

Neometals Ltd.

Ticker: NMT AU
 Share Price: A\$0.19
 Market cap: A\$103.6m
 Cash: A\$81.3m
 Investments (Listed): A\$5.0m
 Debt: A\$0m
 Enterprise Value: A\$17.3m
 Shares Outstanding: 545.4m
 Shares - Fully Diluted: 555.6m
 Managing Director: Chris Reed



Prices as of the close of business
2 November 2020

Contact details:

Roger Breuer (Analyst)
 +44 (0)20 7389 5010
rbreuer@agam.co.uk

Charlie Cannon-Brookes
 +44 (0)20 7389 5017
cbrookes@agam.co.uk

Simon Catt
 +44 (0)20 7389 5018
scatt@agam.co.uk

Richard Lockwood
 +44 (0)20 7389 5013
rlockwood@agam.co.uk

Battery Recycling: In the Right Place at the Right Time

Neometals' recent success, securing **SMS group** as a 50:50 Joint Venture (JV) partner for its battery recycling technology, is a strategic coup. SMS group, with headquarters in Düsseldorf, is a global supplier of industrial plants and equipment and generated approximately EUR3.0 billion of revenue in 2019. The JV, called **Primobius GmbH**, is in an enviable position since both partners contribute significantly to the venture. Neometals' hydro-metallurgical process to recover lithium, nickel, cobalt and other materials from lithium-ion batteries is **environmentally superior** to both landfill disposal and pyro-metallurgical recycling. At the same time, SMS group, brings engineering clout and are located in one of the most competitive and innovative auto-markets in the world. Managing Director, Chris Reed commented recently in an interview with Benchmark Minerals, "Having a large reputable German partner certainly doesn't hurt given many target partners are domestic and well known to SMS".

Importantly, the European Union's vision for a climate-neutral economy, initially communicated by the EU Commission in November 2018, provides an unavoidable backdrop for the European auto industry's transition towards electrification. Primobius GmbH looks exceptionally well placed to benefit from this long-term policy, since hydrometallurgical recycling processes have the ability to lower carbon emissions significantly and support resilient, ethical domestic supply-chains, hungry for battery raw materials. Primobius will complete its Life-Cycle-Assessment calculations with output from the demonstration plant. Li-Ion battery recycler Duesenfeld claim that their hydrometallurgical process saves 8.1 tonnes of CO₂ per tonne of recycled batteries relative to primary extraction of raw materials. And saves 4.8 tonnes of CO₂ per tonne of recycled batteries relative to conventional smelting processes.

A recent comment from Herbert Weissenbaeck of SMS group highlights the opportunity perfectly, "The timing is good to secure a foothold and build credibility with OEMs who value closing the loop in the battery value chain. There is a groundswell of global, and particularly European, support for sustainability and circular opportunities and this strengthens our commitment to Primobius".

While the Primobius JV appears to have found itself in the right place at the right time, for Neometals' shareholders, the key question is - what value does this opportunity represent? To make sense of this, we've gone back to Neometals' battery recycling scoping study released in June 2019, and used this data as the basis for some 'back-of-the-envelope' calculations. By our conservative estimates, if Primobius uses profit-sharing arrangements to secure feed source with OEMs and only builds one 20,000 tpa recycling plant, then **Neometals shares could be worth A\$0.29 per share, based solely on Neometals' 50% JV share of Primobius plus current cash.**

Neometals' Lithium Battery Recycling Scoping Study, released 4 June 2019, considers a lithium-ion battery feedstock comprising 50% LCO (Lithium Cobalt Oxide) and 50% NMC 1,1,1 (Lithium Nickel Manganese Cobalt Oxide).

