

1 November 2006

## Flying under the radar

### Investment Highlights

- Precious Metals Australia (PMA.AU) is gaining recognition as it moves to re-build its Windimurra vanadium project in Western Australia. This is a long-life, first-class project, which will position the company amongst the lowest cost producers globally. Reflecting strong project cash flows from FY08 onwards our DCF-derived valuation for PMA is A\$4.07/share. BUY.
- PMA have recently completed a bankable feasibility study on the re-opening of the Windimurra vanadium project, which shows the operation to be economically robust.
- In addition, the company recently reached an agreement with Noble Group Ltd for the off take of vanadium production for the life of the project (under the current mine plan) at market prices. The off take includes a 'floor price' equivalent to the cash costs of the operation for the first seven years of production. Patersons view the agreement as highly positive for PMA as it underpins the price received for vanadium product from the Windimurra mine without capping upside participation in price strength.
- With the Noble Group off take deal complete the financing of the re-build of Windimurra should be *fait a compli* as the new pricing model significantly de-risks the Windimurra project as we had previously seen the early stages of development as high-risk with operating cash costs likely to exceed vanadium price.
- The next major driver for PMA will be the finalisation of bank funding for \$150m, which we anticipate in coming weeks followed by full-scale project development in early 2007.

#### Company

<b>Stock code:</b>	<b>PMA</b>
<b>Share price:</b>	<b>\$2.20</b>
<b>Recommendation:</b>	<b>BUY</b>

\$3.66    \$4.48



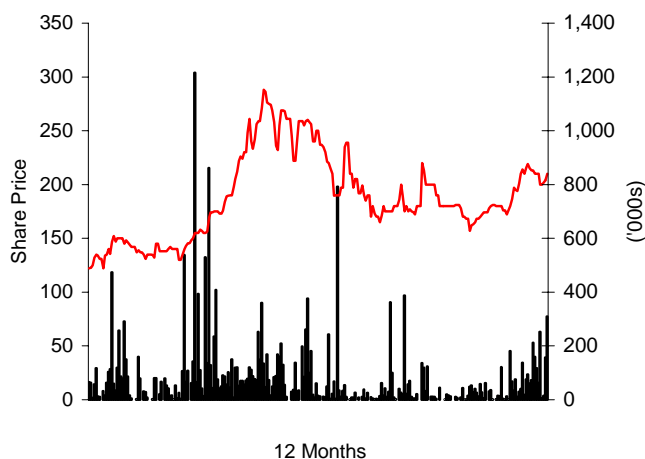
S&P/ASX 300 = 5555

#### Analyst

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#### Company Statistics & Performance

<b>Shares on Issue</b>	76.9m	<b>Daily Vol.</b>	77,110
<b>Market Cap</b>	\$169.1m	<b>Debt</b>	\$0.0m
<b>52 Week Range</b>	\$1.22 - \$2.88	<b>Cash</b>	\$36.4m



#### Investment Summary

Year End June 30	2006A	2007F	2008F	2009F
<b>Reported Earnings</b>				
Net Profit (\$m)	(1.3)	(2.3)	(4.3)	32.9
EPS (cents)	(1.7)	(3.0)	(5.6)	42.8
EPS growth (%)	nm	nm	nm	nm
PER (x)	(128.6)	(73.1)	(39.4)	5.1
<b>EBITDA</b>				
EBITDA (\$m)	(1.3)	(0.9)	9.9	70.0
EV/EBITDA (x)	(94.3)	(213.6)	27.6	3.3
<b>Cashflow Multiples</b>				
Gross Cashflow (\$m)	(8.3)	(5.0)	(3.7)	41.2
GCFPS (cents)	(10.8)	(6.5)	(4.8)	53.7
PGCF (x)	(20.4)	(33.6)	(46.2)	4.1
Free Cashflow (\$m)	2.9	(61.5)	(85.0)	37.5
FCFPS (cents)	3.8	(80.0)	(110.6)	48.7
PFCF (x)	57.3	(2.7)	(2.0)	4.5
<b>Dividend</b>				
Dividend (cents)	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0
Franking (%)	100	100	100	100

## Company Overview

Precious Metals Australia Ltd (PMA.AU) is an ASX-listed emerging vanadium producer. In early 2005, it regained ownership of the Windimurra vanadium mine, located near Mount Magnet in Western Australia, after a protracted legal battle.

Since handover of the project in April 2005, PMA has accumulated assets from the Windimurra site, and based on historical production data has completed a feasibility study with a view to re-building the mine and commencing production of ferrovandium (FeV) and Vanadium Pentoxide ( $V_2O_5$ ) within 12 months time.

PMA is set to implement process improvements overcoming deficiencies identified during previous production and is likely to take advantage of current strength in the vanadium market.

