Commercialising Austpac's Value-Adding Technologies

Mike Turbott, Managing Director



Disclaimer

This presentation is provided to you for information purposes only and should not be construed as and shall not form part of an offer or solicitation to buy or sell any securities or derivatives. It should not be considered as an offer or invitation to subscribe for or purchase any securities in Austpac Resources NL or as an inducement to make an offer or invitation with respect to those securities. No agreement to subscribe for securities in Austpac Resources NL will be entered into on the basis of this presentation.

To the maximum extent permitted by applicable laws, Austpac Resources NL makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and take no responsibility and assume no responsibility for, the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission, from any information, statement or opinion contained in this presentation.

Certain statements may be made herein that use the words "estimate", "project", "intend", "expect", "believe" and similar expressions intended to identify forward-looking statements. These forward-looking statements involve known and unknown risks and uncertainties which could cause the actual results, performance or achievements of the Company to be materially different from those which may be expressed or implied by such statements, including, among others, risks or uncertainties associated with the development of the Company's technology, the ability of the Company to protect its proprietary technology, the market for the Company's products, government regulation, changes in tax and other laws, changes in competition and the loss of key personnel. For additional information regarding these and other risks and uncertainties associated with the Company's business, reference is made to the Company's reports filed from time to time with the Australian Securities and Investments Commission and ASX.



Austpac Resources -The Company

■ Listed on ASX July 1986

■ Shares on issue

Share price

Market Cap

Shareholders

Major shareholder

■ \$5.2M in cash, no debt

Code: APG

649 million

13.5c (06/07/07)

\$88 million

4,200

BHP Billiton 3.8%

Share price up 864% in fiscal 2007 [Intersuisse resources index]



Strategy

Use Austpac's value-adding technologies, especially the ERMS & EARS processes to:

- Become a significant producer of high grade synthetic rutile feedstock for TiO₂ pigment and Ti metal manufacturers
- Produce iron units and recover acid from waste for the world steel industry (BOO plants)
- Produce Direct Reduced Iron (DRI) pellets from iron ore fines (licences)



Austpac's Business

Mineral processing

- Titanium Industry:
 - Synthetic rutile for TiO₂ pigment & Titanium metal
 - Fine mineral agglomeration
- Iron and Steel Industries:
 - Recycling waste iron oxides and chlorides
 - Direct reduction of iron ores ("DRI")

Gold exploration - south east China



Management



Terry Cuthbertson, Chairman

Extensive international corporate experience including a practical operating knowledge of business practices and structures in China and India.



Mike Turbott, Managing Director

35 years' experience in the mining industry. Managed a wide variety of exploration and development projects in Australia, New Zealand, PNG, Indonesia, Philippines and N. America. MD of Austpac since its formation



Robert Harrison, Non-Executive Director

40 years' experience in the marketing commodities in Africa and Australia, with over 20 years specialising in titanium minerals and zircon.



John Winter, General Manager - Process Development

Chemical engineer; 15 years experience, expert in fluid bed roasting and chloride chemistry, developed new processes and know-how that has led to four patents/applications to date.



Richard Jurdeczka, Plant Construction Manager

Civil engineer; 33 years experience in design, construction and project management in industrial, infrastructure, mining and hydrocarbon projects



Our Processes

- ERMS SR

Roasts and leaches ilmenite to produce high grade synthetic rutile

- EARS

Converts iron chlorides in spent leach liquors into hydrochloric acid and iron pellets

