For personal use only

2024 RENISON MINERAL RESOURCE UPDATE

Metals X Limited (**Metals X** or the **Company**) is pleased to provide an update of the Mineral Resources for the Renison Tin Operation (**Renison**) in Tasmania. Renison is 50%-owned by Metals X through the Bluestone Mines Tasmania Joint Venture (**BMTJV**).

HIGHLIGHTS (100% basis)

- New Mineral Resource modelling completed for Renison Bell using data up to 31 March 2024, Rentails Resource remains unchanged.
- Increase in Mineral Resource ore tonnes and decrease in tin grade and metal.
- The Renison resource now stands at 20.2 Mt at 1.45% tin for a total of 291,000 tonnes of contained tin.
- Measured and Indicated Resource tonnage increased by 140 Kt and tin tonnes decreased by 5% to 257 Kt of contained tin. Inferred Resources tonnage decreased by 30 Kt and tin tonnes decreased by 8% to 34 Kt of contained tin.
- Continuing commitment to underground resource definition and grade control drilling, with the addition of a third underground diamond drill rig.
- The Renison Life-of-Mine Plan and an update of the Ore Reserve is expected to be completed in Q3 2024.

Executive Director, Mr Brett Smith, commented:

"Renison is a world class tin deposit and Australia's largest primary tin producer. The results from the 2024 Mineral Resource update represent the ongoing definition and resource drilling and updated modelling assumptions.

Resource growth this year was impacted by continued resource definition drilling to support the life of mine plan. An additional underground drill rig has been mobilised to site to drill extensional targets. This extensional drilling along with the current surface "Ringrose" drilling are expected to continue to deliver ongoing growth in the resource."

This announcement has been authorised by the Board of Directors of Metals X Limited

ENQUIRIES
Mr Brett Smith
Executive Director
E: brett.smith@metalsx.com.au

RENISON TIN OPERATION
MINERAL RESOURCE STATEMENT – JUNE 2024

Summary

TABLE 1: RENISON TIN OPERATION MINERAL RESOURCE ESTIMATE AT 31 MARCH 2024
MLX equity share is 50% of the Mineral Resource estimate shown below.

Deposit	Mineral Resource Category[1, 2]	Tonnes (Mt)	Tin (% Sn)	Copper (% Cu)	Contained Metal Tin (kt)	Contained Metal Copper (kt)
Renison Bell [3]	Measured	2.74	1.82	0.24	49.9	6.62
	Indicated	14.6	1.42	0.18	207	26.8
	Inferred	2.80	1.23	0.13	34.5	3.59
	Total	20.2	1.45	0.18	291	37.1
Rentails Project [4,5]	Measured	23.9	0.44	0.22	104	52.7
	Indicated	-	-	-	-	-
	Inferred	-	-	-	-	-
	Total	23.9	0.44	0.22	104	52.7
TOTAL	Measured	26.6	0.58	0.22	154	59.3
	Indicated	14.6	1.42	0.18	207	26.8
	Inferred	2.80	1.23	0.13	34.5	3.59
	Total	44.0	0.90	0.20	396	89.7

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve.
2. Figures are rounded according to JORC Code guidelines and may show apparent addition errors. Contained metal does not imply recoverable metal.
3. Cut-off grade of 0.65% Sn.
4. Cut-off Grade of 0.0% Sn.
5. The Rentails Mineral Resource is at 31 May 2018.

Key Assumptions and JORC 2012 Requirements

Mineral Resources are reported inclusive of Ore Reserves. Mining production data up to 31 March 2024 and all exploration information has been included. Mineral Resources have been depleted for mining to 31 March 2024.

The tin price assumption used to estimate Mineral Resources is US$27,300/t Sn at an assumed exchange rate of USD/AUD 0.69 giving a price of AUD $39,550/t Sn.

The Mineral Resources have been classified in accordance with the guidelines set out in the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, published by the Joint Ore Reserves Committee (JORC), of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia, December 2012 (the 'JORC Code' or 'JORC 2012').

