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mining

Investor Presentation
Macquarie Harbour Mining Limited
ABN: 41 124 212 175
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MHM...

A diversified resources company with projects structured to generate shareholder wealth in the short, medium and long term

Recently commenced income generation through aluminium business. Income to be reinvested into growth of aluminium division, for self-funded exploration within the mineral division. Focus: to minimise shareholder dilution and maximise earnings per share

Entering a significant period of growth over the next 5 years to become a major player in the aluminium and resource industries

Introduction

Listing Date 14 December 2007, with \$5.5M raised

~87.5M Shares on Issue (MHM) and ~27.5M Options (MHMO)

Current share price \$0.30 (market cap ~\$26.0M), 52-week range \$0.45 – \$0.02

Cash at 31 December 2009 ~ \$7.8M

Top twenty shareholders control 31.8% voting rights

Directors and Senior Management

Basil Conti FCA FCIS FTIA, *Chairman*

A CPA with over 35 years experience in corporate governance and management with ASX-listed and private enterprise corporations

Frank Rogers, *Managing Director*

Forty years experience in process engineering, mining, exploration and public company management

Ben Mead B.Ec, *Executive Director*

Diverse commercial management and business development experience in Australia, United Kingdom and the United States

Peter Robertson B.E. (Met) MBA, *Non-Executive Director*

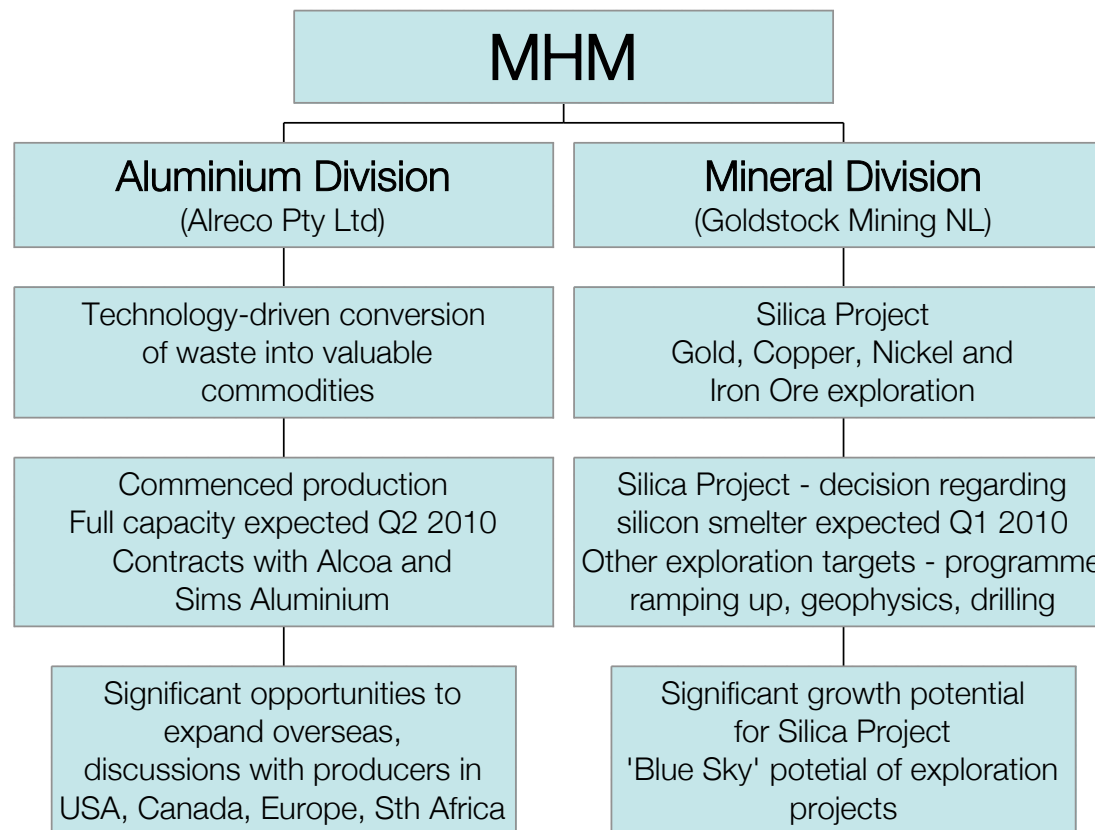
A metallurgist with extensive experience in process development and engineering in the aluminium industry

Dr. Neil Allen B.Sc PhD, *Non-Executive Director*

A mineral physicist with extensive exploration and mineral dressing experience in Tasmania