Direct Reduced Iron

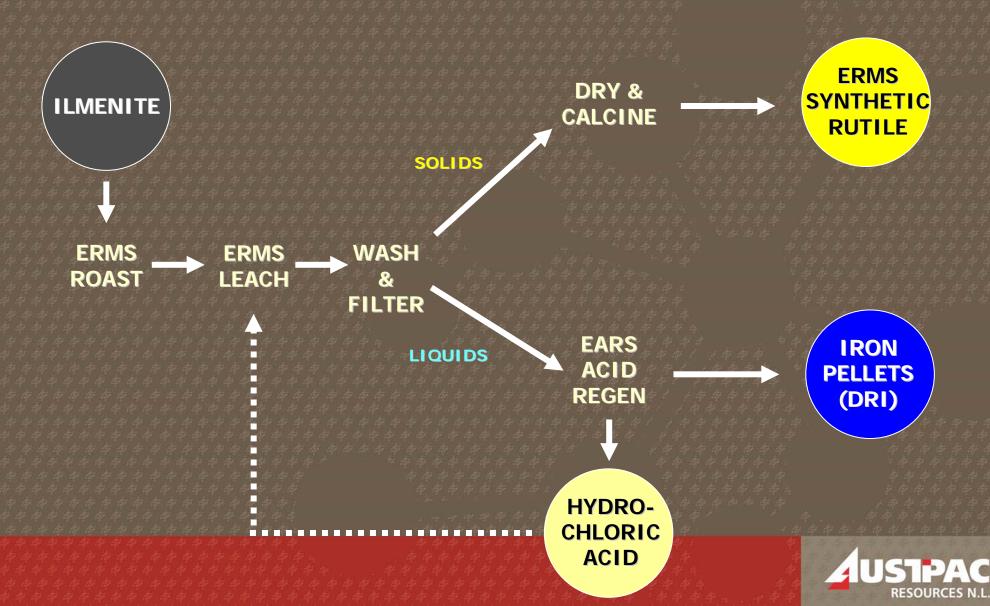
Innovative fluid bed process to reduce iron oxide to iron metal

Agglomeration

New fluid bed process to agglomerate fine minerals



ERMS SR & EARS Process



ERMS SR & EARS Process

Unique Features

Produces two valuable products

- Ultra-high grade synthetic rutile (for pigment <u>and</u> metal)
- Iron pellets for steel (instead of fine oxide waste)

Continuous - therefore lower capital & operating costs

Versatile - can treat <u>any</u> ilmenite and use <u>any</u> fuel (solid, liquid or gas)

Environmentally friendly - no solid or liquid wastes - no radioactivity





ERMS SR

World's highest quality synthetic rutile (>96% TiO₂)

■ TiO₂

97.0%

■ Fe₂O₃

0.55%

■ SiO₂

0.57%

 \blacksquare Al₂O₃

0.17%

 $\mathbf{Cr}_2\mathbf{O}_3$

0.01%

CaO

<0.01%

■ MgO

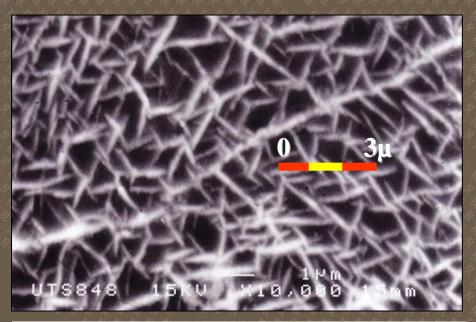
0.02%

MnO

0.01%

■ U+Th

<10ppm





BHP Billiton & ERMS SR

Research Agreement (Sep. 2006 - Jan. 2007)

Commercialisation Agreement (May 2007)

- BHPB share placement raised \$ 5m (25,000 000 shares; largest shareholder with 3.8%)
- Integrated Demonstration Plant at Newcastle (3,000 tpa)
- BHPB licensed to use technology in Africa (fee based on gross sales revenue)
- BHPB owns Corridor Sands (>100Mt ilmenite)
- Next step: 60,000 tpa commercial ERMS SR plant

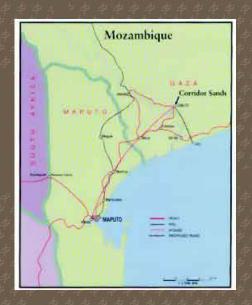
Jointly seeking opportunities to apply ERMS SR process elsewhere in the world



Corridor Sands

- Near Chibuto, southern Mozambique
- Ownership:
 - 90% Corridor Sands Limitada (BHP Billiton)
 - 10% Industrial Development Corp. of South Africa
- World's largest known heavy mineral ilmenite resource, >100Mt ilmenite (100-year-plus asset)
- BHP Billiton reconfiguring project

Titania Slag, ERMS SR option





Commercial ERMS SR Plant

- Scale-up from Demonstration Plant only 20:1
- 60,000 tpa ERMS SR plant (+ 45,000 tpa DRI pellets)
- Economically attractive:
 - Capital cost: ~\$ 85M
 - EBITDA: > \$ 35M
 - IRR: > 30%, Payback: < 3 years
- South eastern Australia possible location