## Valuation Thesis and Methodology

### General

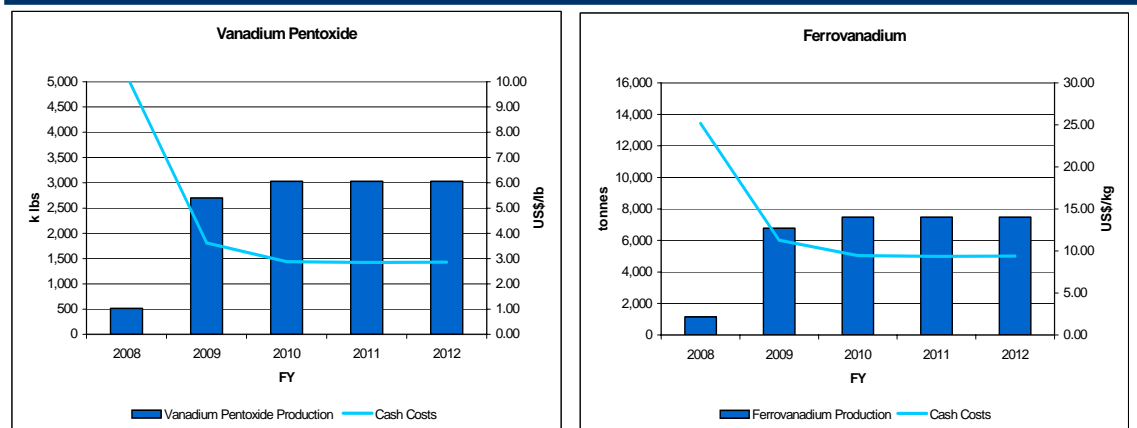
Our valuation for PMA is \$3.96/share based on a DCF methodology using a 10% discount rate.

We have used parameters from historical operations at Windimurra and inflated costs inline with industry inflation since shutdown in 2003. We treat ore resources conservatively and assume 66% total conversion to mineable inventory (ore reserves).

### Production Scenarios

We envisage a mining operation delivering 3.4mt to the Windimurra plant p.a. over a 20-year mine life, which we believe could prove conservative based on existing resource inventory. Our production scenario sees a major ramp up in production in the first year of operation and then steady state production by 2010. As production is increased we anticipate unit costs to fall in line against the \$25m p.a. fixed cost base

**Figure 1: Production Scenarios**



Source: Patersons Estimates

## Costs – capital and operating

Our valuation assumes steady state unit costs of US\$9.8/kg and US\$2.85/lb for ferrovanadium and vanadium pentoxide production respectively. Around 40% of the total operating costs (80% of vanadium pentoxide costs) are fixed (with major items including gas supply, sodium oxalate, and maintenance) the first two years of production show higher unit costs with ramp up of production.

We have assumed a total capital spend of \$160m to re-build the Windimurra operation and total sustaining capital expenditure of around \$4m p.a. reflecting maintenance requirements and periodic replacement of equipment associated with the roast/leach circuit and ferrovanadium circuit.

## Financing

We believe the company will use a mix of debt and equity to fund its 90% (\$144m) share of capital required to re-build the project. On our estimates around \$108m in would fund the project to full production in addition the company's existing cash reserves of A\$36m.

## Risks and sensitivities

PMA's single operation status carries risk, as does its 100% exposure to the vanadium pentoxide and ferrovanadium prices.

The re-build of the Windimurra plant has a relatively high capital requirement (55% of project NPV) up-front and once sunk this capital is at risk for some time prior to production reaching steady state. The existing production history, we believe, takes much of the technical risk out of the project and largely mitigates this risk.

Vanadium prices are highly volatile. PMA is addressing this issue two ways.

Firstly by positioning itself at the low end of the cost curve. On our modelling and from comparatives with competitors, we are comfortable that these levels are realistic, particularly with PMA's reagent and power cost efficiency relative to its peers.

Secondly by entering into an off take agreement with Noble Group Ltd the price received for Windimurra vanadium has a floor price equivalent to cash costs of production.

**Figure 2: Valuation Sensitivity**

		NPV / Share Sensitivity to Ferrovanadium Price and Discount Rate					SPOT (US\$38/kg)
		Ferrovanadium Price (US\$/kg)					
Discount Rate		8.39	11.18	13.98	16.78	19.57	
	7%	1.57	3.96	6.46	8.98	11.52	
	8%	1.29	3.47	5.74	8.03	10.34	
	10%	1.05	3.03	5.11	7.20	9.31	
	11%	0.85	2.65	4.55	6.47	8.41	
	12%	0.67	2.32	<b>4.07</b>	5.83	7.62	18.12
	13%	0.51	2.03	3.64	5.27	6.91	
	14%	0.37	1.78	3.26	4.77	6.29	
	16%	0.26	1.55	2.93	4.33	5.74	
17%	0.15	1.35	2.63	3.93	5.25		

Source: Patersons Estimates

## Noble Group Off take – Underpins operating margins

In July 2006 PMA entered into a financing and off take agreement with Hong Kong based commodities trading house Noble Group. The agreement comprised the following:

- (1) Vanadium off take agreement with prices set at prevailing market prices with the proviso that the minimum price is equal to cash costs of production. In return PMA issued Noble A\$10m of PMA stock at A\$2.68/sh (a 22% premium to PMA's share price at the end of July).
- (2) Convertible note issued to Noble - A\$8.2m, 3yr term, 2%+ LIBOR, and a A\$2.20/share conversion price into PMA ordinary shares.
- (3) Option on 10% of the Windimurra project for A\$13.5m cash (since exercised)

These issues will raise a total of \$21.7m, which will bring the company's cash reserves to circa \$60m by the middle of Q4 CY06.