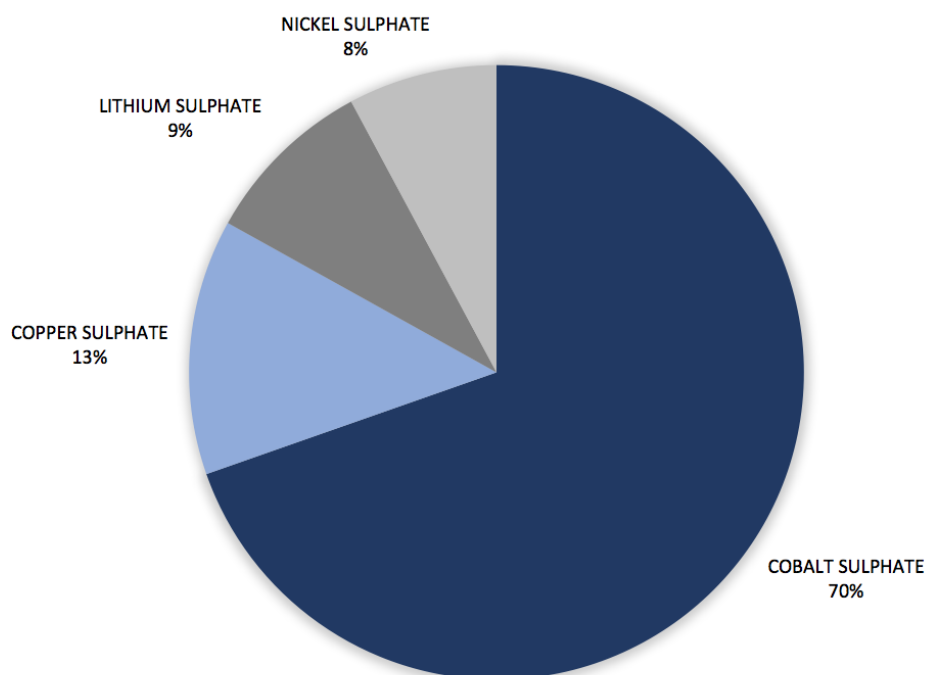
Operating at 50 tonnes per day (~20,000 tonnes per annum), the recycling plant is forecast to produce the following amounts of cobalt, copper, lithium and nickel in sulphate form.

ANNUAL PRODUCTION	(TONNES)	
COBALT SULPHATE	(TONNES)	9623
COPPER SULPHATE	(TONNES)	5635
LITHIUM SULPHATE	(TONNES)	1544
NICKEL SULPHATE	(TONNES)	2020

We've used Neometals' price deck and held prices flat over 15 a year period, despite expecting price increases for these battery materials as electric vehicle production grows. We've also ignored manganese and a host of other low-value outputs from the recycling process.

PRICES		
COBALT SULPHATE	(USD/T)	6,151
COPPER SULPHATE	(USD/T)	2,030
LITHIUM SULPHATE	(USD/T)	5,000
NICKEL SULPHATE	(USD/T)	3,298

Total revenue generated per annum is estimated at US\$85million. A breakdown of revenue by production is shown below;

