ASX RELEASE

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Feasibility Study shows low cost battery grade lithium hydroxide production possible using ELi Technology

Highlights

- **Positive results for Feasibility Study ('FS') on producing battery grade lithium hydroxide and lithium carbonate using the patented ELi™ Process**
- **The FS cost estimates established to an accuracy of +/- 15% confirm a production operation is technically feasible and economically viable**
- **The FS demonstrates an internal rate of return of 51% and a pre-tax net present value of US$481M using a 12% discount rate**
- **Pilot plant study using run-of-mine concentrates is the next step in commercialising ELi**

Joint venturers Neometals Ltd (ASX: NMT) and Mineral Resources Limited (ASX: MIN) have taken a major step towards commercialisation of their patented ELi Process that could see low cost battery grade lithium products produced from spodumene concentrate sourced from the Mt Marion Project near Kalgoorlie.

Results of a Feasibility Study ('FS'), following a positive Prefeasibility Study in 2012, have confirmed the proposed production project is technically feasible and economically viable.

The ELi Process converts spodumene concentrate into a high purity lithium chloride solution, then uses electrolysis to produce high purity lithium hydroxide and lithium carbonate, both high value products used in the lithium ion battery industry. The technology is owned and being developed by Reed Advanced Materials Pty Ltd (RAM), which is 70% owned by Neometals and 30% owned by MIN.

The FS evaluates an operation to produce 20,000tpa of lithium carbonate equivalent ('LCE') battery grade lithium hydroxide and lithium carbonate by conversion of spodumene concentrates at a proposed plant in Malaysia. The FS incorporates an Engineering Cost Study ('ECS') with technical, engineering and economic assessments carried out by the subsidiary of the German-owned EPC contractor M+W Group, M+W Group (Singapore), to provide capital and operating cost estimates to an accuracy of ±15%.

Neometals and MIN have rights to deploy the ELi Process and to purchase spodumene concentrates from Mt Marion to secure the supply chain for an ELi processing plant.

The FS confirmed the potential for a viable, profitable new business using the ELi Process. Neometals and MIN believe that the ELi Process provides a key competitive advantage with lower capital and unit operating costs when compared to current industry averages using conventional technology.

The current market for battery grade lithium hydroxide and lithium carbonate is in tight supply due to high demand growth and constrained supply resulting from low installed base of production capacity in the high purity product sector. The market demand is forecast to grow significantly for the next 5 years through to 2020 (the timeframe in which Neometals and MIN are aiming to commence production at the project) and continue thereafter. Spodumene converters in China dominate the current battery market supply capacity for lithium hydroxide, resulting in a geographic concentration of production. This project has the potential to bring new supply capacity at competitive operating and capital costs to the market.

Details of the FS are attached, with key highlights summarised in the table below:

Feasibility Study Highlights	
Average Annual Production	14,000t $LiOH.H_2O$ 5,600t Li_2CO_3
Life of Plant (LOP)	20 years
Life of Plant Revenue	US$ 4,042 million
Pre-tax Net Cash flow	US$ 82.39 million
Pre-tax NPV (12% discount rate)	US$481.7 million
Pre-tax Internal Rate of Return	51%
Cash Operating Cost per tonne of $LiOH.H_2O$	US$ 4,630
Cash Operating Cost per tonne of Li_2CO_3	US$ 5,345
Pre-production Capital cost (including EPCM and Contingency)	US$ 158 million
Payback of capital costs	2.6 years

Key assumptions

Operating and capital costs are presented as at end of the 4th Quarter of FY2015-16 with an indicative accuracy of ±15%. All analysis is in US dollars and assumes real long-term prices of US$11,000/t for high purity 'battery grade' $LiOH.H_2O$ and US$ 10,000/ t of high purity 'battery grade' Li_2CO_3. Current pricing for large volumes of lithium hydroxide in US/Europe is US$14,000-20,000/t with spot sale in China for US$25,000-28,500/t (Industrial Minerals, 9 June 2016). A sensitivity analysis is contained in the attachment to this announcement.

P**ROJECT DEVELOPMENT AND CORPORATE STRATEGY**

Based on the robust FS results, RAM supports the project progressing to a full, integrated pilot plant study to refine the process design and confirm the operating parameters to sufficient accuracy for the detailed design phase for a full scale plant. RAM plans to undertake this pilot plant evaluation of the patented ELi Process in the FY2016-17, subject to board approval. A decision to progress to the construction phase of a full scale plant would be subject to successful execution of the full pilot scale test work and completion of detailed design of the full scale plant.

