

#### **ASX Announcement**

12 November 2020

# Lac Rainy Graphite Project Scoping Study Update

## **Highlights:**

- Scoping Study with DRA Global well advanced with completion anticipated in early January 2021
  - Benchmark Mineral Intelligence (UK) has been appointed to provide forecasts on pricing and supply and demand metrics driving growth in future graphite markets – marketing report will provide insight into how Lac Rainy Graphite Concentrate can be positioned to take advantage of market dynamics and growth areas
  - Mine design, planning and scheduling advancing with key parameters and inputs complete – initial mine design will focus on a simple open cut operation with limited environmental footprint and continued reclamation to ensure minimal surface disturbance
  - Future mining operation will take advantage of the low-cost Quebec Hydro-electric power – a high-voltage powerline passes across the Lac Rainy project area
  - Forecast production profile of approximately 93,650 t/y of graphite concentrate
    with an overall graphite recovery rate of 86.3% and an overall graphite concentrate
    grade of 96.7% C has been forecast based on metallurgical test work conducted by
    SGS (Canada)
  - Tailing management facility design criteria has been established the Company will adopt a dry stack tailings facility which will reduce environmental impact and minimise any water run-off issues – this will also avoid any potential environmental impacts associated with traditional tailing storage dams
- Lac Rainy hosts a JORC (2012) Mineral Resource of 13.3Mt at 11.5% TGC in the category of Indicated and Inferred for 1.529Mt of contained graphite, using a 5% TGC cut-off
- In addition to the JORC (2012) Mineral Resource Lac Rainy currently has a JORC (2012) Exploration Target Estimate of 7.3Mt to 14.6Mt @ 7.5% to 12.5% Total Graphitic Carbon (TGC) for an additional 0.55Mt to 1.825Mt of contained graphite using a 5% TGC cut-off
  - The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource
- Only the first 1.6km of strike of the 4km of strike along the Main Carheil Graphitic Trend
  has been drill tested. The SE and NW strike extensions and the recently discovered West
  Carheil Graphitic Trend are still to be drilled extensional drilling program has been
  designed
- The Lac Rainy Deposit is open to the north and south along strike, as well as down-dip and plunge, indicating significant exploration upside and drill ready targets
- Further potential resource growth upside exists in the recently discovered high grade
   West Carheil Graphitic Trend which has the ability to further increase the tonnage of Lac Rainy



Metals Australia Ltd (ASX: MLS) (Metals Australia or Company) is pleased to provide shareholders with an update on the progress of its Scoping Study at its 100% owned Lac Rainy Graphite Project located in Quebec, Canada.

As previously advised, the Company appointed DRA Global (**DRA**) to complete the Scoping Study at Lac Rainy.

The Scoping Study is well advanced and progressing with completion anticipated in early January 2021. The Company has also engaged Benchmark Mineral Intelligence (UK) to provide forecasts on pricing as well as coverage and commentary regarding the supply and demand metrics expected to drive growth in future graphite markets. The Company believes that the **marketing report will provide great insight into how Lac Rainy Graphite Concentrate can be positioned to take advantage of market dynamics and growth areas.** 

DRA has already completed the preliminary mine design, mine planning and mine scheduling with key parameters and inputs set so that economic analysis can commence. The **initial mine design will focus on a simple open cut operation with limited environmental footprint and continued reclamation to ensure minimal surface disturbance.** 

The future mining operation at Lac Rainy will take advantage of the **low-cost Quebec Hydro-electric power. A high-voltage powerline** passes across the Lac Rainy project area.

Based on the preliminary analysis and inputs, a forecast production profile of approximately 93,650 t/y of graphite concentrate with an overall graphite recovery rate of 86.3% and an overall graphite concentrate grade of 96.7% C has been forecast based on metallurgical test work conducted with SGS (Canada).

In addition, the tailing management facility design criteria has been established. The Company will adopt a dry stack tailings facility which will reduce environmental impact and minimise any water run-off issues. This will also avoid any potential environmental impacts associated with traditional tailing storage dams

The Company plans on delivering the Scoping Study before commencing a graphite marketing campaign. The Scoping Study will focus on the delivery of a high-purity and high-carbon (total) graphite concentrate. The Scoping Study will provide certainty and assurance to potential graphite concentrate buyers / end-users.

Commenting on the scoping study update for the Lac Rainy Graphite Project, Director of Metals Australia, Mr Gino D'Anna stated:

"We have been working closely with DRA on setting the key parameters and inputs for the Scoping Study which will determine the economic viability of the future mining operation at Lac Rainy. The engagement of Benchmark Mineral Intelligence (UK) provides the Company with a critical skill set in understanding and establishing the future growth markets in the graphite sector. We believe that Lac Rainy should deliver a robust mining operation with significant exploration upside.

We believe that as the world starts to emerge from the current COVID-19 risk averse environment, economies will start to rebuild and strengthen, resulting in significant funds being invested back into alternative energy sources and electrification. This will help to stimulate demand for those critical battery-metals, of which graphite is a key ingredient. We see a lot of upside in the future demand for graphite and we are positioning the Company to be able to take advantage of the change in market dynamics.

The Lac Rainy project offers significant flexibility. It has projected low strip ratios, can be readily accessed through open cut mining methods and has consistently delivered exceptionally high-grade results. The recently completed scoping study level metallurgical testwork program confirmed that the graphite mineralisation at Lac Rainy is able to deliver a graphite concentrate that not only exceeds the industry standard benchmarks, but can produce a high-purity and high-carbon (total) graphite concentrate.

The Lac Rainy Graphite Project offers significant upside."



