Vital Metals (VML)

Revitalised exploration and emerging development company, focused on the advanced Watershed tungsten project in far north Queensland; and the Doulnia gold project in Burkina Faso, West Africa.

Recommendation: Speculative BUY

1st December 2011

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Company Information

ASX Code	VML
Share Price A$	0.058
Ord Shares	228.4m
Options	5.5m
Market Cap A$	13.2m
Cash A$	2.7m
Total Debt	-
Enterprise Value A$	10.5m

Board of Directors

Non-Executive Chairman	David Macoboy
Chief Executive Officer	Mark Strizek
Non-executive Director	Peter Cordin
Non-executive Director	Andrew Simpson
Non-executive Director	Doug Stewart

Substantial Shareholders

Citicorp Nominees Pty Ltd	9.4%
Mr Rex Harbour	7.7%
JP Morgan Nominees Aust	5.6%

Company Details

Address	Suite 44c Cottesloe Central 460 Stirling Highway, Peppermint Grove WA 6011
Phone	+618 9436 9644
Web	www.vitalmetals.com.au

12-Month Price Chart

Source: Bloomberg

Key Points

- ***The company's Watershed tungsten project ranks amongst the top ten undeveloped tungsten projects in the world today, having originally been discovered during the 1980s.***
- ***Watershed is at an advanced stage in the development cycle, with a Pre-Feasibility Study completed during late 2008 and a Definitive Feasibility Study now underway and funded by Japan's JOGMEC.***
- ***The development prospects for Watershed have never looked better, with the biggest game-changer being the vastly improved outlook for tungsten, which is now essentially a strategic metal.***
- ***Based on a 610,000tpa plant in Stage One producing 3,000t WO_3 concentrate annually over an initial mine life of six years, project NPV is A$65.5m, IRR is 42%, with capital pay-back within 2.3 years.***
- ***The company has diversified its commodity and geographic focus by expanding into gold and base metal exploration in West Africa. The company has just commenced a new drill program in Burkina Faso.***

Vital Metals is a predominantly tungsten-focused exploration company, with 100% ownership of one of the world's most advanced, undeveloped tungsten projects – Watershed in northern Queensland. The project is now being fully funded through a Definitive Feasibility Study by Japan's JOGMEC group.

The company has recently diversified its exploration focus by farming-into an exploration project in southern Burkina Faso, West Africa, where gold is the major target. A major drilling program has just resumed, whilst the company has also applied for additional acreage prospective for zinc mineralisation.

Company Overview

Vitals Metals was listed on the ASX in October 2005 to explore and appraise its flagship Watershed tungsten project in northern Queensland. The project has a history dating back to the early 1980s when it was discovered by Utah Corporation of the US. A significant JORC-compliant resource has been defined and a Pre-Feasibility Study was completed during late 2008.

Vital received formal notice of participation in the Watershed tungsten project from Japan Oil, Gas and Metals National Corporation (JOGMEC) on 22nd August 2011. Under the terms of the Agreement, JOGMEC can earn a 30% stake in the Watershed project by spending $5.4m to fund completion of a Definitive Feasibility Study (DFS), which is currently underway.

Investment Review

Vital has interests in tungsten in Queensland and gold in West Africa

Vital Metals is an Australian advanced tungsten exploration company listed on the Australian Securities Exchange (ASX: VML). The company is simultaneously advancing two majority-owned projects - the 100%-owned Watershed tungsten project in Queensland and the 60%-owned Doulnia gold project in Burkina Faso.

Watershed is an advanced tungsten deposit

The Watershed project is amongst the top ten undeveloped tungsten resources outside of China and is well positioned as a potential new ore supply as demand for the metal continues to grow. The Watershed deposit was originally located and explored by Utah Development Company Limited during the early 1980s with some additional work conducted by Peko-Wallsend during the mid-1980s. Vital acquired the project in 2005 and has been working on the deposit since that time.

Vital has recently boosted its ground position at Watershed

Vital has been active in increasing its tenure position and now has access to an exploration portfolio that covers an area of more than 600 sq km. The increase in land holding has been achieved via the grant of a new application (EPM 18171) and purchase of tenements (transfer pending) from Republic Gold Limited (EPM 14735 and EPM 10026) and Seco Resource Finance Pty Ltd (EPM 15544). A total of seven Mining Lease Applications encompass more than 1,900Ha.

Watershed hosts a well-defined JORC-compliant resource

The Watershed project hosts an undiluted, JORC-Compliant Indicated Resource of 15.1Mt grading 0.46% WO_3 for 69.kt contained metal at a cut-off of 0.1%. The Resource comprises 997 mineralised intercepts, including 304 intercepts exceeding 5m @ 0.5% WO_3 (of which 160 exceed 5m @ 1.0% WO_3). The average length of the mineralised intercepts is 5.4m.

Resource upside is considerable

Vital's geological team believes that there is significant scope to extend the limit of the known scheelite mineralisation at depth; having observed a trend for the mineralisation to increase with depth as shown in hole MWD119 which intersected 20m @ 1.27% WO_3 from 302m (reported to ASX 17 February 2007).

A major recent development was the farm-in of JOGMEC

Vital recently received a formal notice of participation in the Watershed project from Japan Oil, Gas and Metals National Corporation (JOGMEC) on 22nd August 2011. Under the terms of the Agreement, JOGMEC can earn a 30% stake in Watershed by spending $5.4 million to fund completion of a Definitive Feasibility Study (DFS) for the Project. JOGMEC will make the $5.4 million payment in a series of installments over the Earn-In period and the initial payment of $800,000 was received on the 22nd September 2011.

In-house modelling has defined a project with robust margins and rapid pay-back

Based on revised numbers from the 2008 Pre-feasibility Study, total capital costs are estimated at A$69m (incl. $12m working capital), based on a 610,000tpa plant in Stage One producing 3,000t WO_3 concentrate annually over an initial mine life of six years. Assuming a discount rate of 12.5%, project NPV is estimated at A$65.5m, with a strong IRR (Internal Rate of Return) of 42%, solid operating cash flow of A$33.8m annually and a capital pay-back period of just 2.3 years.