The FS has been completed using a location in Peninsular Malaysia as the base for operations. Malaysia offers good logistic access for bulk spodumene concentrate deliveries from Australia and proximity to the main base of global lithium battery cathode production. NMT's negotiations with Malaysian Government agencies have been supportive of locating the project there.

MANAGING DIRECTOR COMMENT:

Chris Reed, Managing Director, Neometals, commented:

"We are pleased to have completed another step towards commercialising our patented ELi process and building a globally competitive, high purity 'battery grade' lithium compound facility.

"The next step in the project's development plan is to complete an integrated pilot plant test program using run-of-mine concentrates from Mt Marion before we commit to the detailed design and construction of a full scale plant. In parallel we will commence a formal partner selection process to commercialise this globally significant project."

ENDS

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Forward-looking information

This document includes certain statements, opinions, projections, forecasts and other forward-looking information which, while considered reasonable by Neometals, are inherently subject to significant uncertainties and contingencies. Many known and unknown factors could cause actual events or results to differ materially from estimated or anticipated events or results included in this document. Investors are cautioned that forward-looking statements are not guarantees of future performance – they should make their own independent investigations, consideration and evaluation of the opportunity to invest in Neometals.

FEASIBILITY STUDY (FS, "The Study") DETAILS

- *The study evaluates an operation to produce 14,000 tonnes/annum of high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$) and 5,600 tonnes/annum of high purity 'battery grade' lithium carbonate (Li_2CO_3) by chlorination of spodumene ore and electrolysis of lithium chloride (LiCl).*
- *The study concludes that the Operation:*
    - *Is feasible as a profitable business venture that could meet reasonable ROI criteria.*
    - *Has apparent lower than industry average unit production costs on a cash basis and on a fully-costed basis.*
    - *Has lower capex than equivalent capacity plants that use conventional brine and other spodumene processing flowsheets.*
- *The Study results indicate that the project has the potential to support a robust business in a high growth market sector.*
    - *The economics of the business can be enhanced by locating this plant in a jurisdiction that offers lower associated capital, natural gas and electric power costs and in a location that is closer to the end markets in China, Korea and Japan. Malaysia is a preferred chosen location because of these advantages.*
    - *The battery market sector has a preference for suppliers to offer an integrated supply chain. The RAM high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$) and high purity 'battery grade' lithium carbonate (Li_2CO_3) project could be supplied from the Mt Marion spodumene mine.*
- *Key parameters from the Study are:*
    - *The capital and operational cost estimates are presented in US Dollars (US$) current for the 4th quarter 2015-16 Australian financial year and are considered to be within ± 15% order of magnitude as per International/ Australian standard for Feasibility Study (FS).*
    - *Net Present Value (NPV) of the project is estimated at US$ 481.7 million (before tax discount rate of 12%).*
    - *The Internal Rate of Return (IRR) of the project is estimated at 51 %.*
    - *The capital cost of the plant including land and owner's cost and including EPCM contractor fee and contingencies is estimated at US$158 million.*
    - *Potential for very competitive cash operating costs and margins.*
        - *Estimated US$ 4,630 / tonne high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$) cash cost compared with average market price US$ 11,000/ tonne.*
        - *Estimated US$ 5,345/ tonne high purity 'battery grade' lithium carbonate (Li_2CO_3) cash cost compared with average market price US$ 10,000.00/ MT.*
    - *An estimated net cash flow average of the project is US$ 82 million per annum (pre-tax) for the life of the project.*
    - *The estimated payback period of the project is 2.6 years.*
- *Both high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$) and high purity 'battery grade' lithium carbonate (Li_2CO_3) are used for the production of the cathode materials for lithium ion batteries.*

- *Developments in battery chemistry to improve operating characteristics are trending towards the use of lithium hydroxide monohydrate ($LiOH.H_2O$) for pre-cursor production of high performance cathode materials.*

- *Installed production capacity for suitable quality lithium hydroxide monohydrate ($LiOH.H_2O$) is substantially smaller than for equivalent quality grade lithium carbonate (Li_2CO_3) and has limited the adoption of lithium hydroxide monohydrate ($LiOH.H_2O$) as a pre-cursor raw material.*
- *The number of producers of suitable grades of lithium hydroxide monohydrate ($LiOH.H_2O$) is fewer than for lithium carbonate (Li_2CO_3) and has been a commercial constraint on the adoption of lithium hydroxide monohydrate ($LiOH.H_2O$) in cathode manufacturing.*
- *Lithium hydroxide monohydrate ($LiOH.H_2O$) has been generally more expensive than equivalent grades of lithium carbonate (Li_2CO_3) due to the higher cost of production associated with conversion of lithium carbonate (Li_2CO_3) into lithium hydroxide monohydrate ($LiOH.H_2O$) by conventional causticisation method.*