Noble exercised its option on a 10% stake in Windimurra following thorough technical, financial and legal due diligence. This third party review adds credence to PMA's feasibility parameters on the project's technical and economic robustness.

With a 10% equity stake in the Windimurra Project, Noble Group will contribute circa A\$16m as its of total capital spend for plant rebuild.

## Windimurra – a brief history

The Windimurra mine was built in 1999 for a capital cost in the order of \$185m. The project treated 7.2Mt of vanadium ore for production of 28.65Mlbs of vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>).

PMA commissioned a bankable feasibility study (BFS) on the Windimurra project in 1998 and following the successful completion of this study, PMA (49%) and Xstrata plc (51%) entered into a joint venture to develop the Windimurra project.

The vanadium processing plant, infrastructure and mine were constructed for \$115m, while third parties and the WA state government invested circa \$70m for the Midwest gas pipeline and on-site power station.

The Windimurra operation commenced production in November 1999, however production was initially plagued by:

- Commissioning and timing delays
- Outages due to power station load capability
- Material handling problems
- Vanadium recovery lower than budget due to over grinding in the beneficiation circuit

A period of low vanadium prices coincident with these production difficulties created financial constraints, which resulted in PMA selling its 49% participating interest in the project in return for a 15% net profit interest on a life of mine basis. Xstrata plc continued to operate the mine until April 2003. It was placed on care and maintenance and ultimately closed in 2004.

PMA has now settled its legal claims against the previous owners of the Windimurra vanadium mine and has regained control of the project. Under the terms of the settlement PMA received

A\$24.3m in cash and assumed all of the environmental obligations at the Windimurra Site. In addition, PMA purchased remaining on-site assets and mining tenements for \$4m.

## **Current status**

The majority of plant and equipment from the Windimurra operations has been removed, however some key items such as the rotary kiln remain. Additionally, items recently bought back by PMA (that had been removed) have a replacement value in the order of A\$50m (1999 dollars).

Following remedial work the kiln at Windimurra has been refurbished and is now ready to be re-lined with refractory material. Development activity on the site has commenced with camp refurbishment and minor earthworks now underway.

## **The Project**

### **Location and tenure**

The Windimurra project is located 600km northeast of Perth, in Western Australia, 80km from Mt Magnet townsite. The project's mining tenements are surrounded by the Windimurra pastoral station and are unencumbered by native title claims. The recent operational history of Windimurra, we believe will greatly assist environmental and operating approvals ahead of re-commissioning.

### **Geology**

Vanadium mineralisation at Windimurra occurs within a magnetite rich horizon, the Sheppard's Discordant Zone and is located on the eastern side of the Windimurra complex (a gabbroic intrusive complex). Current ore resources are defined over a 4km strike length. We note that vanadium mineralisation has been identified over a strike length in excess of 25km, which should see resource upgrades following drilling (currently underway).

Much of the magnetite horizon is weathered to an extent of 40m giving rise to simple mining methods and relatively 'soft' ore in comparison to many other vanadium operations. Economic mineralisation extends to surface with a mineable width of 150m. The resource remains open at depth and is continuous north and south.

### **Ore Reserves And Resources**

From the commencement of mining in August 1999 to closure in December 2002, a total of 7.32Mt ore at 0.535% V<sub>2</sub>O<sub>5</sub> was delivered to the Windimurra plant, showing a positive reconciliation against PMA's ore resource / reserve model. The company has updated this model to reflect mined out material. A final open pit design has been completed, which encompasses the following reserve inventory.

Patersons believe that there is significant potential to add to this inventory with extensions likely both along strike and at depth. While these extensions are currently being drilled-out for inclusion in a resource statement they have been defined by earlier mapping, aeromagnetic surveys and reconnaissance drilling.

We have assumed a total mineable inventory for the project of 64Mt at 0.49% V<sub>2</sub>O<sub>5</sub>. Incorporating a modest resource to reserve conversion factor of 67% based on current resources.

**Figure 3: Ore Reserves and Resources**

	Mt	% V <sub>2</sub> O <sub>5</sub>	Contained V <sub>2</sub> O <sub>5</sub> (Mlbs)	Category
<b>Ore Reserves</b>	50.40	0.49	543.34	Proven
<b>Mineral Resources</b>	95.53	0.47	989.85	Measured and Indicated

Source: *Precious Metals Australia*

## Redevelopment Progress

### Planning And Financing – Key Releases To Look For

Early in 2006, PMA completed a design optimisation study which identified the key re-design options, generated a new process flow sheet, and produced a first pass capital cost estimate and confirmed operating costs.

The Windimurra Feasibility Study has been completed concluding that Windimurra Vanadium Project is robust, viable and can be economically developed. Total capital expenditure requirements including working capital were assessed at \$161.1m plus \$14.3m contingency. The project shows highly competitive operating costs in the lowest quartile of world costs.

