

22 October 2021

Sunrise Energy Metals Annual General Meeting

MELBOURNE, Australia – Sunrise Energy Metals Limited (**Sunrise Energy Metals** or **Company**) (ASX:SRL) will today at 1pm (AEDT) hold its 2021 Annual General Meeting via webcast. Shareholders and guests are able to register and attend the AGM by accessing the weblink below:

https://web.lumiagm.com/377201969

Managing Director and CEO, Mr Sam Riggall, will provide a general update at the AGM. Mr Riggall's presentation is attached.

This announcement is authorised for release to the market by the Directors of Sunrise Energy Metals.

For more information, please contact:

Corporate	Investors
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About Sunrise Energy Metals Limited

Sunrise Energy Metals Limited (ASX:SRL) is progressing its world-class Sunrise Battery Materials Complex in New South Wales, utilising its Clean-iX[®] technology. The Sunrise Project is one of the largest and most cobalt-rich nickel laterite deposits in the world and is development-ready, with all key permits and approvals in place. Sunrise is also one of the largest and highest-grade scandium deposits globally.

Forward Looking Statements

Certain statements in this news release may constitute "forward-looking statements or "forward-looking information" within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of the Company or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the Company's current expectations regarding future events, performance and results, and speak only as of the date of this new release. Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this news release are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.



Battery Materials for a Sustainable Future

Annual General Meeting October 2021



Cautionary statement



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Readers are cautioned that actual results may vary from those presented.

All such forward-looking information and statements are based on certain assumptions and analyses made by Sunrise Energy Metals' management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; changes in commodity prices; delays in financing or project funding; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, and the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations. Readers are cautioned not to place undue reliance on forward-looking information or statements.

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Our Mission

To sustainably provide battery materials for a decarbonising planet



Board and Executive Management





Robert Friedland Co-chair & Non-**Executive Director**



Jiang Zhaobai Co-Chair and Non-**Executive Director**



Sam Riggall Managing Director And Chief **Executive Officer**



Board

Eric Finlayson Non-Executive Director



Stefanie Loader Lead Independent Non-Executive Director



Trevor Eton Non-Executive Director

Senior Management



Chief Financial

Officer



Melanie Leydin Company Secretary

Major shareholders



- Robert Friedland
- Pengxin Mining
- Fidelity Management & Research

Critical metals for a decarbonising world





The Sunrise Project is Australia's largest and most advanced battery materials project with a 50 year mine life



Fully integrated from mine to battery chemicals with an average annual metalequivalent production of 21.3kt of nickel and 4.4kt of cobalt



Sustainably designed to operate on 100% renewable power with industry-leading carbon footprint, water re-use and responsible waste management



Exceptional project economics with LOM revenue: >US\$16.3 billion, LOM EBITDA: US\$10.8 billion, avg FCF (post-tax): US\$308 million pa and NPV₈ of US\$1.2 billion



Optionality for precursor production and recycling of spent battery cathode to recover valuable metals



Uniquely positioned as western world provider of sustainable battery material production. Actively engaging with strategic partners to secure funding and offtake



FY21 Highlights





Continued to advance workstreams at the Sunrise Battery Materials Project



Successful study confirming 100% of external power requirements at Sunrise to be sourced from renewable power



Development of several collaborative agreements to advance the scandium potential at the Sunrise project



Initial drilling program at the Phoenix Platinum Zone at Sunrise confirming a high-grade platinum intersection



Agreement to acquire the Hylea Project in NSW to extend our exploration footprint in this highly prospective area



Share consolidation and successful demerger of Clean TeQ Water





Sunrise Battery Materials Project



- Location: 350km west of Sydney with one of the largest cobalt deposits outside of Africa. Jurisdiction is attractive to western world consumers
- Large resource: over 900kt nickel and 160kt cobalt in resources, with reserves to sustain a 50-year operation
- Construction-ready: A\$250M invested in pre-development capex with all key permits and land secured
- Infrastructure: rail, port and renewable energy infrastructure
- Scandium: the world's largest scandium resource for stronger and lighter aluminium alloys



Key project economics





Note: 1) Average over first decade of operation. Financial evaluation based on first 25 years of operation. Refer to ASX Release of 28 September 2020 for more details.

