Sector: Specialty Materials

Vertical Markets: China based Nuclear Power, Solar Technology, LED Semiconductors, Lithium-Ion Batteries

Company: China Carbon Graphite Group, Inc. (CHGI.OB)

Website: ChinaCarboninc.com

Extending Coverage: Initial Coverage: Dec 5 2010	March 2, 2011 Strong Buy
Target Price:	$5.50 by 2012 $8 to $10 by 2013
Current Price:	$2.03
Market Cap:	$40.92M
Shares Outstanding:	20.16M Avg Volume (3 month) 222,003
Enterprise Value:	$ 72.15M
Revenue Q3 2010 (ttm):	$9.97M
Qtrly Revenue Growth (yoy):	78%
Total Cash (mrq):	$9.10M
Total Debt:	$32.86M

Analyst: Tobin Smith, Chief Research Officer, NBT Equities Research, LLC

Overview

Extending coverage of China Carbon Graphite Group, Inc (CHGI) at Strong Buy. NBT EQUITIES RESEARCH believes CHGI is the best positioned high purity Isostatic carbon graphite producer within China.

CHGI is doubling its annual ultra-pure production capacity to 60,000 tons of graphite products in 2011 addressing 50%+ CAGR 2011-2015 specialty growth markets at up to 200% higher gross margins.

In short, the CHGI business strategy is transforming the company from a low margin commodity producer of carbon graphite to a high margin, high production growth company. This transformation, we believe, should enhance the company's value in the near future.

Moreover, with current media focus on "rare earth" metals being strategic to China and in short supply, carbon graphite has quietly become a vital element within China as well. China is undertaking a huge expansion in nuclear power, and according to recent PRC rulings, the country is aiming to become self-sufficient in ultra-pure nuclear grade carbon graphite as well as in rare earth metals. In fact, carbon graphite has recently been proclaimed an "important strategic element" within China by Chinese regulators.

As China rolls out over 60 new nuclear power plants over next 8-10 years *[Source: Nuclear Power in China, World Nuclear Association, January, 2011],* and extends it leadership in other ultra-pure graphite intensive industries such as solar panel manufacturing, LED semiconductors and lithium batteries as well as rapidly expanding its electric-arc furnace (EAF) steel melting production with so-called "mini

mills," CHGI is transforming itself over the next few years from:

A) a low-margin commodity producer, to

B) a high margin (35-50%) specialty producer addressing >50% secular annual growth in demand for nuclear grade, solar grade, semiconductor and lithium battery grade ultra-pure graphite. In addition, the exploding demand for lithium battery power creates the perfect storm of demand growth for CHGI (there is actually 10 times more graphite than lithium inside of a lithium-ion battery). The final component of this 50% CAGR demand cycle is the rapid adoption and expansion of recycled steel mills. The electric-arc furnaces required by this process consume important quantities of high-quality graphite electrodes.

This unique "triple play"—300% higher margins, mandated 50% per year indigenous demand growth, and 200% rapid expansion of ultra-high quality production capacity are the basis for our Strong Buy recommendation and investment thesis.

CHGI is uniquely positioned to:

a) become the dominant provider of ultra-pure solar and nuclear grade graphite in China;

b) add over $120,000,000 in new annual revenues with high margin (35-50%) nuclear, solar and semiconductor grade production capacity by 2013; and

c) sell 100% of its nuclear grade graphite product direct (*i.e.*, without intermediaries) to the booming nuclear power plant industry in China with each new plant consuming approximately 1400 tons per year of nuclear grade graphite.

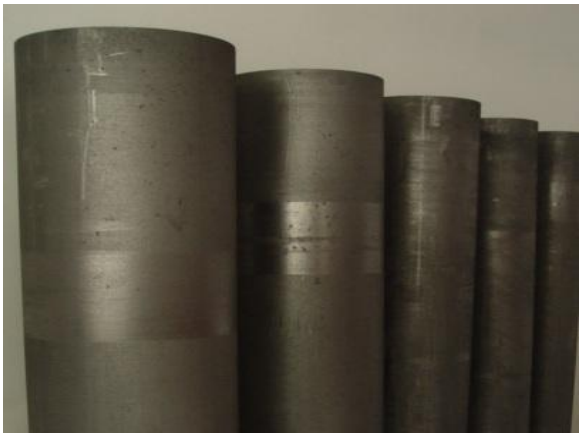


Image 1: Graphite Electrode

Investment Thesis: Key Investment Points

CHGI valuation is poised to grow over 400%-500% in the next 36-48 months based on 1) 2X organic production expansion; 2) 200% higher gross margins from a new production quality mix; 3) 8x-10x eps growth; and 4) a significantly higher eps multiple.

As one of the top two Isostatic graphite producers in mainland China, CHGI is rapidly transforming from a low margin maker of commoditized graphite electrodes (mostly used in steel production) to a high margin producer of ultra-pure grade graphite via unique and defensible and proprietary technology.

Running at full capacity in Q3 2010 with @ $9.97M in revenues, 20% margins and .36

annualized earnings per share, we believe CHGI is currently worth $3.50-$4.00 per share based on comparable valuation multiples.

Doubling capacity to 60,000 tons of high grade capacity by June 2011, plus an additional 15,000 tons of 100% nuclear graphite capacity starting in mid-2012, CHGI adds over $120,000,000 of new annual revenues at 35% margins and $1.25 eps.

With this substantial growth in top line, bottom line and price per share, we assume that CHGI will seek to up-list to the NYSE/AMEX Exchange or opt for a full NASDAQ listing within the foreseeable future.

$1.25 eps in 2013 could see stock prices at $8-12 per share in late 2012-early 2013 at 25M shares outstanding and 7-9x multiple.

It's very rare in investing that we see 30-50% secular demand growth, significantly increasing margins, mandated regulatory protection and relative undervaluation to global competitors.

CHGI has all of that and more.