The company's acreage footprint is continually growing

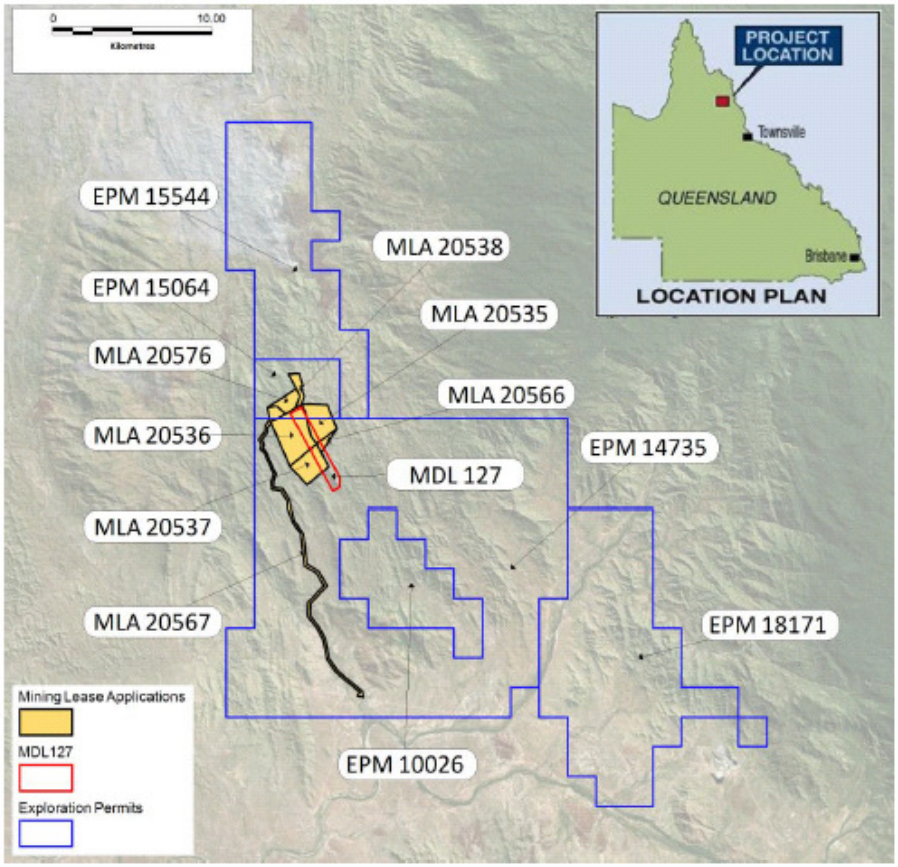
Vital has expanded its exploration focus to include gold and base metal interests in Burkina Faso, West Africa. The company's gold projects are located in favourable geotectonic settings at, or in close proximity to, the intersection of the Markoye Fault Corridor (host of Essakane, Tarpako, Bombore, Kiaka and Youga gold deposits of >16 Moz combined resource/reserve) and the 1,200km long Bole Shear Zone (host to Castle Minerals' and Azumah Resources' exciting gold projects).

Project Review

Watershed Scheelite Deposit, Queensland

The company's 100%-owned Watershed Scheelite Deposit ranks in the top ten unexploited tungsten deposits worldwide. The current JORC-compliant resource comprises 15.1 Mt grading 0.46% for 69,300 tonnes (6.93 million metric tonne units – mtus) of contained WO3, occurring in both scheelite-bearing quartz-feldspar veins and disseminated scheelite in altered metamorphosed host-rock.

Watershed Project Location



Source: Vital Metals

~600 sq km acreage position

The Watershed tungsten deposit was originally located and explored by Utah Development Company Limited during the early 1980's, with limited further work conducted by Peko-Wallsend Operations Limited during the mid-1980's. Vital acquired the project in 2005 and has been investigating the deposit since that time.

Project history dating back to the early 1980s

Watershed is located in hilly open woodlands at the headwaters of the Palmer and Mitchell Rivers, about 160km NW of Cairns, in far north Queensland. The deposit lies around 35km northwest of the historic Mount Carbine tungsten deposit, which produced 10,000t WO_3 over 16 years between 1970 and 1986.

The Watershed deposit has been defined by more than 44,000m of diamond drilling and 3,800m of RC drilling. Mineralization has been encountered over a strike length of approximately 1,500m and down-dip to 450m. The deposit is open at depth and along strike. In addition to the Watershed deposit there are also exploration prospects at the Watershed South, Desailly and Desailly North prospects.