The full Mineral Resource estimate for the Renison Tin Operation is tabulated in Table 1.

Material Information for the individual deposits, including a summary of material information pursuant to ASX Listing Rules 5.8 and 5.9 and the Assessment and Reporting Criteria in accordance with JORC 2012 requirements, is included in the body of this report and in Appendix A to this announcement.

For personal use only

Mineral Resource Governance Statement

In accordance with ASX Listing Rule 5.21.5, governance of the Company's Mineral Resources development and management activities are managed through the management team of Renison Tin Operation (**Renison**) in Tasmania which is 50%-owned by Metals X through the Bluestone Mines Tasmania Joint Venture (**BMTJV**).

Senior geological and mining engineering staff of the BMTJV oversee reviews and technical evaluations of the estimates and evaluate these with reference to actual physical, cost and performance measures. The evaluation process also draws upon internal skill sets in operational and project management, ore processing and commercial/financial areas of the business.

The BMTJV Management Committee of which Metals X has three members is responsible for monitoring the planning, prioritisation and progress of exploratory and resource definition drilling programs across the Company and the estimation and reporting of Mineral Resources. These definition activities are conducted within a framework of quality assurance and quality control protocols covering aspects including drill hole siting, sample collection, sample preparation and analysis as well as sample and data security.

A four-level compliance process guides the control and assurance activities by the BMTJV:

- Provision of internal policies, standards, procedures and guidelines.
- Mineral Resource reporting based on well-founded geological and mining assumptions and compliance with external standards such as the JORC Code.
- Internal review of process conformance and compliance.
- Internal assessment of compliance and data veracity.

The BMTJV Management Committee aims to promote the maximum conversion of identified mineralisation into Mineral Resources compliant with JORC 2012.

The Company reports its Mineral Resources, as a minimum, on an annual basis, in accordance with ASX Listing Rule 5.21 and clause 14 of Appendix 5A (the JORC Code).

Competent Persons named by the Company are members of the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG), and qualify as Competent Persons as defined in the JORC Code 2012.

Mineral Resource Estimates

Table 1 shows the updated Mineral Resource estimate for the Renison Tin Operation as at 31 March 2024.

Summary of Material Information

Appendix A to this report contains all information material to understanding the estimates of Mineral Resources. In accordance with Listing Rule 5.8.1, the following summary of material information in this regard is provided below.

Geology and geological interpretation

Renison is one of the world's largest operating underground tin mines and Australia's largest primary tin producer. Renison is the largest of three major skarn, carbonate replacement, pyrrhotite-cassiterite deposits within western Tasmania. The Renison Mine area is situated in the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic-Cambrian siliciclastic and volcaniclastic rocks. At Renison there are three main shallow-dipping dolomite horizons which host replacement mineralisation. The major structure associated with tin mineralisation at Renison, the Federal Basset Fault, was formed during the forceful emplacement of the Pine Hill Granite during the Devonian and is also an important source of tin mineralisation.

Drilling techniques, sampling and sub-sampling techniques

The bulk of the data used in resource calculations at Renison has been gathered from face chip samples, sludge drilling and diamond core using NQ2, LTK60 and LTK48 sizes. This core is geologically logged and subsequently halved for sampling. Drill hole samples are typically whole core sampled to streamline the core handling process if required. Each development face / round is horizontally chip sampled with the sampling intervals being domained by

For personal use only

geological constraints. Sludge drilling is performed with an underground production or development drill rigs (nominal 64mm-89mm diameter hole). It is an open hole drilling method using water as the flushing medium.