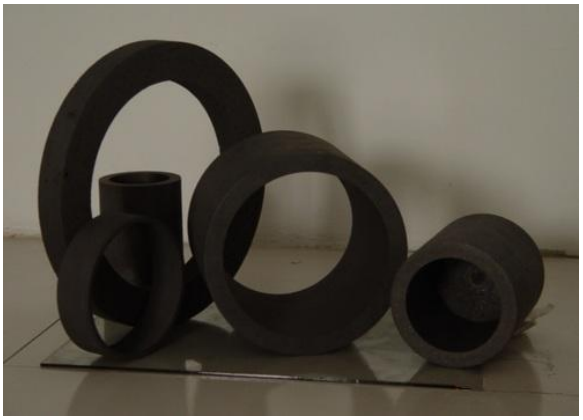


Image 2: High Purity Graphite

HONORS & ACCLOADES
Top 10 High-Tech Enterprises in Inner Mongolia
Top 50 Private Enterprises in Inner Mongolia
First to Develop Fine Grain Graphite Blocks with a length of 3500 mm – the largest available in China's carbon market

About CHGI

China Carbon Graphite Group, Inc. (CHGI.OB), through its affiliate Xingyong Carbon Co. Ltd., manufactures graphite electrodes, fine-grain graphite, high-purity graphite and other carbon-derived products at its Inner Mongolia facility. The company was founded in 1986 as a state-owned enterprise (SOE) and converted to private enterprise in 2001. CHGI listed on the US OTC market in December 2007 via reverse merger. With over 550 full time employees, according to reports the company, it is one of the largest wholesale supplier of fine-grain graphite and high-purity graphite in China.

The company reported dramatically higher sales and earnings for the 3rd quarter ending September 30, 2010. $9.97M of Q3 2010 revenue and .36 earnings per share form the baseline of earnings power, PRE-expansion.

China Carbon Graphite has started executing on a growth strategy that starts with new forming and baking plants in order to meet the growing demand for high-purity (and higher gross margin) products in the global market. The

annual demand for nuclear grade and solar grade ultra-pure graphite is growing in excess of 50% within China. Construction of the new CHGI forming plant, which will produce large-size ultra-high-graphite electrodes as well as high-purity and fine-grain graphite, is slated to be completed by June 2011. The new baking plant will have 36 furnaces and include 30,000 tons of annual capacity, making it the largest baking plant in China's graphite industry.

Part two of the growth strategy is vertical integration--the acquisition of a large scale natural graphite mine in Inner Mongolia.

The 4th part of the CHGI Revenue and Margin Growth Plan: "Mini-Mill" Steel Production.

The company noted in its most recently-filed 10-Q that steel plants in China have been upgrading their electric-arc furnace facilities, which has boosted demand for large-size ultra-high graphite electrodes, a unique and specialized product. China's steel industry, far and away the world's largest, is today rapidly evolving into an industry, like that of the U.S., where electric-arc furnaces requiring graphite electrodes in huge quantities will ultimately be the dominant type of steel furnace used.

This transition to mini-mill steel production is inevitable, as the Chinese steel industry begins to utilize not only imported scrap steel and iron but, soon, domestically produced scrap as well. Shortages have developed and are expected to continue. CHGI earnings will also rise materially once these new plants are brought online over the next few years.

Adding the company's short term strategy (doubling capacity and shifting product mix to high margin graphite) to its long-term strategy (expanding its product offering by manufacturing nuclear grade and solar graphite that would be used as reflectors or moderators in nuclear reactors in China) we see a formula for significantly higher revenues and gross margins—a rare feat in any industry. At present, there are 11 nuclear power plants in

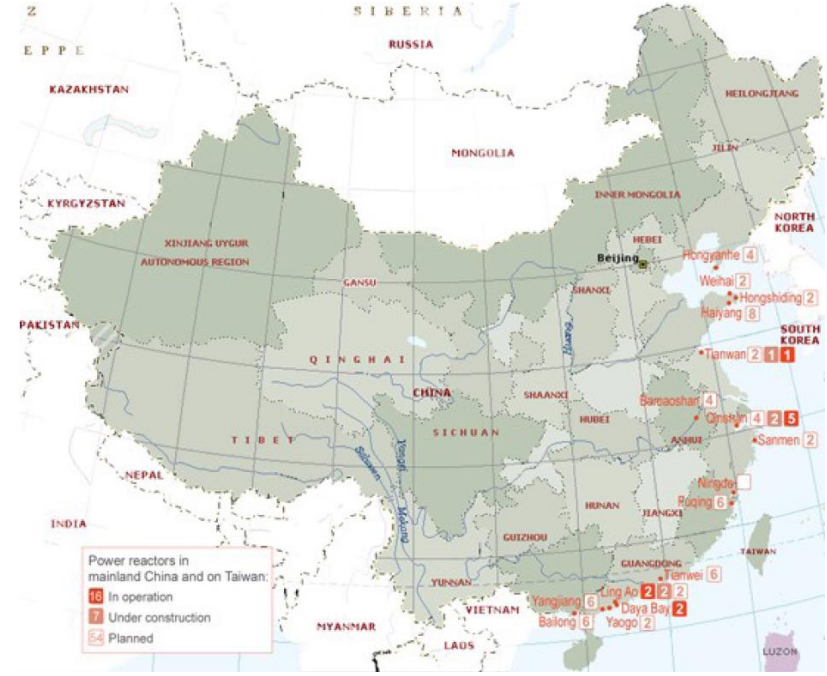


Image 4: Nuclear power reactors in mainland China
Source: World Nuclear Association, January 2011

China, with 15 more plants currently under construction — and only one other manufacturer of nuclear graphite pure enough for use in these plants. The company works with Hunan University and Qinghua University to research and develop nuclear-grade graphite.

The Winning Strategy: High Margin Solar/Nuclear/Semiconductor/EAF steel mill graphite produced with proprietary technology and exclusive ultra-pure capacity

CHGI is already a market leader in graphite production in China/PRC. CHGI is now moving into solar and semiconductor grade graphite in 2011 to meet demand for graphite products for solar energy and semiconductor applications in China projected to reach 40,000 tons. Nuclear grade graphite sold direct to the SOE nuclear power plants addresses demand from 60 new nuclear power plants to be constructed in China over the next 8-10 years.