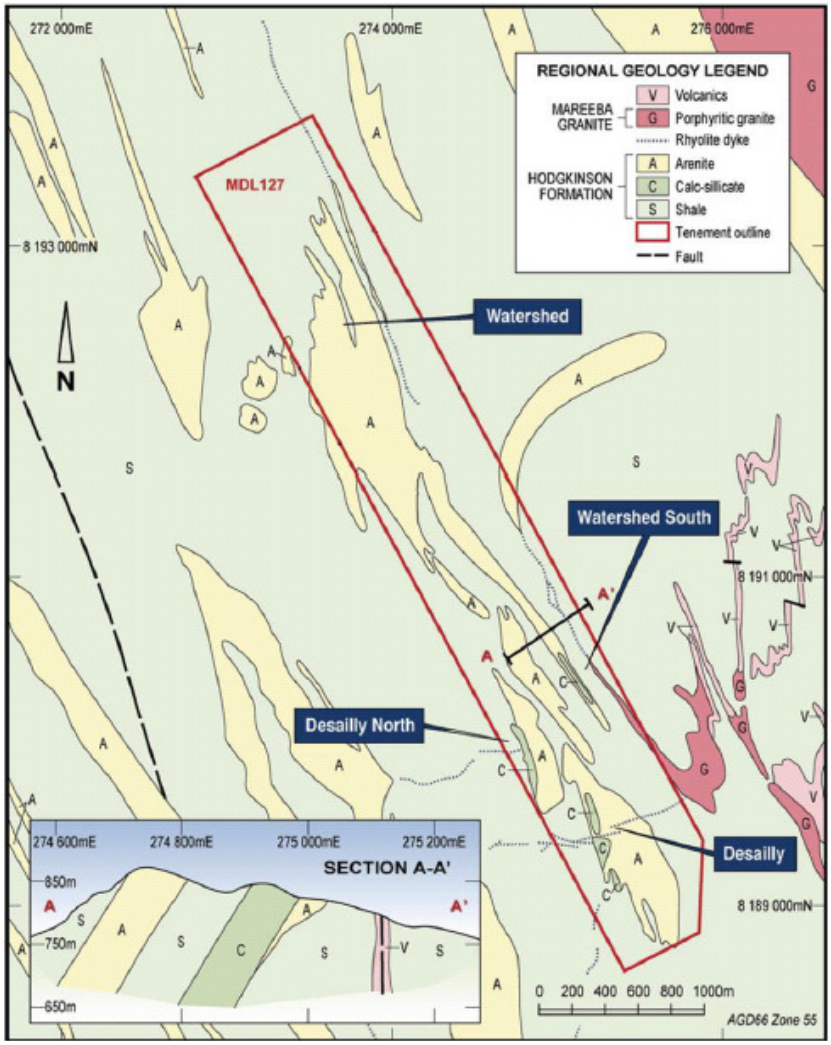
Project Geology

The Watershed project area is dominated by arenaceous and argillaceous metamorphosed sediments of the Hodgkinson Formation. These rocks form a prominent ridge that hosts the known tungsten mineralisation. Minor chert and quartz-feldspar porphyry have been mapped within the project area, the latter as a persistent dyke to the east of the Watershed deposit.

The dominant structural fabric is an upright, north-northwest trending cleavage. This cleavage corresponds broadly with the fabric developed during the fourth regional deformation. The nearest exposure of granitoid lithologies to the Watershed property is a northwest-trending porphyritic granitoid exposed ~2km to the east of the project area.

Regional Geology

Various exploration target areas



Source: Vital Metals

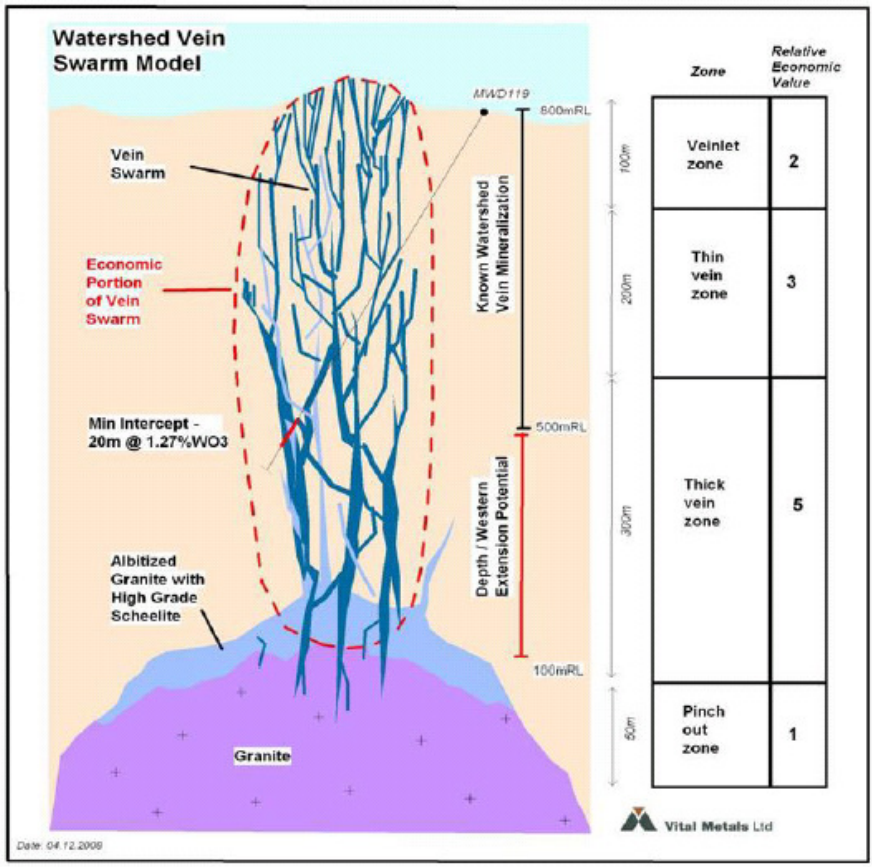
Tungsten mineralisation occurs exclusively as scheelite over a strike length of approximately 3,000 metres sub-parallel to the regional north-northwest trend. The scheelite is hosted by calc-silicate and albite-muscovite altered rock units and by quartz-feldspar veins invading both the altered units and the enclosing unaltered host rocks. Disseminations of scheelite may also be present in the vein selvedges and nearby fracture planes.

Mineralisation

The mineralisation is observed to occur predominantly in quartz-scheelite vein swarms. These are usually oriented east-west with some locally developed north-northwest trending veins (parallel to the dominant foliation) although observation from closely spaced drilling indicates that some shallow dipping mineralised structures may also be present. Vein widths observed in drill core range from 0.5cm to 100cm. Minor pyrrhotite, pyrite and arsenopyrite may sometimes be present.

The veins display the highest tungsten grade, where biotite is present in addition to calc-silicate alteration. The mineralisation vein swarms are best developed in the arenaceous units and are relatively attenuated in the argillaceous units. Quartz-scheelite veins are most abundant in the arenite in the hinge zone of the anticline which forms the Watershed Ridge.

Watershed Vein Swarm Model



Source: Vital Metals

There is considerable potential for resource extensions at depth

Vital's geological team believes that there is significant scope to extend limit of the known scheelite mineralisation at depth; having observed a trend for the mineralisation to increase with depth as shown in hole MWD119 which intersected 20m @ 1.27% WO_3 from 302m (Reported to ASX 17 February 2007).

Using the Vein Swarm model which shows a good correlation with drilling, it appears that there is potential for the mineralisation to exhibit significantly higher grade and thickness at depth. Further drilling will be required to confirm grades and continuity however there appears to be reasonable potential for an underground mining operation in the future.

Project Resource

The Watershed Project contains an Indicated Resource at 0.10% WO_3 cut-off of 15.1 million tonnes at 0.46% WO_3 for 69,300 tonnes (6.93 million metric tonne units – mtus) of contained WO_3. WO_3 occurs in both scheelite-bearing quartz-feldspar veins and as disseminated scheelite in the altered metamorphosed host rock. The mineralisation at Watershed is open at depth and along strike in both directions.