John Richardson B.Sc MAIG, *Chief Geologist*

Mr Richardson was previously employed as Senior Geologist with Mount Isa Mines, and has diverse exploration experience in Australia, Chile, Iran, Khazakstan and Libya



Alreco Pty Ltd



Aluminium Division

Alreco Pty is 100%-owned operating subsidiary. Owns the global rights to a proprietary technology to process waste (Aluminium 'Salt Slag') from the secondary aluminium industry

Results in previously landfilled material being processed into valuable commodities of aluminium (10-20%), salt (50%) and non-metallic product ('NMP') or aluminium oxide (30-40%)

Recently acquired Salt Slag Processing Facility from Sims Metal Management (ASX:SGM). Facility to be upgraded over 26 week period, no interruptions to operations during upgrade

Processing contracts to treat Aluminium Salt Slag and Aluminium Dross negotiated with Alcoa and Sims. Operating model largely insulates Company from fluctuations in the aluminium price and USD

Access to Alcoa landfill containing 160,000 tonnes of Salt Slag, including between 16,000 and 32,000 tonnes of aluminium (to be processed over 5 year period)

Anticipated EBITDA profits of \$230,000 per month during upgrade, increasing to \$8.6 million per annum at full capacity

Project Background

Working with the aluminium industry since 1998 to resolve issues concerning disposal of Aluminium Salt Slag, a by-product of secondary smelting operations

Salt Slag traditionally placed in landfill, EPA no longer permits. Industry cannot continue to operate without a viable solution. Waste designated as 'hazardous' in every developed country except USA, as material can leach ammonia and heavy metals

Technology removes the need for any material to be consigned to landfill, processes waste material and converts to three valuable commodities; aluminium metal, salt and aluminium oxide or Non-Metallic Product ('NMP')

Technology not only removes the landfill 'legacy', the recovered materials are increasingly valuable (aluminium, potash), the process significantly reduced CO₂ emissions as compared to aluminium production from primary sources, and permits the promotion of 'Green Can' concept presently being promoted in Australia – a completely recyclable product with an infinite life, the aluminium can. Without the Alreco process this concept is simply not possible

Financial Detail

Aluminium Salt Slag Facility and underlying land purchased from Sims for \$3.0M, with a further \$2.0M being spent on the technology upgrade

Three-year contract with Alcoa to process between 11,000 and 13,000 tonnes of Aluminium Salt Slag per annum, for \$300 per tonne. Alcoa retains ownership of recovered metal and salt, Alreco retains NMP (value ~\$200 per tonne)

One year contract with Sims to process Aluminium Salt Slag, Aluminium non-Salt Slag and Aluminium Dross, details of contract confidential at request of Sims

Access to Alcoa-owned landfill to process 160,000 tonnes of material. Landfill contains between 16,000 and 32,000 tonnes of aluminium, 80,000 tonnes of salt and 48,000 to 64,000 tonnes of NMP. Alcoa has relinquished ownership of any material that is reclaimed

NB: Alreco will retain 60% of the EBITDA profits from the three-year Alcoa processing contract and Alcoa landfill. Remaining 40% owned by existing company. MHM has first right of refusal to acquire remaining 40% through the issue of scrip, under independent valuation and subject to shareholder approval

Environmental Benefits

Landfilled salt slag causes significant environmental problems – releases ammonia into air and metals into groundwater. No landfill means no contamination issues

Significantly reduced energy consumption by producing aluminium from Salt Slag waste, as compared to primary sources; requires 95% less energy than required to produce aluminium from bauxite

Australian Aluminium Council states that primary aluminium production results in 3.1 tonnes of CO₂ per tonne of metal. Alreco Process uses 95% less energy, so will reduce CO₂ output by approximately 2.945 tonnes of CO₂ per tonne of metal. The Alcoa landfill alone contains between 16,000 and 32,000 tonnes of aluminium, resulting in a saving of between 47,000 and 94,000 tonnes of CO₂ from emission. When the Alcoa processing agreement and Sims processing agreement is taken into consideration, this figure increases further

The Australian Aluminium Industry has been promoting the 'Green Can' concept – an infinitely recyclable product with no resultant waste. This is only achievable due to the technology being implemented by Alreco

Alreco is looking to implement an evaporation plant into the circuit, that will utilise Alcoa's waste heat from the Point Henry Smelter to produce a crystalline salt from the Salt Slag treatment (as opposed to the use of evaporation ponds). This will result in the saving of approximately 120,000,000 litres of water per year

