

1 March 2022

ASX Announcement

## **ACADEMIC COLLABORATION WITH LEADING EUROPEAN RESEARCH ORGANISATIONS TO ADVANCE IVITTUUT PROJECT, GREENLAND**

### **Highlights**

- Eclipse Metals has agreed to facilitate academic collaboration for a PhD research program with the University of St Andrews, UK, and the Natural History Museum and University of Oslo, Norway, on the geology of its Ivittuut project, Greenland
- World-renowned REE specialists Professor Adrian Finch (University of St Andrews) and Associate Professor Henrik Friis (University of Oslo) will jointly supervise the PhD research focused on Ivittuut
- The search for green technology metals is expected to deliver an improved geological framework, enabling more effective exploration and resource development at the Ivittuut prospect

Eclipse Metals Ltd (ASX: **EPM**) (**Eclipse Metals** or the **Company**) is pleased to announce a collaborative research program on mineralogical and petrological characterisation of the Ivittuut mine in Greenland with world-renowned REE specialists Professor Adrian Finch at the University of St Andrews, UK, and Associate Professor Henrik Friis at the Natural History Museum at the University of Oslo, Norway,

Research at Ivittuut will contribute to University of St Andrews' global PhD programme entitled "*The Search for Green Technology Metals – How Fluids Make or Break Critical Metal Deposits*". The planned research will focus on the impact of hydrothermal fluids on movement of elements in and out of critical metal deposits.

With an increasing global focus on green technologies and a zero carbon future, the Company anticipates that this academic project will further its understanding of the genesis and controls on REE mineralisation in its Ivittuut mine with implications for its Grønnedal-Ika carbonatite project.

**Executive Chairman Carl Popal said,** "*The PhD collaboration will provide us not only with advanced research to deliver a clearer understanding of the geology at Ivittuut but also address one of the biggest challenges facing global energy sustainability in decarbonised economies with new materials for the modern world. The PhD research will have immediate impact in developing Ivittuut as a source for critical metals in the European green technology market, directly addressing these issues.*

*"The Ivittuut cryolite mine has been a multi-commodity producer and has potential for further polymetallic mineralisation to be exploited. The Ivittuut area is known to be a prime REE target in*

*South Greenland. Access to the knowledge of these REE experts will provide support in understanding and development of mineralisation within the project area, with a view to defining a REE resource in line with the company's mission towards advancing developments in sustainable green energy metals."*

## **BACKGROUND**

For geological reasons, all major potential European REE sources are located in Scandinavia with Greenland hosting some of the largest REE deposits, not just in Europe but globally. The Ivittuut deposit in Greenland, which formed about 1.3 billion years ago as cooling hydrothermal fluids moved through the Earth's crust, has been identified as having significant potential to contribute to the academic knowledge base for REE mineralisation.

The PhD research at the core of this arrangement will be co-supervised by Professor Adrian Finch and Associate Professor Henrik Friis, both of whom specialise in the geology of REE mineralised systems, the processes that form them and the tectonic environments in which they occur.

The collaboration will span a period of 36 months with the first 18 months based in St Andrews and the subsequent 18 months based in Oslo. Professor Finch will lead the research in isotopic and petrological characterisation of the mineralisation, whereas Professor Friis will provide his expertise and skills in rare mineral identification and characterisation. Our assistance to these REE specialists will have a more immediate impact on the success of Eclipse Metals' exploration activities at Ivittuut with implications for the Grønnedal-Íka prospect.

## **ABOUT THE IVITTUUT PROJECT**

Ivittuut is located in southwestern Greenland and has a power station and fuel supplies to service this station and local traffic to support mineral exploration. About 5.5km to the northeast of Ivittuut, the settlement of Kangilinnguit (Grønnedal), respectively provide a heliport and an active wharf with infrastructure. The Grønnedal-Íka carbonatite complex is less than 10km from Ivittuut and only 5km from the port of Grønnedal. This complex is one of the 12 larger Gardar alkaline intrusions in Greenland and is recognised by GEUS as one of Greenland's prime REE targets along with Kvanefjeld and Kringlerne (Tanbreez).

**Authorised for release by the Board**

Carl Popal  
**Executive Chairman**

Oliver Kreuzer  
**Non-Executive Director**



## **About Eclipse Metals Ltd (ASX: EPM)**

Eclipse Metals Ltd is an Australian exploration company focused on exploring South-western Greenland, Northern Territory and Queensland for multi commodity mineralisation. Eclipse Metals Ltd has an impressive portfolio of assets prospective for cryolite, fluorite, siderite, quartz (high purity silica), REE, gold, platinum group metals, manganese, palladium, vanadium and uranium mineralisation. The Company's mission is to increase shareholders' wealth through capital growth and ultimately dividends. Eclipse Metals Ltd plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture incomes.