## Production History - A Great Advantage

Windimurra's production history affords PMA with operating data with which to re-design a new plant. A key outcome of the company's optimisation design study is to address historical bottlenecks in the processing circuit. The more serious problems were:

- The original mill design was highly conservative, with Windimurra ore softer than originally anticipated. Consequently the SAG mill was oversized and led to over-grinding and sliming prior to ore being processed through magnetic separation circuit.
- The magnetic separation circuit was found to be under-engineered with fine ore and slimes 'clogging' magnets, which then showed increased wear.
- The three-unit power station originally installed at Windimurra did not adequately match the plant's main power load causing two generators to overload or three to be underutilised. Anecdotally, this caused many production outages during previous operations as the result of power failures.
- Two issues impacted historical vanadium production from the kiln: (1) Magnetite concentrate was fed into the kiln wet, which lowered time spent in a 'reactive' temperature; and (2) Materials handling following roasting was poorly designed, with blockages frequently stopping production.

The Windimurra project is expected to show a moderate to high fixed cost base, thus the removal of such production impediments results in substantial incremental increases in our valuation. On our estimates fixed operating costs will total circa \$25m p.a. hence the impetus for production expansions.

## Process Improvements – keeping unit costs low

### Crushing, Grinding & Classification

Ore will be crushed via a single stage jaw crusher, and fed into a SAG mill for finer grinding. Product classification and sizing will be via physical screening and then possibly hydro-cyclones to prevent over-grinding and sliming. Product classification was via traditional hydro-cyclones, which failed to classify the feed from the SAG mill adequately.

### Beneficiation And Magnetic Separation Circuit

Vanadium contained within the magnetite/haematite is passed over a series of low intensity and high intensity drum magnets. Magnetic material containing vanadium is separated from gangue producing a magnate concentrate.

The company believes a re-design in this circuit can be achieved through improving the sizing of the feed to magnets, which will reduce 'clogging'. Patersons note that historically recovery of contained vanadium through beneficiation was 53%. We have assumed only marginally higher (circa 55%) for the re-designed plant and await production testing before re-visiting this assumption. Once operating at steady state, this area of the plant could provide upside to our current valuation for PMA should recoveries outperform expectations.

### Roasting

Vanadium is liberated from magnetite particles via roasting at high temperature (+1,200°C) with a sodium flux. PMA use sodium oxalate as a flux (patents held for this process in Australia and South Africa), which is an unwanted waste product of the alumina industry. This provides a distinct advantage compared to competing vanadium producers who use sodium carbonate (via a significant reagent cost saving).

PMA plan to increase oxygen flow into the kiln, and dry/preheat magnetite feed using waste heat. We believe this will lead to a modest gas consumption saving and increase performance in the kiln (vanadium recovery).

### Leaching Precipitation De-Ammoniation

Vanadium salt (in roasted calcine) is leached out of roasted calcine in in-ground vats by high-temperature water. Pregnant liquor containing vanadium is stripped of silicates and ammonium metavanadate (AMV) is precipitated out and then deammoniated in a small gas-fired kiln to form vanadium pentoxide powder. In-ground vats are still in place, representing a significant capital cost saving. Given this process performed well during previous operations, few improvements are planned.

### Fusion And Flaking

Vanadium pentoxide powder is melted in a fusion furnace and poured onto a rotating flaking wheel with flakes broken and conveyed through a packaging plant for export. Quality control is via an XRF assay on-site. This part of the processing circuit performed well in the original design and will be replaced largely unchanged.

## Product Mix

### High Grade Vanadium Pentoxide Production (V<sub>2</sub>O<sub>5</sub>)

There is a market for high purity vanadium pentoxide for chemical use and for high value high specification vanadium master alloys used in the aerospace sector. Windimurra produces a high spec pentoxide, typically +99.7% against an industry standard of 98%.

With its high quality product, Windimurra will target high value vanadium chemical markets including metallurgical vanadium pentoxide, vanadium trioxide and ammonium metavanadate.

### Adding Ferrovandium Production – Major Value Uplift

Ferrovandium (FeV) an alloy of vanadium metal with iron is produced by the conversion of vanadium pentoxide. PMA are examining cost effective methods for ferrovandium production, which will involve the conversion of vanadium trioxide using an electric arc furnace.

PMA see producing ferrovandium as a key part of its new marketing strategy, not only to realise additional value (FeV prices average 2.5x that of V<sub>2</sub>O<sub>5</sub>) but also as a means of protecting the business as steel producers use ferrovandium directly which effectively broadens the customer base for Windimurra vanadium products. The production of ferrovandium was not a step undertaken by the previous owner, who was exporting V<sub>2</sub>O<sub>5</sub> to its South African operations for conversion to FeV.

Patersons anticipate 85% of production to be ferrovandium with V<sub>2</sub>O<sub>5</sub> only sold as a premium product to specialty customers. The company has indicated that it is building flexibility into its new process flow sheet, which will allow changes to production mix (FeV vs V<sub>2</sub>O<sub>5</sub>). To take advantage of price swings between the two products.

