

HALLGARTEN & COMPANY

Initiating Coverage

Christopher Ecclestone cecclestone@hallgartenco.com

Almonty Industries (AII.v)

Strategy: Long

Production-minded

Key Metrics				2013	2014e	2015e
Price (CAD)	\$	0.80	Consensus EPS		n/a	n/a
12-Month Target Price (CAD)	\$	1.32	Hallgarten EPS		\$0.07	\$0.08
Upside to Target		65%	Actual EPS	(\$0.06)		
High-low (12 mth)	\$0.52	2 - \$1.11	P/E	n/a	\$ 11.75	9.5
Market Cap (CAD mn)	\$	29.6				
Shares Outstanding (millions)		37.04	Dividend	n/a	n/a	\$ 0.02
			Yield	0.0%	0.0%	2.5%

Almonty Industries

Production-Minded

- + Tungsten is most commonly used in so called "hard steels" and is best known though for providing the filaments in lightbulbs.
- + Almonty is a producer in Spain, with sveral years of operating history behind it
- + Almonty is one of the few operating mines accessible through Western capital markets
- + After a tough year in FY2013 due to a fire at the processing plant, the company is ramping up production again
- + Prices are firm with no auguries of possible downturn
- + The number of new projects (well, largely reopening of old mines) in the Western World is not that great as to spoil a higher price scenario
- + China is choking off supply. This may be either due to a desire to stockpile material for its own future use or a sign that heavy over-exploitation in recent decades has left the country in a vulnerable supply situation
- * The company needs to work on a second project to ensure future production
- * The promising bid for Ormonde was abandoned with little struggle
- * The Chinese as both the largest producer and one of the main users have a vested interest in higher prices but that does not mean that they may not push prices down to achieve other policy or strategic goals

Background

The principal business of Almonty Industries Inc. (TSX-V: AII) is the mining, processing and shipping of tungsten concentrate from its tungsten mine at the Los Santos Project, located approximately 50 kilometres from Salamanca in western Spain. The Los Santos Project was acquired by Almonty in September 2011. The mine was originally opened in 2008 and commissioned in July 2010 by its former owner. The company also owns the Valtreixal project in Galicia in northwest Spain.

Some Background on the Principals

Usually we leave management to the end of the note and there is indeed the usual elaboration near the end of this piece. However in the case of Almonty something needs to be said "up-front" for it has relevance to potential outcomes for the company. The team currently running Almonty has form, as they say in the racing world. Prior to getting Almonty off the ground they had done the whole thing before with a company called Primary Metals. That TSX-V listed entity had acquired the Panasquiera mine in Portugal, from Avocet Minerals at a time Avocet was in retreat from a number of its activities. The Panasqueira tungsten mine produced wolframite concentrates containing some 100,000 MTUs of

tungsten trioxide per annum. The Panasqueira mine had a long history of production of high-quality wolframite concentrates and was the dominant producer of high-grade tungsten concentrates outside China.

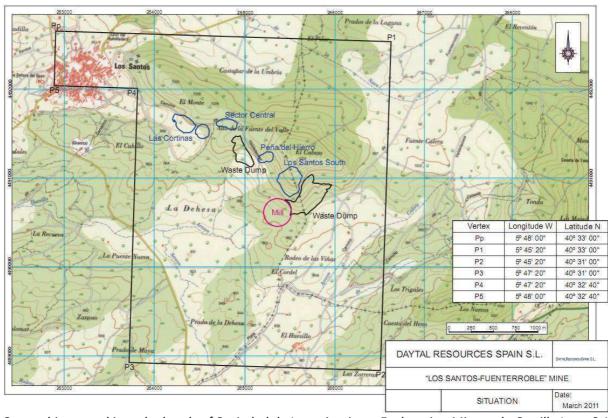
Primary Metals was taken over in 2007 by Sojitz Corporation, one of Japan's leading trading companies, for \$54mn and thus disappeared from the public eye and access for investors wanting a pure play. The principals hunted around for a new opportunity to re-enter the Tungsten producing space and found it in the form of the Los Santos mine. The management group own 37% of the listed entity.

The Los Santos Mine

The Los Santos scheelite deposit is in the province of Salamanca in western Spain and was originally investigated by Billiton starting in 1979. It is 180 km west of Madrid, 50 km south of the city of Salamanca and 1 km east of the town of Los Santos.



After 1980, Billiton completed an exploration campaign which included 249 trenches and 231 diamond drillholes. In addition in one of the zones, Los Santos Sur, an 825m underground ramp was developed, along with level development at the 950m elevation, which provided bulk samples as well as underground drilling access. Billiton went as far as to carry out a pre-feasibility study of the prospect. By 1985, however, with a prevailing tungsten price of US\$81/mtu, the project was not considered viable.



Ownership passed into the hands of Sociedad de Investigacion y Exploracion Minera de Castilla Leon S.A (SIEMCALSA), a publicly-owned company of mining and geological consultants based in Salamanca. In 2007 the deposit was purchased by Daytal, which at the time was 100% owned by ASX-listed Heemskirk Consolidated (HSM.ax). The mine was originally opened in 2008 and commissioned in July 2010.

The Los Santos Project was acquired by Almonty in September 2011 from Heemskirk and represented the QT for the listing of Almonty on the TSX-V. The initial payment was \$14mn to Heemskirk, then as part of the IPO transaction Heemskirk was entitled to a direct 15% equity interest in the new listing vehicle, received an additional US\$3 million cash and was issued with up to 10% of the issued capital in call warrants at a premium to the listing price valuing the deal in excess of US\$20 million.

According to the Heemskirk annual accounts, it now holds:

- 5.56 million CAD\$1 shares
- 3.70 million CAD\$1.25 warrants

These warrants expire on the 23rd of September 2014. They are clearly still out of the money.

Geology

Under Billiton, exploration was focused on skarn mineralisation on the margin between the Bejar granodiorite and the surrounding Cambrian metasediments. The discovery of the Los Santos tungsten bearing skarns was the result of regional geological reconnaissance and the targeted night-time use of ultra-violet lamps to disclose the presence of the tungsten mineral, scheelite (CaWO₄) which fluoresces under ultra violet light.

