



The new strategic mineral...

INVESTMENT HIGHLIGHTS

- Graphite is the anode material in lithium ion batteries, a **\$20 billion market that has been growing at over 20% per year** due to cell phones, cameras, laptops, power tools, etc.
- Electric vehicles and grid storage are **huge markets** that will result in continued strong demand growth.
- China controls 80% of world graphite supply.
- Both the EU and USA have named graphite a **supply critical mineral**.
- Northern's Bissett Creek Project is well located in the southern part of Canada and has a **bankable Feasibility Study** and its major environmental permit.
- Northern believes Bissett Creek will have the highest operating margin and best flake size distribution of any new graphite project.
- Northern has developed a patent pending, green alternative to current graphite purification methods. EV market growth will exponentially increase the amount of graphite that must be purified for battery use.

WHAT IS GRAPHITE?

- Graphite and diamonds are the only two natural forms of pure carbon.
- Graphite conducts heat and electricity very well, maintains its strength to temperatures of 3,600°C and is corrosion resistant.
- Graphite is one of the lightest of all reinforcing agents and has high natural lubricity.
- It is used in refractories (fire bricks that line furnaces in the steel industry), lithium ion batteries, brake pads, gaskets and clutch parts, thermal management in consumer electronics, electric motors, fire retardants, pencils, lubricants and many other industrial applications.
- There are almost **no substitutes for**, and little recycling of, graphite.
- A graphite flake is many, many layers of graphene, which is one atom thick and touted as the new wonder material.



GRAPHITE – THE NEW STRATEGIC MINERAL

- The US, Europe, Japan and South Korea are almost entirely dependent on imported graphite.
- China has imposed export taxes and licenses and **restrictions** on new and existing mines.
- China **intends to build a graphite stockpile** equal to 80% of annual production by 2020
- It takes **30 to 40 times more graphite than lithium** to make a lithium ion battery.
- Planned LiB manufacturing capacity increases **will double graphite** demand by 2021.





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NGC:TSXV

CAPITAL STRUCTURE

Shared Outstanding	65,112,756
Options	4,000,000
Warrants	6,491,858
Fully Diluted	75,604,614

- Approximately 11% F.D. owned by management and insiders
- \$3 million in cash, no debt

PROJECT HIGHLIGHTS

- The Bissett Creek project is in the southern part of Canada close to infrastructure which will reduce the cost of labor, supplies, equipment, power and shipping.
- The estimated capital cost is CDN\$101.6 million including a \$9.3 million contingency. The Company hopes to be in production in 2020 (subject to financing).
- The mine is expected to produce an average of 20,800 tonnes of graphite concentrate per year for 28 years. Production will be almost 90% large/extra large flake, the highest ratio in the industry, resulting in premium pricing.
- Cash operating costs are estimated at US\$640/t of concentrate at current exchange rates based on a low waste to ore ratio, simple flow sheet, natural gas power generation and proximity to infrastructure.
- Measured and indicated resources are large enough to significantly expand production in the future.



PURIFICATION TECHNOLOGY

- The Company has developed a patent pending purification technology for upgrading flake graphite for use in lithium ion batteries and other value added markets.
- The purification of natural graphite is expected to grow into a \$1 billion per year market with the increased adoption of electric vehicles.
- Almost all purification is currently done in China and Northern's technology represents the first cost competitive, environmentally sustainable alternative.
- The technology was developed in conjunction with Hatch Engineering.
- The economics of the Bissett Creek project will be further enhanced by the secondary purification of its production.
- The Company also intends to pursue a parallel strategy of building stand alone purification plants and licensing the technology to manufacturers of battery anode material.
- A pilot plant test is planned for the near future.

MANAGEMENT & DIRECTORS

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