



# Windimurra Project Update



10 January 2011

[www.atlanticltd.com.au](http://www.atlanticltd.com.au)

# Disclaimer

*This presentation has been prepared by Atlantic Limited ("Atlantic") and Midwest Vanadium Pty Ltd ("MVPL") and is for information purposes only. The information contained in this presentation is not, and does not constitute, an offer to issue or sell, or a solicitation, invitation or recommendation to subscribe for or purchase, any securities, nor is it intended to constitute legal, tax or accounting advice or opinion. The information contained in this presentation is not investment or financial product advice and is not intended to be used as a basis for making an investment decision. This presentation has been prepared without taking into account the investment objectives, financial situation or particular needs of any person. The securities of neither Atlantic nor MVPL have not been and will not be registered under the United States Securities Act of 1933 (the "Securities Act") or under the securities laws of any other United States jurisdiction, and may not be offered or sold in the United States absent registration under the Securities Act or an exemption therefrom.*

*This presentation contains statements that may constitute "forward looking statements". Examples of forward looking statements include, but are not limited to, (i) statements regarding Atlantic's or MVPL's future results of operations and financial performance, (ii) statements of plans, strategies, or objectives and (iii) statements of assumptions underlying those statements. Words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "probability", "risk" and other similar words are intended to identify forward looking statements but are not the exclusive means of identifying those statements. By their very nature, forward looking statements involve inherent risks and uncertainties, both general and specific, and many of which are outside the control of Atlantic and MVPL; which may cause Atlantic's or MVPL's actual future results to differ materially from any results, performances or achievements expressed or implied in such forward looking statements. Accordingly, no representation or warranty or guarantee, express or implied, is made as to the fairness, reasonableness, reliability, accuracy, completeness or correctness of any forward looking statement, or any other statement, contained in this presentation. To the maximum extent permitted by law, none of Atlantic or MVPL, nor any of their respective directors, officers, employees, agents or advisers, accepts any liability for any loss or damage, including without limitation any loss or damage arising from fault or negligence, arising from the use of, or reliance on, any forward looking statement, or any other statement, contained in this presentation.*

*The forward looking statements in this presentation speak only as at the date of this presentation. Subject to any continuing obligations under applicable law or relevant ASX listing rules, and to the maximum extent permitted by law, Atlantic and MVPL disclaim any obligation to provide any updates or revisions to any forward looking statements.*

*No action should be taken on the basis of information contained in this presentation, and no reliance may be placed for any purpose on any forward looking statement, or any other statement, made in this presentation.*

*No parts of this presentation may be reproduced without the express written consent of Atlantic and MVPL.*

# Vanadium and iron ore highlights



*Ferrovanadium*



*Vanadium pentoxide flakes*



*Magnetite*

## Vanadium

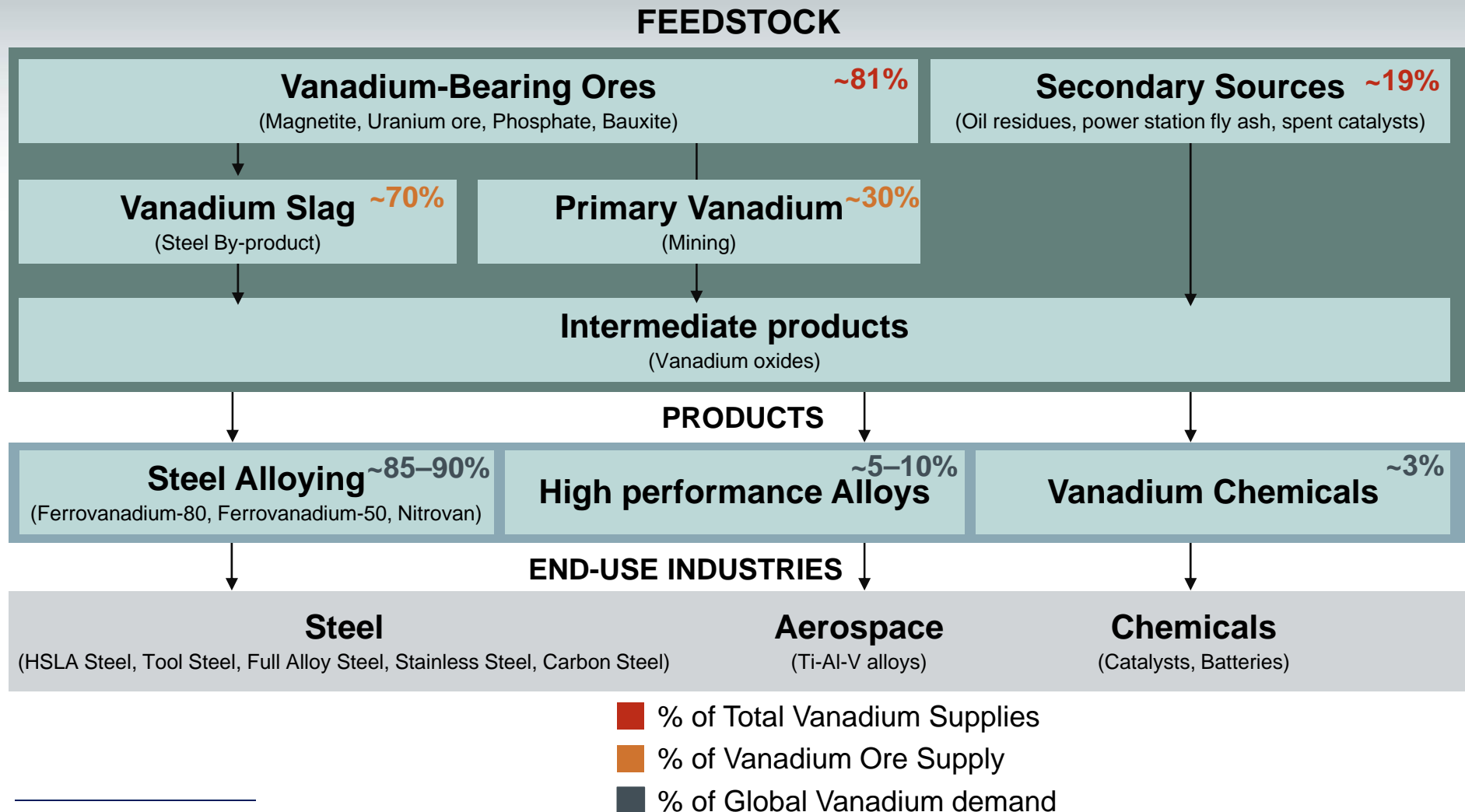
- A gray, soft, ductile element found in minerals as an oxide or sulphide, and in finished steel products as ferrovanadium
- Primarily used as an alloy addition to steel, to impart strength, hardness and increased wear resistance
- Other uses include titanium alloys for the aerospace industry, catalysts and vanadium redox flow batteries
- Main trading forms are pentoxide, ferrovanadium, and other oxides
  - Main sources are: primary ore, slag and residues
- Following a drawdown of inventories during the recession, demand is expected to rebound, driven by restocking in the steel sector
- Emerging markets are expected to support growth in demand as governments jump-start their strategic stockpiling of metals to support planned industrial developments
- Known supplies are concentrated in a few countries (e.g. South Africa, Russia and China) and are expected to operate at higher utilization rates in the near term in order to meet growing demand