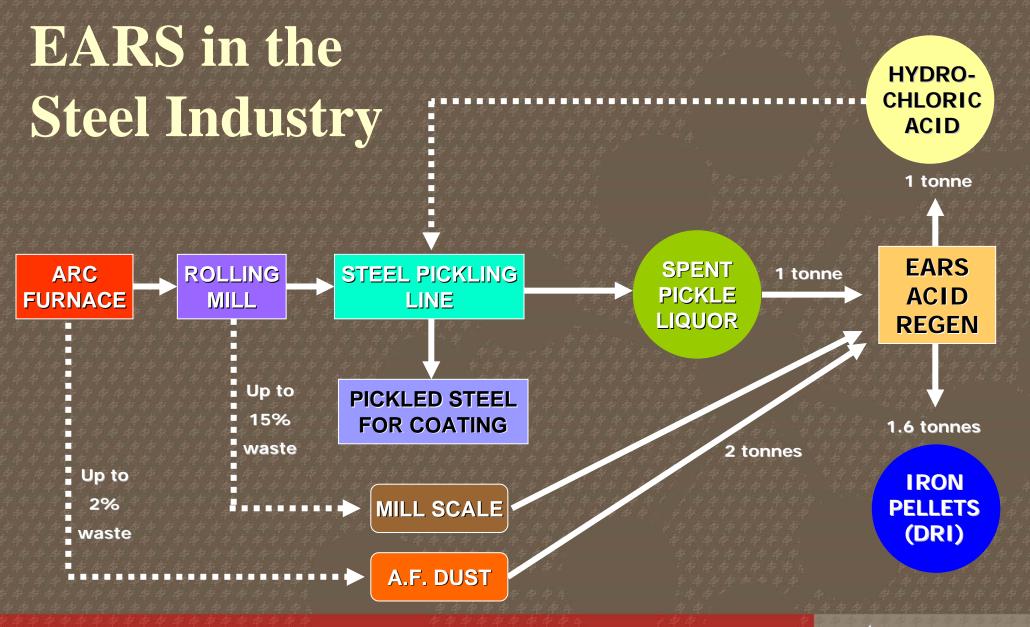


EARS Process: Recycling in the Steel Industry

- EARS regenerates low cost hydrochloric acid from waste chloride solutions from steel pickling & galvanising operations
- Transforms iron units currently lost as mill scales and dusts into high value electric arc furnace feed

1tonne pickle liquor + 2tonnes waste iron oxide = 1tonne of fresh acid + 1.6 tonne iron metal







EARS Iron Pellets (DRI)

High purity feedstock for steelmaking and foundries

■ Fe

FeO

■ TiO₂

■ SiO₂

 \blacksquare Cr_2O_3

■ MgO

■ MnO

 \blacksquare V_2O_5

 \blacksquare P_2O_5

89.7%

6.00%

0.16%

0.18%

0.08%

1.18%

2.29%

0.84%

0.007%





OneSteel EARS Agreement

- Pilot scale test work with OneSteel (spent pickle liquors and iron oxide residues)
- Demonstration Plant is first step towards commercialisation
- Aim to prove viability of steel industry applications
- Will lead to early cash flows

"Build-Own-Operate" (BOO) EARS Plant

- 50 tpd plant Capital cost ~ \$ 6M
- Opex \$130/t, Value >\$750/t; Profit = \$620/t
- Generates > \$ 10M profit p.a.