Ferrovandium production introduces some exposure to the aluminium metal price as it is a major input in the process with around 0.5 to 0.66kgs of aluminium metal used per 1kg of ferrovandium produced.

## Vanadium Market – A history of volatility

### Demand And Marketing

Demand for vanadium is largely determined by the underlying trends in the steel industry, which are in turn determined by the prevailing global economy and industrial production (IP) growth.

Vanadium's principal use is as a strengthening addition in carbon steel and high strength steel used in structural applications such as gas and oil pipelines, reinforcing bars in building and construction and automotive use.

Vanadium alloys are also used in tool steels and stainless steel as well as in titanium-aluminum-vanadium alloys, which are used in aircraft components, high-speed airframes, rocket motor casings and gas turbines.

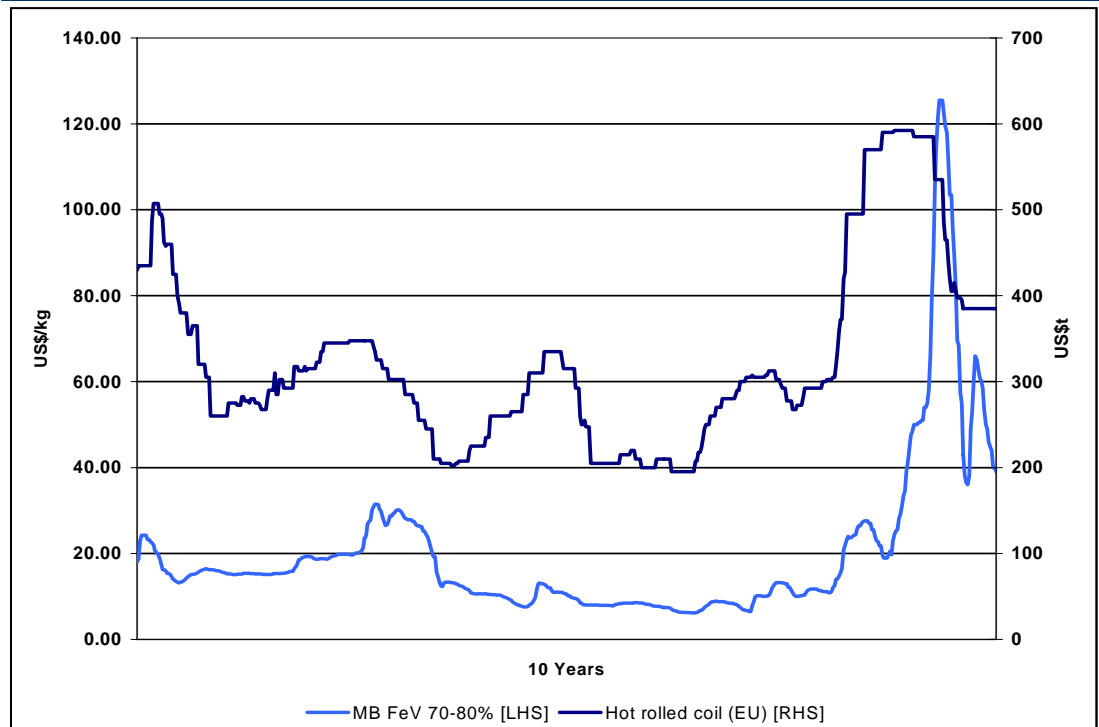
Vanadium pentoxide is sold to 'converters', who due to their small number can exert significant influence on prices from miners. PMA plans to sell vanadium pentoxide from Windimurra as a premium product due (due to high V grade) and will sell to select converters to achieve this.

A distinct advantage of ferrovandium production is that it can be sold directly to steel mills producing specialty products.

Vanadium pentoxide and ferrovandium prices have moved in unison for the past 10yrs. On average the ferrovandium price is 2.25x the vanadium pentoxide price representing a conversion cost and industry profit margins for converters.

The relationship between steel price and vanadium pentoxide price is reasonably strong. Prices over a 10yr period show that steel prices provide a reasonable leading indicator for vanadium prices with a 12-month lag. In general vanadium prices are more volatile when steel prices are elevated.

**Figure 4: Hot Rolled Steel Prices – Leading Indicator for Vanadium Prices**



Source: Patersons Estimates, Metal Bulletin

### Price History

The vanadium price can be volatile over time due to a number of factors including supply, steel demand and the impact of trading positions. The average historic price for V<sub>2</sub>O<sub>5</sub> in 1985-2005 was US\$3.90/lb and for the period 1997-2005 the average historic price was US\$4.11/lb.

Patersons highlight the period of low vanadium prices over Windimurra's previous operating history and the 10-fold increase from these lows in recent years reflecting a marked shift in demand fundamentals with little or no new supply coming online.