## Iron ore

- The primary reserve of Windimurra is a magnetite ore, which is converted to titano-haematite during the kiln process
- Windimurra iron ore may be used in the production of steel and in the heavy aggregate industry
- The market fundamentals for iron ore producers remain strong, with expected demand growth in steel production as BRIC countries continue to ramp up industrialization

Source: CPM Group Vanadium Market Outlook; AME

# Industry structure



Source: CPM Group Vanadium Market Outlook

For personal use only

# Project highlights

- ✓ **20+ year mine life with expansion potential**
  - 97.8 million tonne JORC<sup>1</sup> reserve at 0.47% V<sub>2</sub>O<sub>5</sub><sup>2</sup>
  - 4mtpa ore throughput
  - 176.6 million tonne JORC<sup>1</sup> resource (including reserve) to extend mine life<sup>2</sup>
- ✓ **Globally significant vanadium project**
  - Targeting 5,700 tpa contained vanadium as ferrovandium
  - c. 7% of current global vanadium supply
- ✓ **Iron fines by-product**
  - 1.8 million tonne existing iron fines stockpile
  - 1mtpa iron fines production
- ✓ **Competitive advantage from existing mine, plant and infrastructure**
  - Mine pit already developed into fresh ore
  - Plant c. 85% complete
  - Benefit of > c. US\$500mm spent to date
  - Project well positioned in global industry cost curve



<sup>1</sup> All reserves and resources are Australian Joint Ore Reserve Committee ("JORC") code compliant

<sup>2</sup> As of September 16, 2010

For personal use only

# Project highlights (cont'd)

- For personal use only
- ✓ **Short construction schedule with near-term production**
    - Remaining construction of only c. 7 months
    - First production targeted for September 2011
    - Leading project manager PinC has been retained to manage remainder of construction
  - ✓ **Low technical and operating risk**
    - Plant has proven process flowsheet – standard technology in the global vanadium industry
    - Independent verification through numerous favourable independent technical reports / feasibility studies
  - ✓ **Strong projected customer demand**
    - Steel-based vanadium consumption projected to grow at a CAGR of 6.0% per year between 2009 and 2019 according to CPM Group
  - ✓ **Innovative marketing arrangements**
    - Sales and marketing agreements secured for iron fines production
    - Sales and marketing agreement for vanadium (subject to execution and relevant internal approvals)
    - Vanadium price protection to reduce vanadium price risk