A period of intense exploration activity followed, including diamond drilling and some preliminary engineering including the aforementioned ramp.

The tungsten occurs mainly as scheelite within massive pyroxene skarn. The skarn bodies are generally narrow steeply dipping structures. The deposit is made up of a number of discrete zones, six of which have been modelled for the current resource estimate. The strike length varies for each zone, but zone dips are fairly uniform across the deposit, varying between 60° to 90°. Within each zone, the skarn mineralisation is located within a number of individual beds, separated by barren lithologies. The major skarn beds vary between 2m and 20m in width; there are, however, numerous thinner bands measuring tens of centimetres.

To verify and test the extension of certain skarn beds in Los Santos Sur and Las Cortinas, Almonty completed its own exploration drilling campaigns in each year from 2009 to 2012. This has comprised a total of 94 diamond drillholes and 111 reverse circulation holes.

	No. of Holes	Length (metres)	No of Samples		
Diamond Drill Holes	322	28451	3860		
Reverse Circulation	111	2210	942		
Total	433	30661	4802		

Resource

Almonty Industries is in the midst of a 28,000 metre exploration campaign (7,000 metres per year over four years). In October 2011, Almonty embarked on this drilling program at the Los Santos Project, the aim of which was to convert inferred resources into measured and indicated reserves, extend the

minelife and to further delineate the nature of the resource at the Los Santos Project.

The goal was to prove up the potential high grade underground resource from the bottom of main Los Santos pit. There is said to be

Los Santos Re	source	@ 0.5% WC	3 cutoff
Classification	Tonnes '000	W03%	Tonnes W 03
Measured	615	0.32%	1,966
Indicated	2,422	0.29%	7,059
Inferred	1,416	0.20%	2,880
Total	4,453		11,905

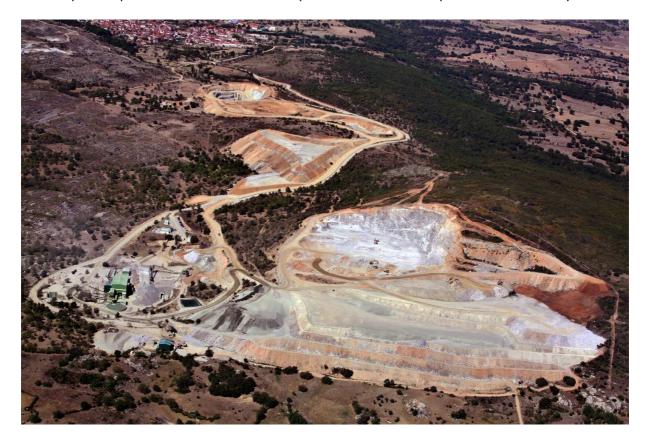
underground potential from 985 to 880 m delineated at 0.4% cut-off grade.

The company completed its drill campaign for fiscal 2012 in May of that year after drilling 5,078 metres and issued a revised NI 43-101 technical report dated September 30, 2012. The Tungsten reserves increased by 10%, contained Tungsten by 20% and the mine life was extended to eight years.

Mining

The open pit operations are conventional drill and blast operations, based on mining 10m benches in waste, and 5m benches in ore, with 0.5m of sub-drilling.

The aerial view below shows the main pit with the green structure to the left being the processing plant and the Los Santos South (Main) pit being the bright white patch just right of centre. Towards the town at the top of the photo is a smaller Las Cortinas pit that has been developed over the last few years.

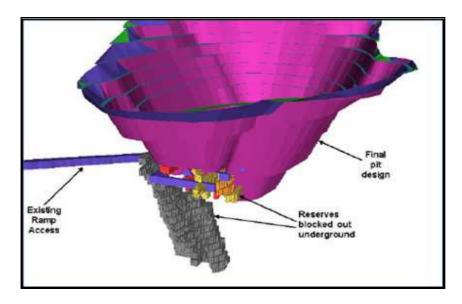


The production mining operations currently employ 30 people – all contractors.

Future Expansion

As mentioned earlier exploration in recent times has been directed towards the lower parts of the deposit as the company believes that underground development has the potential to materially extend mine life.

In the latest resource estimate there was discussion of the mine plan. In an area to the south of the Los Santos Sur pit, some small skarn extensions were blocked out for underground mining, resulting in approximately 94 kt of underground ore. The report claims that it should be possible to access these underground stopes through adit access from the pit, as well as by extension of the existing underground development. In this blocking out process, a cut-off grade of 0.3% WO₃ was used. The underground mining cost of \$30.42 per tonne was derived from estimates from local Spanish mining contractors. The blocking out was based on a cut-and-fill mining method, with 5m lifts.



Based on the current underground resource, a 15,000 tpm operation has been evaluated by management. This would involve a 15 metre crown pillar remaining between the open pit and the underground development. This would provide an additional four-year mine life.

Exploration drilling results demonstrate that substantial potential exists below delineated resources

Processing

The plant is located immediately to the south of the Los Santos Sur pit, near the existing underground portal, in an area close to existing mine workings, the main waste dump and other infrastructure.

After initial operation with a production rate of up to 300 k tpa during 2010, the plant is now processing 500k tpa. The plant is primarily based on gravimetric separation, aimed at recovering scheelite, so as to provide a concentrate containing greater than 68% WO₃.

The process plant (shown on the next page) is primarily based on gravimetric separation, aimed at recovering a high grade scheelite concentrate. During the last 12 months it was able to process 515k tpa, with an average feed grade of 0.23% WO3. Current overall plant recovery of scheelite is approximately 60%. A planned additional scheelite flotation facility should raise this overall recovery to approximately 70%.



The principal operating costs used in connection with this reserve calculation were \$19.08/t ore for processing and administration, \$2.33/t ore for open pit mining, and \$30.42/t ore for underground mining.

All of the other 68 employees on site work directly for Daytal (Almonty's Spanish subsidiary).