- *The forecast demand growth for both high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$) and high purity 'battery grade' lithium carbonate (Li_2CO_3) is more than 20% due to forecast growth in the mobility transport sector (battery electric vehicles (EV), hybrid electric vehicles (HEV), E-Bikes and commercial vehicles), from a low base, in the period 2017-2020.*
- *The stringent purity and quality requirements of the lithium ion battery sector are significant barriers to entry for new and existing lithium compound producers. The conventional production flow sheets used by most current manufacturers of lithium hydroxide monohydrate ($LiOH.H_2O$) and lithium carbonate (Li_2CO_3) require additional processing phases that increase production costs.*
    - *The patented ELi Process that is the subject of the FS delivers the required levels of product purity at typical lower cost than conventional flowsheets.*
- *The company has developed the use of chloride-ion flow sheet. It involves hydrochloric acid based extraction of lithium from spodumene coupled with the electrolysis of lithium chloride (LiCl) solution to produce high purity 'battery grade' lithium hydroxide monohydrate ($LiOH.H_2O$). A further step is the carbonation of lithium hydroxide to produce high purity 'battery grade' lithium carbonate (Li_2CO_3).*
- *The metallurgical testwork to prove the concepts and to develop engineering data were successfully carried out by SGS Oretest Pty Ltd, Western Australia and Process Technology Optimization Inc, USA.*
- *The technical, engineering and economic assessments to estimate capex and opex within ±15% were carried out by M+W Group, an international EPCM contractor.*
- *The chloride system has the potential to reduce capital and operational cost compared with the conventional sulphate process.*
- *The key strengths of the project are raw material supply security (the control of the ore raw material spodumene), reasonably priced and readily available commercial grade reagent (hydrochloric acid), decoupling of the chlor-alkali flow sheet from chlorine production by reconstituting hydrochloric acid. The proposed project location in Malaysia offers access to low cost utilities, a mineral import and attractive business incentives.*
- *A by-product of the proposed process is a non-hazardous aluminosilicate filter-cake that will be supplied to local cement manufacturers and road contractors to reduce or ELi eliminate disposal costs and liabilities.*

