

## ASX Announcement 25 March 2024

ASX:MLS

# METALLURGICAL PROGRAMS SET TO COMMENCE TO ADVANCE DEVELOPMENT PATHWAY AT LAC RAINY

# Test-work to run in parallel with other key development workstreams to unlock the world-class potential of the high-grade flake graphite project

- Major new metallurgical test-work programs are set to commence at the high-grade Lac Rainy flake graphite project in the tier-one Canadian mining jurisdiction of Quebec. The test-work will utilise bulk samples of existing drill-core from the following Mineral Resource<sup>1</sup> zones (see Figure 1):
  - Southeast Carheil: A 220kg bulk sample grading 13% graphitic carbon (Cg). Sample of predominantly fine to medium flake will be split into several variability samples representing the first 10 years of the mining schedule detailed in the previously completed Scoping Study <sup>2</sup>.
  - Northwest Carheil: A 200kg bulk sample grading 8%Cg. Examination of drill core from Northwest Carheil indicates a high proportion of large (>180 micron) flake. The metallurgical test-work program for this portion of the Mineral Resource will assess the recovery characteristics of higher value, large flake graphite concentrate.
- > Metallurgical test-work will be carried out in two stages:
  - 1. Generation of flake graphite concentrate (>95%Cg) using modified flow-sheet conditions designed to optimise recovery of fine to medium flake for downstream spherical graphite production as well as generation of large flake concentrate that can attract premium pricing.
  - 2. Generation of premium battery grade coated spherical graphite (SpG), trialling chemical and thermal purification options to assess the preferred techno-economic method for production of premium battery grade SpG, followed by lithium-ion battery anode charging and durability testing. This work will expand on the outstanding purification (to 99.96%Cg) and battery test results achieved in 2023<sup>3</sup> and will result in the optimum SpG production method being adopted for more advanced development studies.
- The Metallurgical test-work results will feed directly into the flake-graphite concentrate Pre-Feasibility Study (PFS) as well as the Options Assessment and Scoping Study into downstream spherical graphitebattery anode material production. Additionally, the results will guide the preferred location for that production facility.
- Latest workstreams will be advanced as the Company finalises discussions with First Nations groups in Quebec to secure the necessary approvals to launch a major new drilling program aimed at significantly expanding and upgrading the existing Lac Rainy Mineral Resource. The program will also test new

Level 1, 8 Parliament Place West Perth, Western Australia 6005 ASX : **MLS** metalsaustralia.com.au



**regional targets where high-grade rock chips of up to 64.3% Cg<sup>4</sup> have been generated** (see Figure 1). The company is aware of changes to the permitting application process in Quebec that come into effect on May 6<sup>th</sup> this year. More formal stakeholder engagement is a requirement as part of the revised process.

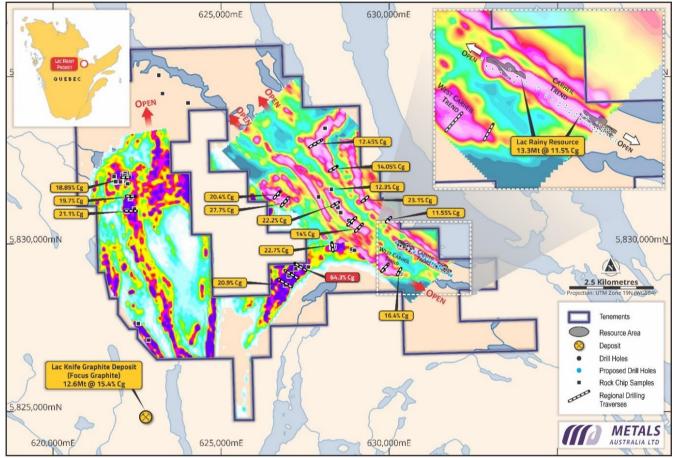


Figure 1: Lac Rainy Graphite Project high-grade sample locations, drilling areas planned with inset of Carheil zone

#### Metals Australia CEO Paul Ferguson, commented:

"These new metallurgical test-work programs at Lac Rainy represent another important step forward along the very clear pathway we have mapped out to develop what we believe has the potential to be a world-class flake-graphite project in the tier-one Canadian mining jurisdiction of Quebec."

"The US\$50 million equity investment and a future construction commitment of US\$275 million<sup>5</sup> announced only last month by General Motors and Panasonic Energy to advance the development of Nouveau Monde Graphite Inc's graphite project in Quebec is another sign of the global rush to secure sources of high-grade flake graphite and downstream products outside China."