Future Strategy

USA market potential

Alreco will seek expansion into the USA in 2011

Around 1 million tpa of Salt Slag is produced in the USA (25,000 tpa produced in Australia)

Alreco has received keen interest in two processing facilities in North America with a combined capacity of 400,000 tpa

There are 8 Salt Slag landfills that present immediate targets for reclamation

Robust profit margins strengthen the case for debt financing of future growth, to reduce shareholder dilution and maximise returns

Europe, Canada and South Africa expansion opportunities

Alreco has had a number of discussions with a major aluminium producers in each of these countries, and there is a keen interest to employ Alreco's exclusive technology into these regions

Australian Operations



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Australian Operations



Additional Technologies

NMP processing

MHM to acquire the exclusive rights to a technology under development for the conversion of NMP into aluminium metal

In Australia, over 50,000 tpa of NMP is produced, which would produce nearly 25,000 tonnes of aluminium metal with a value of \$50.0M at today's prices

USA produces 10 times the volume of NMP produced by Australia

SPL processing

MHM to acquire the exclusive rights to a technology under development to process Spent Pot Lining ('SPL') into valuable commodities

Australia produces 38,000 tonnes of Spent Pot Lining per annum while USA produces some 230,000 tonnes

The process to be used by MHM converts SPL into carbon, fluorine products and refractories for reuse in the aluminium industry

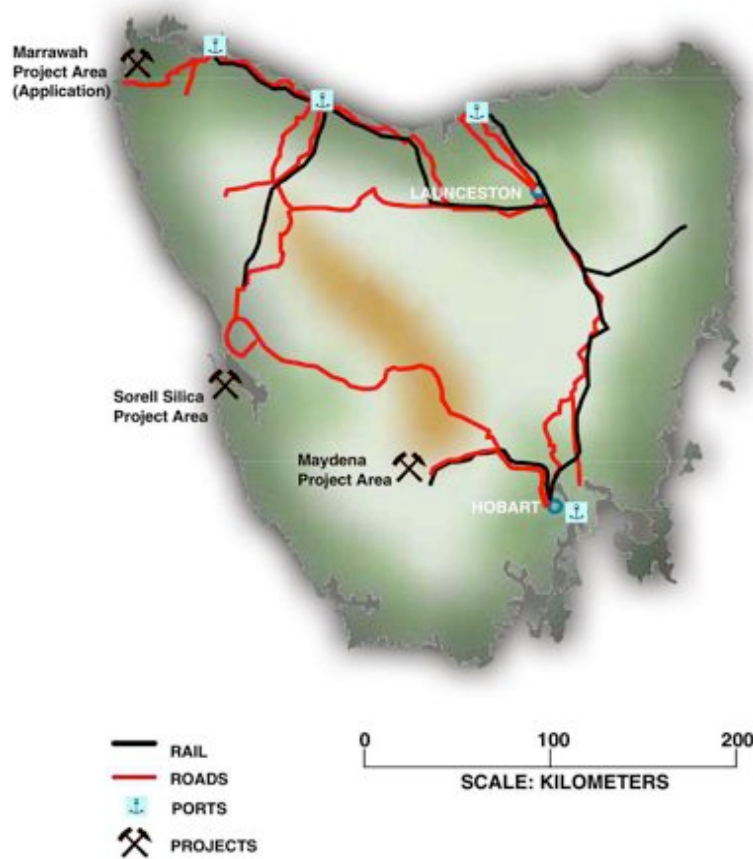
The revenue potential from the treatment of SPL is substantial

Silica Project



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Introduction



Silicon metal is a strategic high-tech commodity: applications in the production of photovoltaic cells, computer chips and diverse range of products that increase efficiency and reduce energy consumption

Demand for silicon metal increasing exponentially due to high-tech and renewable energy applications of the commodity

Advanced stages of off take negotiation and project development with multi-national chemical company

Silica Project Areas

Sorell Silica Project

Comalco (now Rio Tinto Aluminium) delineated four vast project areas ideally suited to silicon metal production, significant potential to upgrade both purity and tonnage.

Unique “world-class” deposit with respect to magnitude and purity

Silica displays excellent thermal stability and mechanical strength - critical factors in suitability for use to produce silicon metal

Drilling to confirm tonnage and grade to JORC compliance subject to positive news regards potential offtake

Maydena Silica Project

Previously mined as feedstock for silicon metal

Excellent proximity to infrastructure (road, rail), minimal environmental issues

Marrawah Silica Project

Excellent reported purity and tonnage potential

Adjacent to sealed roads, excellent proximity to international ports

Offtake Discussions

MHM is conducting offtake discussions with three parties at various stages of development. Samples have been provided to two of these parties and the results have been highly encouraging.