Criteria for classification

Resources are classified in line with JORC guidelines utilising a combination of various estimation derived parameters, the input data and geological / mining knowledge. This approach considers all relevant factors and reflects the Competent Person's view of the deposit. At Renison, material classified as Measured must have development (with face samples) within 20 m. Indicated Mineral Resource must have sufficient grade and geological continuity with drill hole intersections generally between 40m and 20m apart. Inferred Mineral Resource is material that is defined by drill hole intersections between 120m and 40m apart. Geological continuity may be present, but the grade estimate is lower in confidence.

Sample analysis method

Samples are dried at 90°C, then crushed to <3mm, samples are then riffle split to obtain a sub sample of approximately 100 g which is then pulverized to 90% passing 75 um. A 2g subsample of the pulp sample is then weighed with 12 g of reagents including a binding agent, the weighed sample is then pulverized again for one minute. The sample is then compressed into a pressed powder tablet for introduction to the XRF. Sn, As and Cu have a detection limit 0.01%, Fe and S detection limits are 0.1%. Each XRF batch of twenty consists of one blank, one internal standard, one duplicate and a replicate. Anomalous assay results are re-assayed to ensure quality control.

Estimation methodology

All modelling and estimation work undertaken by BMTJV is carried out via Leapfrog™ and Surpac Vision™ software by creating three-dimensional ore body wireframes using sectional techniques. Drill hole intersections within the three-dimensional wireframes are composited and statistical analysis is conducted to determine appropriate search parameters within individual domains. An empty block model is created, and grade estimation is undertaken using ordinary Kriging estimation methods. The resource is then depleted using mining voids and subsequently classified in line with JORC guidelines as above.

Cut-off grades

The Mineral Resource reporting cut-off grade is 0.65% Sn at Renison Bell.

Mining and metallurgical methods and parameters

The Renison mine predominantly applies up-hole benching and open stoping mining methods with (in some cases), post fill and cemented rock fill to fill voids as much as possible. A slurry type fill is planned to be used to backfill a portion of the stope voids of the high-grade wide ore zone in Area 5. A mining dilution of 5% to 15% at zero grade is used to estimate the Ore Reserve. Minimum widths for underground development are 5 m and for stoping minimum widths are 3 m. Historical Mining recoveries of 75 to 98% are applied to estimate ore reserves.

The Renison mine produces a tin concentrate of grade targeting 57% Sn with internal process designed to reduce penalty metals such as iron, sulphur, tungsten and copper. The metallurgical process is complex and applies several stages of gravity-type concentration as well as sulphide and oxide flotation, regrinding and acid leach methods. The metallurgical recovery is estimated from plant feed grades and is based on historical plant performance with modifying factors for different ore sources. Metallurgical recoveries, current and future projected costs and mining factors were considered as part of the cut-off grade analysis.

Annual comparison of Mineral Resources

Tables 2 and 3 compare the 31 March 2023 Mineral Resource estimate with the updated Mineral Resource estimate as at 31 March 2024 for the Renison Tin Operation. MLX equity share is 50% of the Mineral Resource estimates shown below.

For personal use only

TABLE 2: 2024 RENISON MINERAL RESOURCE ESTIMATE – DEPLETION & RESOURCE ADJUSTMENTS FROM PRIOR YEAR

Project	Tonnes[1] (Mt)	Tin (%Sn)	Copper (%Cu)	Contained Metal Tin (kt)	Contained Metal Copper (kt)
31-Mar-23					
Renison Bell	20.0	1.54	0.19	308	38.8
Rentails	23.9	0.44	0.22	104	52.7
Total	43.9	0.94	0.21	412	91.4
Mining Depletion					
Renison Bell	0.751	1.68	0.18	12.6	1.35
Rentails	-	-	-	-	-
Total	0.751	1.68	0.18	12.6	1.35
Resource Adjustments					
Renison Bell	0.86	-0.45	-0.04	-3.91	-0.37
Rentails	-	-	-	-	-
Total	0.86	-0.45	-0.04	-3.91	-0.37
31-Mar-24					
Renison Bell	20.2	1.45	0.18	291	37.1
Rentails	23.9	0.44	0.22	104	52.7
Total	44.0	0.90	0.20	396	89.7

1. Figures are rounded according to JORC Code guidelines and may show apparent addition errors. Contained metal does not imply recoverable metal.