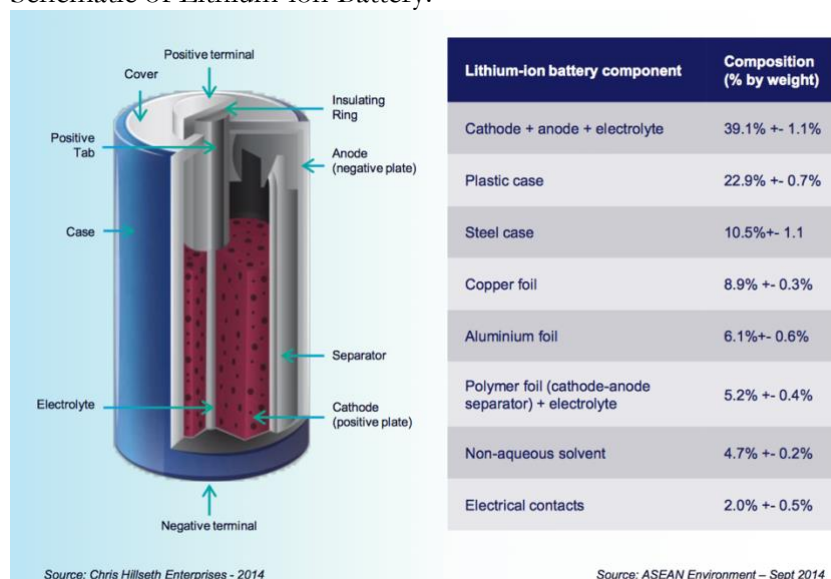


The demonstration plant is being constructed in Hilchenbach, 100km outside of Düsseldorf.

The JV is currently constructing a demonstration plant at a 2,000-square metre facility in Germany owned by SMS group, with commissioning expected early next year. Results will be used in a formal feasibility study, with a final investment decision (FID) by JV partners expected in the March quarter 2022.

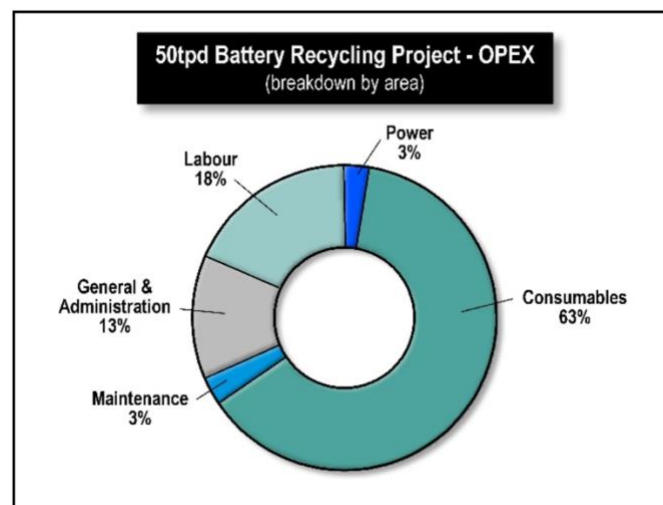
The Scoping Study considered processing of 50 tonnes per day of whole batteries. Shredding and beneficiation removes metal casings and plastics, leaving a ‘black powder’ predominantly made up of cathode, anode and electrolyte material.

Schematic of Lithium-ion Battery:



Source: Neometals’ August 2020 Presentation.

Process facility operating costs were estimated to be US\$6.65/lb of cobalt recovered as cobalt sulphate, excluding by products. Consumables (ie sulphuric acid and ammonia) make up the lion’s share of the operating costs.



Source: Neometals’ Lithium Battery Recycling Scoping Study, June 2019.

In our 'back-of-the-envelope' calculation, we have assumed that long-term supply of feedstock is secured with an automaker, whereby the OEM receives a share of profits.

We have also assumed tax of 30% and calculated an **after-tax** NPV using a 10% discount rate.

COBALT SULPHATE	(USD/T)	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151	6,151		
COPPER SULPHATE	(USD/T)	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030	2,030		
LITHIUM SULPHATE	(USD/T)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000		
NICKEL SULPHATE	(USD/T)	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298		
LBS/T	2204.6																	
YEAR		-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ANNUAL PRODUCTION																		
COBALT SULPHATE	(T)	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623	9,623
COPPER SULPHATE	(T)	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635	5,635
LITHIUM SULPHATE	(T)	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544
NICKEL SULPHATE	(T)	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020	2,020
COBALT SULPHATE	LBS - MLN	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
COBALT SULPHATE (CONTAINED CC	LBS - MLN	20.50%	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
REVENUE	USD (M)	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
COSTS (AVE. NET OP. COST OF RECO	6.65	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9	28.9
CASH FLOW BEFORE OEM PROFIT SHARE		-33	-33	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
CASH FLOW AFTER OEM PROFIT SH ^A	33%	-33	-33	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
TAX RATE	30%																	
AFTER TAX CASH FLOW		-33	-33	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
DISCOUNT RATE	10%																	
NPV (US\$ - M) (100% JV)	108																	
NPV (US\$ - M) 50% ATTRIB. TO NMT	54																	

While the Battery Recycling project remains 'early-stage', and scoping study estimates (operating and capital) are based on bench-scale test work, given where the market is going we believe it's useful to try and make sense of what the recycling project could be worth.