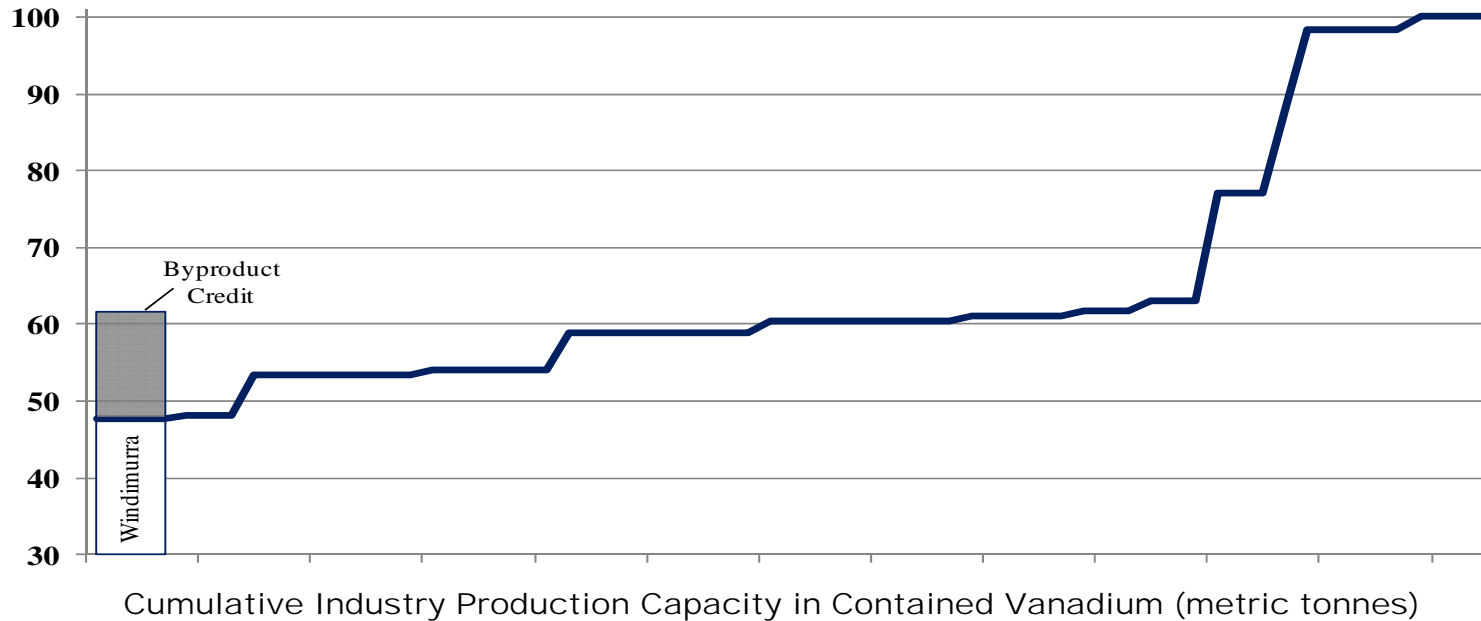


# Windimurra is well placed on the global cost curve

Estimated Long-Term Average Vanadium Operating Costs

Percentage of Maximum Operating Cost

Windimurra's long-term production costs are expected to be less than US\$15 per kg (net of byproduct credit)

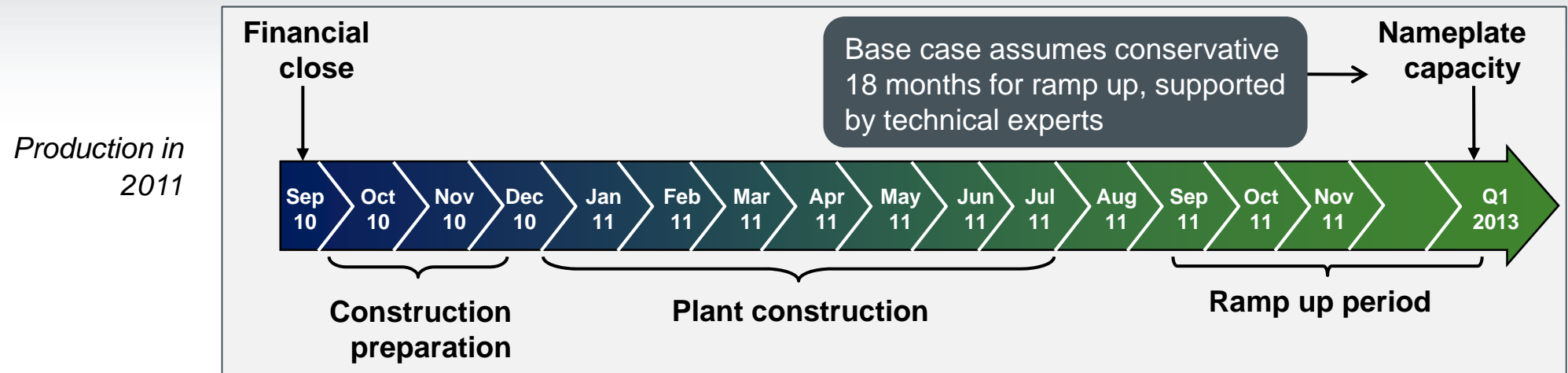


Note 1 & 2 in the Appendix on slide 23 apply to this graph.  
 Source: CPM Group "Vanadium Market Outlook," October 2010.  
 All references to CPM Group charts, tables, and text are not for reproduction without written CPM Group consent.

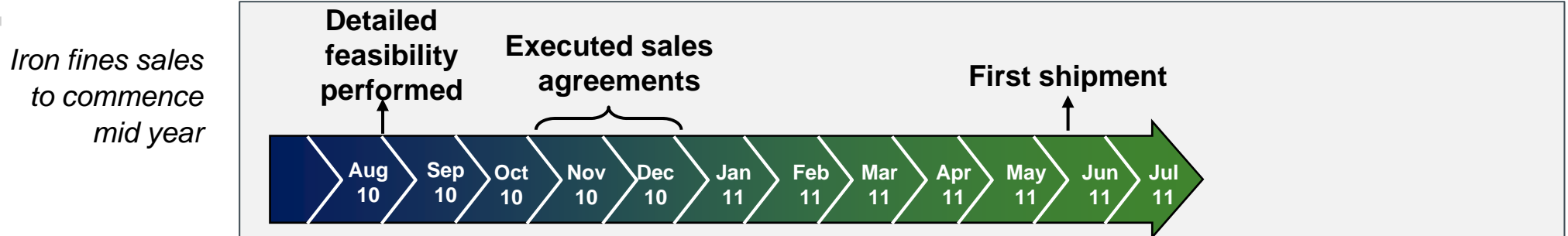
# Development timeline – plant on line in 3<sup>rd</sup> quarter 2011, iron fines sales by mid year

For personal use only

## Vanadium production timeline



## Iron fines monetization timeline





# Project has benefit of over US\$500m prior capex

*All dollars expressed in AUD nominal terms in year of expenditure, converted to USD as at current exchange rate*