The difference between the 2024 Renison Bell Mineral Resource estimate and 2023 Renison Bell Mineral Resource estimate includes the following modifications:

- All diamond drilling, development face sample and sludge drill hole data obtained between 1 April 2023 and 31 March 2024 has been included in the model.
- Updates to all wireframe models based on this data.
- Additional depletions to the model for what was mined between 1 April 2023 and 31 March 2024.
- A total of 310Kt at 0.85% Sn was deemed unrealistic to be mined due to thickness and grade criteria and has been removed from resource reporting.
- The Rentails Mineral Resource was determined using the Rentails Resource Model (rtl180531) with tailings data reported to 31 May 2018.
- Renison implemented restricted search ranges on high grade in the estimation process.

For personal use only

TABLE 3: 2024 RENISON BELL MINERAL RESOURCE ESTIMATE – ANNUAL COMPARISON

MLX equity share is 50% of the Mineral Resource estimate shown below.

Mineral Resource reporting date	Mineral Resource Category[1,2]	Tonnes (Mt)	Tin (% Sn)	Copper (% Cu)	Contained Metal Tin (kt)	Contained Metal Copper (kt)
31 March 2023[3]	Measured	2.45	1.95	0.21	47.8	5.25
	Indicated	14.8	1.51	0.19	223	28.3
	Inferred	2.83	1.33	0.18	37.6	5.19
	Total	20.0	1.54	0.19	308	38.8
31 March 2024[4]	Measured	2.74	1.82	0.24	49.9	6.62
	Indicated	14.6	1.42	0.18	207	26.8
	Inferred	2.80	1.23	0.13	34.5	3.59
	Total	20.2	1.45	0.18	291	37.1

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve.
2. Figures are rounded according to JORC Code guidelines and may show apparent addition errors. Contained metal does not imply recoverable metal.
3. As announced on ASX on 28 September 2023. Cut-off grade of 0.65% Sn.
4. Mineral Resources are calculated on 31 March 2024 by BMTJV, adjusted for depletion to 31 March 2024, using a cut-off grade of 0.65% Sn.

Competent Person's Statement

The information in this report that relates to Mineral Resources has been 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 full-time 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". Mr Carter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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.

For personal use only

APPENDIX A:

JORC CODE, 2012 EDITION

JORC TABLE 1: THE INFORMATION IN THIS TABLE REFERS TO THE FOLLOWING PROJECTS AT THE RENISON TIN OPERATION: RENISON BELL AND RENTAILS

SECTION 1: SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.*	**Diamond Drilling** • The bulk of the data used in resource calculations at Renison has been gathered from diamond core. Three sizes have been used historically NQ2 (45.1mm nominal core diameter), LTK60 (45.2mm nominal core diameter) and LTK48 (36.1mm nominal core diameter), with NQ2 currently in use. This core is geologically logged and subsequently halved for sampling. Grade control holes may be whole core sampled to streamline the core handling process if required. • There is no diamond drilling for the Rentails Project. **Face Sampling** • Each development face / round is horizontally chip sampled at Renison. The sampling intervals are domained by geological constraints (e.g., rock type, veining and alteration / sulphidation etc.). Samples are taken in a range from 0.3m up to 1.2m in waste. All exposures within the orebody are sampled. • There is no face sampling for the Rentails Project. **Sludge Drilling** • Sludge drilling at Renison is performed with an underground production drill rig. It is an open hole drilling method using water as the flushing medium, with a 64-89mm hole diameter. Sample intervals are ostensibly the length of the drill steel. Holes are drilled at sufficient angles to allow flushing of the hole with water following each interval to prevent contamination. • There is no sludge drilling for the Rentails Project. **RC Drilling** • There is no RC drilling for the Renison Project. • There is no RC drilling for the Rentails Project.
Drilling techniques ***Drill sample recovery***	• *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.* • *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).* • *Method of recording and assessing core and chip sample recoveries and results assessed.*	