By our calculations, if only ONE plant (20,000 tonnes per annum) was constructed, it would have a value to Neometals' shareholders of approximately US\$54 million (A\$76 million). This equates to approximately A\$0.14 per share.

It should be noted that the starter plant we have modelled relies on 10% production scrap and precedes a potential plant of 200,000 tpa (10 times larger than the starter plant) to capture end-of-life cells when the remaining 90% of battery material starts coming back. Primobius intend to build multiple recycling plants globally AND plan to expand each plants throughput.

By our estimates, Neometals' A\$81.3 m of cash and their attributable share of the Primobius JV equates to A\$0.29 per share.

With Neometals' cash and cash equivalents of A\$81.3 million equating to a further A\$0.15 per share, the Neometals share-price continues to appear undervalued by the market, assigning little value to the compelling progress of the Battery Recycling Project and assigning no value at all to the rest of its projects.

Conclusion:

Neometals' share price remains considerably undervalued and we see any news relating to battery recycling feedstock agreements with OEMs as likely acting as a catalyst for Neometals' share price.

REPORT END

Copyright and risk warnings

Neometals Ltd (“**Neometals**” or the “Company”) is a corporate client of Arlington Group Asset Management Limited (“Arlington”). Arlington will receive compensation for providing fundraising, and other services to the Company including the publication and dissemination of marketing material from time to time.

This note reflects the objective views of Arlington. However, the Company covered in this note pays Arlington a fee, commission or other remuneration in order that this research may be made available. This note meets the requirements of an acceptable minor non-monetary benefit under COBS 2.3A.19 R (5)(b).

This note is a marketing communication and NOT independent research. As such, it has not been prepared in accordance with legal requirements designed to promote the independence of investment research and this note is NOT subject to the prohibition on dealing ahead of the dissemination of investment research.

Not an offer to buy or sell:

Under no circumstances is this note to be construed to be an offer to buy or sell or deal in any security and/or derivative instruments. It is not an initiation or an inducement to engage in investment activity under section 21 of the Financial Services and Markets Act 2000.

Note prepared in good faith and in reliance on publicly available information:

Comments made in this note have been arrived at in good faith and are based, at least in part, on current public information that Arlington considers reliable, but which it does not represent to be accurate or complete, and it should not be relied on as such. The information, opinions, forecasts and estimates contained in this document are current as of the date of this document and are subject to change without prior notification. No representation or warranty either actual or implied is made as to the accuracy, precision, completeness or correctness of the statements, opinions and judgements contained in this document.

Arlington’s and related interests:

The approved persons who produced this note may be directors, employees and/or associates of Arlington. Arlington and/or its employees and/or directors and associates may or may not hold shares, warrants, options, other derivative instruments or other financial interests in **Neometals Ltd** and reserve the right to acquire, hold or dispose of such positions in the future and without prior notification to **Neometals Ltd** or any other person.

Information purposes only:

This document is intended to be for background information purposes only and should be treated as such. This note is furnished on the basis and understanding that Arlington is under no responsibility or liability whatsoever in respect thereof, to **Neometals**, or any other person.

Investment Risk Warning:

The value of any potential investment made in relation to companies mentioned in this document may rise or fall and sums realised may be less than those originally invested. Any reference to past performance should not be construed as being a guide to future performance.

Investment in small companies, and especially mineral exploration companies, carries a high degree of risk and investment in the companies or minerals mentioned in this document may be affected by related currency variations. Changes in the pricing of related currencies and or commodities mentioned in this document may have an adverse effect on the value, price or income of the investment.