### Margin Protection

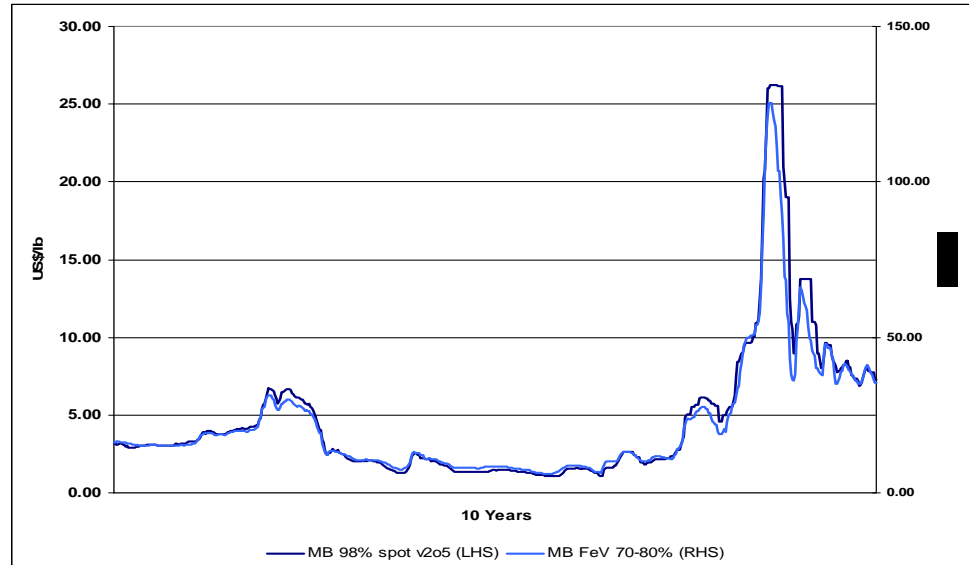
The substantial cash operating margins currently afforded to vanadium producers by elevated commodity prices is unlikely to be sustained over the longer term. Hence we highlight the importance of PMA achieving lowest cost quartile producer status to ensure sustainable margins. Patersons are confident with the process re-design underway this will be achieved, particularly given expanded production of 20Mlbs p.a. vanadium pentoxide equivalent.

Assisting PMA to move to the lowest cost quartile status are the recent cost increases displayed by peer producers. We note that Xstrata's vanadium business (similar production to the proposed operation at Windimurra) reported cash operating costs of US\$27.70/kg FeV for

CY05. This is 2x forecast costs for Windimurra in its first two years of production and 3x our anticipated steady state production costs for the operation.

PMA has entered into a comprehensive vanadium off take agreement with Noble Group. This agreement guarantees breakeven cash margins for the Windimurra project with prices set at prevailing market prices with the proviso that the minimum price is equal to cash costs of production.

**Figure 5: Vanadium 10-year Price History**



Source: Metal Bulletin

### Our Price Forecast

While vanadium pentoxide and ferrovandium prices are highly volatile (see table below) we believe they are set to benefit from ongoing demand for specialty steels and Industrial Production (IP) growth at a time of relatively tight supply.

In our modelling we have (conservatively) assumed a flat spot vanadium pentoxide price of US\$3.24/lb and flat spot ferrovandium price of US\$13.98/kg. These prices are between 65% and 75% of 10yr average prices.

**Figure 6: Vanadium Price Assumptions**

	MB 98% spot v2o5	MB FeV 70-80% spot	MB FeV 70-80%	FeV ratio kg/lb	FeV/V2O5 ratio
	USD/lb	USD/lb	USD/kg		
10 yr average	4.33	9.75	20.47	2.05	2.54
Min	1.05	3.42	6.18	1.18	1.47
Max	26.25	56.50	125.50	3.13	4.25
std/average	106%	86%	95%		
<b>PSL Assumed Price</b>	<b>3.24</b>	<b>6.34</b>	<b>13.98</b>		
<b>Spot</b>	<b>7.30</b>	<b>18.00</b>	<b>35.24</b>		

Source: Patersons Estimates

## **Directors And Management**

### **Mr Anthony J. Grey, Non Executive Chairman**

Mr Grey holds a BA and a Juris Doctor from the University of Toronto. He founded Pancontinental Mining, an ASX-listed diversified mining house with interests in gold, base metals, coal, industrial minerals and uranium. His experience includes four years as a Director of National Mutual Royal Bank and four years as Chairman of Kingsgate Consolidated. Mr Grey is Executive Chairman of Polartechnics Ltd, an ASX-listed biomedical company and is also Chairman of International Ferro Metals Limited.

### **Mr Roderick J. H Smith, Managing Director**

Mr Smith was a founding Director of PMA in 1988. He holds a Bachelor of Commerce from the University of Western Australia and a Diploma in Mining Investment Analysis from the Securities Institute of Australia. Mr Smith is a qualified chartered accountant. Mr Smith has 20 years of senior management and board experience in the mining industry, in which he has held the role of Chairman for several public companies and played a leading role in the development and operation of three gold mines and a vanadium mine.

### **The Earl of Warwick, Non Executive Director**

The Earl of Warwick has wide management and property experience in Australia and overseas. Director of PMA since 1991.