In late June 2013 the company temporarily suspended mineral processing activities as a result of an electrical fire that destroyed its diesel generator power supply and caused severe damage to its electrical switching infrastructure. The fire started in the generator room and the local fire brigade was called to the scene shortly after the fire was discovered. The blaze was quickly brought under control and extinguished, limiting the damage to the electrical supply building and the diesel generators, which were completely destroyed.

The plant operated through the use of temporary diesel generators until such time as the company completed its connection to the state electricity grid in August 2013. The complex remained in operation with ore being stockpiled until processing resumed. There was sufficient power available on site to run all non-mineral processing activities. The company resolved to undertake quarterly repair and maintenance activities, that were originally scheduled to occur in August 2013, during the stoppage in

order to minimize the downtime to its processing operations for the balance of the year.

However this damage caused a noticeable loss of production which was instrumental in pushing the company to a loss in the second half of 2013.

On another score the company has been considering the issue of tailings recovery. With the recent improvements in mill recovery, as well as the further improvements with the planned scheelite flotation facilities, an overall mill recovery of 70% should be achieved. This has meant that specific areas where tailings have been deposited still contain economic WO₃ grades. The resource estimate from 2012 projected that there was 1.461mn tonnes of *in situ* WO₃ grading at 0.17% recoverable In the tailings.

The Second String – Valtreixal

The Valtreixal Sn-WO₃ project is located in the northwestern Spanish province of Galicia, approximately 250km from the Los Santos mine. It is quite common that tin occurs alongside Tungsten in Spanish Tungsten deposits.

A historical resource estimate (not NI43-101 compliant) for the Valtreixal property of 8.65 million tonnes of mineralization at a grade of 0.23% Sn+WO $_3$ (0.10% Sn + WO $_3$ cut-off). This was prepared on the basis of the applicable mineral resource standards in Spain. This historical estimate was based on preliminary exploration work carried out by SIEMCALSA (the same parties that vended Los Santos to Heemskirk) from 2007 to date and includes the analysis of 884 samples taken from 22 trenches comprising 2,740 metres of trench work; 206 samples from 6 drill holes over 1,227 metres; and 180 samples taken from 28 galleries covering 1,072 metres. The bulk samples, comprised of 410 kg of material, were analyzed by Wardell Armstrong International Laboratories on behalf of the Spanish owners. At the time of the acquisition Almonty commented that it had reviewed the data on which the historical estimate was based and believed that the data was relevant and could be relied upon. Almonty intended to carry out additional exploration activities on the project with a view to aggregating sufficient data to complete a NI 43-101 resource estimate.

This property came into Almonty's hands in March 2013 when it entered into an option agreement to acquire a 51% interest in, and be the project operator of, the for total consideration of Euro 1.4 million. Almonty is required to make a Euro 100,000 payment on June 1, 2013 with the balance of funds due over the remaining 24 months should Almonty decide to continue with the project. Almonty also has the option to acquire the remaining 49% interest in the project for an additional Euro 2 million at the end of the 24-month period.

Tungsten Redux

Tungsten has long been a metal of interest for the cognoscenti but remains largely unknown to the broader public (investing or otherwise). If they have heard of it, then most likely it would be in the context of some power tool's marketing campaign. However, the metal is indispensable to a lot of applications that are not up close and personal with consumers but vital for the broader economy. To name but a few there are machine tools and all sorts of drilling for both the oil & gas industries and mining. If the recent price surge escaped the attention of the investment community then at least the recent, much-talked about British Geological Survey Risk List has shone a spotlight on the metal ranking

it as number four in terms of criticality of supply, ahead of Rare Earths.

At the Sharp Edge

Tungsten takes its name from the Swedish words, *tung sten*, or heavy stone. Its symbol in the periodic table though is W which derives from the name of its discoverer, Peter Woulfe, who in 1779 investigated the mineral now known as wolframite and concluded it must contain a new substance. Scheele, in 1781, found that a new acid could be made from tungsten (a name first applied about 1758 to a mineral now known as scheelite). Scheele and Berman suggested the possibility of obtaining a new metal by reducing this acid. The de Elhuyar brothers found acid in wolframite in 1783 that was identical to the acid of tungsten (tungstic acid) of Scheele, and in that year they succeeded in obtaining the element by reduction of this acid with charcoal. Tungsten occurs in wolframite, scheelite, huebnerite, and ferberite.

Tungsten – where and how

All tungsten deposits are of magmatic or hydrothermal origin. During cooling of the magma, differential crystallization occurs, and scheelite and wolframite are often found in veins where the magma has penetrated cracks in the earth's crust. Most of the tungsten deposits are in younger mountain belts, i.e. the Alps, the Himalayas and the circum-Pacific belt (i.e. the Andes). The concentration of workable ores is usually between 0.3 and 1.0% WO $_3$.

Applications

Because it retains its strength at high temperatures and has a high melting point, tungsten is used in many high-temperature applications, such as light bulb, cathode-ray tube, and vacuum tube filaments, heating elements, and rocket engine nozzles. Due to its conductive properties, as well as its relative chemical inertia, tungsten is also used in electrodes.

Its high melting point also makes tungsten suitable for aerospace and high-temperature uses such as electrical, heating, and welding applications, notably in the gas tungsten arc welding process (also called tungsten inert gas -TIG- welding).

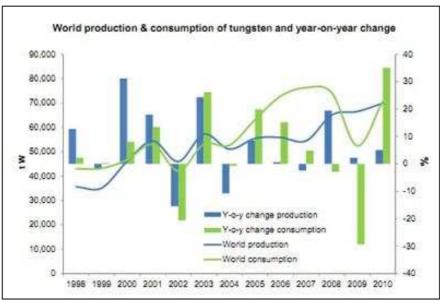
The hardness and density of tungsten are applied in obtaining heavy metal alloys. High-speed steel, may contain as much as 18% tungsten. Superalloys containing tungsten are used in turbine blades and wear-resistant parts and coatings. In its defense applications, tungsten, usually alloyed with nickel and iron or cobalt to form heavy alloys, is used in kinetic energy penetrators as an alternative to depleted uranium but may also be used in cannon shells, grenades and missiles to create supersonic shrapnel.