CHGI's strategy for growth will respond to this market and PRC mandated demand by:

1) **investing in production capacity**, doubling from the current 30,000 tons to 60,000 tons of capacity by June 2011 **to fulfill PRC mandated demand**;

2) **refocusing capacity on the most profitable products** with high gross margins, e.g., fine grain and high purity graphite and ultra-high electrodes **with gross profit margins ranging from 21 to 35 percent**; and

3) **meeting demand in expanding markets** (e.g., nuclear and solar power generation, and lithium-ion batteries) with ongoing research and development and educational partnerships.

Key Advantages: Vertical Integration and Market Uplisting

In addition to its strategy for growth, CHGI presents an immediate opportunity for imminent increases in market valuation. This is due to a trifecta of conditions that currently apply to CHGI.

1) **Vertical Integration Fulfills Demand for a Decade:** CHGI is actively working on the acquisition of a carbon graphite mine in Inner Mongolia province. The size of the deal would be between $30 and $70 million.

   This vertical integration strategy is key to the big picture strategy for CHGI in multiple ways. First it would secure **ALL the graphite capacity they need for the next decade or more**. According to the company CEO, CHGI at full capacity with their new 30,000 ton plant and the addition of a 15,000 ton plant exclusively for nuclear grade graphite will only use 10 to 15 percent of the annual output of the mine acquisitions being explored. With graphite being designated as a "strategically important mineral" in China, locking in their supply of raw materials is KEY to executing on their growth plan.

The additional capacity would be first used for new acquisitions—especially small producers of solar grade graphite and lithium battery grade graphite. Small producers of high end graphite are fearful of raw material availability/price or both. Selling out to CHGI makes great sense for the smaller players—they would get guaranteed access to raw graphite and get liquidity for their equity in their company.

Surprisingly, the actual cost of raw materials for CHGI would not significantly decrease owning their own mine. They have already secured the inventory they need for the next 12 months at very competitive prices. This deal prepares CHGI to execute its business plan for the next DECADE…very compelling for shareholders.

2) **An AMEX Uplisting is Imminent:** CHGI's top priority is to get listed on the NYSE / AMEX exchange. Based on our conversations with various experts in the uplisting process as well as with the CEO of CHGI, we could see this happen in the next 60 days. CHGI is on the verge of meeting the criteria needed to obtain an AMEX listing as outlined below to include CHGI's approximately 1,600 current shareholders and a stock price moving towards $2.50 per share.

Here are the basic AMEX criteria:

- Stockholders equity of at least $4,000,000
- Market Capitalization: $50,000,000
- Market Value: Aggregate market value of publicly held shares of at least $15,000,000
- Distribution: Minimum public distribution of 500,000, together with a minimum of 800 public shareholders or a minimum of 1,000,000 shares together with a minimum of 400 public shareholders.
- Market Price: Minimum market price of $2.00 per share

3) **Repeating a Proven Business Model:** We have dubbed CHGI the "GraphTech of China." GrafTech International Ltd (GTI) is a company that has implemented a now proven business model that works. CHGI is modeling its winning business strategy after GTI, **and at $2.4B market cap it's a goal to aspire to.** We believe that GTI would be a natural buyer of CHGI and in our talks with CHGI CEO, Donghai Yu, he did not disagree.

GrafTech International Limited (GTI), based in Parma, Ohio, is one of the world's largest manufacturers and providers of high-quality synthetic and natural graphite and carbon-based products. It has four major product categories — graphite electrodes, refractory products, advanced graphite materials and natural graphite — that it manufactures in 11 facilities on four continents, with customers in about 65 countries.

GTI is a low-cost global graphite producer with a reputation for product quality, value and service excellence. It is one of the world's largest manufacturers and providers of advanced graphite and carbon materials for the transportation, solar, and oil and gas industries. **The DIFFERENCE in the two companies—**while CHGI goes to 70-80% of its production in VERY high margin clean tech Isostatic graphite applications: solar/nuclear/lithium battery grade graphite, 70% of the GTI graphite electrodes are consumed in the EAF steel melting process, the steelmaking technology used by "mini-mills."

CHGI has a role model and goal—to become the GrafTech International of China with a 70% product mix of substantially higher margin Isostatic graphite. With a $2 billion market cap and reputation for quality, we support CHGI's strategy of becoming the "GTI of China."

Proven, Experienced Management

Donghai Yu, *CEO*

Donghai Yu, 42, has been the company's Chief Financial Officer since December, 2007. Mr. Yu was appointed as CEO to lead in executing the expansion plan. He received his MBA from Oklahoma City University.

Dengyong Jin, *General Manager of China Operations*

Mr. Jin, 53, has been General Manager of China operation since 2001 and has more than 20 years of experience in the carbon industry. He received his degree in economics from Inner Mongolia Television University of China.

In 2004, Mr. Jin was named one of the "Top 10 Outstanding Managers in Inner Mongolia." In 2005, Mr. Jin was named the "Outstanding Entrepreneur" in Inner Mongolia. In 2006, Mr. Jin was named one of "China's Top 100 Outstanding Entrepreneurs in Science and Technology."

Zhenfang Yang, *CFO*

Mr. Zhenfang Yang, age 46 years, was appointed by the Board of Directors as the new interim Chief Financial Officer, effective on September 1, 2010.

Since 2007 Mr. Yang has been serving as the Chief Financial Officer of the Company's operating subsidiary, Xingyong Carbon Company Ltd., and he is a certified public accountant in China. During his term as interim Chief Financial Officer, Mr. Yang will continue to perform his duties as Chief Financial Officer of Xingyong Carbon Company Ltd.

Grace King, *Vice President of Finance*

Grace King was appointed Vice President of Finance in December 2010. Ms. King has 20 years of financial transaction experience, and was a managing partner of APEC advisory services.

Hongbo Liu, *Independent Director, Chairman of the Nominating Committee*

Mr. Liu is one of China's top scholars in carbon graphite studies. He is a professor at Hunan University in Hunan province. He has been granted a special annual allowance for

outstanding scholars in China by the PRC Department of State since 1997. He has a doctorate degree in engineering from Hunan University.