Expenditure	Amount (A\$m)	Amount (US\$m)	Year	Commentary
Xstrata / PMA JV expenditure	A\$115	US\$114	1998-1999	Initial project construction and development of mine
State government / private company funding	70	70	1998-1999	Building of Midwest Gas Pipeline and on-site power station
Windimurra mine redevelopment	320	318	2008-2009	Project reached ~85% completion
Crushing & Beneficiation Plant (built by MRL)	115	114	2008	Estimated based on current replacement cost
<b>Total spent</b>	<b>c. A\$620</b>	<b>c. US\$616</b>		
Less: capital removed by Xstrata <sup>1</sup>	c. 58	c. 58		Kiln, leach vats, roads, existing pit development, and some existing civils were retained, all other equipment was removed
<b>Total invested capital</b>	<b>c. A\$562</b>	<b>c. US\$558</b>		

<sup>1</sup> Company estimate

Note: All financials converted to USD assuming USD/AUD exchange rate of 0.9951 as of January 7, 2011

# Integrated project team for construction completion and commissioning



- A project management consultancy specialising in the provision of integrated project management and project control services
- Ability to provide procurement, contracts administration, quantity surveying and construction management and supervision
- Established in 2005 by principals in response to perceived falling standards and quality of service by the traditional engineering and project management providers
- Key previous clients include:
  - Rio Tinto
  - BHP Billiton
  - Fortescue Metals Group (FMG)
  - Port Hedland Port Authority (Utah Point project)
  - Newmont
  - Newcrest Mining
  - Worley Parsons
  - Ausenco



***PinC provides project management expertise in a flexible and integrated manner with the owner's team, with a strong focus on cost reporting and schedule***

# Key contracts tendered to ensure construction is completed on schedule

Contract	Contractor	Value (A\$m)	Value (US\$m) <sup>1</sup>	Commentary
Project management	PinC	A\$6.5	US\$6.5	<ul style="list-style-type: none"> <li>Integrated structure to minimize costs and ensure seamless transition between construction and operation</li> </ul>
Electrical & Instrumental	EC&M	13.5	13.4	<ul style="list-style-type: none"> <li>Cost based on a schedule of rates</li> <li>\$12.6mm for electrical &amp; instrumental installation and \$0.9mm for other</li> <li>Were engaged in the initial construction of the Project</li> </ul>
Structural & Mechanical	Kerman	16.8	16.7	<ul style="list-style-type: none"> <li>Cost reimbursement at a capped value</li> <li>Standard quality of work guarantees</li> </ul>
Civil engineering	Minepower	3.5	3.5	<ul style="list-style-type: none"> <li>Cost reimbursement at a capped value</li> <li>Plus \$1mm in expenditure for pre strip mining costs</li> </ul>
Vendor packages	Various	18.0	17.9	<ul style="list-style-type: none"> <li>Includes engineering and allowances for refurbishment costs</li> <li>Commercial settlements / documentation currently in progress</li> </ul>
Owner costs	Various	1.5	1.5	<ul style="list-style-type: none"> <li>Includes cost of airfares and accommodation</li> </ul>
Other – currently being tendered	Various	17.9	17.8	<ul style="list-style-type: none"> <li>Comprises refurbishment of existing plant, borefields, insulation works and other miscellaneous construction expenses</li> </ul>
<b>Total construction capital</b>		<b>A\$77.7</b>	<b>US\$77.3</b>	
Construction contingency		19.4	19.3	<ul style="list-style-type: none"> <li>Calculated as 25% of construction capital</li> </ul>
<b>Total construction capital plus contingency</b>		<b>A\$97.1</b>	<b>US\$96.6</b>	
Total camp costs		5.7	5.7	<ul style="list-style-type: none"> <li>Purchased – already expended</li> </ul>
Start up costs		11.7	11.6	
Total Crushing and Beneficiation Plant Acquisition costs		83.0	82.6	<ul style="list-style-type: none"> <li>Fully contracted</li> </ul>
<b>Total est. costs remaining</b>		<b>A\$197.5</b>	<b>US\$196.5</b>	

<sup>1</sup> Converted to USD assuming USD/AUD exchange rate of 0.9951 as of January 7, 2011

# Contracting strategy has delivered high confidence in capital budget

For personal use only

*Bottom up budget built, cross checked with market rates*

*Strategy and capital budget has been independently reviewed by Behre Dolbear Australia*

## 1. Contractors to site and review materials

- Contractors attended site
- Contractors reviewed design materials
- Contractors reviewed prior construction status materials including “as built” drawings
- EC&M, previous electrical contractor on site, reviewed their prior construction status reports

## 2. Contractors provide detailed tenders

- Detailed tenders provided for scope of works by each contractor – thousands of rows of data
- Bottom up scope of works
- Benefit of prior existing knowledge – EC&M knowledge down to the specific cable by cable

## 3. Vendor packages process

- Strategic suppliers who were previously involved in the Project
- PinC managed process to negotiate commercial settlements with suppliers to enable suppliers to finish scopes of work
- Key vendors currently being engaged

## 4. PinC coordination and analysis

- PinC involved throughout the process
- Specific allowances for minor works not covered by tenders
- Market testing of rates based on recent experience in the North West of Western Australia
- Contingency included

## 5. Review by Behre Dolbear Australia (BDA)

- Review of capital budget by BDA
- Included in detailed independent technical report
- BDA satisfied that budget has been developed in a professional and appropriate manner and that construction schedule and budget are achievable