"Building on our Scoping Study which indicates potential for an initial 14-year production mine life, we are committed to accelerating our pre-feasibility studies (PFS) for the production and downstream processing of Lac Rainy's high-grade flake-graphite product."

"Other critical work programs being advanced in parallel with our metallurgical test-work include environment and social impact studies, hydrogeological and geotechnical assessments, Mineral Resource



estimation work and finalising key inputs to mine planning and engineering design for the concentrate plant PFS and the proposed downstream upgrading facility to produce battery anode material."

"We have also finalised our drilling plans and contract and look forward to our drilling permit applications being approved by the government authorities in Quebec. The Company has been advised that no adverse comments were provided by stakeholders during the initial public review period for that drilling program and we look forward to our upcoming discussions with representatives of the Innu Council of Uashat Mak Mani-Utenam First Nations group to outline our planned program as part of the approval process."

"The Company is fully committed to working respectfully and productively with all stakeholders to demonstrate the significance and potential benefits of developing this important critical minerals project, while understanding and accommodating the expectations of stakeholders throughout the development phases."

"Our drilling program aims to extend and further define the Mineral Resource to allow expansion of the mining plan, as well as testing new regional targets where high-grade rock chips of up to 64.3%  $Cg^4$  have been generated. The fact we still have 35km of mineralised zones at Lac Rainy to drill test adds to our confidence that we will be able to significantly grow the existing Mineral Resource."

"Critically, the recent \$3.5 million placement we made through Canadian investors leaves the Company wellfunded to accelerate our exploration and development studies with cash reserves of more than \$18 million. The fact that Metals Australia's market capitalisation is less than our cash balance makes us more determined than ever to demonstrate the value of our flagship Lac Rainy project, which we believe will result in a significant re-rating of the Company's share price."

## About Metals Australia Limited

Metals Australia Ltd (ASX:MLS) has a proven track record of battery minerals discovery and has a high-quality portfolio of advanced battery minerals and metals projects in the highly ranked and well-established mining jurisdictions of Quebec, Canada and Western Australia.

Metals Australia is focused on the exploration and development of its flagship Lac Rainy flake-graphite project in Quebec, a high-quality project which is well placed for the future delivery of premium, battery grade graphite to the North American lithium-ion / EV battery market.

The Company is also advancing its lithium exploration projects in the world-class James Bay region of Quebec, Canada and at its advanced Manindi battery minerals and metals project in Western Australia.

The Company also has highly prospective exploration projects at Warrambie in the northwest Pilbara near the Andover lithium project and in the Murchison gold region of WA.

### References

<sup>1</sup>Metals Australia Ltd, 15 June 2020. "Metals Australia Delivers High-Grade Maiden JORC Resource at Lac Rainy." <sup>2</sup>Metals Australia Ltd, 3 February 2021. "Scoping Study Results for Lac Rainy Graphite Project, Quebec."

<sup>3</sup>Metals Australia Ltd, 23 May 2023. "Outstanding Battery Test Results Confirm Lac Rainy Graphite is Premium Lithium-ion Battery Anode Quality."

<sup>4</sup> Metals Australia Ltd, 16 January 2024. "Exceptional 64.3% Graphite and New Drilling at Lac Rainy."

<sup>5</sup> Nouveau Monde Graphite (TSX.V: NOU) – 15 February 2024 – "Binding Offtakes & Equity Investments Panasonic Energy & GM Along with Co-Investors – Investor Briefing"



## **Cautionary Statement Regarding Forward Looking Information**

This document contains forward-looking statements concerning Metals Australia Limited. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties, and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political, and social uncertainties, and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia Limited as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

## **Competent Persons Statement**

The information in this report that relates to exploration results, Mineral Resources and Exploration Targets has been reviewed, compiled, and fairly represented by Mr Jonathon Dugdale. Mr Dugdale is a Technical Advisor to Metals Australia Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 35 years' experience in exploration, resource evaluation, mine geology and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

## **ASX listing Rules Compliance**

In preparing this announcement the Company has relied on the announcements previously made by the Company as listed under "References". The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.

This announcement was authorised for release by the Board of Directors.

#### \*\*\*ENDS\*\*\*

### **Further Information:**

Additional information is available at metalsaustralia.com.au/ or contact:

Paul Ferguson Chief Executive Officer info@metalsaustralia.com.au Michael Muhling Company Secretary +61 (08) 9481 7833 Elizabeth Michael Investor Relations info@metalsaustralia.com.au