Philip Zhang, *Independent Director, Chairman of the Audit Committee*

Mr. Zhang is the chief financial officer of Universal Travel Group. He had more than 13 years of experience in portfolio investment, corporate finance, and accounting. He is a CPA in Delaware and a member of AICPA.

John Chen, *Independent Director, Chairman of the Compensation Committee*

Mr. Chen is the chief financial officer and director of General Steel Holdings, Inc. He was a senior accountant at Moore Stephens, Wurth, Frazer and Torbet, LLP before joining General Steel.

50% CAGR Growth Opportunities In China

In order to extend its product capacity into the high tech/high margin "Isostatic" graphite, CHGI is investing $12M US in new Isostatic molding machinery and facilities.

This capacity, plus proprietary production technology, creates defensible barriers to entry in the 35-50% margin nuclear, solar and semiconductor markets for graphite.

- 30,000 tons capacity (running on full capacity right now):

  Electrodes --- 5,000 tons

  Fine Gain graphite --- 15,000 tons

  High Purity --- 10,000 tons

- Pending 30,000 tons capacity (will be completed by June) (the percentage will be adjusted according to future demand for these products)

  Large size Ultra-high electors (with diameters of 600mm- 800m) --- 10,000 tons

  Large size rounded fine grain graphite --- 10,000 tons

  Large size rounded high purity graphite --- 10,000 tons

Nuclear Graphite Opportunities

- Nuclear graphite is used as a moderator or reflector within nuclear reactors to slow down neutrons to make them more efficient in producing fission in the fuel.
- Nuclear graphite requires 99.9999% purity and larger sizes.
- Chinese central government will invest 450 billion RMB in nuclear power plants by 2020.a
- China has 13 nuclear power reactors in commercial operation, 27 under construction, and 50 planned to start construction. CHGI estimates that each plant uses up to 10,000 tons of graphite per year.
- The average price of nuclear graphite is 5x that of ultra high electrode graphite, approximate RMB 100,000-200,000/mt.

- Gross margin of nuclear graphite is approximately 50%.
- The nuclear graphite used in China is 100% imported from overseas.
- The Chinese government is strongly encouraging domestic producers to produce nuclear graphite.
- Price range: RMB 80,000-150,000.

once they receive orders from the government, probably in the second half year of 2012.

- Production cycle: 5 months to 6 months.
- China has 13 nuclear power reactors in commercial operation, 27 under construction, and 50 planned to start construction.

Operating Reactors in Mainland China

Units	Province	Type	Net capacity (each)	Commercial operation	Operator
Daya Bay 1 & 2	Guangdong	PWR	944 MWe	1994	CGNPC
Qinshan 1	Zhejiang	PWR	279 MWe	April 1994	CNNC
Qinshan-2 & 3	Zhejiang	PWR	610 MWe	2002, 2004	CNNC
Lingao 1 & 2 &3	Guangdong	PWR	935/1037 MWe	2002, 2003,2010	CGNPC
Qinshan 4 & 5	Zhejiang	PHWR	665 MWe	2002, 2003	CNNC
Tianwan 1 & 2	Jiangsu	PWR (VVER)	1000 MWe	2007	CNNC
Total (13)			**10,234 MWe**		

Source: World Nuclear Association, December 2010

All future nuclear reactors will be 'HTR-PM,' which requires 1400 tons per year, 400 tons more than regular nuclear reactors.

- The company plans to build a 15,000 ton plant to produce nuclear graphite

HTR-PM Reactor

- HTR Reactor (High Temperature Gas Cooled Reactor), the 4th generation nuclear reactor, was developed by Qinghua University.

- The first HTR reactor will start construction in Shidao Bay in the Shangdong province in early 2009.
- Each HTR reactor demands more than 1,400 tons of nuclear graphite.
- More than 1,000 tons of nuclear graphite was ordered from Toyo Tanso in November 2008 for the Shidao Bay nuclear reactor -- an order in the tens of millions of dollars.
- China plans to implement HTR reactors for all planned nuclear power stations after Shidao Bay reactor's successful operation.

Opportunities in Solar/Semiconductor Graphite

- Similar type of graphite (High electrical conductivity).
- Gross Profit Margin: 35%-50%.
- Average price: RMB 80,000- 120,000.
- Isostatic graphite is a key component to manufacture Poly-Si.

Nuclear Reactors Under Construction

Plant	Province	MWe Gross	Type	Project Control	Start Const.	Operation
Lingao-2 (units 2)	Guangdong	1080	CPR-1000	CGNPC	05/2006	8/2011
Quinshan 2 (units 4)	Zhejiang	650	CNP-600	CNNC	01/2007	2012
Hongyanhe (units 1-4)	Liaoning	4x1080	CPR-1000	CGNPC	08/2007, 04/2008, 03/2009, 07/2010	10/2012-2014
Ningde (units 1-4)	Fujian	4x1080	CPR-1000	CGNPC	02/2008, 11/2008, 01/2010, 09,2010	12/2012-2015
Yangjiang (units 1-4)	Guangdong	4x1080	CPR-1000	CGNPC	12/2008, 02/2009-03/2011	08/2013-2016
Fuqing (units 1-2)	Fujian	2x1080	CPR-1000	CNNC	11/2008, 06/2009	2013. 2014
Sanmen (units 1 & 2)	Zhejiang	2x1250	AP1000	CNNC	12/2008-09/2012	10/2013, 2014
Haiyang (units 1 & 2)	Shandong	2x1250	AP1000	CPI	09/2009, 06/2010	2014-2015
Taishan (units 1 & 2)	Guangdong	2x1770	EPR	CGNPC	10/2009, 04/2010	12/2013, 2014
Changjiang & others	Hainan	3x650-1080	CPN-600	CNNC	04/2010-11/2010	2014-2015
Fangjiashan (units 1-2)	Zhejiang	2x1080	CNP-1000	CNNC	12/2008, 07/2009	2013 & 2014
Total: 27				**29,790 MWe**		