No longer if, but how fast...



EV Penetration to grow significantly¹



EV's are more critical mineral intensive (kg/vehicle)²



Forecast Nickel Demand Growth¹



Forecast cobalt demand growth¹



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...with nickel hydromet to do the heavy lifting



• New nickel sulphide resources are non-existent; recycling volumes will be immaterial to 2035

- The Chinese business case for nickel pig iron conversion is weak – the environmental legacies are far too great
- Nickel hydromet flowsheets can deliver low-cost metal -Moa Bay, Coral Bay, Taganito, Ramu, etc.
- Sunrise, utilising proven hydromet processing, is a template for sustainably produced battery materials

Tonnes (contained nickel)



Sunrise – an optimal flowsheet for battery materials



Using a robust and proven ion exchange system to recover metals out of solution, the benefits are:

- A smaller footprint with high on-site co-gen
- Selective metal loading and targeted impurity removal
- Higher metal concentrations deliver reduced capex and reagent use
- A direct-to-sulphate (D2S) route to battery-grade metal (no intermediates)
- Allows direct-to-precursor (D2P) production by keeping metals in solution (no crystallisation)



Carbon – it's all about the nickel



- Nickel processing can make up ~95% of the carbon footprint of all raw materials in a battery
- The mining sector needs to embrace sustainability in its capital allocation frameworks
- Key design features of the Sunrise Project include:
 - ✓ 100% renewable power for mine and processing plant
 - ✓ Water re-use from on-site water treatment facilitates
 - ✓ Managing HSEC obligations to international best practice
 - ✓ Applying ANCOLD standards to waste management
 - ✓ Capacity to recycle for a fully circular supply chain



Source: Energetics, Life Cycle Assessment Report: greenhouse gas emission comparison for nickel production routes (Feb 2020). The GHG emission intensities of alternative processing routes are based on literature data that cannot be effectively harmonized. For comparison purposes the only harmonization that has occurred has been on end product (NiSO4) and using economic allocation to end products. Comparisons against Sunrise should be considered indicative. See also Nickel Institute, Life Cycle Data Assessment. Energy consumption for conventional PAL, ferronickel and NPI products assumes Indonesian development utilizing coal as primary power source. Sulfide nickel data varies between 9 and 19 kg CO2e depending on power source.

Scandium – a new generation of alloys



- Sunrise collaborates with a number of industrial partners, across many industries, to deliver new and advanced scandium alloys
- Scandium production from Sunrise will deliver safe and dependable supply chains for both defense-related applications and emerging communications technologies
- Our objective is to drive scandium production costs to a point where value in use becomes compelling





Why Sunrise?



Exposure to large growing mega-trend	 Growing demands for decarbonisation are leading to increased demand for batteries EV penetration set to grow 10x from 4% in 2020 to over 25% by 2030 Other applications such as grid-scale energy storage will also provide strong demand growth
The right location	 Located in stable jurisdiction with low sovereign risk Uniquely positioned as the leading western world provider of critical battery metals All key permits in place with good government and community support
Significantly advanced project	 Over A\$250m of investment to date in the project Significant project work and technical studies have identified the key development pathways and workstreams Project now advanced to funding stage with construction activity to commenced within 3 months of securing finance
Scale and exceptional economics	 50 year operation hosting the world's largest cobalt resource outside of Africa & the world's largest scandium resource Exceptional project economics with average free cash flow (post-tax) of US\$308 million pa, 15%IRR and 5 year payback NPV₈ of US\$1.2 billion
Environmentally sound project	 Sustainably designed to operate on 100% renewable power with industry-leading carbon footprint, water re-use and responsible waste management
Longer term optionality	 The resource supports low-cost expansion options, subject to government approval Optionality for project to incorporate direct to precursor and recycling spent EV batteries Optionality from expanding exploration portfolio



<u>Corporate</u>

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