GORNO INNOVATION RECEIVES EUROPEAN UNION BOOSTER FUNDING AND SUPPORT

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HIGHLIGHTS

- EU support for Gorno innovation - EIT RawMaterials is demonstrating EU support for Gorno by funding an innovative program to enable 'locked up' high-grade zinc, lead and silver mineralisation to be mined without additional mine development.
- No tailings dams - Gorno is being designed to be one of the few mines worldwide with no long-term surface tailings storage, with all tailings to be stored in the underground mine workings. The EIT RawMaterials Booster funding enables cutting-edge assessment of the historical voids to maximise storage capacity.
- Efficient recovery of valuable raw materials - a paste backfill containing the mine tailings will provide support to underground openings, thereby increasing roof stability to allow for maximum extraction of the mineralisation with minimal additional development.
- Reduced energy consumption and carbon emissions embrace the concept of Green Mining – Gorno's mineralisation is highly amenable to XRT sorting technology which reliably separates valuable mineral ores from waste rock before processing. This results in a reduction in the processing plant size/capital cost and reduced tailings. The XRT technology is also being tested to produce a saleable limestone by- product which can offset aggregate produced from quarries for use in the circular and low-carbon economy.
- Clean zinc and lead concentrates vital for European smelters - Gorno mineralisation can produce some of the cleanest and highest-grade zinc and lead concentrates available globally. These high purity products would provide a traceable, clean and environmentally sustainable metal supply to European smelters with a much-reduced transportation and environmental waste impact compared to other market sources of concentrates.

Pier Luigi Franceschini - Innovation Hub Director of EIT RawMaterials CLC South S.r.l. (Rome, Italy) said: *"We are very happy that EIT RawMaterials is able to support this innovation program at Gorno, and we recognise the project's unique environmental qualities. The Booster program support for Gorno is evidence that EIT RawMaterials has an agile process to bring suitable raw materials projects into an investment channel. We look forward to engaging the team at Gorno further with our networks towards achieving our shared vision of a green and resilient Europe, where raw materials are a major strength of the EU economy."*

Geraint Harris, MD of Alta Zinc Limited, commented: *"We are delighted with the positive response our activities have received from Pier Luigi Franceschini and the EIT RawMaterials team in Rome, and it is rewarding to be able to contribute to the raw materials requirements of Europe with the pioneering re-start of base metal mine in a historic mining country such as Italy. Our goal is to turn Gorno into one of the cleanest and most environmentally responsible new breed of base metals mines coming on stream in Europe.*

Their actions show that the EU is taking concrete steps towards ensuring reliable, secure and sustainable access to raw materials; and we are happy to be contributors to a globally competitive, green, and digital Europe."

Alta Zinc Limited (Alta or the Company) (ASX:AZI) is pleased to announce it has successfully received funding support for an innovative remote sensing and laser project at Gorno through the EIT RawMaterials Booster program.

EIT RAW MATERIALS AND THE EUROPEAN RAW MATERIALS ALLIANCE

Minerals, metals and advanced materials are key enablers to achieve the objectives of the European Green Deal. Today, only a fraction of the most relevant raw materials is produced in Europe. This can be changed through a circular economy approach, through innovation in recycling, substitution, processing, mining, and exploration. It is the objective of EIT RawMaterials to secure a sustainable raw materials supply by driving innovation, education, and entrepreneurship across European industrial ecosystems.

EIT RawMaterials provides a collaborative environment for disruptive and breakthrough innovations by connecting business with academia, research, and investment. It also invests in future generation of innovators for the raw materials sector through initiatives ranging from education of school students to higher qualifications for industry professionals.

The company is committed to supporting Europe's transition towards a circular, green, and digital economy whilst strengthening its global competitiveness and securing employment. On this foundation, EIT RawMaterials has been mandated by the European Commission to lead and manage the European Raw Materials Alliance (ERMA), established in September 2020, as part of the EU's Action Plan on Critical Raw Materials, and the publication of the 2020 List of Critical Raw Materials.

EIT RawMaterials coordinates ERMA to unlock multi-country, public and private investment potentials and supports strategic developments with potential for innovation and high-value job

creation in the raw materials sector to secure access to critical and strategic raw materials, advanced materials, and processing know-how for EU industrial ecosystems.

The Action Plan on Critical Raw Materials looks at the current and future challenges and proposes actions to reduce Europe's raw materials' dependency on third countries, diversifying supply from both primary and secondary sources and improving resource efficiency and circularity while promoting responsible sourcing worldwide.