Tungsten compounds are used in catalysts, inorganic pigments, and as high-temperature lubricants. Tungsten carbide (WC) is used to make wear-resistant abrasives and cutters and knives for drills, circular saws, milling and turning tools used by the metalworking, woodworking, mining, petroleum and construction industries and accounts for about 60% of current tungsten consumption. Tungsten oxides are used in ceramic glazes and calcium/magnesium tungstates are used widely in fluorescent lighting, while tungsten halogen bulbs are frequently used to light indoor photo shoots, and special negative films exist to take advantage of tungsten's unique disentangling properties. Crystal tungstates are used as scintillation detectors in nuclear physics and nuclear medicine. Other salts that contain tungsten are

used in the chemical and tanning industries

Supply

Over the last few years, sources of supply have shifted totally. In 1986, the USSR was the world's largest consumer but, by 1992, the reformed CIS was exporting tungsten and by 1996 was the world's second largest supplier. In the late 1990s and at the beginning of the new millennium, China had risen to dominate production with 90% of the world market for tungsten production and supply. This was despite China supposedly having about 75% of the world's tungsten resources.

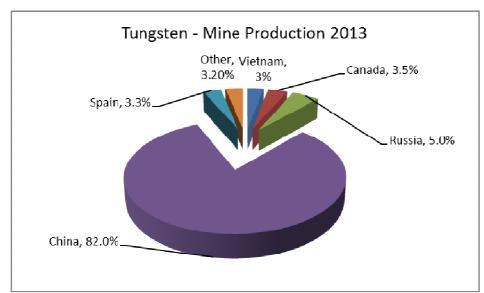


Source: Roskill

This shifting dynamic makes it hard to identify where exactly the future production will be coming from. The calculation of global reserves leaves something to be desired in our view. On the Chinese side we, as in so many other things, have no verification of how large reserves are or the pace at which they are being consumed (something that has been an issue also in Rare Earths and Antimony in recent times). On the Western side we have reserves of Tungsten that are the result of decades of low focus on exploration. The fact that several relative newcomers to the space can come up with substantial new resources rather swiftly after beginning exploration might imply that the West's share of global Tungsten resources is severely underestimated (as it has been in Antimony and Rare Earths).

Who Has It

The latest assessment of the USGS (from 2008) is that China has 56% of global Tungsten resources, Russia has 9%, the USA has 5% and Canada has 4%. However, it is not which country currently has the resources that matters but the country that gets into production first. Thus Portugal currently has more going on in the Tungsten space than the US does, while South Korea currently has no production but if Woulfe Mining ever get their operation going there the country might account for 7% of global production and fully 50% of ex-China output. It too doesn't not figure in the ranking of major resource



holders (despite its putative mine once being the world's largest).

Source: USGS, Roskill, Hallgarten

This moving feast means that, besides China and Russia, other principal producing countries are Austria, Australia, Bolivia, Canada, Portugal, Spain and Vietnam whilst mines have closed in the last decade in Australia, Brazil, Canada, France, Japan, Peru, South Korea, Sweden, Thailand and the USA. Chinese production peaked in 2011 at around 70,000 tpa and has since declined by around 10% according to Roskill.

Vietnam's production could double in the next two years from the current 3,000 tpa while the currently weak Australian presence could start to become real again.

Sources of Produc	tion over the last 10 Years
Primary	55-60,000 tpa
Recycling	20-25,000 tpa

Not only have the sources of supply altered but so have the tungsten compounds traded, as fluctuating price differentials between concentrate and upgraded products and governmental restrictions played their part in the market. In just the period 1986 to 1996 the concentrate trade plunged from 84% to 29% while intermediate products (including tungstates, tungsten oxides and hydroxides, W and WC powders, and ferrotungsten) soared from 16% to 71%, largely reflecting the shift to China dominance with the Chinese wanting to hold onto the value added. The concentrate trade should start to trend up again as China dominance retreats.

The China Factor

We see in tungsten the same dynamic that other specialty metals have experienced over recent

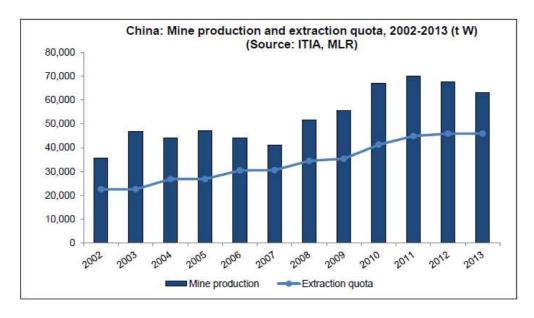
decades. Some Tungsten producers even try to hitch their wagon to the Rare Earths phenomenon. During the 1980s and the 1990s, China, with the world's largest reserves and lowest cost of production, flooded the world market. This drove down the price of both APT and WO_3 concentrates to below the production cost of most other producers. Amongst the distortions this produced was that APT prices, driven downwards by Chinese processors, were only marginally above the price of concentrates at about USD\$50 per MTU (metric ton unit = 10kg).

The distressed price in the world market quickly drove many tungsten mines and APT producers in the Americas, Asia and Europe out of business and led to their closure. Moreover, outside of China, exploration and mine development programs were quickly abandoned.

However, the distressed market price for tungsten concentrates and its products began to change in 2003 and more markedly in 2004-2005 propelled by the rapid growth and emergence of the Chinese economy in the world marketplace. As in other metals the rapid growth of Chinese demand for tungsten products for its domestic market triggered a tightening of the availability outside of China which was coupled with the Chinese government's policy curtailing mining projects and taxing the export of tungsten concentrates in order to conserve resources for future domestic needs. This led to a price surge in 2005 with the price of APT moving rapidly from below \$80 to nearly \$300 per metric tonne unit (MTU). This in turn sparked a recovery in Tungsten recycling, so the price stayed in the \$250 range for the ensuing five years. However, with recycling at its max (37% of global supply in 2010 according to the USGS) and demand for Tungsten still high, the APT price took strong step upwards to its current \$460 range.