Source: World Nuclear Association, December 2010

- The world solar and semiconductor industry is shifting to use Poly-Si to produce Solar and Semiconductor products, which demands a huge amount of this type of graphite product.
- Majority of Solar Graphite and Semiconductor graphite used in China is imported from overseas (Japan, Germany, France).
- Projected China demand: roughly 40,000 tons.
- Market shortage of Poly-Si silicon.
- Over 95% of semiconductor appliances are made from of silicon.
- The annual growth rate of the Electronic industry, which consumes nearly 80% of globally produced Poly-Si silicon, is estimated at 30% or more.
- The expanding Solar industry creates increased demand for Poly-Si silicon
- China is planning to expand its Poly-Si production from 2,000 tons to 20,000 tons.
- Foreign Poly-Si producers plan to shift production plants to China.
- Isostatic graphite used in Poly-Si production prices at RMB 10,000 – 170,000/mt.

Corporate Governance

For China based companies with US listings, corporate governance has become the #1 priority of institutional investors. No matter HOW attractive the company and its growth strategy, the last nine months have changed the way Wall Street fund managers—hedge fund to mutual funds—evaluate China-based companies with US listings.

#1 Issue: Does the firm have a Top 10 Ranked Auditor? CHGI has already gone through the transition to a Top 10 ranked US auditor in 2010 with BDO Siedman and its China-based affiliates. This auditor transition, like most, resulted in write-downs of inventories and receivables that hit the CHGI income statement in 2010.

The good news is that transition is 100% behind the company. The days of US-listed Chinese companies with second or third tier auditors is over.

#2 Issue: Does the company have a CFO with enough English skills to communicate to US based investors? Again, with Grace King brought in as CFO, CHGI gets a very broadly experienced and accomplished CFO—who is really the General Manager for US Capital Markets.

#3 Issue: Does the CEO understand how important investing time and money in developing capital markets sponsorship?

With the addition of NBT Equity Group and its highly effective Capital Markets Sponsorship program underway, the answer again is clearly yes. Our affiliates at NBT are producing a number of events and research reports (including this one) on CHGI, the tremendous opportunities in Isostatic carbon graphite in China, and bringing that compelling story to the NBT Capital Markets Network of buy side and sell side analysts, portfolio managers and self-directed investors worldwide.

Valuation

NBT Equities Research is completing is financial model for CHGI.

We have received from the company a pro-forma on its expected results of its Solar-grade and Nuclear-grade graphite production capacity starting in 2012.

NBT assumes that solar grade graphite at 2000 mt of production in 2012 and a split between nuclear grade and solar grade in 2013 at 4000mt**.**

EPS for 2012

Our model assumptions at 30M shares fully diluted in 2012 with .48 cents of regular production ($60M US) and $60M of Solar Grade graphite from new capacity presents up to .80 per share in net income.

For 2013 (assuming nuclear graphite sales @ $90M) we conservatively model $1.20 to $1.50 in earning per share on 35M shares issued and

Key Financial Data

	Solar-grade graphite		Nuclear Graphite	
	2012 E	2013 E	2012 E	2013 E
Sales Revenue	**$89,912,409**	**$119,109,489**	**$95,751,825**	**$130,788,321**
COGS	61,343,066	78,277,372	61,927,007	79,445,255
Gross profit	**28,569,343**	**40,832,117**	**33,824,818**	**51,343,066**
Sales expense	6,293,869	8,337,664	6,702,628	9,155,182
Adminstration	2,602,439	3,573,285	2,602,439	3,923,650
EBITDA	**19,673,035**	**28,921,168**	**24,519,751**	**38,264,234**
D & A	251,849	357,328	251,849	392,365
EBIT	19,421,187	28,563,839	24,267,902	37,871,869
Interest	2,000,000	2,000,000	2,000,000	2,000,000
EBT	17,421,187	26,563,839	22,267,902	35,871,869
NI	**$17,421,187**	**$26,563,839**	**$22,267,902**	**$35,871,869**

Assumption: 2,000mt production of Solar-grade or nuclear graphite in 2012, 4,000mt production in 2013
Source: China Carbon Graphite, Inc.

outstanding.

At 7-9 times multiples on 2013 eps in the $1.25 range we easily get to our $8-$10 target value.

As additional forecasting details are released, we will adjust our valuation forecast accordingly.

Risk Factors

Beyond general economic and financial market considerations, risks to our investment thesis include increases in raw material costs and reduced availability of raw materials. However, CHGI has hedged against these risks by purchasing enough raw materials for at least one year's production prior to recent price increases. The company's acquisition of a graphite mine will allow the company to have a reliable supply of graphite for up to 10 years.