For personal use only

Criteria	JORC Code Explanation	Commentary
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**Percussion Drilling** • This drilling method was used for the Rentails project and uses a rotary tubular drilling cutter which was driven percussively into the tailings. The head of the cutting tube consisted of a 50mm diameter hard tipped cutting head inside which were fitted 4 spring steel fingers which allowed the core sample to enter and then prevented it from falling out as the drill tube was withdrawn from the drill hole. • There is no percussion drilling for the Renison Project. • All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Diamond core is logged geologically and geotechnically. • RC chips are logged geologically. • Development faces are mapped geologically. • Logging is qualitative in nature. • All holes are logged completely, all faces are mapped completely.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Generally, drill core is sampled whole-core to streamline the handling process and ensure a larger more representative sample is obtained. For selected drill holes where, representative core is required to be kept, core is cut and half sampled. If a field duplicate is required, the core is quarter cored and sampled. • Samples are dried at 90°C, then crushed to <3mm. Samples are then riffle split to obtain a sub-sample of approximately 100g which is then pulverized to 90% passing 75um. 2g of the pulp sample is then weighed with 12g of reagents including a binding agent, the weighed sample is then pulverised again for one minute. The sample is then compressed into a pressed powder tablet for introduction to the XRF. This preparation has been proven to be appropriate for the style of mineralisation being considered. • QA/QC is ensured during the sub-sampling stages process via the use of the systems of an independent NATA / ISO accredited laboratory contractor. • The sample size is considered appropriate for the grain size of the material being sampled, however due to patchy mineralisation it is deemed that whole core sampling is more representative for volume and patchy mineralisation observed from sampling of the two cut halves of core intervals. • The un-sampled half of diamond core is retained for check sampling if required. • For RC chips regular field duplicates are collected and analysed for significant variance to primary results.

For personal use only

Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Assaying is undertaken via the pressed powder XRF technique. Sn, As, WO3 and Cu have a detection limit 0.01%, Fe, Ca, MgO and S detection limits are 0.1%. These assay methodologies are appropriate for the resource in question. • All assay data has built in quality control checks. Each XRF batch of twenty consists of one blank, one internal standard, one duplicate and a replicate, anomalies are re-assayed to ensure quality control.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• The labs conduct umpire checks reported on a 10-month basis for their own external checks. • XRF calibration and servicing is conducted on a regular basis. • Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process. • Virtual twinned holes have been drilled in several instances across all sites with no significant issues highlighted. Drillhole data is also routinely confirmed by development assay data in the operating environment. • Primary data is loaded into the drillhole database system and then archived for reference. • All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists. • The lab results are received electronically in .csv file format. No primary assay data is modified in any way. If any error is noted, including transcription errors, the lab is informed and immediate corrections are requested prior to importing data into database. • An electronic copy of the internal lab monthly report is also filed away in Renison QAQC folder.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole, currently with a GyroSmart tool in the underground environment at Renison, and a multishot camera for the typically short surface diamond holes. • All drilling and resource estimation is undertaken in local mine grid at the various sites. Renison Mine grid is orientated 40.97 degrees west of true north and the RL=elevation+2000m. • Topographic control is generated from remote sensing methods in general, with ground-based surveys undertaken where additional detail is required. This methodology is adequate for the resource in question.