# Project has developed systems and procedures already in place

For personal use only

Personnel	Environmental	Mining	Operational
<ul style="list-style-type: none"> <li>▪ CEO of MVPL appointed</li> <li>▪ Key technical resources retained through receivership process including experienced vanadium process experts</li> <li>▪ Ramp-up strategy and organisational chart defined and underway</li> </ul>	<ul style="list-style-type: none"> <li>▪ Water licenses in place</li> <li>▪ Environmental management plans developed</li> <li>▪ Dust, water, fauna, soil monitoring systems developed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Relevant mining approvals in place</li> <li>▪ Mine plan and schedule developed</li> <li>▪ Key tenement licenses in place</li> <li>▪ Key clearance permits received</li> </ul>	<ul style="list-style-type: none"> <li>▪ Process safety and induction procedures developed</li> <li>▪ Commissioning plan and identification of critical spares developed</li> <li>▪ Process ramp-up schedule developed</li> <li>▪ Process plant training documentation developed</li> <li>▪ Standard operating procedures developed</li> </ul>

# Well understood reserves and resources with expansion potential

*One of the world's largest proven reserves of vanadium*

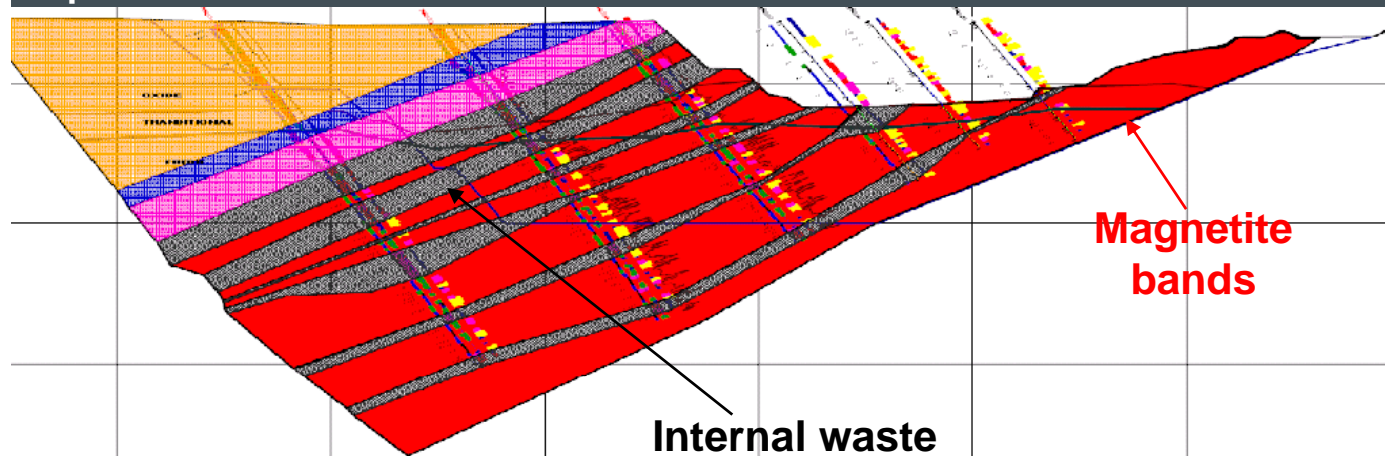
*Significant opportunity for further expansion*

*Well understood ore body drives straight forward mining process*

## Commentary

- **JORC compliant Reserves and Resources:**
  - 176.6m tonnes of Resource @ 0.46% V<sub>2</sub>O<sub>5</sub><sup>1</sup>
  - 97.8m tonnes Proved and Probable Reserves @ 0.47% V<sub>2</sub>O<sub>5</sub> – 24 year life<sup>1</sup>
- **Well understood ore body with significant expansion potential:**
  - Ore body extremely well understood due to prior mining history and extensive additional core drilling
  - All reported reserves are based on only a 4km section of a 25km strike length
  - Drilling has only occurred within a 6km length of the known strike
  - Open at depth and along strike
  - Central pit Reserves to 155m depth and still open
- **Low risk mining**

## Deposit cross section



<sup>1</sup> As of September 16, 2010

# Easily accessible ore available using conventional mining methods

*Contractor mining operation initially, reduces ramp up risk*

- **The Project will be pursuing a contractor mining strategy for initial years**
  - Contractor selected for civil construction works as well as contract mining
  - Contractor mining to continue until project is ramped up and steady state, then migrate to owner miner operation

*Fresh ore available for immediate mining*

- **The oxidised and fresh magnetite-rich ore is to be mined to a depth of 150m**
- **Fresh ore exposed at base of existing pit**
- **Planned pit extends ~4 km north-south, ranging in width from 220m to 400m**
  - Ore close to surface
  - Very low ore to waste ratio of 1:0.60
  - Pit access and haul roads already developed

*Fully developed pit already available*

- **Straight forward open-pit mining**
  - Conventional bench mining
  - Limited blasting through the oxide and transitional ore



For personal use only

# Project well serviced by ports, roads, airports and energy infrastructure

*Project conveniently served by Port of Geraldton and Port of Fremantle (Perth)*

*Project operates on fly in – fly out basis from Perth to Mt Magnet*

*Access to gas through the existing gas pipeline a significant competitive advantage*

## Logistics

### Port of Geraldton

- Incoming – Soda ash – 40ktpa bulk
- Outgoing – Iron fines – 1mtpa bulk
- Sufficient capacity available
- Storage initially outside of Geraldton, potential for future dedicated storage shed or shared facility at port (when berth 7 complete)

### Geraldton – Site (Geraldton)

- Soda ash trucked to site
- Iron fines trucked from site to Geraldton; distance approx 400km

