



rhstruthers@gmail.com

Know when to hold-em!  
Know when to fold-em!  
Know where to set stops!  
Know when to run!  
Never count your portfolio  
Until the sells are done..

\*\*\*\*\*

Graphite prices and the Graphite exploration stocks have not escaped the commodity plunge in the last few months. Steel demand has softened and so has prices for some types of graphite.

What the market does not grasp is the huge growing demand for Battery Grade graphite know as Spherical Graphite and prices remain high between \$7,000 and \$10,000 per tonne. The **Electric Car market may be disruptive to some of the auto industry but it will be a money train for Graphite producers.**

[The International Energy Agency forecasts](#) that annual sales of electric vehicles will reach approximately 6 million units per year by 2020. On average, approximately 42 kg of spherical graphite is required for most current electric vehicle models.

Not all Electric Vehicles are equal and to ease the fears of a short driving range - many EVs are going to use better and more batteries like Tesla Motors' Model S. It has a market leading battery range of over 420 km is powered by an 85 kW battery which requires 170 kg of spherical graphite.

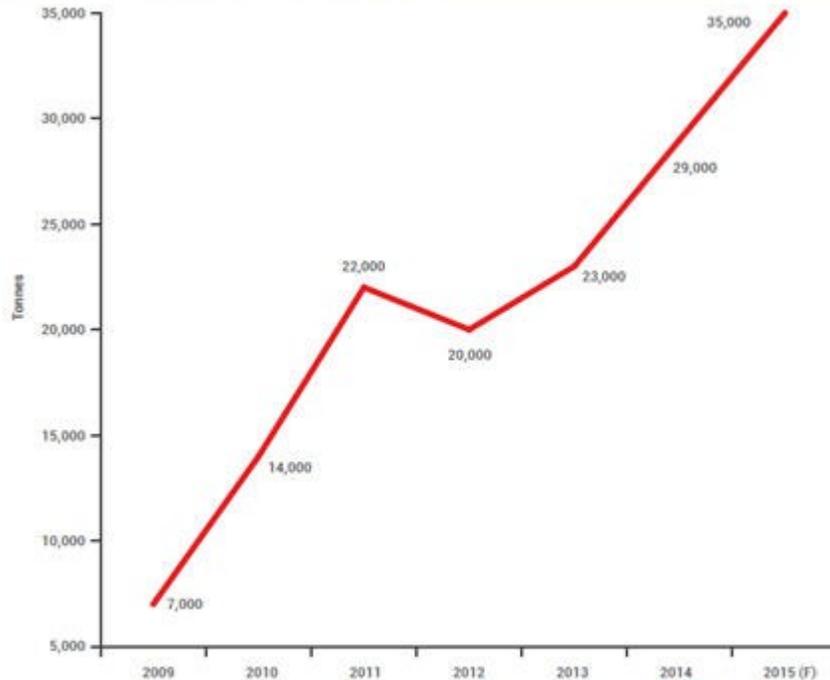
Then add in rising demand in Battery storage use for fluctuating electrical grid demand, helping to integrate renewable energy sources, especially Solar. They can be used to reduce expenditures for transmission and distribution power lines and backup power.

- [Tesla unveiled the Powerwall](#), a compact, wall-mounted and rechargeable battery (7 kWh or 10 kWh). Tesla has announced plans to dedicate 30% of its Gigafactory's capacity to this area and noted that it is having discussions with almost all the utility companies in the US.
- [Daimler AG announced plans to market batteries](#) as "stationary energy storage plants", with an option of either 2.5 kWh or 5.9 kWh
- [AGL Energy announced its Power Advantage](#) proposition (a 6KWh battery), making it the first Australian energy retailer to allow consumers to manage their home energy consumption.

Currently the Spherical Graphite Market is controlled by Japan, S Korea and China.

The graph next page showing exports from China shows a pretty clear picture

## SPHERICAL GRAPHITE EXPORTS FROM CHINA



Demand is so strong an Australian Company Syrah Resources is proposing the world's largest ( 25,000 tpa ) Spherical Graphite plant in the U.S, The cost is about \$80 million and could be in production in 2 years making it the first facility of its kind in the west.

