MARKET ANALYSTS AGREE

The time to invest in graphite is right now

by Daina Lawrence

Though the word graphite brings to mind pencils and baseball bats, the commodity has new uses and a new role as a critical component in today's technology. Investors should take a long, hard look at graphite as a potential investment; according to market experts, demand is increasing and the price is quickly being driven upwards, says Ryan Fletcher, director at **Zimtu Capital Corp.** [ZC-TSXV].

"We're a public investment company and part of our role for our shareholders and investors is to be ahead of the curve and have foresight," says Fletcher. "We're looking for where there's opportunity ahead of time before the general public or the retail or the rest of the market figures it out." Right now that opportunity is in graphite, according to Fletcher, because it remains a well-kept secret – for now.

The flake graphite operation of Eagle Graphite near Nelson, southeast British Columbia. Photo courtesy Eagle Graphite Corp.

"I'll test from time to time by asking brokers or financiers, people that have been in the business longer than I have, I'll say 'what do you know about graphite?' and 'have you heard anything about it?' " says Fletcher. "I'd say one out of 20 know about it."

Just like diamonds, graphite is a naturally-formed polymorph of carbon. It is an excellent conductor of heat and electricity and has the highest natural strength and stiffness of any material. At the same time, it is one of the lightest of all reinforcing agents and has high natural lubricity, making it especially valuable to the steel and automotive industries. Graphite's value is becoming ever more evident as it is used in items like lithium batteries, fuel cells, laptops, smart phones and electric vehicles and, as the market demands more of these products, graphite is going to become even more sought after.

A couple of years ago, Zimtu Capital looked at graphite and a project in Eastern Canada. At the time there wasn't a lot of knowledge in the finance and brokerage community about the product and the company decided it was not the right time to invest.

However, movement in the industry has really picked up within the last 12 months and there have been a number of large financings for graphite companies, which piqued the interest of the public investment company, explains Fletcher, citing large multi-million dollar fundraising deals with **Focus Metals Inc.** [FMS-TSXV] and **Northern Graphite Corp.** [NGC-TSXV; NGPHF-OTCBB].

"That, in our minds, legitimized the space with $45-million being raised and we started to look at it more from the investment side – either acquiring properties or looking to invest in companies that are acquiring properties and advancing."

Right now, China holds more than 70% of the graphite market, but countries around the world, including Canada, are looking at expanding the market, into their nations, to help diminish the global reliance on China's graphite exports.

Experts agree the longer China holds a monopoly on the graphite market the higher the prices may soar because many of the graphite mines are located in the country's northern regions where poor winter conditions often cause closures lasting several months. Power outages are also a relatively common occurrence and these factors make this material even harder to acquire, illustrating why non-Chinese graphite mines are needed to keep up with global demand.

Since 2005, graphite prices have almost

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tripled as a result of continuing industrialization in China, India and other emerging economies thanks to solid graphite demand from steel and automotive markets. But new technologies, such as lithium-ion batteries, fuel cells and nuclear power have the potential to create a more significant future demand. For example, it takes 20 to 30 times more graphite than lithium to make lithium-ion batteries.

Graphite prices reflect flake size and purity, with large-flake (+80 mesh), 94% carbon varieties fetching premium pricing. Prices pushed US $1,300 per tonne in the late 1980s, but crashed to US $600-750 per tonne in the 1990s as China's graphite mines flooded the market with product. During this period there was essentially no exploration and as a result there are very few projects in development today. These days, large-flake, high carbon graphite sells for US $2,500-$3,000 per tonne as the supply for this quality is especially tight.

The mineral is considered rare and valuable, which makes it appealing to investors and miners alike. But this market squeeze can also be dangerous, explains Fletcher. European and American governments now consider graphite a strategic resource. That is, a resource where the supply risk and economic importance of it are significant enough to potentially start a conflict, much like oil.

"It's strategic and the Chinese understand that and they've already started to make moves to try and control graphite resources for their own internal economy," says Fletcher. "So you have value added taxes, export licensing and so forth that the Chinese are putting onto the resource to try and control it..." But, like most things in business, there are no guarantees and getting into graphite means having to know what you're up against. "I mean, there are certain cautions or pitfalls that you should be aware of if you're an investor looking at this space," warns Fletcher.