Distribution:

This note is not for public distribution, nor for distribution to, or to be used by, or to be relied upon by any person other than the Company. Without limiting the foregoing, this note may not be distributed to any persons (or groups of persons), to whom such distribution would contravene the UK Financial Services and Markets Act 2000 or would constitute a contravention of the corresponding statute or statutory instrument in any other jurisdiction.

Disclaimer

This report has been forwarded to you solely for information and should not be considered as an offer or solicitation of an offer to sell, buy or subscribe to any securities or any derivative instrument or any other rights pertaining thereto (“financial instruments”). This report is intended for use by professional and business investors only. This report may not be reproduced without the consent of Arlington Group Asset Management Limited.

The information and opinions expressed in this report have been compiled from sources believed to be reliable but, neither Arlington Group Asset Management Limited, nor any of its directors, officers, or employees accepts liability from any loss arising from the use hereof or makes any representations as to its accuracy and completeness. Any opinions, forecasts or estimates herein constitute a judgement as at the date of this report. There can be no assurance that future results or events will be consistent with any such opinions, forecasts or estimates. Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied is made regarding future performance. This information is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed and it may not contain all material information concerning the company and its subsidiaries. Arlington is not agreeing to nor is it required to update the opinions, forecasts or estimates contained herein.

The value of any securities or financial instruments mentioned in this report can fall as well as rise. Foreign currency denominated securities and financial instruments are subject to fluctuations in exchange rates that may have a positive or adverse effect on the value, price or income of such securities or financial instruments. Certain transactions, including those involving futures, options and other derivative instruments, can give rise to substantial risk and are not suitable for all investors. This report does not have regard to the specific instrument objectives, financial situation and the particular needs of any specific person who may receive this report.

The value of any securities or financial instruments mentioned in this report can fall as well as rise. Foreign currency denominated securities and financial instruments are subject to fluctuations in exchange rates that may have a positive or adverse effect on the value, price or income of such securities or financial instruments. Certain transactions, including those involving futures, options & other derivative instruments, can give rise to substantial risk & are not suitable for all investors. This report does not have regard to the specific instrument objectives, financial situation and the particular needs of any specific person who may receive this report. Investors should seek financial advice regarding the appropriateness of investing in any securities, financial instrument or investment strategies discussed in this report.

Arlington Group Asset Management Limited (or its directors, officers or employees) may, to the extent permitted by law, own or have a position in the securities or financial instruments (including derivative instruments or any other rights pertaining thereto) of any company or related company referred to herein, and may add to or dispose of any such position or may make a market or act as principle in any transaction in such securities or financial instruments. Directors of Arlington Group Asset Management Limited may also be directors of any of the companies mentioned in this report. Arlington Group Asset Management Limited may from time to time provide or solicit investment banking or other financial services to, for or from any company referred to herein. Arlington Group Asset Management Limited (or its directors, officers or employees) may, to the extent permitted by law, act upon or use the information or opinions presented herein, or research or analysis on which they are based prior to the material being published.

To our readers in the United Kingdom, this report has been issued by Arlington Group Asset Management Limited, a firm authorised and regulated by the Financial Conduct Authority. This report is not for distribution to private customers.

This report is not intended for use by, or distribution to, US corporations that do not meet the definition of a major US institutional investor in the United States or for use by any citizen or resident of the United States.

This publication is confidential for the information of the addressee only and may not be reproduced in whole or in part, copies circulated, or disclosed to another party, without the prior written consent of Arlington Group Asset Management Limited. Securities referred to in this research report may not be eligible for sale in those jurisdictions where Arlington Group Asset Management Limited is not authorised or permitted by local law to do so. In particular, Arlington Group Asset Management Limited does not allow the redistribution of this report to non-professional investors and cannot be held responsible in any way for third parties who affect such redistribution. © 2020