Metallising EARS Iron Oxide

- Fluid bed reduction of EARS iron oxide pellets to iron; a new DRI process developed in batch test work
- Continuous pilot scale unit was built to test the process prior to large scale implementation
- Process is being incorporated into EARS section of the Demonstration Plant







Other Technology Applications

- DRI process Iron ores
- Agglomeration of fine minerals



Iron Ore to DRI

- Value addition in the iron ore industry:
 - Magnetite sands to direct reduced iron (DRI)
 - Low value iron ore fines to high value DRI
- The continuous metallisation unit at Newcastle demonstrated the process using Pilbara iron ore fines
- ERMS SR Demonstration Plant will be used to process bulk iron ore samples

Interest from iron ore producers





Fine Mineral Agglomeration

- New fluid bed process; no binders
- Demonstrated on "Hi-Ti" minerals





WIM 150 ilmenite could supply a south eastern Australian ERMS SR plant for >50 years



Murray Basin Mineral Sand Developments

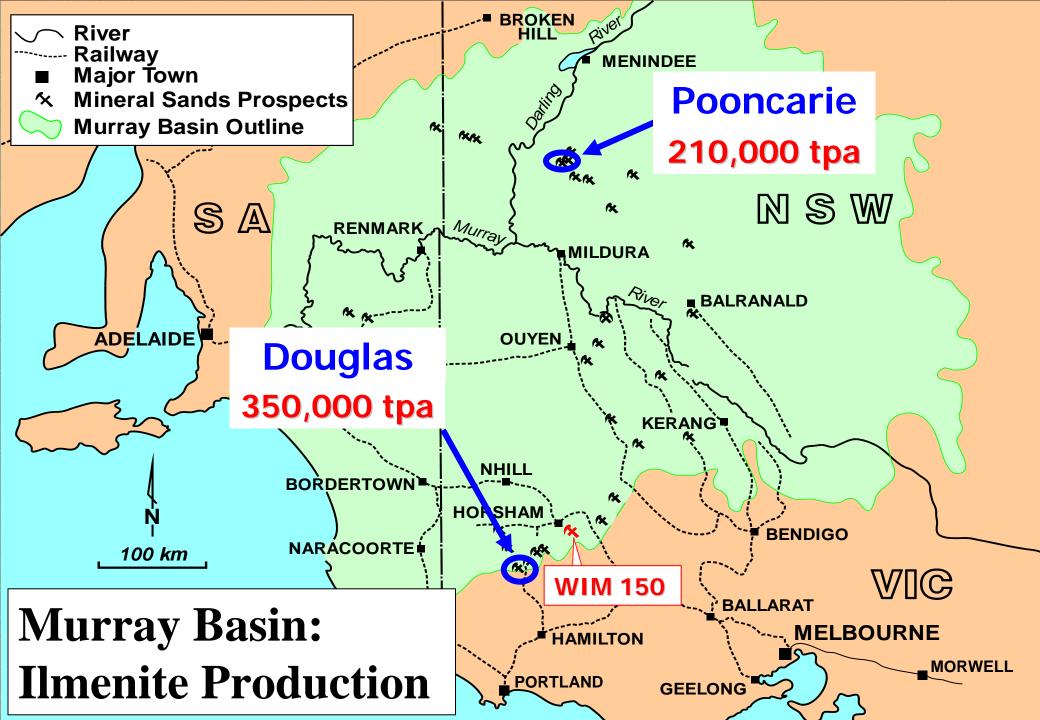
Huge value-add potential



- 2006 two new mineral sand mines commenced production in the Murray Basin
- Unsaleable ilmenite (high chrome, needs ERMS)