### Perth – Site (Perth)

- General supplies trucked to site
- Finished product backloaded to Perth; distance approx 600km

### Port of Fremantle (Perth)

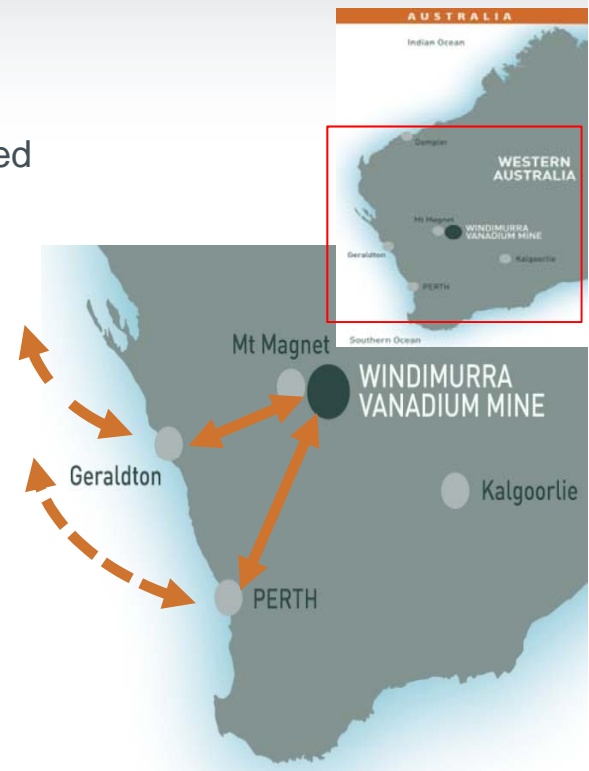
- FeV shipped containerised

### Air services

- Minesite served by airport at Mt Magnet (c. 80km to site)
- Airstrip also available at Windimurra (subject to upgrade)

### Energy

- Dedicated Midwest gas pipeline delivers cost effective natural gas to site for project gas requirements and power generation in on site power station





# Vanadium sales and marketing agreement for 100% of output

## Ferrovandium

- Agreement subject to execution and relevant internal approvals
- Agreement for the purchase, worldwide distribution and marketing of 100% of ferrovandium output which meets the required specification
- Well funded and experienced commodities marketing group
- Agreement provides for partial price protection over initial term of 5 years
- Attractive commission structure
- Initial prepayment for cargo at port of departure provided at US dollar 3-month LIBOR plus small margin, significantly reducing working capital requirements

# Marketing agreements in relation to the Project's iron fines by-products

## Heavy aggregate market

Use of iron fines in heavy aggregate for heavy concrete is a niche market that would result in the Project's by-product being sold at premium prices



- Coal and Ore Trading (Cotrading) is a specialist UK marketing firm handling c. 50% of world trade in the heavy aggregate market
- 5 year (plus optional renewal) sales and marketing agreement agreed with expected tonnage of between 500k-1mtpa

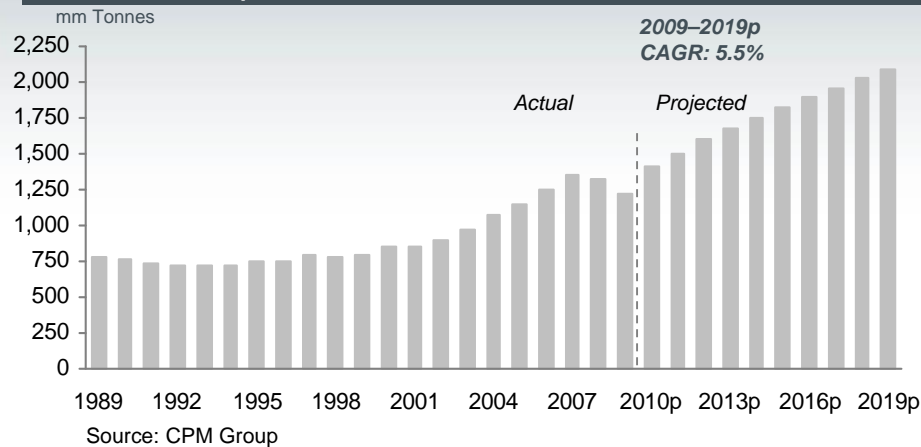
## Hot metal market



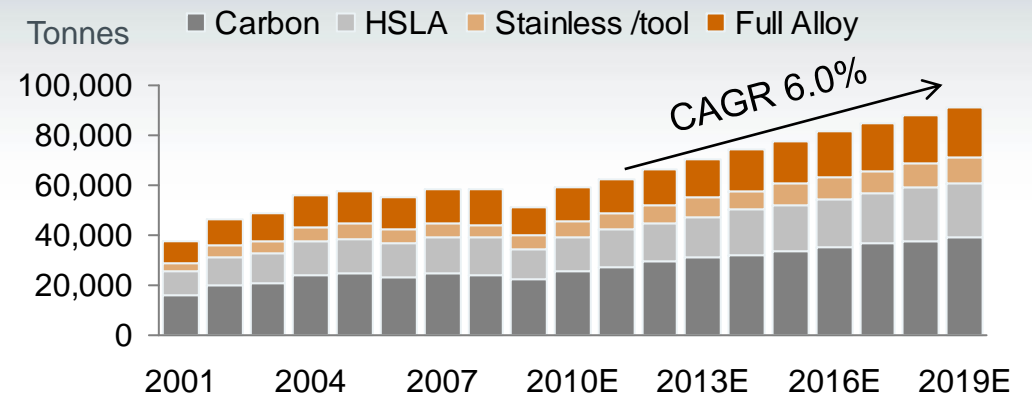
- Tennant Metals is a leading Australian commodities trading house and a specialist in the marketing of high titanium iron ores
- 5 year sales and marketing agreement agreed with Tennant for byproducts from the Project for use in hot metal applications (anticipated as sinter blend product in the sinter stage of the blast furnace)