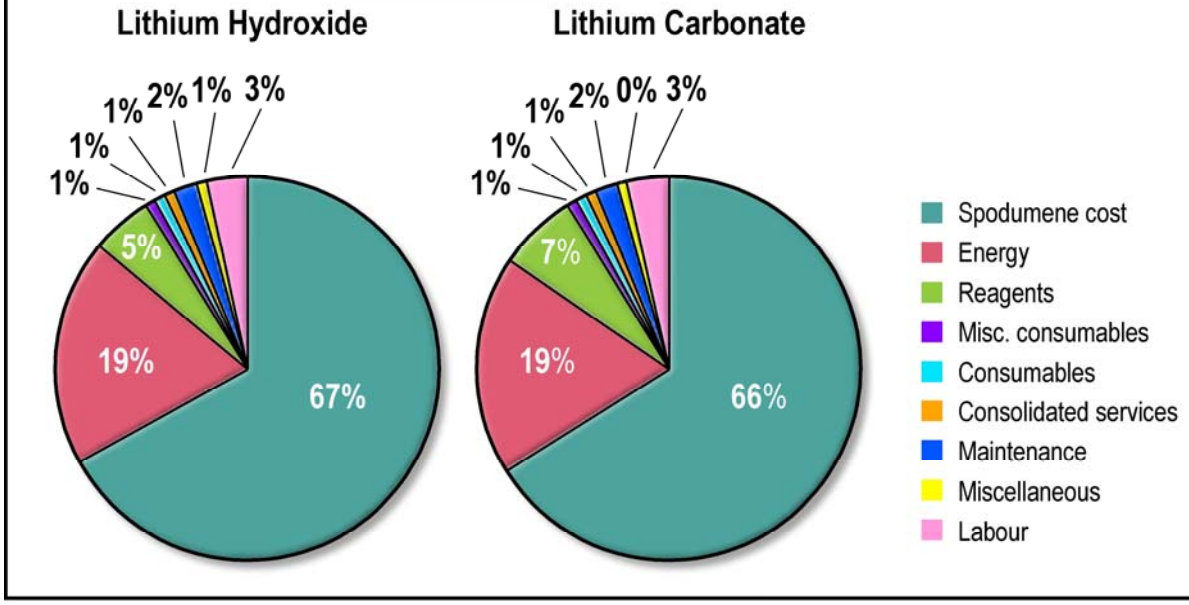
OPERATING COST ESTIMATE

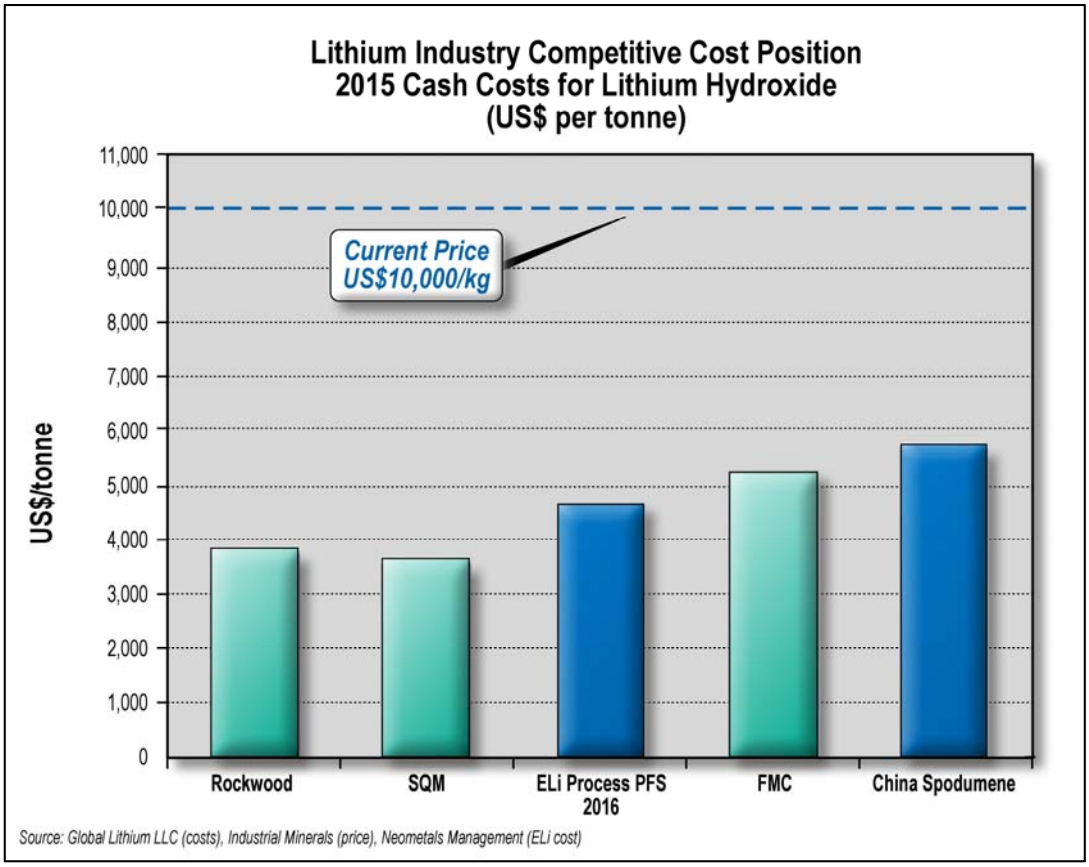
M+W Group has estimated the operating costs for the ELi Process in Malaysia to a FS accuracy of ±15%.

Operating Cost Estimate

CASH COSTS	US$/t $LiOH.H_2O$	US$/t Li_2CO_3
Spodumene Cost (@ Market Price)	**3,097.27**	**3,519.74**
Processing Cost		
Energy	886.48	1,007.40
Reagents	237.36	373.99
Misc. consumables	55.49	63.06
Consumables	24.55	27.90
Consolidated services	43.64	49.59
Maintenance	114.50	130.12
Miscelleneous	15.36	17.46
Labour	155.51	155.51
Total Processing Cost	**1,532.90**	**1,825.03**
Total Costs (US$/t EXW)	**4,630.17**	**5,344.77**
Shipping/transport	200.00	200.00
Total costs (US$/t CIF)	**4,830.17**	**5,544.77**
Selling Price(US$/t CIF)	**11,000.00**	**10,000.00**