For personal use only

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drilling in the underground environment at Renison is nominally carried-out on 40m x 40m spacing in the south of the mine and 25m, x 25m spacing in the north of the mine prior to mining occurring. A lengthy history of mining has shown that this data spacing is appropriate for the Mineral Resource estimation process and to allow for classification of the resource as it stands. • Drilling at Rentails is usually carried out on a 100m centres. This is appropriate for the Mineral resource estimation process and to allow for classification of the resource as it stands. • Compositing is carried out using “best fit” techniques based upon the modal sample length of each individual domain. This technique is deemed appropriate for the Renison orebodies.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows. • Development sampling is nominally undertaken normal to the various orebodies. • It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• At Renison and Rentails samples are delivered directly to the on-site laboratory by the geotechnical crew where they are taken into custody by the independent laboratory contractor.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Site generated resources and reserves and the parent geological data is routinely reviewed by a third party on a biennial basis.

For personal use only

SECTION 2: REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All Tasmania resources are hosted within 12M1995, a standard Tasmanian Mining Lease. • No native title interests are recorded against the Mining Lease. • The Mining Lease is held by the Bluestone Mines Tasmania Joint Venture of which Metals X has 50% ownership. • No royalties above legislated state royalties apply to the Mining Lease. • Bluestone Mines Tasmania Joint Venture operates in accordance with all environmental conditions set down as conditions for grant of the Mining Leases. • There are no known issues regarding security of tenure.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Renison area has an exploration and production history in excess of 100 years. • Bluestone Mines Tasmania Joint Venture work has generally confirmed the veracity of historic exploration data.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Renison is one of the world's largest operating underground tin mines and Australia's largest primary tin producer. Renison is the largest of three major Skarn, carbonate replacement, pyrrhotite-cassiterite deposits within western Tasmania. The Renison Mine area is situated in the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic-Cambrian siliciclastic and volcaniclastic rocks. At Renison there are three shallow-dipping dolomite horizons which host replacement mineralisation. • The Rentails Mineral Resource is contained within three Tailing Storage Facilities (TSF's) that have been built up from the processing of tin ore at the Renison Bell mine over the period 1968 to 2016.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No exploration results are reported as part of this release, results relating to the deposits have been previously released with full drill holes information.

For personal use only

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results are reported as part of this release, results relating to the deposits have been previously released. • All results presented are length weighted. • No high-grade cuts are used. • Any contiguous zones of internal waste or high-grade zones are clearly explained in relevant tables. • Cu percentage is also reported for any significant Sn intersections as a bi-product indicator value. • No metal equivalent values are stated.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• No exploration results are reported as part of this release, results relating to the deposits have been previously released. • Unless indicated to the contrary, all results reported are true width. • Given restricted access in the underground environment the majority of drillhole intersections are not normal to the orebody.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• No exploration results are reported as part of this release, results relating to the deposits have been previously released.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No exploration results are reported as part of this release, results relating to the deposits have been previously released.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• No relevant information to be presented.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration assessment and normal mine extensional drilling continues to take place at Renison. • Project assessment continues to progress at Rentails.

For personal use only

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Drillhole data is captured and stored in acQuire GIM Solution software on the Sequel Server platform which is currently considered "industry standard". • As new data is collected it passes through a validation approval system designed to pick-up any significant errors before the information is loaded into the master database. The information is uploaded by a series of Sequel routines and is performed as required. The database contains diamond drilling (including geotechnical and specific gravity data), face chip and sludge drilling data and some associated metadata. By its nature this database is large in size, and therefore exports from the main database are undertaken (with or without the application of spatial and various other filters) to create a database of workable size, preserve a snapshot of the database at the time of orebody modelling and interpretation and preserve the integrity of the master database. • A random check of 20 original assay files against database records is performed before the estimation as part of validation, for any transcription errors or for any incorrect assignment to drillholes. • A resvalid code of zero is assigned to drillhole data deemed reliable and trustworthy. A resvalid code of 1 is assigned as invalid and flagged for further investigation and not used in estimation.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Mr. Colin Carter is employed as Renison Tin Operation as Resource Development and Planning Manager and is located on site on a full time basis. • Site generated resources and the parent geological data is routinely reviewed by experienced senior resource geologists.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• Mining has occurred since 1800's providing significant confidence in the currently geological interpretation across all projects. • No alternative interpretations are currently considered viable. • Geological interpretation of the deposit was carried out using a systematic approach to ensure that the resultant estimated Mineral Resource figure was both sufficiently constrained, and representative of the expected sub-surface conditions. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation. • Independent evaluations, underground structural and geological mapping has been verified by an external consultant geologist. • The architecture of the Renison horst / graben system is the dominant control on geological and grade continuity. • The depositional history of Rentails is well documented.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Renison has currently been mined over a strike length of >1,950m, a lateral extent of >1,250m and a depth of over 1,200m. • Rentails is deposited in three adjacent TSFs which have and aggregate length of approximately 1.8km and a width at the widest point of circa 1km. Maximum depth is in excess of 20m.