The Lac Rainy project should deliver attractive economics due to its potentially significant size, high grades and extensive surface outcrop that offers low strip ratios. Metallurgical studies to date indicate a straightforward processing flowsheet.

The Company's ongoing focus is to develop this Mineral Resource into a low-cost mining operation. The Company believes that the Lac Rainy project offers considerable flexibility and exploration upside.

This can be unlocked not only through additional drilling and other exploration but also through refining the metallurgical flowsheet to determine the most appropriate graphite products that can be produced and marketed with the Lac Rainy graphite concentrate.

## BACKGROUND: LAC RAINY - JORC (2012) MINERAL RESOURCE ESTIMATE

Lac Rainy hosts a JORC (2012) Mineral Resource Estimate of 13.3Mt at 11.5% TGC in the category of Indicated and Inferred for 1.529Mt of contained graphite, using a 5% TGC cut-off.

The global resource is made up of the high-grade South-East Carheil Graphite Deposit which is classified in the Indicated category and the North-West Carheil Graphite Deposit which is classified in the Inferred category, as shown in Table 1 (below).

Table 1 - JORC (2012) Mineral Resource Estimate

Deposit	Classification	Tonnes	Total Graphitic Carbon (TGC)	Contained Graphite (Tonnes)	S %
South-East Carheil Graphite Deposit	Indicated	9,600,000	13.1%	1,257,600	9.8
North-West Carheil Graphite Deposit	Inferred	3,700,000	7.3%	270,000	7.3
	Total <sup>1</sup>	13,300,000	11.5%	1,529,500	9.1

<sup>1.</sup> Mineral Resource estimated at a 5% TGC cut-off

Refer to ASX announcement dated 15 June 2020 and titled "High-Grade Maiden JORC Resource at Lac Rainy Graphite Project".

The mineral resource at Lac Rainy offers potential for development into a long life, high-grade graphite mining operation. Lac Rainy can be mined using open cut mining methods with low strip ratios as more than 90% of the current global resource defined within the first 100m.

Drilling completed to date has only tested the first 1.6km of the approximate 4km of strike along the Main Carheil Graphitic Trend with the SE and NW strike extensions and also the recently discovered West Carheil Graphitic Trend still to be drilled. The Company has designed an extensional drilling program to further grow the resource base and drill test some of the other high-priority targets which have been identified.

The deposit at Lac Rainy remains open to the north and south along strike, as well as down-dip and plunge, indicating significant exploration upside and drill ready targets.

## **BACKGROUND: JORC (2012) EXPLORATION TARGET ESTIMATE**

The JORC (2012) **Exploration Target Estimate** for the high-grade Lac Rainy Graphite Project has been defined as **7.3Mt to 14.6Mt** @ **7.5% to 12.5% Total Graphitic Carbon (TGC) for an additional 0.55Mt to 1.825Mt of contained graphite** using a 5% TGC cut-off.

The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target is in addition to the JORC (2012) Mineral Resource Estimate at the Lac Rainy Graphite Project. The global Exploration Target is made up of the high-grade South-East Carheil



Graphite Exploration Target and the recently discovered West Carheil Graphite Exploration Target, as shown in Table 1 (below). The Company believes there is potential for a future substantial increase in the JORC (2012) Mineral Resource beyond the current JORC (2012) Exploration Target.

Table 1 – JORC (2012) Exploration Target

Deposit	Classification	Tonnes		Total Graphitic Carbon (TGC)		Contained Graphite (Tonnes)	
		lower limit	upper limit	lower limit	upper limit	lower limit	upper limit
South- East Carheil Graphite	Exploration Target	3,080,000	6,160,000	8.0%	13.0%	248,000	806,000
West Carheil Graphite	Exploration Target	4,200,000	8,400,000	7.0%	12.0%	294,000	1,000,000
	Total <sup>1</sup>	7,280,000	14,560,000	7.5%	12.5%	542,000	1,806,000

<sup>2.</sup> Exploration Target estimated at a 5% TGC cut-off

Refer to ASX announcement dated 10 September 2020 and titled "High-Grade JORC Exploration Target at Lac Rainy Graphite".

The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Company looks forward to providing shareholders with further updates as we continue to achieve our milestones at Lac Rainy.

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

## **ENDS**

# For more information, please contact:

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#### **Caution Regarding Forward-Looking Information**

This document contains forward-looking statements concerning Metals Australia. 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 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 Person Declaration**

The information in this announcement that relates to Exploration Results is based on information compiled by Mr. Jean-Paul Barrette P.Geo, B.Sc. Mr Barrette is Project Geologist with Magnor Exploration Inc. and a consultant to Metals Australia Limited. Mr Barrette and is a member of the Ordre des Géologues du Québec (OGQ) with member number OGQ #619. Mr. Barrette has sufficient experience (35 years) that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Barrette consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to Resource Estimation is based on information compiled by Simon Coxhell, Principal Consultant of CoxsRocks Pty Ltd. Mr Coxhell is a consultant to the Company. Mr Coxhell is a Member of the Australian Institute of Mining and Metallurgy. Mr Coxhell has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code"). Mr Coxhell consents to the inclusion in this report of the Matters based on this information in the form and context in which it appears. Mr Coxhell has not been to the Lac Rainy site but is familiar with graphite deposits around the world and has completed numerous resource estimates for this commodity.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

#### **ASX Listing Rules Compliance**

In preparing this announcement dated 12 November 2020, the Company has relied on the announcements previously made by the Company and specifically dated 15 June 2020 and 10 September 2020. 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 dated 12 November 2020.