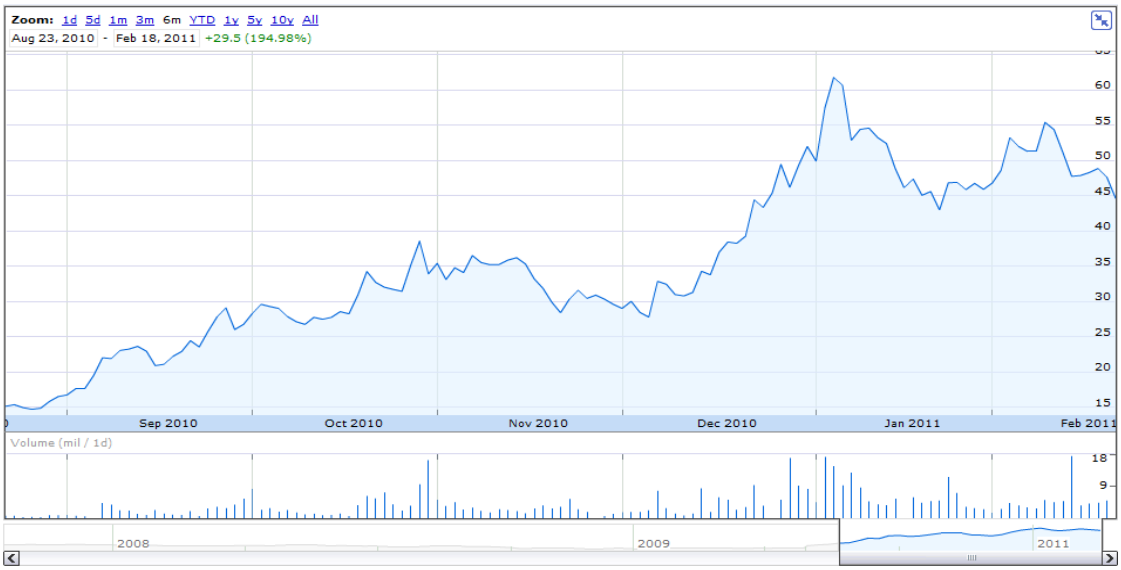
Summary and Winning the Endgame

As one of the top two Isostatic graphite producers in China, CHGI is rapidly transforming from a low margin maker of commoditized graphite electrodes (mostly used in steel production) to a high margin producer of ultra-pure grade graphite through a unique and defensible and proprietary technology.

At its current price, we see a great deal of upside to CHGI investors. As discussed, this includes CHGI's valuation that is set to grow 400% - 500% in the next 36 to 48 months based on organic production expansion, 200% higher gross margins from a new production quality mix and 8x-10x eps growth to meet PRC mandated demand. Coupling these already favorable factors with the Company's probable listing on AMEX leads NBT to conclude that CHGI is a long-term investor value and a strong buy today.

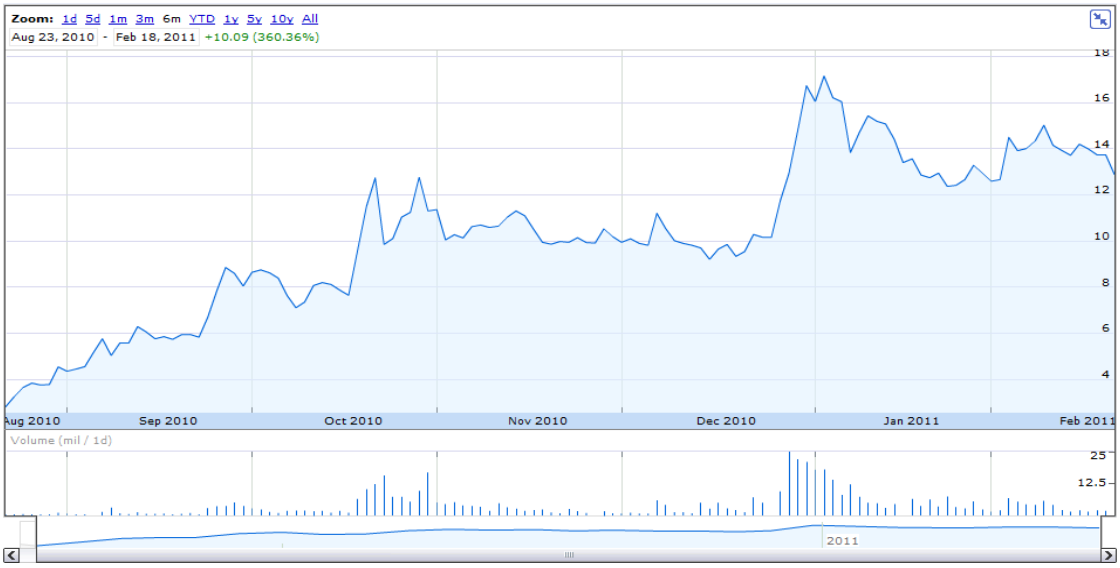
Mineral Stocks in China – A Growth Curve

Molycorp (NYSE: MCP) – 6-Month Chart



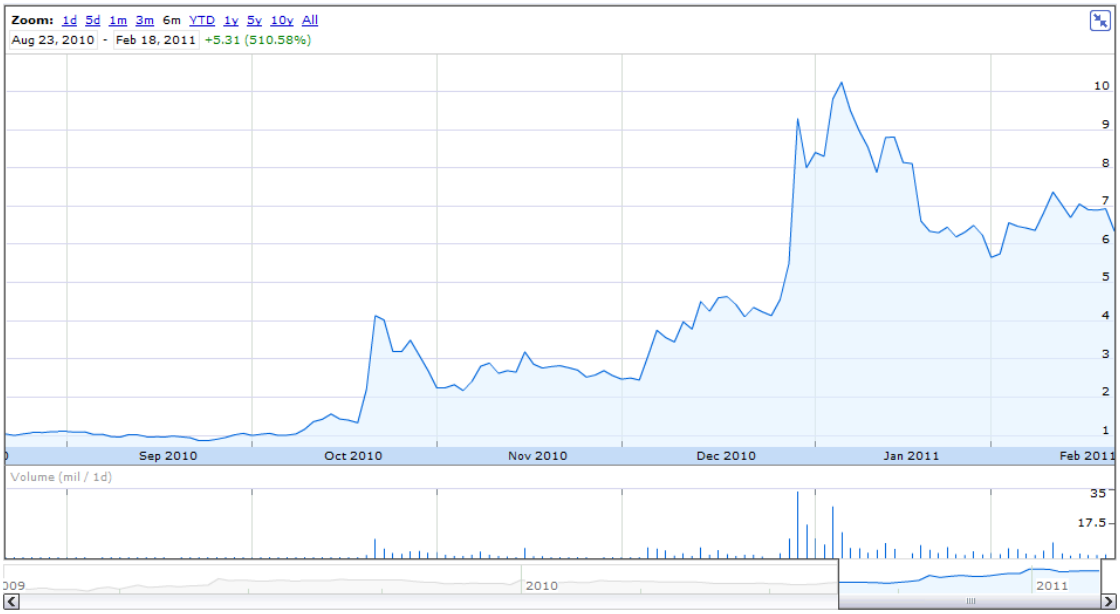
Source: Google Finance

Rare Element Resources Ltd. (AMEX:REE) – 6-Month Chart



Source: Google Finance

China Shen Zhou Mining & Resources Inc. (AMEX:SHZ)