Syrah has the biggest and best Graphite deposit in the World. The feasibility gives it a whopping IRR of 71% with less than a 2 year payback

<http://www.syrahresources.com.au/site/DefaultSite/filesystem/documents/ASX%20Announcement%202015/16%20Balama%20Feasibility%20Study%20and%20Corporate%20Update%20Presentation%2029May15.pdf>

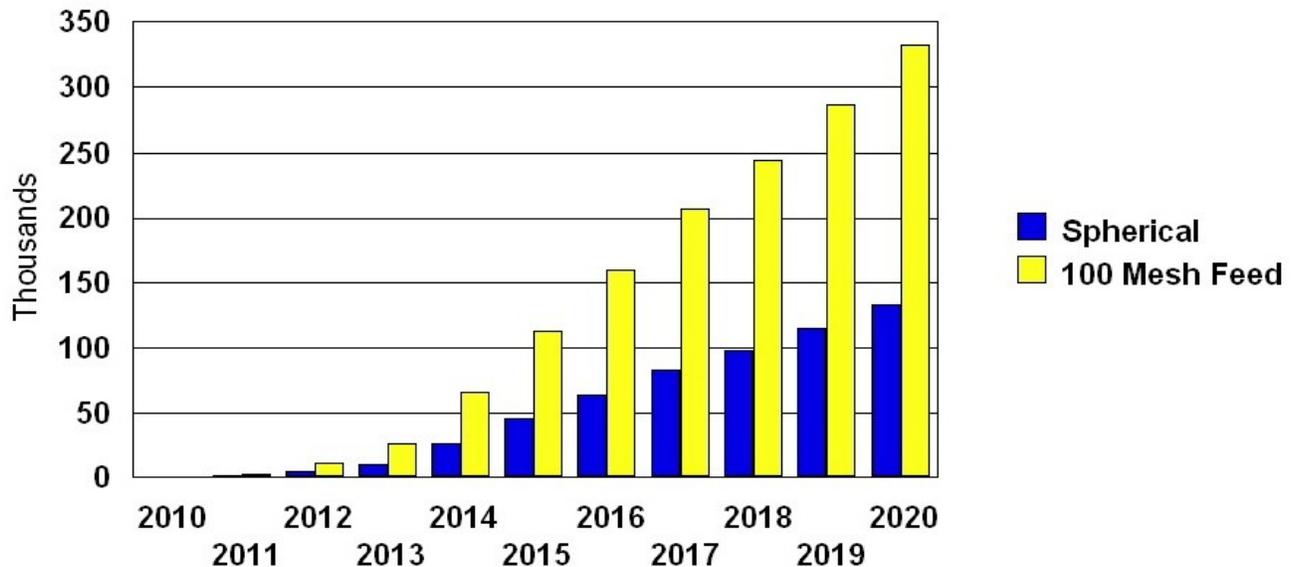
Syrah has a market cap of over A\$700 million. The performance of graphite stocks is way better in Australia, **the Aussies get it - while we in North America are still in the dark ages.**

Some info I got from Syrah - A major anode producer has forecast spherical graphite demand to **increase at a compound annual growth rate of 26% from 2014 to 2020**, to reach 133,000 tonnes per year by 2020.

**The only growth numbers you see like this are in the tech sector and eventually the tech investors in North America might grasp this.** At this point we only have some beaten up mining investors in the graphite space. The techies will buy anything to do with a smart phone except the battery. Perhaps we need a smart phone battery shortage to wake them up

I used the data from the Anode company in the Syrah report to make this graph

## Spherical Graphite Demand 100 US mesh graphite required for feed



Obvious the junior graphite companies focusing on the battery market are heading in the right direction and lets see how the more advanced ones are doing

Alabama Graphite had some very good news last week on a 43-101 resource at the Cossa Project in Alabama

I thought this would be a good time to look at the advanced North American graphite deposits, there chances to become a mine, the ones on our list and a start to building up a Graphite section on the web site

**Alabama Graphite C:ALP Recent Price \$0.19 Shares Out 115.5M Market Cap \$22M**

ALP reported an Indicated Resource of 78.5M tonnes at 2.39% Cg so this puts it into the league of the other advanced North American deposits.

They have to do some more work to go measured and Indicated but the beauty of this deposit and the advantage over others - it is flat lying, on surface and mostly oxidized so easy processing to separate graphite. Trenching can go a long way to move the resource to measured and indicated, any drilling is cheap and shallow.