For personal use only

Criteria	JORC Code Explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• All modelling and estimation work undertaken by BMTJV is carried out in three dimensions via Leapfrog™ and Surpac Vision™. • After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional and / or plan view to create the outline strings which form the basis of the three-dimensional orebody wireframe. Wireframing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate three-dimensional representation of the sub-surface mineralised body. • Drillhole intersections within the mineralised body are defined, these intersections are then used to flag the appropriate sections of the drillhole database tables for compositing purposes. Drillholes are subsequently composited to allow for grade estimation. In all aspects of resource estimation, the factual and interpreted geology was used to guide the development of the interpretation. • Once the sample data has been composited, a statistical analysis is undertaken using Snowden Supervisor and Leapfrog software to assist with determining estimation search parameters, top-cuts, distance capping of high-grade tin domains etc. Variographic analysis of individual domains is undertaken to assist with determining appropriate search parameters, which are then incorporated with observed geological and geometrical features to determine the most appropriate search parameters. • Top-cuts are applied to outlier data after a statistical analysis to determine where composite grade continuity breaks down (qq plots etc) while distance capping to high grade is applied to continuous high grade mineralised zones in domains to restrict the high grade distribution to data rich zones only (proximal to infill drilling). The top-cuts and grade distance capping Is determined in conjunction with domain analysis and reconciled mined grade. • An empty block model for the area of interest is created out of the depletion and sterilisation model which is updated using mining voids. This model contains attributes set at background values for the various elements of interest as well as density and various estimation parameters that are subsequently used to assist in resource categorisation. The block sizes used in the model will vary depending on orebody geometry, minimum mining units, estimation parameters and levels of informing data available. • Grade estimation is then undertaken, with ordinary kriging estimation method is considered as standard, although in some circumstances where sample populations are small, or domains are unable to be accurately defined, inverse distance weighting estimation techniques will be used. Both by-product and deleterious elements are estimated at the time of primary grade estimation. It is assumed that by-products correlate well with tin. There are no assumptions made about the recovery of by-products. • SG is calculated using elemental Sn, S, As, Fe and MgO grades determined by regression analysis and with a stoichiometric function using elemental Sn, Cu, As, Fe and MgO grades. • Resources are subsequently classified in line with JORC guidelines utilising a combination of various estimation derived parameters and geological / mining knowledge.

For personal use only

Criteria	JORC Code Explanation	Commentary
		• This approach has proven to be applicable to BMTJV's tin assets and by previous mining reconciliation. • Estimation results are routinely validated against primary input data, previous estimates and mining output. • Good reconciliation between mine claimed figures and milled figures is routinely achieved.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnage estimates are dry tonnes.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource reporting cut-off grade is 0.65% Sn at Renison. • There is no lower reporting cut-off grade for Rentails.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Renison mine predominantly applies up-hole benching and open stoping with in some cases post fill and cemented rock fill to fill voids. The mining method has been successfully applied over the past decade with small tweaks and geotechnical considerations progressively applied. • A minimum mining width of underground development is 4.5m and for underground stoping a minimum width of 2.0 m. Resource models are diluted to these limits before dilution is applied. • Mining recoveries vary depending upon the stopes physical shape, geological setting and size between 75% and 98%.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• The Renison mine produces a tin concentrate of grade varying between 50- 60 % Sn with internal process designed to reduce penalty metals such as iron, sulphur, tungsten and copper. • The metallurgical process is complex and applies several stages of gravity-type concentration as well as sulphide and oxide flotation, regrinding and acid leach methods. The method is proved and has successfully operated for over 50 years. • The metallurgical recovery is estimated based on regression analysis of grade recovery curves from the actual processing of ores in the plant. • Metallurgical recoveries on the various ore types and grades were considered as part of the cut-off grade analysis.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts,*	• Bluestone Mines Tasmania Joint Venture operates in accordance with all environmental conditions set down as conditions for grant of the respective Mining Leases.