Input Cost Analysis





CAPITAL COST ESTIMATE

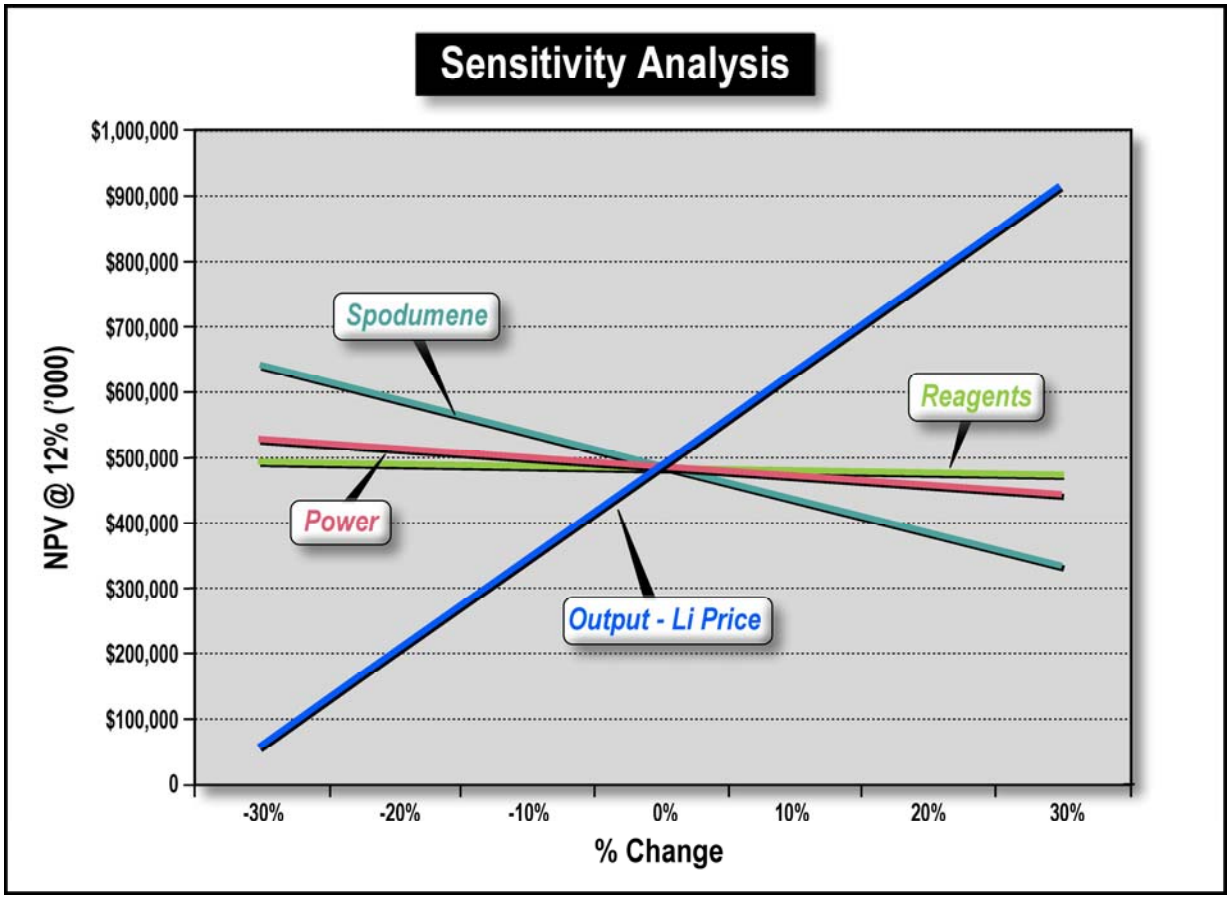
M+W Group has estimated the capital costs to build the processing facilities in to a FS accuracy of ±15%.

Capital Cost Estimate

	PACKAGE	US$ MILLIONS
1	EPCM	10.00
2	Site Establishment	3.32
3	Process Building & Warehouse (CSA)	21.91
4	Mechanical Works	2.71
5	Electrical Works	13.87
6	ELV	4.92
7	Piping Works	4.46
8	Others	0.11
9	Process Equipment Supply	70.24
10	Owners Cost	17.29
11	Contingencies	9.59
	TOTAL PLANT CAPITAL COST	158.42

SENSITIVITY

The analysis of project costs shows the operation is most sensitive to the cost of raw materials and electricity. The project has been modelled on the purchase of raw materials at market price. The market price of spodumene concentrates in this sector has a close relationship to the market price of the final products.



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