They are very close to infrastructure in a good year round climate with cheap skilled labour force.

Beyond a doubt this will be among the lowest cost producers with a very low Capex and easy to start smaller production and ramp up.



ALP might have the best looking chart among these Graphite stocks presented. There is good long term support just below \$0.15 and it looks like a new uptrend is in place. We see a rising wedge formation and it looks like it might break out to the upside. A move to \$0.20 would be positive and a break to \$0.25 bullish.

<http://www.alabamagraphite.co>

**Northern Graphite NGC Recent Price \$0.18 Shares Out 49.1M Market Cap \$8.8M**

NGC's Bissett Creek has M&I resource of 69.8M tonnes at 1.74%, a lower grade than Alabama and it is also flat laying - near surface. Not as heavily oxidized as Cossa. However Northern is among the two most advanced projects with a Feasibility as does Mason.

NGC is the only one with an Environmental permit complete and they likely have the best flake distribution with 90% large flake or better.

Bissett would process 2,900 tonnes/day with a cash cost of C\$795/t. Capex is very low at C\$101 million. The IRR is at 19.8%

<http://www.northerngraphite.com>



On the chart the down trend is obvious, it was holding support around \$0.27 but when that broke the volume picked up and we went lower. There is some support forming now at \$0.18 so I will be watching to see if that holds. If so, a reversal that fills the gap between \$0.23 and \$0.27 could be the 1<sup>st</sup> upside move

**Mason Graphite LIG Recent Price \$0.40 Shares out 86.2M Market Cap \$34.5M**

Beyond a doubt Mason has the highest grade with a M&I resource of 65.7M tonnes grading 17.2% Cg

They have completed a feasibility and this would be an open pit with average annual graphite concentrate production: 51,900 tonnes. That is a lot of graphite to find off takes for and that is their challenge. You can't start low and ramp up production in an open pit scenario it is about steady rock moving.

The high grade means a low production cost of graphite concentrate: C\$376/tonne

Weighted avg. selling price in USD \$1,465 : C\$1,905/tonne

The Capex is quite good at C\$169M and a very strong IRR of 44.1%

They have filed the Environmental Impact Study and have a partnership with the Manicouagan-Uapishka Biosphere Reserve ("RMBMU") in respect of the development of the Company's Lac Gueret project.



Mason chart looks better than Northern. You see the down trend but it looks like it may have ended, no lower lows. Support looks strong around \$0.37 with several tests of this area and volume has picked up. We need to see a break above \$0.45 and ultimately \$0.50 to confirm a new up trend. A close at \$0.35 would be bearish

<http://www.masongraphite.com/>

The above 3 companies I would say are likely the only chances of graphite Mines in North America. If others do come along, these 3 would already be supplying all that is needed.

Honorable mention goes to

**Focus Graphite FMS Recent Price \$0.09 Shares Out 128M Market Cap \$11.5M**

FMS's Lac Knife has very good grades with M&I of 9,576,000 tonnes grading 14.77%

Their Feasibility indicates cost of at \$441 per tonne of graphite concentrate which is low and an IRR of 30.1% They would produce 44,300 tonnes a graphite a year which is a lot to find off takes for, but that is the advantage FMS has - being the only company with an off take agreement for up to 40,000 tonnes per year. They have also filed their Environmental Impact Study.

The Capex if \$165 M about the same as Mason. The challenge for Focus is financing with 128M shares out at 9 cents a roll back might be required.

But don't rule them out - if somebody can pull a rabbit out of a hat it is CEO Economo. Insiders did most of the last financing.



Focus also looks like the down trend is broken, but the support looks weak around 9 cents with low volume. Sometimes this means sellers have dried up, I will watch to see if this holds. A break above 15 cents would be very positive

<http://www.focusgraphite.com/>

You can see that Mason with the highest value makes some sense with a high grade low cost advanced project. It does not make much sense how low Northern is priced, especially less than half the value of Alabama.

But the craziest of them all is Zenyetta – it has zero chance of becoming a mine and yet has the highest valuation. I only wonder when the bubble breaks or pipe dream ends.

**Zenyetta ZEN Recent Price \$0.85 Shares out 55.6M Market Cap \$47M**

The problems with ZEN are many. They have an Indicated resource in two pipes of 25.1 M tonnes at 3.89% Cg which is OK at first glance, but smaller than all the others considering end concentrate.