ERMS SR: only suitable process for upgrading ilmenite





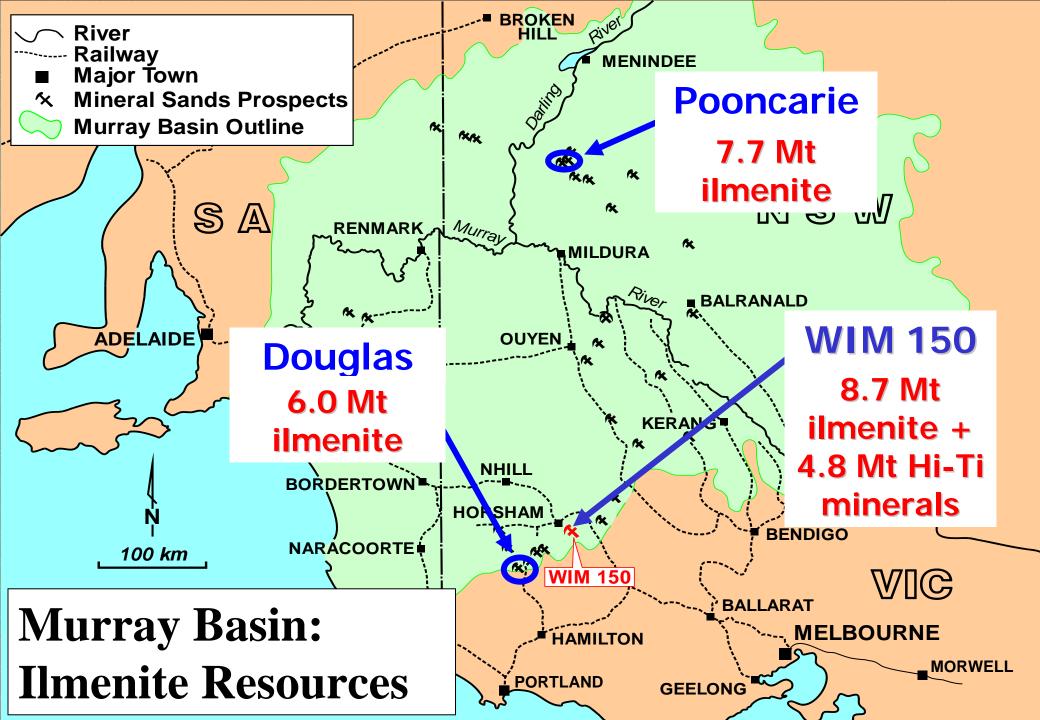
Iluka



Murray Basin Operations High-chrome Ilmenite BeMax







Austpac's WIM 150 Deposit

- Very large, fine grained HM deposit zircon and high chrome ilmenite
- ERMS SR process can achieve ~96% TiO₂ fine grained synrutile
- Austpac's new agglomeration process solves fine grain size problem
- Proven reserves adequate to supply major ERMS SR plant for over 50 years
- JV: Australia Zircon will earn 80% upon completion of a BFS; zircon-focused



Austpac's Forward Program

- ERMS SR Commercialisation with BHP Billiton
- EARS Early cash flow from the Steel Industry
- DRI Adds value to iron oxides and iron ores
- Agglomeration of fine minerals
- WIM 150 (Austpac can treat titanium minerals)



Project Timelines

(Fiscal Years)

Project	2007-08	2008-09	2009-10	2010-11	2011-12
Demonstration		7 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	7. 4. 4. 4.)	* * * * * * * * * * * * * * * * * * *
Plant (3,000tpa)		* * * * * * * * * * * * * * * * * * *	7 # # #	> 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	· \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
60,000 tpa ERMS SR		\$\phi \phi \phi \chi \chi \chi \chi \chi \chi \chi \c			4 4 4 4 4 4 4 4 4 4 · 4 4 4 4 4 4 4 6 6 6 6 6 6 6 6 6 6 6 6
Plant - S.E. Australia		7	**		
EARS Plant #1		# # # # # # # # # # # # # # # # # # #	<u> </u>	7 7 7 7 1 4 4 4 1 4 4 4	**************************************
(Australia)	\$ # # # \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ 5 5 5 5 5 5	######################################		1 # # # # 1 # 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ • \$ \$ \$ \$ \$
EARS Plant #2	* * * * * * * * * * * * * * * * * * *	4 4 4 4 4 4 4 4			
(Australia)		,			
DRI from iron ore fines (licences)					# # # # # # # * # # # # # # # # # # # # #





Cash Generation Potential

(EBITDA, Fiscal Years)

Project	2007-08	2008-09	2009-10	2010-11	2011-12
60,000 tpa ERMS SR Plant - S.E. Australia				\$30M	\$35M
EARS Plant #1 (Australia)		1	\$5M	\$10M	\$10M
EARS Plant #2 (Australia)			\$1M	\$10M	\$12M
DRI from iron ore fines (licences)					
Project EBITDA (Cumulative)			\$6M	\$50M	\$57M



Investment Case

- World class, proprietary, value-adding technologies
- Widely applicable to Titanium and Steel Industries
- JVs with BHP Billiton & OneSteel
- Experienced management team
- Murray Basin (WIM 150 and ilmenite treatment opportunities)
- Low entry price into exciting growth company with long term earnings capability





www.austpacresources.com



Unique **Technology** for the Global Mining Industry