# Steel – attractive industry dynamics

## Global steel production



## Global demand for vanadium for use in steel



Source: CPM Group, USGS, World Steel, ISSF, WBMS, Company Reports

## Commentary from CPM

- Global apparent finished steel demand continues to improve in line with global economy
- In medium term, demand will improve as global recovery gathers further strength
- In longer term, as economies of China and other developing countries continue to mature, average demand growth rates are expected to moderate towards long-term trends of 3.1% during 2015-2020

## Commentary from CPM

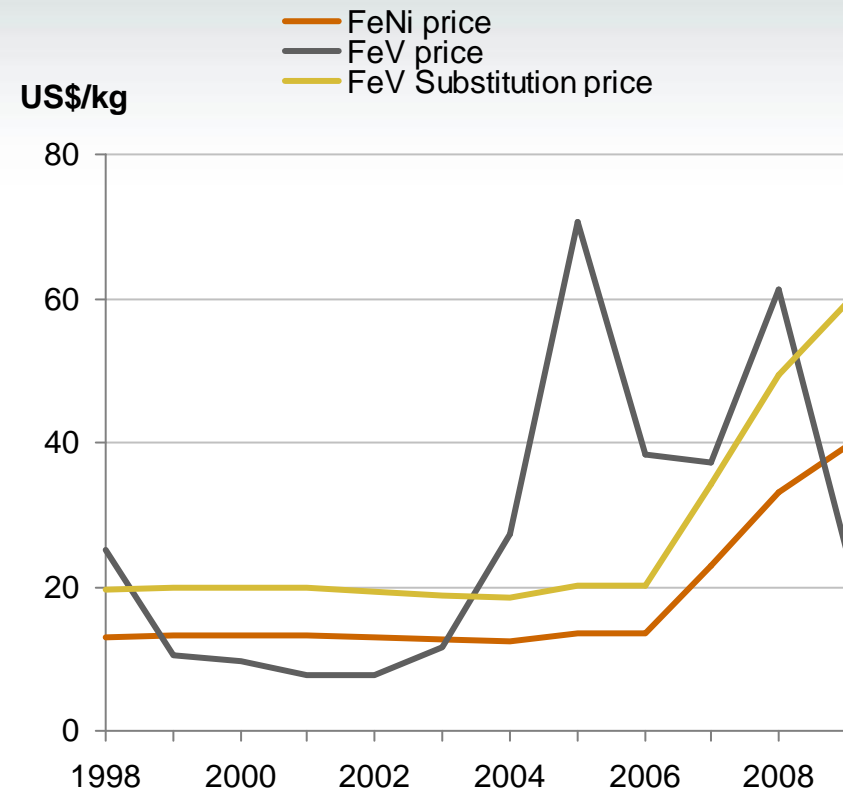
- All steel end-users demand are expected to grow from 2009 to 2019
  - Carbon steel accounts for 37% of global vanadium demand and is expected to grow at a CAGR of 5.7%
  - High steel low alloy (HSLA) accounts for ~21% of global vanadium demand and projected to grow at a CAGR of 6.3%
  - The stainless tool steel sector accounts for ~9% of vanadium demand and expected to grow at a CAGR of 6.5%
  - Full alloy accounts for 20% of vanadium demand and is projected to grow at 5.9% CAGR

# Limited substitutes are available for ferrovanadium

## Commentary

- The most likely substitute for vanadium is niobium however this can only occur in limited applications
- Vanadium used in aerospace alloys, catalysts and batteries cannot be substituted by niobium
- Relative inelasticity by steel producers to price as vanadium is a relatively small component of cost structure
- Can only be replaced in steel
  - According to CPM group, requires 1.5x FeNi for similar properties
  - Used when the price of vanadium is prohibitive
  - Steel makers reluctant to change existing formulas
  - Ferroniobium substitution for ferrovanadium occurred between 2004 – 2007 when FeV prices increased to historic highs
- The use of vanadium as an alloying element is preferred by HSLA steel makers because it is easier to form and thus cheaper to produce in downstream processes
- The niobium industry is also controlled by one producer (Brazil's CBMM), which poses a potential risk for customers

## Ferroniobium substitution in steel



Sources: CPM Group, FeNb (1998 - 2008: Departamento Nacional de Producao Mineral; 2009: March - December quotes from Metal-Pages), FeV (Metal Bulletin), USGS

***Vanadium preferred over niobium. Niobium substitution is not expected at current and CPM forecasted FeV prices and recent niobium price levels***

For personal use only

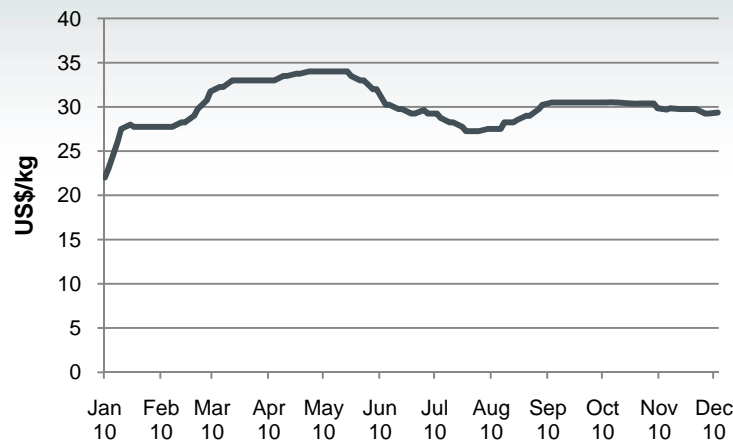
# Strong outlook ferrovanadium prices

*Weakening of price over July was due to concerns over the Euro-zone's fiscal position and a potential economic downturn*