He explains that graphite is different because it's custom-made for the industry and producers have to do a deal with an end-user for their product, making it a more one-on-one approach from producer to manufacturer. "The one thing that people have to realize is with any minor commodity is that graphite isn't like copper, gold or oil. No matter where you get it from its relatively the same and there's a global market for it. And the market for it is so big that you could just dump it into the market and you will get whatever the current price for it is."

Fletcher notes that it is these end-users that hold much of the future of graphite mining in their hands because they know they're going to need a certain amount of product, but they don't know where they're going to get it. "So I see a bright future in that respect, in terms of the end-users supporting these projects and entering into transactions and really becoming involved with developers."

Canada's graphite mine development has been picking up steam with current exploration in Ontario, Québec and parts of British Columbia.

Eagle Graphite Corp. owns one of only two natural-flake, graphite mines operating in North America – the Black Crystal deposit in southeastern British Columbia. The company acquired and reopened the 100-hectare, open pit quarry back in 2006-2007 and is now producing 4,000 metric tonnes per year of high carbon, natural-flake graphite with a purity level ranging from 93% to 99%. And it only shows signs of going up, says Jamie Deith, President of Eagle Graphite. "We plan to grow our production capacity several times over. Demand for our product is very strong, and we want to use this opportunity to establish ourselves as a leading producer," he says. "It will require a moderate amount of capital to get there, but we feel that the market is becoming increasingly receptive to graphite mining."

Other Canadian companies seem to be catching on as well as several graphite juniors are also positioning themselves to profit from the growing demand for the resource. The country's list of developers includes Focus Metals, **GreenLight Resources Inc.**, **Strategic Energy Resources**, **Mega Graphite**, Northern Graphite Corp., **Ontario Graphite,** and **Strike Gold Corp.** [SRK-TSXV] and its subsidiary, Strike Graphite.

As its main focus, Northern Graphite holds the Bissett Creek Graphite Project 100 km east of North Bay, Ontario, close to major roads and infrastructure. An NI 43-101 Preliminary Economic Assessment Report has been completed and the company has begun a bankable final feasibility study and started the environmental and mine permitting process. Northern expects to begin mine construction early this year, subject to a positive final feasibility study and the availability of financing.

Strike Graphite has two graphite projects in northern Saskatchewan – the Deep Bay East Project and the Simon Lake Project. Deep Bay East is less than 15 km east of the Deep Bay West Graphite Mine. Strike's graphite property is noted for its potential to host a near-surface graphite deposit comprised of scarce, large-flake, high-purity graphite. The Simon Lake Project is located approximately 280 km northeast of La Ronge and hosts several showings of flake graphite mineralization in historic drill holes.

Orocan Resource Corp. [OR-TSXV], which is changing its name to **Standard Graphite Corp.** [SGH-TSXV], has about a dozen graphite projects in southern Ontario and Québec as well as eastern Québec. For this year, the company has planned airborne geophysical surveys, ground EM geophysics, mapping, trenching, metallurgical testing, and diamond drilling.

"We are seeing plenty of exploration companies emerging in Canada, but most of those are for deposits in Québec," explains Deith. "In BC, there has been relatively few good graphite deposits identified, so I expect that Eagle will account for most of the graphite exploration here."

More exploration is also a possibility for Eagle Graphite as the company's open-pit quarry is currently surrounded by 7,600 hectares of undeveloped mineral claims, boasting loads of potential.

"There is definitely room for more graphite production, and over the next two to three years I would not be surprised to see a few producers coming on line in Eastern Canada. However, I foresee Eagle Graphite remaining the only producer in Western North America for several years at least."

But even with these changes happening in North America, Asian countries are still going to account for much of the demand and China still remains at the forefront of the market, driving prices upwards.

"By and large I think the analysts have it right," says Deith. "Prices have increased dramatically over the past few years due to Chinese government policies, which, in turn, appear to be driven by Chinese domestic consumption of graphite, especially for steel making."

"I don't see that situation changing so long as China and India are growing economically. There is also very real potential for a future surge in demand if either electric or hydrogen fuel cell vehicles start to appear in large numbers. The leading designs for both vehicle types consume significant amounts of graphite, and supplies are already tight." ■