Watershed Project – Total Resource

Category	Cut-off (%WO_3)	Ore (Mt)	Grade (%WO_3)	Metal (kt)
Indicated	0.1	15.1	0.46	69.3

Source: Vital Metals

Pre-Feasibility Studies Complete

Rising tungsten price have greatly enhanced Watershed's commerciality

Watershed is at an advanced stage in the development cycle, with a Pre Feasibility Study (PFS) completed in late 2008. This comprehensive study looked at all aspects of the development of possible mining and processing scenarios for Watershed.

Vital is greatly encouraged by prices being obtained for tungsten, which are at a level where the development of Watershed as contemplated in the PFS will be economically viable. Vital has reviewed the results of the PFS and is developing a strategy to provide for the commercialisation of the Watershed resource.

Definitive Feasibility Study Underway

Vital received a formal notice of participation in the Watershed Tungsten Project from Japan Oil, Gas and Metals National Corporation (JOGMEC) on 22nd August 2011. Under the terms of the Agreement, JOGMEC can earn a 30% stake in the Watershed Project by spending $5.4m to fund completion of a Definitive Feasibility Study (DFS). The DFS will review and update the PFS numbers outlined below.

The JOGMEC farm-in is a major vote of confidence in Watershed's future

JOGMEC will make the $5.4m payment in a series of installments over the Earn-In period and the initial payment of $800,000 was received on the 22nd September 2011. The Earn-in by JOGMEC is a major turning point for the Watershed project in our view. In addition to the benefit of a project funding partner, JOGMEC brings considerable technical and development expertise to the DFS process, and is also of strategic value in terms of future off-take.

Project Manager appointed

Vital has appointed, Mr Paul Rundel as Project Manager to manage the Watershed DFS. Paul is a qualified metallurgist and has previously worked on the Watershed Project and most recently has come to Vital after having managed a number of successful upgrades at Territory Iron's France Creek operations.

The first phase of the metallurgical test-work program has commenced and will provide additional samples for further work. Preparations are being made for a limited diamond drilling program that will test the inferred material and is also designed to close-off mineralisation along strike.

Production Enhanced Via Simple and Innovative Use of X-ray Ore Sorting

Extensive financial and flow-sheet modelling of the Watershed project has been undertaken. In essence, these involve an initial conceptual plant design processing ~450,000 tonnes annually of scheelite ore, with flexibility for mine and plant expansion over time. Crucially, the plant design is simple and utilises low-cost technology such as crushing, spirals, tables and a small flotation circuit to recover the ore.

The process flow-sheet follows conventional primary and secondary crushing, followed by multiple screening that provides the right-sized product for the X-ray ore-sorting circuit. Downstream processing of the ore-sort accept product follows conventional tertiary crushing and screening, with rod mill product feeding a bank of spirals producing rougher and scavenger concentrates. Spiral tails are screened, with coarse product reporting direct to tailings, while ore fines are subjected to fatty acid flotation in a scavenger role.

Ore sorting plays an important role in respect of both upgrading the feed to downstream secondary processing, as well as eliminating more than 55% of the ROM feed as a reject waste product. The effect of this is that the grade of material progressing to further downstream processing is more than doubled, whilst also greatly reducing secondary crushing requirements and subsequent elimination of excessive scheelite fines, which could become problematic for gravity and flotation recovery. Overall scheelite recoveries are in excess of 93%.

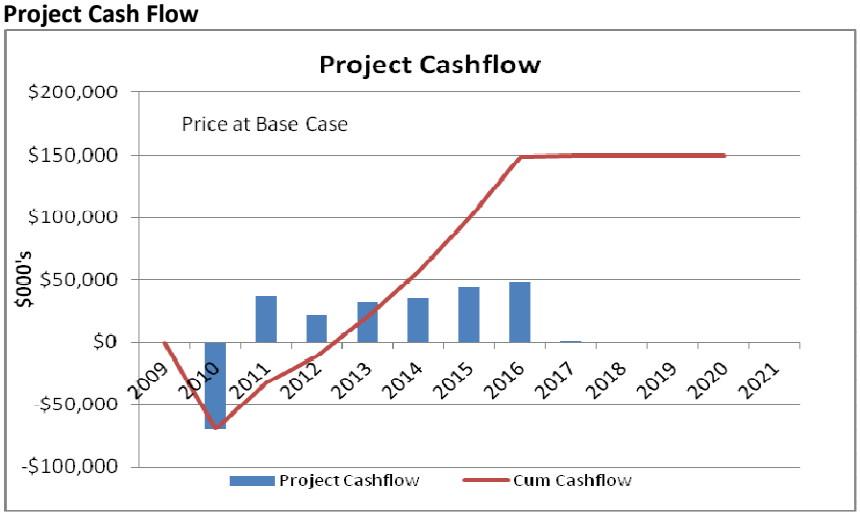
Scheelite concentrates from both the gravity and flotation process circuits are further upgraded by means of multiple tables, thereby producing an on-specification +65% WO_3 concentrate product. In all, whilst X-ray sorting in the mining industry isn't anything new, this particular application of the technology on such a large scale for ore-sorting of scheelite is something bold and adventurous, which should dramatically enhance the economics of the Watershed project by reducing the size of the required plant and therefore capital and operating costs.

PFS Modelling Identifies Robust Project Economics

Based on revised 2008 Pre-feasibility Study numbers, total capital costs are estimated at A$69m (incl. $12m working capital), based on a 610,000tpa plant in Stage One producing 3,000t WO_3 concentrate annually over an initial mine life of six years.

Assuming a discount rate of 12.5%, project NPV is estimated at A$65.5m, with a strong IRR (Internal Rate of Return) of 42%, solid operating cash flow of A$33.8m annually and a capital pay-back period of just 2.3 years.