### **Michael Kiernan, Non Executive Director**

Mr Kiernan joined the board of PMA following the Noble Group off take agreement. Mr Kiernan is the Chairman of several ASX-listed companies and was former MD of Consolidated Minerals Ltd

### **Mr Michael Fry, Non Executive Director**

Mr Fry holds a Bachelor of Commerce degree from the University of Western Australia, is an Associate of the Securities Institute of Australia and a past member of the Australian Stock Exchange. He has experience in capital markets and corporate treasury management specialising in the identification of commodity, currency and interest rate risk and the implementation of risk management strategies.

### **Mr Mike Drew, Chief Financial Officer/ Company Secretary**

Mr Drew has a Bachelor of Business (Accounting) and a Master of Mineral Economics from Curtin University. He was involved in the development and operation of Windimurra in 1996 to 2000. As company secretary of PMA in 1996 to 1998, Mike was responsible for corporate governance and involved in the financing and development of the Windimurra Project. Mike was then appointed Commercial Manager of the Windimurra joint venture involved in all aspects of budgetary control, management administration and control of supply and service contracts.

### **Mr Shaun Bunn, Director Of Operations**

Mr Bunn holds a BSc in Extractive Metallurgy from the Western Australian School of Mines and a postgraduate MBA from Deakin University. He has previously held senior technical positions in the nickel and gold industries and his experiences encompass managing feasibility studies, project development and plant commissioning.

### **Mr Brett Foster, Project Manager**

Mr Foster was formerly with Vanadium Australia from 1999, during the construction and commissioning phases of the Windimurra Project. On settlement between Xstrata and PMA in August 2005 he joined PMA.

Precious Metals Australia Ltd (PMA) \$2.20				
Profit & Loss (\$m)	1HY06A	2HY06A	1HY07E	2HY07E
Sales Revenue	0.6	0.0	0.0	0.0
Other Income	0.0	1.3	1.7	2.1
Operating Costs	0.4	0.0	0.0	0.0
Depn & Amort	0.0	0.0	0.0	0.0
Exploration Exp.	0.0	0.0	0.2	0.4
Corporate/Admin	1.1	1.7	2.0	2.0
<b>EBIT</b>	<b>(0.9)</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>(0.3)</b>
Interest	0.0	0.0	0.0	1.4
<b>Operating Profit</b>	<b>(0.9)</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>(1.8)</b>
Tax expense	0.0	0.0	0.0	0.0
Minorities	0.0	0.0	0.0	0.0
<b>NPAT</b>	<b>(0.9)</b>	<b>(0.4)</b>	<b>(0.5)</b>	<b>(1.8)</b>
Significant Items	0.0	0.0	0.0	0.0
<b>Normalised NPAT</b>	<b>(0.6)</b>	<b>(0.3)</b>	<b>(0.4)</b>	<b>(1.2)</b>
Cash Flow (\$m)	1HY06A	2HY06A	1HY07E	2HY07E
Adjusted Net Profit	(0.9)	(0.4)	(0.5)	(1.8)
+ Interest/Tax/Expl Exp	0.0	0.0	0.2	1.9
- Interest/Tax/Expl Inc	3.1	3.9	2.5	2.3
+ Depn/Amort	0.0	0.0	0.0	0.0
+/- Other	0.0	0.0	0.0	0.0
<b>Operating Cashflow</b>	<b>(4.0)</b>	<b>(4.3)</b>	<b>(2.8)</b>	<b>(2.2)</b>
- Capex (+asset sales)	(9.6)	0.4	10.8	45.6
- Working Capital Increase	(2.2)	0.1	0.1	0.0
<b>Free Cashflow</b>	<b>7.8</b>	<b>(4.8)</b>	<b>(13.7)</b>	<b>(47.8)</b>
- Dividends (ords & pref)	0.0	0.0	0.0	0.0
+ Equity raised	26.5	0.0	0.0	0.0
+ Debt drawdown (repaid)	0.0	0.0	8.2	100.0
<b>Net Change in Cash</b>	<b>34.2</b>	<b>(4.8)</b>	<b>(5.5)</b>	<b>52.2</b>
Cash at End Period	45.2	40.4	34.9	87.1
Net Cash/(Debt)	45.2	40.4	26.7	(21.1)

Production Summary	1HY06A	2HY06A	1HY07E	2HY07E
Ferrovanadium (t)	0	0	0	0
Price Received (US\$/kg)	0.00	0.00	0.00	0.00
Cash Cost (US\$/kg)	na	na	na	na
Cash Margin (US\$/kg)	na	na	na	na
FX Received	0.75	0.74	0.75	0.75
Cash Margin (A\$/lb)	na	na	na	na
Vanadium Pentoxide (klbs)	0	0	0	0
Price Received (US\$/lb)	0.00	0.00	0.00	0.00
Cash Cost (US\$/lb)	na	na	na	na
Cash Margin (US\$/lb)	na	na	na	na
FX Received	0.75	0.74	0.75	0.75
Cash Margin (A\$/lb)	na	na	na	na