It was reported recently by the Mercury Newspaper that one Company, Wacker Chemie AG is considering development of silicon smelter in Tasmania. Whilst MHM cannot confirm or deny the rumors it can confirm that Wacker is one of the parties in discussion.

Founded in 1916, Wacker is a diversified chemicals company based in Munich, with operations in five continents and ~15,000 employees

2008 sales of €4.3 billion, EBITDA of €1.05 billion

World-leader in production of silicon metals for chemical applications, silicon wafers for the semiconductor industry and a major producer of hyperpure polysilicon used in the photovoltaic solar energy market

Decision to proceed reported to be Q1 2010 (Examiner Newspaper, Nov 2009)

Silicon Smelting in Tasmania

Silicon metal is produced when silica is smelted with carbon to produce silicon

Essentially three tonnes of silica together with one tonne of charcoal or low-ash, low-sulphur coal are smelted using ~12MW electricity to produce one tonne of silicon metal

This silicon metal is then further processed and utilised in a variety of ways from computer circuitry to solar panels to construction materials and cosmetic products

Tasmania is a premier global location for such a silicon smelter:

- ✓ World-class quartzite with respect to purity and magnitude
- ✓ 100% renewable energy available the process (hydro-electric power)
- ✓ Charcoal produced by the collection of forest waste and / or plantation timber: at present this forest-waste is burnt in 'post harvest operations'. No further benefit is derived from this waste, and post harvest burns can cause localized air quality problems. A silicon smelter could utilise a significant proportion of this waste, with charcoal produced in a closed-loop operation with significantly reduced emissions. The waste heat from the process could also be used to generate additional renewable electricity.

Ongoing Exploration

MHM has commenced ramp-up of exploration for gold, nickel, copper and polymetallics on existing project areas

MHM project areas contain a diversity of rock types including the highly prospective Mt Read Volcanics with structural complexity of a type that augers well for mineral discovery

Number of gold targets with significant potential:

- ✓ Pelias Cove – contains observed outcropping copper mineralisation, significant quantities of coarse gold present in panned heavy concentrates. Fault breccia and silica flooding intersected in drilling are promising indications of a primary gold source
- ✓ North Butler Creek – extensive outcrop with disseminated pyrite and accompanied by significant alluvial gold. Carbonate-silica-pyrite-sericite pervasive within a volcanic-sedimentary sequence
- ✓ Hill 99 – outcropping massive iron sulphide. Sulphide gossan float with highly chloritised rocks and coincident copper and zinc soil anomaly over 400m strike length. The target contains an extensive alteration package of the type that hosts the Henty gold and Hellyer zinc mineralisation

Ongoing Exploration

The Company also plans to conduct geophysical analysis (VTEM) of the province, covering some 300km². Targets including:

- ✓ Hibbs Ultramafic Belt, a 25km province that hosts nickel sulphide and PGM mineralization with recorded occurrences at periodic intervals along the 25km structure
- ✓ King River VHMS structure
- ✓ Pelias Creek, Butler Creek and Hill 99 gold structures

MHM has previously identified a structure of high-grade iron ore, with surface samples returning grades in excess on 69% Fe. Due to the high development and infrastructure costs this project is presently on hold and will be recommenced at a later date. It is a policy of MHM to focus upon those projects which are the least likely to result in shareholder dilution in the early stages of the Company's development

MHM has recently employed an exploration manager and project geologist, both with significant experience (>10 years) in gold and base metal exploration in similar geological settings to those on MHM's tenements

Conclusions

Recently commenced production and income from aluminium project, technology upgrade commenced and ongoing

Aluminium Project has anticipated EBITDA profit of \$8.6M pa once operating at full capacity, \$230,000 per month during plant upgrade

Significant growth potential in USA, Canada, Europe and South Africa

Significant environmental benefits should increase profile of MHM to 'ethical investors'

Silica project has potential to generate returns in perpetuity

Simple mining and processing operation

Significant medium to long term potential for gold, nickel, copper and iron ore projects held within existing exploration areas

MHM Director's and Management have a significant stake in the Company and are committed to generating prosperity for all Shareholders in the short, medium and long term



Macquarie Harbour Mining Ltd

52 Channel Highway

Kingston TAS 7050

Ben Mead

p. +613 6229 9955

m. +614 2484 0810

www.mhml.com.au



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