Disciplining the Market

Just as in Rare Earths and other specialty metals the Chinese government is curtailing mining programs and strongly "encouraging" downstream processing of concentrates to higher value added products such semi-finished and finished tungsten products. We might also note that before the 2008 slump China had become a net importer of tungsten concentrates and scrap.



Source: Roskill

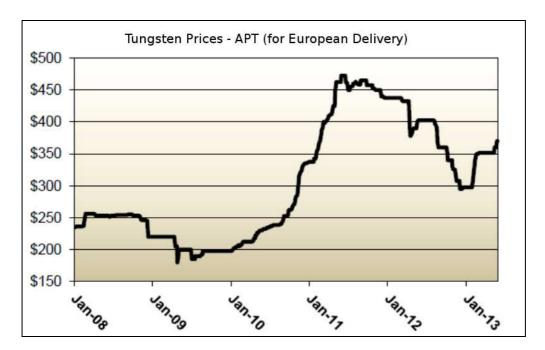
The chart on the preceding page shows that China's production peaked in 2011 and has since tailed off. The extraction quotas that the Chinese have are regularly blown out by the producers (legal and illegal) but it's interesting to note that the gap has narrowed.

This narrowing is probably due to a measure, taken in early 2011, when China's Ministry of Land and Resources announced that authorities in the country had identified and ordered the clean-up of more than 280 illegal mines in an effort to regulate the exploration of valuable minerals. The number of exploration licenses for minerals such as Rare Earths, tungsten, tin, and antimony were reduced to 116 from 400 in eleven provinces and regions in the country via spot checks led by teams dispatched by the ministry. This campaign has aimed to end the supposedly illegal excavation of valuable minerals. These measures, ostensibly, were in an effort to conserve resources.

Pricing

The average annual price of tungsten since 1950 has fluctuated between a nadir of US\$10 per metric ton unit in 1963 and a peak of US\$175 in 1977. After that point it sagged back to trade in a \$50-75 band for several decades before its revival in the new century.

The chart below shows the recent price trends for APT, with a clear recovery being evident since its nadir in mid-2009. More interesting though is that the current price vastly exceeds levels pre-2008, which is a different look to most other industrial metals.



As noted earlier, the trade in concentrates has diminished and the market has relied more and more upon the APT quotation as a price guide since APT is the product traded in the largest quantity. Prices are mainly based on the quotations published twice a week by London's "Metal Bulletin", although

other trade journals also publish quotations or indicative prices.

Our latest projections are shown in the table below.

Tungsten APT	MTU
Pricing Projections	(US\$)
2010	\$245
2011	\$415
2012	\$460
2013	\$385
2014e	\$395
2015e	\$425
2016e	\$432
2017e	\$410
2018e	\$402

Prices peaked in 2012 and then started a light decline mainly because Western world production did not pick up and China started slowing. Losing Malaga's mine from the production picture meant that the projected production from other mines was not enough to seriously move the price lower. Vietnam though is ramping up in the production space to take up the slack from losing Peru as a source.

Frankly not enough is known about the China dynamic to explain the likely actions there. For instance, was China restricting export quotas a ploy to get prices up or does it reflect some sort of production problem, either short- or long-term within the Tungsten supply chain within China? Pricing even at the \$425 level for 2015 projected here is enough to give handsome returns to most mine reactivation plans or low capex *de novo* projects.

Reaction in the West

This produced a flurry of activity with companies outside of China realizing that they urgently needed to find and secure long-term supply of tungsten and its products from sources outside China. This led to increased investment in exploration and mine development activities outside of China, particularly in Vietnam, Australia and the Americas. Three former tungsten mines were reopened: CanTung (owned by North American Tungsten) in Canada in 2005, the aforementioned Panasqueira (now owned by Sojitz) in Portugal in 2005 and Pasto Bueno (owned by Malaga Mining) in Peru in 2006.

Factors militating against a ramp up in production included:

- long lead times between exploration and new mine openings
- the steep rise in mine development and operating costs
- the very limited availability of high grade deposits (i.e. greater than 0.6% WO₃)

The result is that the pipeline of new projects is largely empty and even if potential mines were identified there would be little new significant supply expected over the next 3-4 years. Moreover further price advances for tungsten concentrates and products would be necessary before any new major mining programs could stand a chance of gaining funding. As we have seen APT prices went off a cliff with the global slump of 2008 and any miners with aspirations to get into production ended up shelving plans for the duration of the slump. This only served to accentuate the China-dependency of the industrial users of Tungsten. The second price (and equity market) retreat in 2012-13 put projects like King Island Scheelite and Woulfe Mining (and MacTung) back in the freezer.

The Process: Mining to concentrating

Tungsten is usually mined underground. Scheelite and/or wolframite is frequently located in rather narrow veins which are slightly inclined and often widen with the depth. Open pit mines exist but are less common.

Most tungsten ores contain less than 1.5% WO $_3$ and thus ore dressing plants are always in close proximity to the mine. The ore is first crushed and milled to liberate the tungsten mineral crystals. Scheelite ore can be concentrated by gravimetric methods, often combined with froth flotation, whilst wolframite ore can be concentrated by gravity, sometimes in combination with magnetic separation. Pricing

Most tungsten concentrates are processed chemically to ammonium paratungstate (APT). Secondary raw materials like (oxidized) scrap and residues are another important feed for chemical tungsten processing. However, wolframite concentrates can also be smelted directly with charcoal or coke in an electric arc furnace to produce ferrotungsten (FeW) that is used as alloying material in steel production. Pure scheelite concentrate may also be added directly to molten steel.

Offtakers Rule!