Project Cash Flow



Source: Vital Metals

Total cost per tonne processed is estimated at A$67.07, while gross revenue per tonne processed will be approximately A$122.85. The calculations are based on assumptions of an A$ exchange rate of US$0.99, a tungsten price of US$379/mtu, an assumed head grade of 0.35% WO_3 and 75% metallurgical recovery. **These figures generate a robust operating margin of A$55.78/t for the project.**

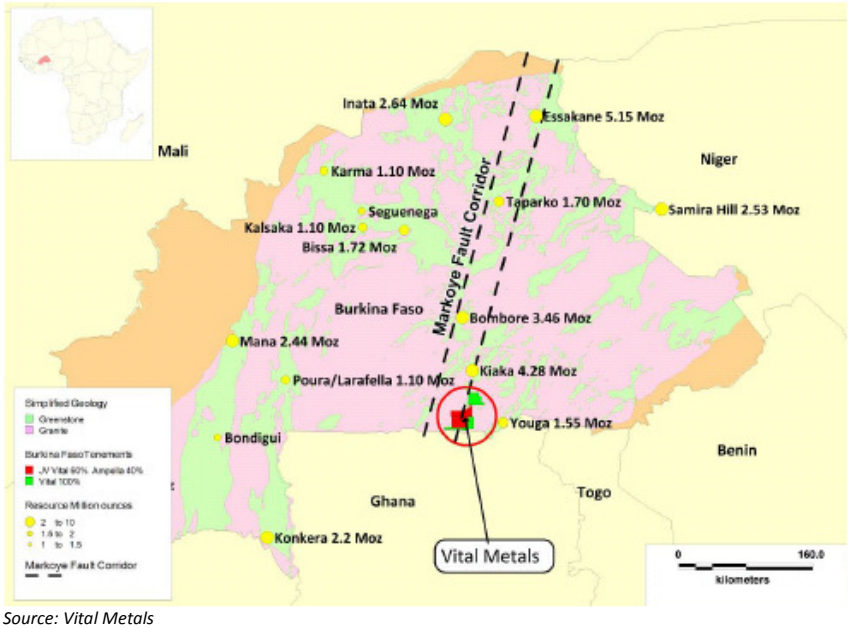
Doulnia Gold Project, Burkina Faso

In November 2009, Vital entered into a farm in agreement with Ampella Mining to earn up to 80% of the Doulnia Gold Project in southern Burkina Faso, West Africa.

Vital's Burkina Faso projects are favourably located

Vital's gold projects are located in favourable geotectonic settings at, or near to, the intersection of the Markoye Fault Corridor (host of Essakane, Tarpako, Bombore, Kiaka and Youga gold deposits of >16 Moz combined resource/reserve) and the 1,200km long Bole Shear Zone (host to Castle's and Azumah's exciting gold projects).

Project Location



Source: Vital Metals

Vital has so far completed a comprehensive review of previous exploration and the regional to local geophysical, structural, geological and geochemical attributes of the project.

High-grade gold mineralisation from recent drilling

A first phase drilling program confirmed the highly prospective nature of the project in general and the Kollo prospect in particular. Vital's Phase 2 drilling program comprised 128 holes for over 11,000 meters, yielding a project best intercept of **4m at 58.03 g/t gold from 24m depth.**

Vital has so far earned a 60% project stake

Vital secured 60% ownership of the Doulnia and Kampala tenements (Ampella 40%) during the year. In August 2011 year Vital earned a 60% interest in the project, having expended $1.5m. Following the success of the initial exploration programs, the board has committed to sole-fund a further $2m to earn a 70% interest in the Project. Vital retains the right to sole-fund a Pre-Feasibility Study to earn 80%.

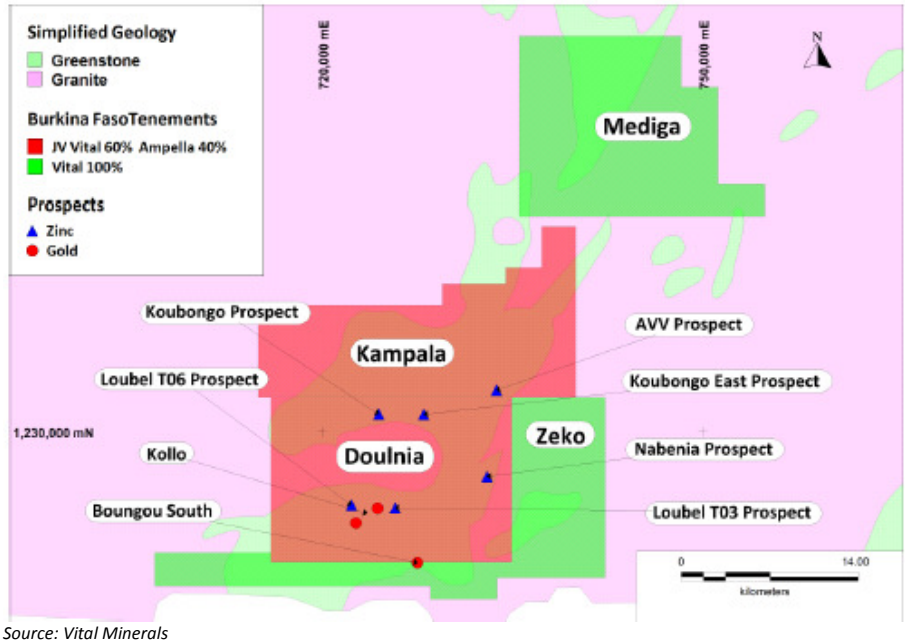
Strategic tenement package of ~850 sq km

With the recent grant of the Mediga tenement (Vital 100%), Vital now has a strategic tenement package of ~850 sq km of contiguous tenements (including JV lease areas) which increases the potential for further gold discoveries. Recognising the prospectivity of the landholding, Vital has also applied for two additional tenements in the region which is also prospective for base metals with VHMS zinc-rich mineralisation.

Tenement Outline and simplified Geology

6,000 metre RC drilling program underway

Strengthened management and technical team



Source: Vital Minerals

Exploration activity during the recent September quarter was focused on the Doulnia tenements, with the final gold assay results from 12,000m of RC drilling being received for the Kollo gold prospect. The drilling program tested a number of prospective targets on the Doulnia tenement, and was aimed at further defining the width, gold tenor and continuity of mineralisation at the Kollo gold prospect.

Among the standout intersections from the drilling at Kollo was the result from KRC 210, which comprised 44m at 6.39 g/t gold from 8m depth (which included 4m at 58.03 g/t gold from 24m depth).

The program targeted geochemical anomalies and included infill and step out drilling around known areas of mineralisation. Assay results confirmed multiple sub-parallel zones of gold mineralisation over a strike extent of at least 3km within the Kollo prospect area. Gold mineralisation was identified in multiple zones, enveloped by broader zones of strong sulphide and sericite alteration. The zones are parallel to regional foliation, major structures and the trend of new artisanal workings.