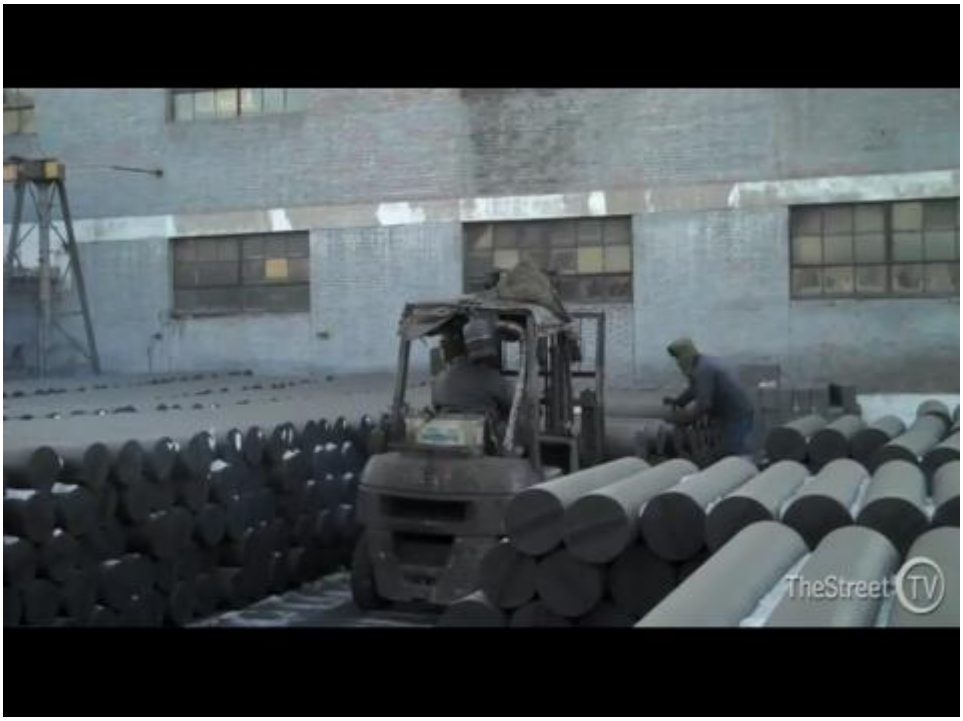
Source: *Google Finance*

APPENDICES

APPENDIX A: Videos

TheStreet.com: The Upside in China Carbon Graphite

MONGOLIA (TheStreet) -- Beijing based investor Rick Pearson tours China Carbon Graphite's facilities to interview CEO Donghai Yu and view production and expansion capacity.



APPENDIX B: Quick Background on Graphite (courtesy of Technology Metals Research)

Graphite has long been a key ingredient in steel, castings, lubricants, vehicle brakes, golf clubs, tennis rackets and — no surprise — pencils. But this polymer of carbon — a chemically identical sibling of both diamonds and coal — will become increasingly important in coming years due to its chemical, electrical and thermal properties. Its ability to remain stable in ordinary corrosive environments, conduct electricity and resist heat allow it to serve as a key component in applications like the storage batteries and nuclear-electricity generation stations that will power us into the future.

Coal powered the Industrial Revolution; its chemical twin, graphite, will be of great value in constructing the components of the clean-energy economy, making graphite a true diamond in the rough!

While one may assume that it is as common as the dirt that it somewhat resembles, the supply of graphite is far from infinite. Natural graphite comes in several forms: Flake, amorphous and lump. Of the one million tons of graphite that are processed each year, just 40% is of the most desirable flake type. Only flake and synthetic graphite (made through an expensive process from petroleum coke) can be used in lithium-ion batteries. Graphite mining and processing are limited to a relatively small handful of countries, with China currently producing 70% of the total global supply.

Demand for lithium-ion batteries will increase rapidly as battery-power (electricity) supplements, and will even replace gasoline- and diesel-fueled internal-combustion engines in vehicles as 'green energy' expands. While hybrid automobiles such as the Toyota Prius have used nickel-metal-hydride batteries for more than a decade, newer hybrid models like the Chevy Volt, as well as battery-only electric-drive vehicles like the Tesla Roadster and the Nissan Leaf, rely upon the more-efficient lithium-ion batteries that will almost certainly be employed in all hybrid or fully electric vehicles in just a few short years. Large-flake graphite will be very much in demand to produce the hundreds of millions of lithium-ion batteries required for these automobiles.

Governmental bodies are taking notice of just how crucial secure supplies of graphite are. Graphite prices have been increasing in recent months, and investors' interest in this industry is almost certain to climb as word spreads about the impending boom in demand and the companies that will be making moves to meet it.

A Slippery Supply

Global graphite production has held steady at approximately one million tons per year over the past decade. The weak demand in the first half of the 2000s, combined with relatively low prices, led to little investment and development of graphite mining and processing capabilities over this time span. Many graphite-producing countries saw a steady drop in annual production between 2001 and 2008, including the Czech Republic, Russia, Madagascar, Zimbabwe, Canada and Mexico. Taking up the slack over this

period were the Ukraine, Brazil, India and North Korea. China saw some peaks and valleys in production during this time, but currently produces nearly four-fifths of the world's total supply of graphite, keeping 60% of this output for its own manufacturing requirements.

Japan, the U.S., Europe, South Korea and Taiwan — each of which has an economically significant and well-developed steel industry — import significant quantities of graphite from China. While China is the dominant player in the graphite game, 70% of its production is of the amorphous and lower-value small-flake graphite that is used in industrial applications rather than in batteries.

At this point in time, the fragmented nature and seasonality of its graphite production base raise some doubts that China will be able to increase its output; in fact, China itself currently imports a significant amount of North Korea's graphite production. Producers in other regions of the world will need to step up their efforts to meet demand, which will require significant investment.

Increasing Applications Driving Demand

Graphite has long been a key component for the aviation, automotive, steel and plastic industries, as well as in the manufacture of bearings and lubricants. High-purity large-flake graphite is essential for the production of the lithium-ion batteries that are crucial to the consumer-electronics industry. Demand for this form of graphite will rise rapidly as production of larger batteries for vehicular propulsion comes online.