In sharp contrast to the bemoaners of the REE space, the end users in the Tungsten space are acutely aware of their vulnerability in the supply chain. Not unsurprisingly the major users have moved to try and secure their upstream (as per our mantra in specialty metals "Secure Thy Upstream"). In one case Sandvik, the major toolmaker, acquired, back in 2009, Wolfram Bergbau- und Hütten-GmbH Nfg. KG, an Austrian producer and supplier of tungsten products which operates a refining plant for producing tungsten carbide, including a chemical plant for recycling tungsten material, in St. Martin, Austria. It also operates a mine and ore dressing plant in Mittersill, Austria. WBH is active within the tungsten industry since 1975 and offers tungsten carbide and tungsten metal powders. Sandvik had been part of WBH's global customer base since many years. Tungsten carbide is the primary raw material of cemented carbide, and therefore the acquisition of WBH is of long-term strategic importance for Sandvik. WBH also has taken a significant stake (alongside Resource Capital Funds) in Wolf Minerals (owner of the Hemmerdon project in the UK).

This move by Sandvik was interesting as the company was particularly vulnerable to supply disruptions as it is up against China, making a major push into the tool space and thus we might tactfully say that it would be to the benefit of Chinese toolmakers to have foreign competitors experience supply problems from the Chinese tungsten mines. If any investors doubt that that might happen then they would be

naive indeed.

With the demise of Malaga's Pasto Bueno mine, the Tungsten giant, GTP have had to go hunting and have cemented deals with a few of the up and coming players, including Almonty, of which they are very supportive. These non-predatory symbiotic relationships should be a model for a lot of specialty metals miners.

The Bid for Ormonde

The best word for Almonty's unsolicited bid for Ormonde in August 2013 would be ephemeral. As far as we can see it never had any clear terms and it was no surprise it ultimately came to grief despite the eminent sense in merging together players in the Tungsten space. The background is that in August Almonty revealed that it had made an approach to acquire Ormonde Mining plc (ORM.L) in a share exchange transaction. The approach was rejected by the Ormonde board of directors without engaging with Almonty. Almonty then announced that it was "considering its various options regarding Ormonde". This vaguely threatening language never materialized into anything more aggressive. To the outside observer all that happened was that Almonty answered some questions of the Irish Takeover Panel (Ormonde being domiciled there) and then nothing more was heard until late January 2014.

The Irish Takeover Panel imposed a deadline of January 31, 2014 for Almonty to either announce an offer for Ormonde under Rule 2.5 of the Irish Takeover Rules or announce that it would not proceed with an offer for Ormonde. As a result Almonty announced that it did not intend to make an offer.

Almonty claimed its reason for not proceeding was that it had a number of significant concerns regarding Ormonde's Barruecopardo Project. As a result of Ormonde's unwillingness to engage in any dialogue with Almonty, it has not been possible for Almonty to address its concerns, and consequently it felt that an offer for Ormonde would not be in the best interests of our shareholders.

We can't help thinking that Almonty was right to go after Ormonde and wrong to let it get away. We are not entirely persuaded by the "sour grapes" element of the rationale for not proceeding considering that they had not been allowed to do any due diligence by the target. Whatever information Almonty was operating upon was out there already.

The Barruecopardo asset seems to have substantial potential. It is also located in the province of Salamanca. The project is a brownfield site, the deposit having previously being worked to shallow depths by a series of small open pit workings (30m depth) and one larger open pit (80m depth), from the early 1900s until 1982.

The current JORC mineral resource estimate (prepared by CSA Global in December 2011) stands at 27.39 Mt grading 0.26% WO $_3$ equating to 7.1 million metric tonne units (mtus) or 71,000 tonnes of contained WO $_3$. Of this total, 17.8 Mt grading 0.29% WO $_3$ (equating to 5.06 million mtus or 50,600 tonnes of contained WO $_3$) is in the Measured & Indicated Resource categories, with an additional Inferred Resource of 9.59 million tonnes grading 0.23% WO $_3$ (equating to a further 2.2 million mtus or 2,000 tonnes of contained WO $_3$).

Mineral Resource Estimate (JORC-compliant) – there is 27.39 Mt grading 0.26% WO₃

- > 17.8 Mt Measured & Indicated
- > 9.59 Mt Inferred

This deposit is open along strike and at depth. All this augurs for a long life mine.

The results of a Definitive Feasibility Study were announced in February 2012. The mine plan calls for open pit mining to be based on a pit design, containing M+I Resources of 8.71mn tonnes grading 0.32% WO₃. Ormonde's Feasibility Study envisaged production metrics of:

- Production rate of 1.1m tonnes per year
- ➤ Production of an average of 227,000 metric tonne units (mtus) WO₃ per year
- LOM of nine years
- ➤ 78% recovery to a 74.6% WO₃ scheelite concentrate (industry standard: 65%) using simple gravity processing

Financial metrics were estimated to look like:

- > Forecast annual net pre-tax operating cash flows of €29M at APT price of US\$350/mtu
- Pre-tax NPV (8% discount rate) of €120M and an IRR of 52.0% at an APT price of US\$350/mtu
- Low capital cost of €48.5M and cash operating costs of €99/mtu
- Capital payback period of approx. 2 years at an APT price of US\$350/mtu

Ormonde says they submitted final permit documentation in July 2012. In early February 2012 Ormonde received formal written notification from the Regional Environmental Department in Castilla y Leon of the granting of the Environmental Impact Declaration for the Project. The EID contained a positive finding, stating that the Project as proposed was, from an environmental perspective, approved in so far as Ormonde complies, inter alia, with the conditions presented in its Environmental Study and Restoration Plan.

Current Operating Performance

On the following page can be seen our earnings model for Almonty with our forward projections. It should be noted that the company has a September year end.

Fiscal year 2013 was a tough one for the company with things going well until the fire, this produced a production setback, significant remediation costs and other setbacks. Therefore revenues took a knock from June 2013 onwards (though now back on track). The company worked with its insurance adjusters to determine the extent of the damage and business interruption that is covered under its insurance policies. The effect of the cost of remedying the situation and then the compensation are seen in 3Q13 and 4Q13 respectively.

As per our predictions shown on the model, we expect revenues in FY14 to top those of FY12 by a small margin. We would expect them to rise by a further ten percent in FY15.

Erring on the side of caution for FY14 we are estimating net profits (post-tax) of \$2.52mn, despite the

company having achieved \$1mn in Q1 alone. We look forward to being proven wrong. Our caution relates to how costs might look once all things running as normal for several quarters. Our earnings estimate for FY15 is for around \$3.1mn in post-tax earnings. This would represent EPS of 8.5cts.