6,000 metre RC drilling program underway

Vital has most recently been reviewing targets for the next phase of drilling, which will commence before the end of November. The 6,000m RC drilling program has two aims: to extend the known limits of gold mineralisation at the Kollo prospect with the goal of defining a resource; and secondly to test a 1.2km gold-in-soil anomaly at the Boungou South prospect, located to the south east of Kollo. The gold-in-soil anomaly is open along strike and has a maximum width of around 200m with a maximum gold in soil value reporting at 1478ppb Au.

Strengthened management and technical team

Vital has also strengthened its technical team, with Mr Jamie Williamson appointed as Country Manager in Burkina Faso. Jamie spent nearly 3 years with Anglo Ashanti, working on gold projects throughout Africa. His skills will be invaluable as Vital seeks to define an initial gold resource at Kollo. In addition, Vital also appointed West African exploration and geophysics specialist consultants, SEMS Exploration to provide additional geological resources to assist the company in the next phase of exploration.

The Fundamentals of Tungsten

Tungsten (wolfram, W) has an atomic number of 74 and sits within group 6 of the periodic table. The metal has a very high density of 19.3g/cm^3 (same as gold); the lowest coefficient of expansion of any pure metal and at 3410°C has the highest melting point of any of the metallic elements. Tungsten has a boiling point of 5555°C which is a temperature comparable to the surface of the sun.

Western Australia's Pilbara region still dominates the domestic iron ore industry

Tungsten occurs in nature only in the form of minerals. Although more than thirty tungsten bearing minerals are known, only two of them are important for economic use, namely wolframite and scheelite.

Long before the element 'tungsten' (from the Swedish tungsten, meaning heavy stone) was discovered (1783), the mineral wolframite was known in the tin mines. The name Wolfram is derived from the Latin words for 'wolf's foam' and insinuates "the wolf that devoured tin". During the early day processing of tin ore, the 'foam' formed on the molten tin which reduced tin recovery.

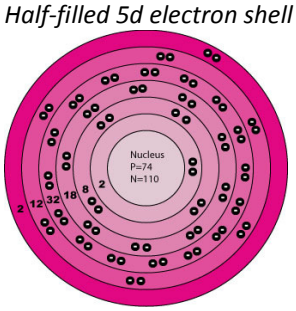
Tungsten mineralisation characteristics

Name	Chemical Formula	%WO_3	Colour	% Occurrence
Wolframite	(Fe, Mn) WO_4	76.50%	Black	25%
Scheelite	$CaWO_4$	80.50%	White	75%

Source: ITIA

Atomic structure of tungsten

Half-filled 5d electron shell



The average concentration for tungsten in the earth's crust is 1.5g/t and all primary deposits are of magmatic or hydrothermal origin. During cooling of the magma, differential crystallisation occurs. Scheelite and wolframite are often found in veins where the magma has penetrated cracks in the earth's crust. Deposits typically occur throughout the younger mountain ranges with China possessing over 60% of the world's known reserves. Of the known ore deposits, 75% are scheelite and 25% are wolframite.

Pure scheelite has a blue-white fluoresce in ultraviolet light, a property which is utilised in prospecting. Wolframite is a general term for iron and manganese tungstates where the iron/manganese ratio can vary. A mineral with more than 80% $FeWO_4$ is called Ferberite and a mineral with more than 80% $MnWO_4$ is called Hübnerite.

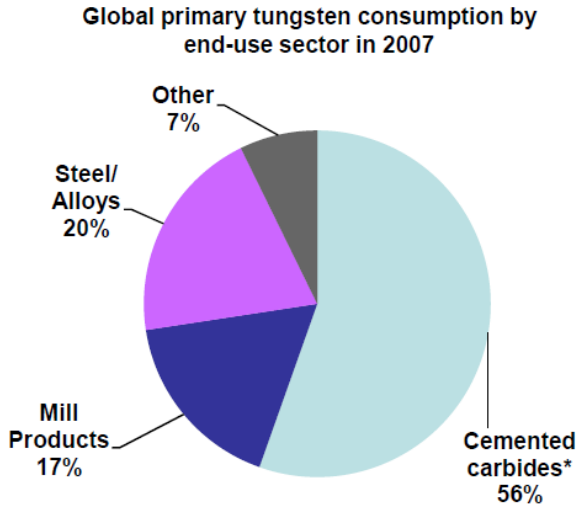
At temperatures above 1,650°C, tungsten has the highest tensile strength of all metallic elements in pure form. Alloying small quantities of tungsten in steel greatly increases its toughness. Tungsten drill bits have the highest wear resistance and are most substitutable. Most of tungsten's unique properties are due to the half filled 5d electron shell with a very high binding energy of the tungsten metal lattice. Based on these properties, many compounds cannot be substituted in many important applications in different fields in modern technology.

Ferrotungsten is a tungsten-iron alloy containing at least 75% W. The raw materials used for ferrotungsten production are rich ores or concentrates containing the minerals wolframite, hubnerite, ferberite and scheelite.

Uses of Tungsten

Primary use of tungsten is in hard metals

About 56% of tungsten consumption is in the form of Tungsten Carbides for use in cutting and drilling tools. These carbides are made by 'cementing' hard tungsten grains in a binder matrix of tough cobalt metal by liquid phase sintering. This product is considered to be one of the hardest and most durable of all metals. The military use of tungsten carbide is for armour-piercing rounds, while light bulb manufacturers use the tungsten metal for filaments within incandescent light bulbs due to its resistance to heat.



Source: CRU Analysis
**otherwise known as 'Hard Metals'*

The airline industry also has a high reliance on tungsten. The superalloy turbine blades within the jet engines have high concentrations of tungsten as they need characteristics of high-temperature strength, high creep strength at high temperatures, high thermal fatigue resistance, good oxidation resistance, excellent heat corrosion resistance, good welding properties and ease of casting.

Tungsten and tungsten compounds are also extensively used as catalysts and in a number of other chemical reactions. A catalyst works by accelerating reactions that would normally be too slow or would not even take place. After the reaction, the catalyst remains essentially unchanged.

Tungsten classed as a 'strategic metal'

Tungsten has been classed as a 'strategic' metal due to the properties of the metal in terms of heat resilience and hardness. There are hundreds of different uses for the metal. Today, virtually all high speed cutting and drilling tools are made of steel alloys containing tungsten. The basic type has 18% tungsten, 4% chromium, 1% vanadium and 0.5 to 0.8% carbon.

