast, has extended the shortage of needle coke, a necessary ingredient in the production of graphite electrodes. Normally, we would expect China to fill this gap, but, as mentioned above, factory closures and additional export duties designed to keep product at home mean they can no longer meet this requirement.

At the end of last year, China announced they plan to stockpile graphite as one of their critical elements since production is likely to continue falling, and this year, Chinese spot graphite electrode prices recently reached \$30,000 per MT, a 300% increase since January, demonstrating the serious nature of the looming supply deficit and leaving the door wide open for new projects.

The growth in the markets for electric vehicles and grid storage systems should be enough to drive graphite prices even further, which, in the absence of new projects coming online,

may ultimately close some smaller steel refineries as costs begin to spiral. Construction will still play a major role in graphite demand, but China's construction sector will largely just continue to restrict their export of graphite products since the stockpiles will be consumed domestically.

Graphite is about to explode in popularity, and the world's largest supplier of the material is unable to scale as quickly as it once could. This puts junior explorers and burgeoning producers in an enviable position since very few new graphite projects have been listed over the last couple of decades, and any investor looking for exposure should consider getting in sooner rather than later.