Currently, the iron and steel industries are the largest consumers of graphite. But demand for graphite has been rising for other applications — researchers in the field of material science continue to find new uses for this durable, heat-resistant, electricity-conducting substance. Graphite will be used in the construction of next-generation nuclear reactors, which are expected to reach temperatures as high as 1,000 degrees C in their cores — triple the temperature of today's reactors.

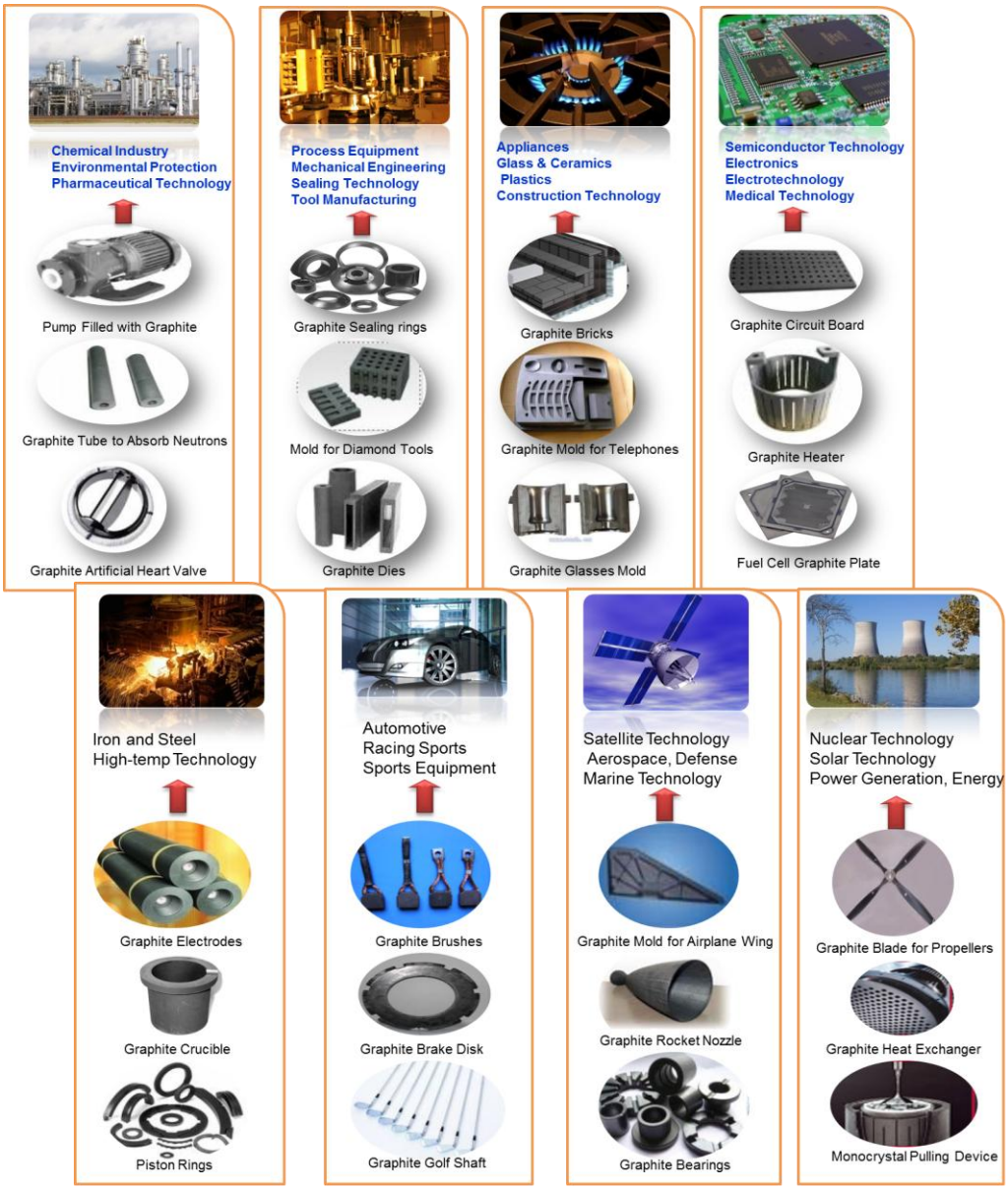
Graphite is one of the few substances that can resist such heat. It has already replaced asbestos as a health-risk improvement in automotive brake linings and pads. As the standard of living rises in developing nations like Brazil, Russia, India and China, many more vehicles of all types will be added to the world's roadways, increasing demand. Few people realize that 84% of the world's total population lives in emerging-market countries.

Of course, it is expected that a rapidly growing number of automobiles will utilize extensive lithium-ion battery systems to assist with or singlehandedly provide propulsion, which is where the single-greatest increase in graphite demand is anticipated. At present, 2% of all new vehicles sold are gas-electric hybrids, plug-in hybrids or battery-only full-electric drive — most of which still use nickel-metal hydride batteries. It is projected that by 2020, these types of automobiles will represent 5-18% of all sales and almost exclusively be powered by lithium-ion batteries, which are both lighter and more powerful than

nickel-metal hydride ones. With 70 million vehicles forecast to be sold in 2020, vast amounts of graphite will be required to manufacture the lithium-ion batteries that will power many of them.

Perhaps the single greatest testimony to graphite's importance is the concern that governmental bodies have shown about its important role in security. A 2010 European Commission study regarding the criticality of 41 different materials to the European economy included graphite among the 14 materials high in both economic importance and supply risk. A recent WikiLeaks posting revealed that a list known as the Critical Foreign Dependencies Initiative developed by the U.S. Department of Homeland Security and the State Department included graphite mines in China among those overseas sites that could damage American interests if terrorists were to disable them. The U.S. military will also increasingly rely on graphite for battery and fuel cell applications, as the armed forces lessen their dependence on petroleum.

APPENDIX C: CHGI Example Applications



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