ERMA's purpose is contribute to ensuring reliable, secure and sustainable access to raw materials as key enablers for a globally competitive, green and digital Europe.

Alta became a member of ERMA in January 2021, aligning with the EU aim of providing reliable access to key raw materials and recognising the benefit of being part of a unique network of organisations across the raw materials value chain. Alta is aiming to provide a European source of very high-grade, clean, low-impurity zinc and lead concentrates from Gorno by 2024.

REMOTE SENSING AND LASER PROJECT

Alta is trialling the innovative use of high intensity laser scanning for geologic assessment of the mineralisation remaining in previously mined stopes at Gorno and also volume assessment of the underground voids. This will enable potential new Mineral Resources to be identified for extraction once the open void has had the roof supported by cemented backfill made from new mine tailings. This enables detailed geological survey and calculations to be achieved with a high level of precision and accuracy, delivered by a safe, cheap and time effective technique, even in tight enclosed spaces that otherwise could be too difficult to access.

In assessing the Booster application, EIT RawMaterials recognised the highly favourable environmental benefits from the enhanced efficiency of the extraction of valuable raw resources at Gorno:

- Accurate survey will allow geologic assessment of the mineral content and tonnes remaining in pillars, which may then be included in mineral resources.
- A key feature of re-development plans for Gorno is that plant tailings will be permanently stored in the mined stopes as cemented paste backfill. This means tailings do not need to be stored above ground, significantly reducing the surface environmental impact.
- The cemented backfill can provide sufficient roof support so that mineralised pillars can be extracted, thus releasing the 'locked-up' zinc, lead and silver metal.
- Extraction efficiency of the valuable existing mineral resources is therefore increased, reducing the potential waste of available raw materials.

- Mined waste can displace commercially quarried limestone aggregate products, reducing the environmental footprint and carbon emissions of this raw material supply.

INNOVATION AND SUSTAINABILITY

Sustainability is a key consideration for the EU in sourcing to raw materials supply. At its core, EU policies seek to improve the management and reduction of energy and resources used in extracting materials, to minimise and mitigate any side-effects to the surrounding natural and social environments both short-term and long-term. The use of innovation and technology to reduce impacts on the planet is therefore paramount.

Testwork has shown that the Gorno mineralisation is highly amenable to XRT sorting technology which reliably separates the valuable metal ores from the host rock (limestone). This has been shown to reduce the amount of ore fed to the processing plant by half, with minimal loss of contained metal. This significantly cuts the size of the processing plant required with savings to the initial capital cost and ongoing maintenance costs and it is estimated that energy consumption can effectively be halved compared to traditional methods. All of these savings will be measured to calculate the reduced CO2 footprint of the operations.

The mass of tailings generated are also cut significantly, resulting in further savings in relation to energy usage, emissions and cost and allowing all tailings to be stored safely underground.
Once the host rock is separated from the metallic minerals by the XRT technology it can potentially be re- used as a saleable limestone by-product which will offset aggregate produced from quarries for use in the circular and low-carbon economy. This is the now the subject of ongoing testwork.

CLEAN ZINC FOR EUROPEAN SMELTERS

The European smelter industry produces ~2.2 Mtpa of zinc metal of which more than 55% is imported from the rest of the world. Many of these imported concentrates are shipped over significant distances and are increasingly ‘dirty’, i.e. contain high levels of deleterious elements which makes it difficult for the smelters to dispose of the smelter waste within environmental guidelines. Treating ‘clean’ concentrates low in deleterious elements will reduce the environmental impacts of Europe’s smelter waste disposal and metallurgical testwork shows Gorno can produce amongst the cleanest zinc and lead concentrates available globally. Reduced freight distance for concentrates sourced from Italy compared to concentrates sourced from the rest of the world will also significantly reduce the carbon emissions from transportation and will strengthen domestic sourcing of raw materials in the EU and assist in diversifying sourcing from third countries.

The EIT RawMaterials Booster program provides targeted investment support specifically for innovative start-up and SME projects and is awarded annually to applicable projects, and forms the first level of the EIT RawMaterials funding strategy. The funding was granted following assessment of Gorno's financial metrics, investment case and strategic relevance to the raw materials value chain for Europe; it therefore positions the company to potentially attract further support through ERMA's unique network of organisations. The Gorno project received Booster funding of €40,000 (A$64,400) and Alta will be pursuing additional opportunities to partner with EU organisations to attract further and more substantial non-dilutive funding.