Potential substitutes for cemented tungsten carbides include cemented carbides based on molybdenum carbide and titanium carbide, ceramics, ceramic-metallic composites (cements), diamond tools, and tool steels.

Supply and Demand for Tungsten

Tungsten's abundance in the earth's crust ranks 57th and is similar to that of Molybdenum. Economic concentrations of tungsten ore tend to be rare with most economic deposits small. Typical mines tend to have only several million tonnes at <1% WO_3 usually containing <500,000t of contained tungsten.

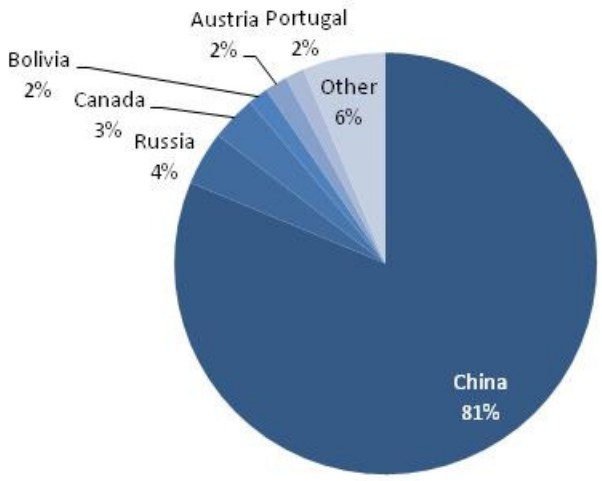
China is the dominant player in the market

The relatively high price of ammonium paratungstate (currently at US$450/metric tonne unit (1mtu =10kg)) is allowing previously deemed 'sub-economic' deposits to now become economic. China is by far the largest player with >80% of global production.

Country/ Continent	Production (t,W)
China (estimate)	43,500
Russia (estimate)	3,100
Canada	2,300
Africa	2,000
Bolivia	1,200
Austria	1,100
Portugal	1,000
Thailand	580
Peru	400
Brazil	300
Mongolia	150
Total	**55,630**

Source: ITIA

2009 expected world mine production



Source: USGS and Breakaway

Future supply concerns

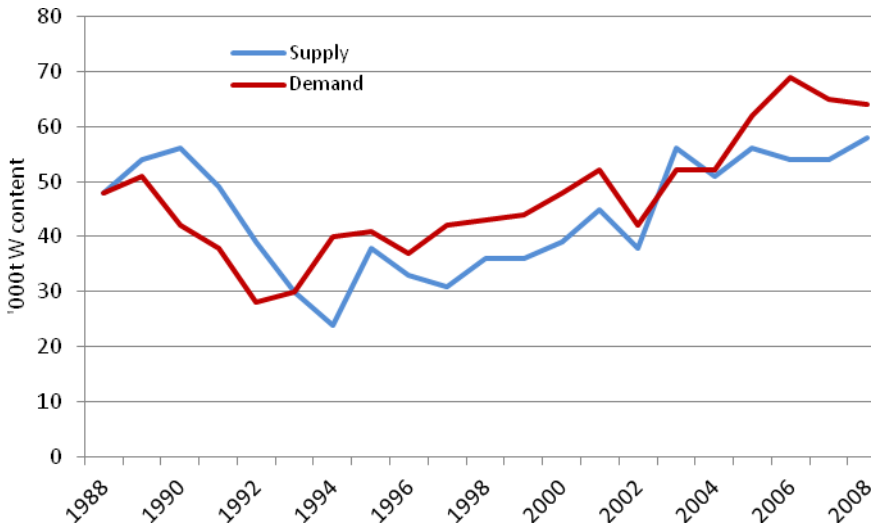
Global tungsten production in 2008 was 55.6kt. The USGS expect this to increase to 58kt in 2009. China is expected to account for 81% of total production with Russia the closest competitor at just 4% of total world production. The chart highlights the concern for the western world future supply as current production is limited to just a few significant projects.

Scrap tungsten

The recycling of tungsten is an important source of metal in total world supply. The industry is able to treat almost every kind of tungsten containing scrap. Due to the high concentrations of tungsten in scrap comparative to ore, the ITIA suggests that 35-40% of total tungsten production is recycled worldwide.

Supply and demand curves for tungsten: 1988 to 2008.

Demand likely to outpace supply

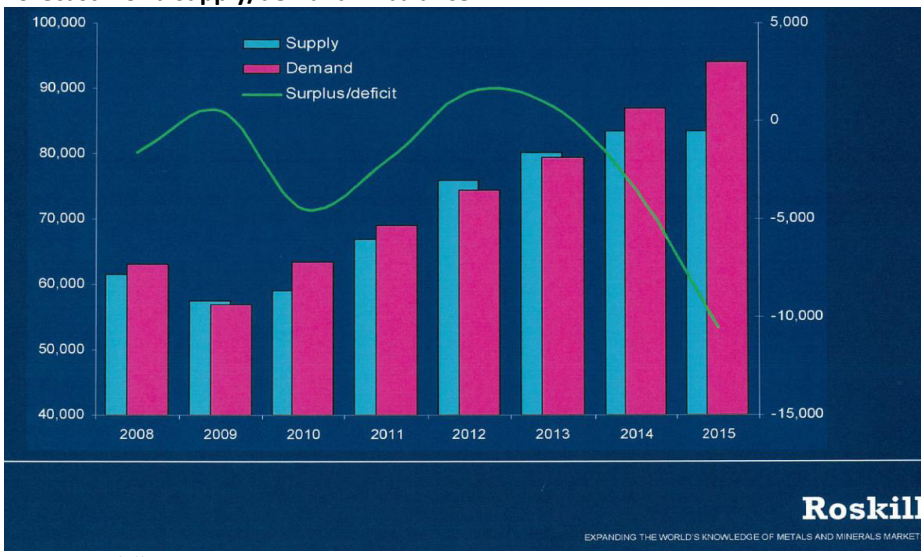


Source: ITIA

The chart shows demand outstripping supply with the difference primarily being supplemented by material released from government stock piles, especially in the USA and Russia.

Forecast world supply/demand imbalance

Government are depleting stockpiles resulting in supply deficit.



