ASX RELEASE 26 JULY 2021



# RENISON TAILINGS RETREATMENT PROJECT FEASIBILITY STUDY TO BE UPDATED

Metals X Limited (**Metals X**) is pleased to announce that the work on the Renison Tailings Retreatment Project (**Rentails**) will recommence with the expected completion of an updated Definitive Feasibility Study (**2022 DFS Update**) in 2023. The project involves the retreatment of tailings at the Renison Tin Operation (**Renison**), in which Metals X holds a 50% equity interest. Renison is managed by Bluestone Mines Tasmania Joint Venture Pty Ltd (**BMT** or the **Manager**) on behalf of the joint venture owners.

## **HIGHLIGHTS**

- Rentails currently comprises a Measured Mineral Resource of 23.9 million tonnes of historical tailings at an average grade of 0.44% Sn and 0.22% Cu<sup>1</sup> and tailings from the continued operation which has been reported to exceed ten years<sup>2</sup>.
- In 2017 Metals X announced an updated DFS<sup>3</sup> (**2017 DFS Update**) which was based on an Ore Reserve of 21.6 million tonnes of historical tailings at an average grade of 0.45% Sn and 0.23% Cu and reported estimated production of 5,400 tonnes of tin (Sn) and 2,200 tonnes of copper (Cu) per year, through the re-processing and recovery of tin and copper from the historical tailings at Renison over 11 years.
- The 2022 DFS Update is expected to commence in Q1 CY2022 following approval by the BMT joint venture owners, expected in Q4 CY2021, recruitment of the owner's team, and selection of primary consultants. The DFS Update will examine the influence of changes in technology, market conditions and available fuel sources for the thermal update plant, and will update capital cost estimation and contracting strategies with the aim of a Final Investment Decision in 2023.
- The Rentails facility (Figure 1) will require 17 to 20 MWs of power sourced from the Tasmanian hydro and wind power network. The Renison operation is leading edge in sustainable tin concentrate production using 12 to 16 MWs of sustainable renewable power.
- The aim is for the Rentails facility to be designed and operated to be Net Zero Emission through the selection of the technology and energy source for the thermal upgrade plant with consideration of the world's first use of green hydrogen in tin fuming.



Figure 1. Proposed location of Rentails at the Renison Tin Mine

<sup>3</sup> Refer ASX announcement: 4 July 2017, Renison Tailings Retreatment Project ("Rentails") Updated DFS Confirms High Margin Project.

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<sup>&</sup>lt;sup>1</sup> Refer ASX announcement: 7 June 2021, 2021 Renison Mineral Resource Update.

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement: 17 June 2020, Renison Area 5 underpins 10-year mine life and increased tin production.



# BACKGROUND

In 2009, a DFS was completed on the Rentails opportunity which was updated in 2017. The following summarises elements of the 2017 DFS Update; reference should be made to the ASX announcement on 4 July 2017 for further details.

The Rentails facility is targeted to produce a high-grade tin fume (approximately 72% Sn) and a high grade copper matte (approximately 70% Cu), both "premium" products that are readily saleable.

The 2017 DFS Update assumed the Rentails process flowsheet consisted of fine grinding, sulphide flotation, Ultra Fine (UF) gravity separation, tin flotation and thermal upgrade as follows:

- Fine grinding of tailings feed which results in significantly improved cassiterite liberation compared to historic processing methods
- Copper flotation to realise copper value and provide a sulfidising agent to the fuming furnace
- · Ultra-fine gravity separation to scavenge ultra-fine tin which would be otherwise lost
- Tin flotation to produce a low-grade tin concentrate suitable for thermal upgrade
- Thermal upgrade of the tin flotation concentrate to produce a high-grade tin fume product and copper matte as a co-product.

The 2017 DFS Update assumed Top Submersible Lance (TSL) technology for the fuming or thermal plant producing approximately 5,400 tonnes of tin (Sn) and 2,200 tonnes of copper (Cu) per year, through the re-processing and recovery of tin and copper from the existing historical tailings at Renison. The planned tailings treatment rate was nominally 2 million tonnes per year over 11 years.

A strong business case for Rentails was reported in the 2017 DFS Update at assumed Sn price of US\$20,000/t, Cu price of US\$5,000/t and 0.75 USD/AUD exchange rate and on a 100% basis of:

- Net present value (NPV<sub>8%</sub>) of A\$260 million pre-tax
- Internal rate of return (IRR) of 37% pre-tax
- Upfront capital of A\$205 million

### 2022 DFS UPDATE

The 2022 DFS Update will examine the influence of changes in technology, market conditions and available fuel sources for the thermal update plant, and will update capital cost estimation and contracting strategies with the aim of a Final Investment Decision in 2023. It is expected that the 2022 DFS Update will formally commence in Q1 CY2022, following recruitment of the owner's team, selection of primary consultants, external stakeholder engagement and formal approval by the joint venture owners of the DFS Scope, Schedule and Cost Forecast in Q4 CY2021. The BMTJV Manager will be accountable for delivery of the updated DFS to the joint venture owners.

Currently the Renison mine is provided 12 to 16 MWs of sustainable renewable power from the Tasmanian hydro and wind power network. This makes Renison leading edge in sustainable tin concentrate production. The Rentails facility will require approximately 17 to 20 MWs of additional power sourced from renewable sources.

The aim is for the Rentails facility to be designed and operated to be Net Zero Emission through the selection of the technology and energy source for the thermal upgrade plant. The 2017 DFS Update assumed Top Submersible Lance (TSL) technology for the thermal upgrade plant. This selection will be revisited given changes in technology and economic conditions and will consider the use of green hydrogen to be part of the energy source for the thermal upgrade plant. This selection is plant of the energy source for the thermal upgrade plant. This selection will be revisited given changes in technology and economic conditions and will consider the use of green hydrogen to be part of the energy source for the thermal upgrade plant. This would be the first use of hydrogen for tin fuming in the world.

Engagement with external stakeholders to recommence previous work on regulatory approvals for the project will commence immediately.



#### This announcement has been authorised by the board of directors of Metals X Limited

#### **ENQUIRIES**

Mr Brett Smith Executive Director E: <u>brett.smith@metalsx.com.au</u>

#### **Competent Person's Statements**

The information in this report that relates to Mineral Resources was released to ASX on 7 June 2021 and is based on and fairly represents information compiled by Bluestone Mines Tasmania Joint Venture Pty Ltd technical employees under the supervision of Mr Colin Carter B.Sc. (Hons), M.Sc. (Econ. Geol), AusIMM. Mr Carter is a fulltime employee of the Bluestone Mines Tasmania Joint Venture Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activities 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". The Company is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

The information in this report that relates to Ore Reserves was released to ASX on 18 August 2016 and is based on and fairly represents information compiled by Metals X Limited technical employees under the supervision of Mr Michael Poepjes BEng Mining Engineering), MSc (Min. Econ), MAusIMM. Mr Poepjes is a former full-time employee of the Company and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activities 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". The Company is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Metals X confirms that all material assumptions underpinning the production targets and forecast financial information from those production targets reported in the 2017 DFS Update continue to apply and have not materially changed.

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.

#### **About Metals X Limited**

Metals X Limited (ASX: MLX) is an ASX-listed mining company which has 50% ownership of Australia's largest tin operation through the Renison Operation (Bluestone Mines Tasmania JV) located in Tasmania.