However there is a lot of overburden - 50 to 100 meters and these pipe deposits are narrow and go down deep. It is going to cost them a lot of \$\$ to drill this to move the resources into the M&I category.

They did a pre feasibility and really had to do some stretching to make something work. The Capex is very high at \$441 million and they have to move a lot of rock. I mean extraordinaire.

The pre feasibility has them processing about 1 million tonnes of rock to come up with 30,000 tonnes of concentrate but that is the least of it. I did not see a strip ratio but just looking at the overburden, the waste rock and pit design - all the rock to move in non mineralized pit walls. It looks like they would have to easily move 4 times as much more waste.

Now add in the fact there is no infrastructure, the closest power and Nat gas line is 30 kms away and on First Nations land - so agreements would have to be set for production.

Even if everything went perfect this is many years away from final permitting and would never get financed anyway. As I said the chance of a mine is zero

I have nothing against ZEN, as someone once told me – **it is what it is**



The ZEN chart does not look good. There was pretty good support around \$1.25 but when that broke a new down trend or the major down trend continued. At this point there is no sign of a bottom yet

<http://www.zenyatta.ca>

**Elcora Resources ERA Recent Price \$0.20 Shares Out 54.6M Market Cap \$10.9M**

I follow ERA, they are not in N. America, but are unique. They are the only junior of these listed that has a mine. They are in Sri Lanka, and no matter what you hear elsewhere it is the best graphite in the world and the only producer of lump vein graphite

The advantage ERA has they can start low production and ramp up. This is not only cost effective but it is easier to get off take agreements to sell the graphite. Their unique vein graphite also gives them an advantage to produce graphene because of the purity with less processing

Their weakness at this point is no information on mine grades and reserves. They are doing some drilling so will be interesting to see those numbers. At some point we will get production numbers that will give grades as well.

Elcora intends to be more of a processing company and value add than a mining company. Once their process facility is running full bore which should be complete any time now they could take ore from other Sri Lanka mines as well. Currently they are processing test material for various potential customers. There is numerous developments underway so we can expect news on drilling, mining, the processing plant, possible sales agreements and news on the graphene front.

They are well financed with a recent \$1.38M loan and a \$1M private placement and should not be far off from mine cash flow.



The chart looks pretty good. There is good support at 15 cents and it is in a slight up trend. The stock needs to break above 25 cents for a further move higher.

<http://elcoraresources.com>

\*\*\*\*\*

Most of the graphite companies are touting this or that, best grade or purity, the most large flake, ideal for batteries, agreements with graphene companies, you name it. However in the end they will have to get a mine in production and sales and off take agreements in place to make any kind of decent money and reward shareholders. A lot of this other fluff will only bring in small revenues at best and use up shareholders cash.

Based on valuation, low number of shares out and the stock chart, Northern NGC and Elcora ERA look like the best buys at present. Mason on dips to \$0.36 and Alabama if it fails to break out of the upside of the wedge and falls back

(c) Copyright 2015, Struther's Resource Stock Report

*All forecasts and recommendations are based on opinion. Markets change direction with consensus beliefs, which may change at any time and without notice. The author/publisher of this publication has taken every precaution to provide the most accurate information possible. The information & data were obtained from sources believed to be reliable, but because the information & data source are beyond the author's control, no representation or guarantee is made that it is complete or accurate. The reader accepts information on the condition that errors or omissions shall not be made the basis for any claim, demand or cause for action. Because of the ever-changing nature of information & statistics the author/publisher strongly encourages the reader to communicate directly with the company and/or with their personal investment adviser to obtain up to date information. Past results are not necessarily indicative of future results. Any statements non-factual in nature constitute only current opinions, which are subject to change. The author/publisher may or may not have a position in the securities and/or options relating thereto, & may make purchases and/or sales of these securities relating thereto from time to time in the open market or otherwise. Neither the information, nor opinions expressed, shall be construed as a solicitation to buy or sell any stock, futures or options contract mentioned herein. The author/publisher of this letter is not a qualified financial adviser & is not acting as such in this publication. Struther's Resource Stock Report is not a registered financial advisory. Investors are advised to obtain the advice of a qualified financial & investment adviser before entering any financial transaction*