Almonty Industries									
CAD mns (FY ending Sept)									
	FY12	1Q13	2Q13	3Q13	4Q13	FY13	1Q14	FY14e	FY15e
Revenue	21.65	5.032	5.005	3.574	4.73	18.34	5.463	21.93	23.40
Other Revenue, Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Revenue	21.65	5.03	5.01	3.57	4.73	18.34	5.46	21.93	23.40
Cost of Mining	11.11	2.52	2.44	2.179	3.28	10.42	2.496	9.87	10.06
Gross Profit	10.54	2.51	2.57	1.40	1.45	7.92	2.97	12.06	13.34
Selling/General/Admin. Expenses,	3.10	0.82	0.719	0.78	0.93	3.25	0.803	3.28	3.4
Non-cash compensation	0.26	0.015	0.015	0.166	0.01	0.21	0.056	0.31	0.3
Depreciation/Amortization	4.86	1.399	1.595	1.421	2.41	6.83	1.065	5.20	5.5
Unusual Expense (Income)									
Other Operating Expenses	-0.03	0.032	0.012	0.081	-0.06	0.07	-0.093	-0.23	-0.3
Total Operating Expense	19.31	4.79	4.78	4.63	6.57	20.77	4.33	18.43	19.0
Operating Income	2.34	0.25	0.22	-1.05	-1.84	-2.43	1.14	3.50	4.3
Financing costs	0.07	0.017	0.023	0.076	0.10	0.21	0.094	0.00	0.0
Other financial				0.527	-0.93	-0.40			
Income Before Tax	2.27	0.23	0.20	-1.66	-1.01	-2.24	1.04	3.50	4.3
Tax (Credit)	-0.14	0	0	0	0	0.00	0	0.98	1.2
Income After Tax	2.42	0.23	0.20	-1.66	-1.01	-2.24	1.04	2.52	3.1
ForEx effect	-2.23	0.823	-0.167	1.06	0.52	2.24	1.474		
Post ForEx	0.186	1.052	0.034	-0.596	-0.492	-0.002	2.516	2.52108	3.1305
Diluted Weighted Average Shares	37.044	37.044	37.044	37.044	37.044	37.044	37.044	37.044	37.04
Diluted EPS	0.065	-0.02	-0.02	-0.02	-0.02	-0.060	-0.02	0.068	0.08
Production MTUs	65,848	19,359	19,129	12,336	15,717	67,435	17,160	74,200	76,40
Cash Op. costs per MTU	\$183.00	\$146.00	\$145.00	\$198.00	\$172.00	\$177.00	\$154.00	\$152.00	\$147.00

In that circumstance we would also see the company enter the dividend lists with 2 cts per share at least. It should be noted that as management are such strong shareholders they too have a vested interest in ensuring a payout.

Financing

In mid-December 2013, the company announced that it has entered into a Memorandum of Understanding with Global Tungsten & Powders Corp. for up to US\$20mn in financing for the acquisition/build-out of, and an offtake commitment for a portion of the output of, Almonty's next tungsten project. Our first reaction was to think this might be the company's second project, Valtreixal, but then it occurred that it could have been financing for the Ormonde deal. When the company commented that it was "currently evaluating several potential tungsten mining projects that are at various stages of due diligence" this gave the distinct impression that it was projects besides its own Valtreixal property.

Definitive terms of the GTP deal will be finalized once Almonty has reached a definitive agreement to acquire its next tungsten mining project.

At the end of January 2014, Almonty announced that it has entered into two unsecured debt facilities with Banca de Empresas, a subsidiary of Banco Santander Group, for CAD\$ 3.8 million. The funds from this fiinancing are intended to be used for continued evaluation of potential strategic acquisitions and investment opportunities in the tungsten industry and for advancing the development of the Valtreixal Project. Sounds like a war-chest is being put together.

Directors & Management

Lewis Black is a Director, the President and Chief Executive Officer of Almonty. He is a Partner of Almonty Partners LLC and has extensive experience in the tungsten mining industry. From June 2005 to December 2007, he was Chairman and Chief Executive Officer of Primary Metals, and he was formerly head of sales and marketing for SC Mining Tungsten Thailand. He is a former Vice President of the International Tungsten Industry Association.

Daniel D'Amato, a director, is also a Partner of Almonty Partners LLC and has over 20 years of experience in the finance industry specializing in portfolio management and private equity. He began his career on Wall Street with Bear Stearns where over nearly a decade he became Managing Director. In 2005, with business partner Lewis Black, he co-founded Almonty. From June 2005 to June 2007, he served on the board of directors of Primary Metals Inc., of which Almonty was the majority owner.

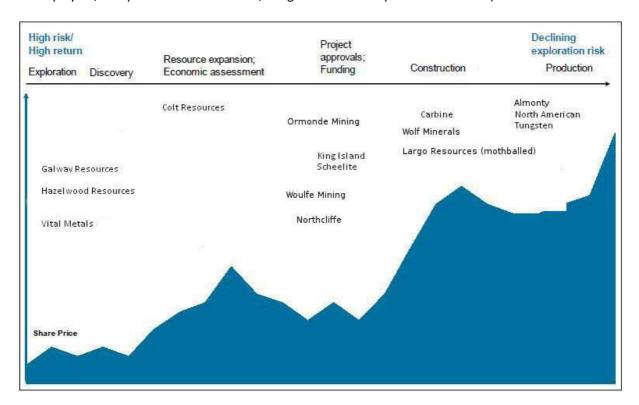
Bruce Ratner, a director, is Chairman and Chief Executive Officer of Forest City Ratner Companies, a New York-based real estate development company he started in 1985. He is one of the most important figures in the US real estate development industry. He is also currently a director of Forest City Enterprises, Inc., a NYSE-listed national real estate company, a position he has held since 2007. Prior to starting Forest City Ratner Companies, he served as New York City's Commissioner of Consumer Affairs during the administration of Mayor Ed Koch. He also served for four years as a faculty member at the New York University Law School. Mr. Ratner holds a B.A. from Harvard University and a J.D. from Columbia University School of Law.