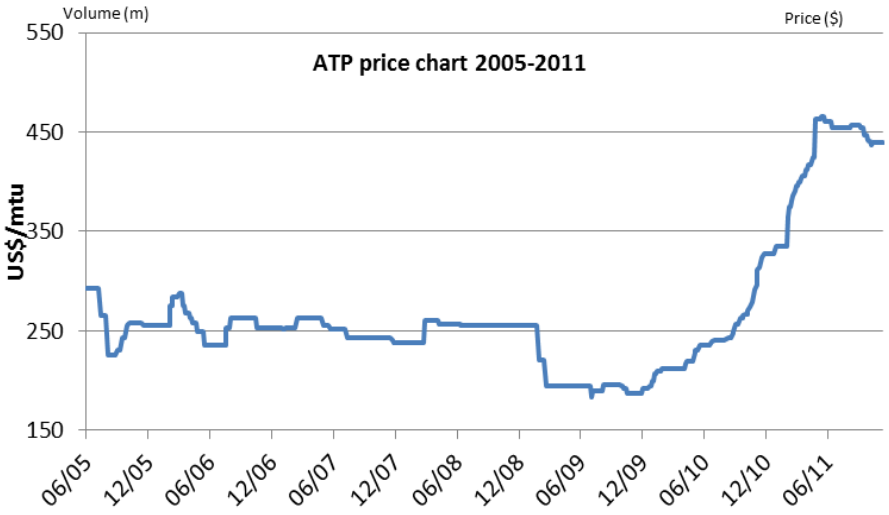
Source: Roskill

The chart above complied by Roskill forecasts the world tungsten market to be in deficit by 2013 as government stock piles are depleted.

China's dominance of the industry created through high volumes of low cost exports and otherwise poor market conditions throughout the 1980's and 1990's drove most Western producers from the market. In the early 1990's tungsten prices fell to a low of US$45/mtu for concentrates. Many Chinese mines were high grade with APT refineries also artificially supported by the government in a non-transparent market. As a result very little exploration and mine development outside of China took place over this period. Starting in 2004, growth in global demand for tungsten and changes in policy within China led to significant upward trend in the tungsten price.

Little exploration outside of China between 1980's/90's

The price of tungsten is best followed by Ammonium paratungstate (ATP) $[(NH_4)_{10}[H_2W_{12}O_{42}]\cdot 4H_2O]$ which is an intermediate tungsten product and acts as one of the industry's main reference pricing products. Current APT prices are ~US$450/mtu, (1mtu = 10kg) well above pre GFC levels and tight markets suggest much higher prices into 2015.



Source: Bloomberg

Tight market supply may cause further price appreciation

Breakaway's View

The reliability of future supplies of tungsten minerals is of concern to many nations. China's dominance in the tungsten market and obvious moves by the country to restrict exports and increase imports of tungsten concentrates sends a clear signal to Breakaway of a tightening market with the likely effect of increased ATP prices.

Breakaway maintain a robust outlook for the sector

Breakaway believe tungsten is below the radar of most investors. Tungsten is a 'strategic' and 'critical' raw material and with worldwide demand increasing and with few mines coming on line outside of China, Breakaway is confident now is the time to increase exposure to tungsten.

Board of Directors

Non-Executive Chairman

David Macoboy holds a Bachelor of Economics (Hons) and a Bachelor of Commerce from the University of WA. David is a Fellow of the Australian Institute of Company Directors and a Certified Practicing Accountant. He has extensive cross-industry experience, especially in the areas of corporate strategy, finance, treasury, risk management and international fund raising, which are particularly useful in terms of ensuring the company's new West African gold project is adequately funded, and its existing tungsten projects are appropriately promoted.

Chief Executive Officer & Managing Director

Mark Strizek is a qualified geologist with more than 15 years' experience in the mining industry. He is a Member of the Australasian Institute of Mining and Metallurgy. He holds a Postgraduate Certificate in Geostatistics from Edith Cowan University and a Bachelor of Science from Macquarie University. Mark's career initially included gold in Western Australia and NSW, then as a consulting geologist in iron ore, nickel and manganese. Most recently Mark has been with Iron Ore Holdings as General Manager – Exploration where he has progressed the exploration of the Maitland River Magnetite Resource and the development of a commercialisation strategy for the Pilbara Iron Ore assets.

Non-Executive Director

Andrew Simpson holds a Graduate Diploma in Business and Administration (majoring in Marketing and Finance) from Curtin University and is currently the Managing Director and Principal of Resource and Technology Marketing Services Pty Ltd (RTM) in Perth. Andrew's professional career began with Allied Eneabba in 1975 where he held a variety of positions, including Marketing Manager and Commercial Manager (R&D) over an 11 year period. He formed RTM in 1999 to specialize in strategic and business planning, resource project assessment and marketing. RTM is recognised as one of Australia leading market research consultants to the international mining industry.

Non-Executive Director

Peter Cordin is a civil engineer with 35 years' experience in the evaluation and operation of resource projects within Australia and overseas. Currently he is the Managing Director of Dragon Mining with gold mines in Sweden and Finland. He was Project Manager responsible for the construction of an alluvial diamond facility and two carbon-in-leach gold treatment plants in Australia and Indonesia. He has direct experience in the management of diamond and gold operations. Mr Cordin was Managing Director of Grant's Patch Mining Limited and Director-Operations of Forsayth NL. He has recently been involved in the development of resource projects in Kazakhstan and New Caledonia. He is a non-executive director of Coal in Africa.

Non-Executive Director

Doug Stewart has 40 years' technical and commercial experience in mining through a broad range of consulting, senior technical and operational roles across three continents. Currently Doug has non-executive board roles with Conquest Mining (developing a polymetallic project and mining gold in Queensland), with Alara Resources Ltd (developing a late-stage zinc/copper project in Saudi Arabia) and with Vital Metals. He also has a Project Management role with Red Hill Iron Limited. Doug's roles have included Senior Mining and Geological Consultant (with Snowden Associates) focused largely on mine planning and optimisation, Chief Engineer on open pit mines for Cassiar Mining and Teck Corporation in Canada, Senior Planning Officer or block caving operations in Africa and he has been chief geologist for several mines where he was responsible for Ore Reserves calculations.

Analyst Verification

We, Gavin Wendt and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

Disclosure

Breakaway Investment Group (AFSL 290093) may receive consultancy fees and commissions on sale and purchase of the shares of Vital Metals and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

Disclaimer

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