Balance Sheet (\$m)	2005A	2006A	2007F	2008F
Cash	11.0	40.4	87.1	52.1
Total Assets	11.2	36.3	142.2	187.9
Total Debt	0.0	0.0	108.2	158.2
Total Liabilities	1.1	1.1	109.3	159.3
Shareholders Funds	10.1	35.6	34.0	31.0
<b>Ratios</b>				
Net Debt/Equity (%)	na	na	62	342
Interest Cover (x)	na	na	0.0	0.1
Return on Equity (%)	68%	-7%	-13%	106%

Reserves & Resources	Mt	% V2O5	Mlbs V2O5
<b>Ore Reserves</b>			
Windimurra	50.4	0.49	544.4
<b>Mineral Resources</b>			
Windimurra	95.5	0.47	989.8

Year End June 30				
Profit & Loss (\$m)	2006A	2007F	2008F	2009F
Sales Revenue	0.6	0.0	46.3	150.8
Other Income	1.3	3.8	7.7	5.5
Operating Costs	0.4	0.0	39.2	81.3
Depn & Amort	0.0	0.0	1.5	9.2
Exploration Exp.	0.0	0.6	0.8	0.8
Corporate/Admin	2.8	4.0	4.1	4.2
<b>EBIT</b>	<b>(1.3)</b>	<b>(0.9)</b>	<b>8.4</b>	<b>60.8</b>
Interest	0.0	1.4	12.7	13.8
<b>Operating Profit</b>	<b>(1.3)</b>	<b>(2.3)</b>	<b>(4.3)</b>	<b>47.0</b>
Tax expense	0.0	0.0	0.0	14.1
Significant Items (gain)/loss	0.0	0.0	0.0	0.0
<b>NPAT</b>	<b>(1.3)</b>	<b>(2.3)</b>	<b>(4.3)</b>	<b>32.9</b>
Significant Items	0.0	0.0	0.0	0.0
<b>Normalised NPAT</b>	<b>(0.9)</b>	<b>(1.6)</b>	<b>(3.0)</b>	<b>32.9</b>
Cash Flow (\$m)	2006A	2007F	2008F	2009F
Adjusted Net Profit	(1.3)	(2.3)	(4.3)	32.9
+ Interest/Tax/Expl Exp	0.0	2.1	13.5	28.7
- Interest/Tax/Expl Inc	7.0	4.8	14.3	29.6
+ Depn/Amort	0.0	0.0	1.5	9.2
+/- Other	0.0	0.0	0.0	0.0
<b>Operating Cashflow</b>	<b>(8.3)</b>	<b>(5.0)</b>	<b>(3.7)</b>	<b>41.2</b>
- Capex (+asset sales)	(9.1)	56.4	81.3	3.8
- Working Capital Increase	(2.1)	0.1	0.0	0.0
<b>Free Cashflow</b>	<b>2.9</b>	<b>(61.5)</b>	<b>(85.0)</b>	<b>37.5</b>
- Dividends (ords & pref)	0.0	0.0	0.0	0.0
+ Equity raised	26.5	0.0	0.0	0.0
+ Debt drawdown (repaid)	0.0	108.2	50.0	0.0
<b>Net Change in Cash</b>	<b>29.4</b>	<b>46.7</b>	<b>(35.0)</b>	<b>37.5</b>
Cash at End Period	40.4	87.1	52.1	89.6
Net Cash/(LT Debt)	40.4	(21.1)	(106.1)	(68.6)

Production Summary	2006A	2007F	2008F	2009F
Ferrovanadium (t)	0	0	1,151	6,777
Price Received (US\$/kg)	0.00	0.00	25.17	14.80
Cash Cost (US\$/kg)	na	na	25.17	11.27
Cash Margin (US\$/kg)	na	na	0.0	3.5
FX Received	0.75	0.75	0.74	0.73
Cash Margin (A\$/lb)	na	na	0.0	4.8
Vanadium Pentoxide (klbs)	0	0	517	2,699
Price Received (US\$/lb)	0.0	0.0	10.2	3.6
Cash Cost (US\$/lb)	na	na	10.2	3.6
Cash Margin (US\$/lb)	na	na	0.0	0.0
FX Received	0.7	0.8	0.7	0.7
Cash Margin (A\$/lb)	na	na	0.0	0.0

Valuation	A\$m	A\$/sh
Windimurra	291	3.79
FX and Commodity Hedging	0	0.00
Unpaid Capital	1	0.01
Corporate	(15)	(0.20)
Exploration	0	0.00
Cash	36	0.47
Debt	0	0.00
<b>Total @ 10% Disc Rate</b>	<b>313</b>	<b>4.07</b>

Directors		
Name	Position	
Tony Grey	Chairman	
Roderick Smith	Managing Director	
Earl of Warwick	Non-Executive Director	
Michael Fry	Non-Executive Director	
Michael Kiernan	Non-Executive Director	
Ricardo Lieman	Non-Executive Director	
Substantial Shareholders		
Name	Shares (m)	%
R J H Smith	11.81	15.37
Matterhorn Investment Mgmt	10.32	13.43
Earl of Warwick	6.31	8.20
JP Morgan Chase and Co	6.46	8.40

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