Mark Trachuk, a director, is a lawyer and is a Partner at Osler, Hoskin & Harcourt LLP in Toronto. He practices in the area of corporate and securities law with an emphasis on mergers, acquisitions and strategic alliances. He heads Osler's International Practice Group. He holds a B.A. from Carleton University, an LL.B. from the University of Ottawa and an LL.M. from the London School of Economics. He also holds the ICD.D designation from the Institute of Corporate Directors.

Dennis Logan, a director, as well as being the company's Chief Financing Officer and Corporate Secretary. Prior to joining Almonty, he was a Managing Director, Investment Banking at Desjardins Securities from June 2007 until September 2011. From May 2005 to June 2007, he was Director, Investment Banking at Westwind Partners Inc. and was formerly a Partner at Loewen, Ondaatje, McCutcheon. He is a Chartered Accountant and a member of the Institute of Chartered Accountants of Ontario.

The Tungsten Lifecycle Chart

Our all-purpose Lifecycle chart serves particularly well, in the case of Tungsten, to show the state of progress of the various players vis-à-vis each other on the exploration-production continuum (not that some players, irrespective of which metal, imagine themselves production-bound).



This chart looks similar and yet different from the last time we published it. Carbine is currently only a tailings reprocessing facility with minimal volume (180 tpa WO₃) but intends to shift to mining mode within two years. Malaga is gone to the wall with bankruptcy and it was part of the exclusive producer group. Largo entered production then went into reverse. Woulfe Mining was on the verge of construction and has now slipped back under new less-committed management. Ormonde has moved forward and Northcliffe has appeared as a contender. Geodex and Playfair have disappeared from the wannabes. Colt and King Island are standing still. The dark horse was Wolf Minerals with its Hemmerdon project in England that raced past the other Woulfe and is now starting to build. Hazelwood is a strange hybrid. It is well-advanced with building a Ferrotungsten refinery in Vietnam but not progressed very much at all with its mines, hence the positioning well to the left of the lifecycle chart.

Risks

The risks for the Tungsten space in general. These are:

- A return to a weakening Tungsten price
- Failure of the Tungsten story to reignite when mining market returns to general interest
- Weakened global industrial demand (particularly in tools) that would soften prices and volumes
- China skewing the market in some way to again create distortions in prices and trade patterns

Most of these risks are different sides of the same price prism, with the exception of the market's perception/ disinterest in Tungsten.

Financing remains difficult and dilutive when it takes place. The only way to harvest the attractive prices is to be in production and the only way to do that is to finance mine-builds/reactivations.

Specific risks at Almonty might be:

- Overpaying for an acquisition
- Problems with bringing its second mine on-stream

Conclusion

In a market awash with wannabes and never-gunnabes, Almonty's management team has not only managed to get one Tungsten producer off the ground but now they are on their second go-around. This time they do not look like they are building to sell it but rather putting together a long-term producer. While they have a second property in relative close proximity they decided to make a run at the more advanced Ormonde, taking advantage of the depressed valuations in the market and the potential synergies between the two companies' projects. It would seem that the dropping of the bid was a tactical retreat for the short term and we would not be surprised to see them lock horns again.

Tungsten is one of those metals where the fluctuating price makes it hard to plan a company's trajectory for more than a couple of years. While there may be a supercycle in the broader metals space some individual metals have not been able to maintain price spikes for more than a transitory period. A chart for the Tungsten price, since 2008, looks remarkably robust and is closer to its highs than to its lows. It is a metal though that has failed to capture the market's interest due to generalized ignorance of Tungsten and its supply/demand dynamics.

Tungsten, in theory, should be a bellwether of industrial activity, more than virtually any other metal, as it is directly levered into machine-tool manufacturing as the swing factor in its demand (the relatively non-variable part being lighting uses). However, the "spoiler" here is China which distorts the Tungsten market much as it has distorted so many others, three years ago we had a situation where Western Tungsten demand was weakish but Chinese demand was strong (and the Chinese slashed exports) and so up went the price. Now we have a situation where Western demand recovers and Chinese demand slows (and/or exports rise) and the price weakened. The lesson here being that ostensible demand does not matter in some metals, instead all that matters is China's attitude.

Overall there now exists a window of opportunity for tungsten producers, like Almonty, as end users scramble to secure alternative, more reliable sources of supply. Any broader economic recovery (than the current anaemic version) should lead to increased competition for tungsten concentrates in the global market between Chinese and non-Chinese processors and consequently result in an increasing price structure for tungsten and its products in the future. A jump in prices of APT to over \$500 would not be unthinkable.

Back at Almonty, earnings are back on the rise after last year's fire and plans are afoot for heading

underground to extend the life of mine. We regard Almonty as a promising **Long** position with a twelvemonth price target of \$1.32.



Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Hallgarten's Equity Research rating system consists of LONG, SHORT and NEUTRAL recommendations. LONG suggests capital appreciation to our target price during the next twelve months, while SHORT suggests capital depreciation to our target price during the next twelve months. NEUTRAL denotes a stock that is not likely to provide outstanding performance in either direction during the next twelve months, or it is a stock that we do not wish to place a rating on at the present time. Information contained herein is based on sources that we believe to be reliable, but we do not guarantee their accuracy. Prices and opinions concerning the composition of market sectors included in this report reflect the judgments of this date and are subject to change without notice. This report is for information purposes only and is not intended as an offer to sell or as a solicitation to buy securities.

Hallgarten & Company or persons associated do not own securities of the securities described herein and may not make purchases or sales within one month, before or after, the publication of this report. Hallgarten policy does not permit any analyst to own shares in any company that he/she covers. Additional information is available upon request.

© 2014 Hallgarten & Company, LLC. All rights reserved.

Reprints of Hallgarten reports are prohibited without permission.

Web access at:

Research: www.hallgartenco.com

60 Madison Ave, 6th Floor, New York, NY, 10010