For personal use only

Criteria	JORC Code Explanation	Commentary
	particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density of the mineralisation at Renison is variable. Bulk density sampling is undertaken via assessments of drill core (BMTJV practice is to undertake bulk density determinations on a representative selection of drill core sent for assay), and are reviewed constantly (BMTJV practice is to collect check SG samples as a regular part of the mining cycle). Where no drill core or other direct measurements are available, SG factors have been assumed based on similarities to other zones of mineralisation. • Due to a comprehensive density dataset available to Renison, it has allowed the regression analysis calculation using elemental Sn, S, As, Fe and MgO grades to determine specific density in the mid and lower Renison Models. This regression calculation uses ordinary kriged block grades to calculate density into each block in the block model and is reconciled back against measured lab SG values. • Renison uses a stoichiometric calculation of density based on dominant mineral species in the Upper Renison Model. This stoichiometric function is then applied on ordinary kriged block grades to calculate density into each block in the block model. The current calculation is as follows: 2.61+(0.0159*Cu)+(0.0349*Sn)+(0.0339*Fe)+(0.0339*As)+(0.0089*MgO). • As a check to the calculation archimedes method data continues to be collected for half cut core. • Given the volume of the TSF's are known, and the tonnage of tailings material deposited into the dams was recorded, the insitu bulk density of the Rentails resource has been back-calculated.

personal use only

Criteria	JORC Code Explanation	Commentary
Bulk density (continued)		
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Resources are classified in line with JORC guidelines utilising a combination of various estimation derived parameters, the input data and geological / mining knowledge. This approach considers all relevant factors and reflects the Competent Person's view of the deposit. • At Renison classification utilises inverse distance estimations for measured, indicated and inferred classifications. The measured estimation for classification for most Renison models is limited to utilising only development data off set above the drive to enforce the Bluestone Mines requirement that only those areas with ore development may be classified as measured, up to 20m above the development. The lower Renison models, due to their extensive close spaced diamond drilling also makes use of diamond drill hole proximity to determine measured areas. The inverse distance estimations use a combination of search size and sample selection to allow zones of coherent classification related to drilling density. • A final validation step makes a comparison from previous resource classifications, so that both a visual check and block model outputs can be objectively examined, reflecting changes in input data, confidence of geology and metal values. Variations such as average distance of informing samples, kriging variance and slope of regression values for each resource category, domain and pass number can be appropriately assessed, so that the level of subjectivity when undertaking classification can be minimised.

For personal use only

Criteria	JORC Code Explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Resource estimates are peer reviewed by the site technical team as well as by a third party on a biennial basis.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• All currently reported resources estimates are considered robust, and representative on both a global and local scale. • A continuing history of mining with good reconciliation of mine claimed to mill recovered provides confidence in the accuracy of the estimate for Renison and Mount Bischoff. • The application of geostatistical analysis and procedures through Snowden's Supervisor v8.2 software is used to quantify and validate the resource estimate. Currently, it is peer reviewed onsite by experienced senior resource geologists prior to releasing the final resource statement and prior to the final report approved by the competent person. • A detailed set of production records provides confidence in the accuracy of the estimate for Rentails.

For personal use only