*Current price of US\$29.35 kg FeV*

*Fundamental market dynamics driving price increases*

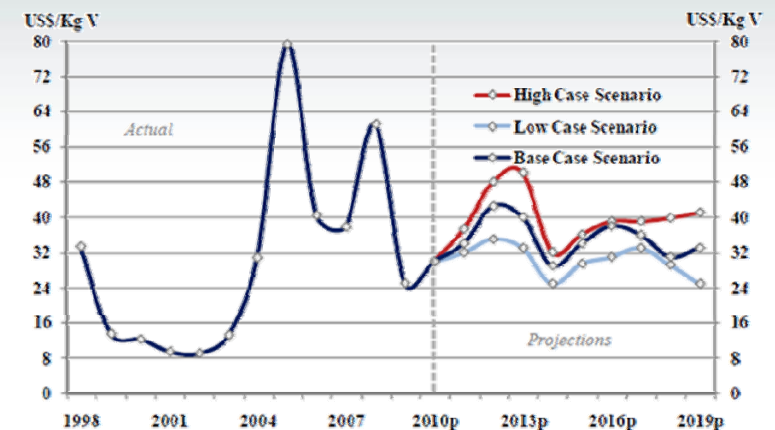
## Recent price performance



Source: Bloomberg

- From a low of US\$22/kg in January, FeV prices peaked at US\$34/kg on 28 April 2010
- During 3Q 2010, global uncertainty and deterioration of real economic activity exerted downward pressure. However, by September, ferrovanadium prices had risen to US\$30.25/kg as traders and key consumers provided price support

## Real FeV prices for alternative scenarios



Source: CPM Group (as of October 2010)

- Base case FeV price is projected to average US\$34.75 from 2010 – 2019
- High case FeV price is projected to average US\$39.20 from 2010 – 2019 driven by changes in supply-side dynamics
- Low case FeV price is projected to average US\$30.28 from 2010 – 2019 driven by less robust demand assumptions

# Lessons learned from prior operation

## 1. Better knowledge of ore body

- Ore body has been retested extensively since prior operations with additional drilling (>9km), metallurgical test work and magnetic probing

## 2. Selective mining & blending on ROM pad

- Better knowledge of reserve allows selective mining to improve grade, reduce silicas, and provide consistent feed to plant through ROM pad blending

## 3. Improved vanadium recoveries

- Revised mine plan to focus on fresh ore for higher recovery
- Replacement of SAG mills with high pressure grind rolls to prevent over-grinding and improve recovery

## 4. Increased capacity

- Tailored processing plant allows for final vanadium capacity targeted at 5.7ktpa of vanadium metal (up from max 3.1ktpa previously achieved)

## 5. Addition of FeV stage

- Replacement of previous  $V_2O_5$  circuit with FeV circuit to capture further value in the industry value chain

## 6. Sale of byproduct

- Realization of the value from the Plant's annual production of c. 1Mtpa of iron ore byproduct,
  - Sales and marketing agreements agreed for all byproducts with Cotrading and Tennant Metals

# Appendix

## Global Cost Curve – slide 7

### Note 1:

Production capacity for slag, vanadium pentoxide, and/or ferrovanadium is converted into contained vanadium units; Production cost estimates are reported in kilograms of vanadium on a pro-rata basis; Cost curve is in ferrovanadium equivalent where the underlying costs and capacity may be V<sub>2</sub>O<sub>5</sub>; Other ferroalloy converters' source their raw materials from vanadium producers and therefore may result in double counting of production; Long-term cost estimates are derived by applying a 4% premium to CPM Group's 2010 cost estimates; This escalator was derived using long-term projections for key components of the vanadium production process; Windimurra costs reported for first seven years of production.

### Note 2:

Detailed production costs for vanadium producers are not reported. The cost structures of existing producers, even those that are publically traded, are concealed for a variety of commercial, logistical, and regulatory reasons. CPM has estimated average pro-rata vanadium production costs for existing operations through a combination of on-the-ground information gathering, in-depth analysis of relative production economics, and financial modelling of public data. Estimates for individual projects lack precision and undue reliance should not be placed on them. The cost curve has been adjusted for ore grades, manufacturing processes, and other input factors that affect the cost structure. For by-product producers that produce iron ore, steel, vanadium, etc. operating costs have been allocated across all commodities in proportion to their value. In CPM's view, these pro-rata estimates without by-product credits allow for proper comparison of production economics across the different types of vanadium operations in the cost curve.

## COMPETENT PERSON'S CONSENT STATEMENT

The information in this presentation that relates to Ore Reserves is based on information compiled by Quinton de Klerk who is a Member of The Australasian Institute of Mining and Metallurgy. Mr de Klerk is a Director and Principal of Cube Consulting Pty Ltd (CUBE).

Mr de Klerk has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr de Klerk consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

The information in this presentation that relates to Exploration Results and Mineral Resources is based on information compiled by Colin J.S. Arthur who is a Member of The Australasian Institute of Mining and Metallurgy and Fellow of the Geology Society of London. Mr Arthur is a full-time employee of MVPL. Mr Arthur has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Arthur consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.