

**ASX RELEASE: 16 FEBRUARY 2018** 

# ADMIRAL BAY ZINC PROJECT MINERAL RESOURCE UPDATE

#### **HIGHLIGHTS**

- Metalicity recently commissioned Optiro Pty Ltd to review the company's zinc projects, resource estimates, classification and reporting against the JORC Code 2012 and the CIM Standards 2014, in preparation for completion of a NI 43-101 Technical Report for a potential TSX-V listing.
- Mr Ian Glacken is acting as the Qualified Person (QP) for this review under NI43-101 and Competent Person under the JORC Code. Mr Paul Blackney of Optiro contributed to the work.
- On the basis of a circa A\$50M database of geological models, drillhole data, remote sensing survey data, site visit, and regional geological models generated by world experts in Mississippi Valley Type (MVT) deposits, Optiro primarily concludes the following in relation to Admiral Bay
  - The classification and reporting under the CIM Standards (CIM, 2014) would result in an identical tabulation and classification of the JORC 2012 MRE published on 4/7/2016 by Ridley Mineral Resource Consultants (RMRC). The JORC 2012 MRE published on 4/7/2016 was an Inferred Mineral Resource Estimate (MRE) of 170Mt at 7.5% ZnEg
- Metalicity announced a successful Institutional Placement to predominantly North America funds with strong support for a potential TSX-V listing.
- The Company will keep the market updated as to progress with the potential TSXV listing

Metalicity Limited (ASX:MCT) ("MCT" or "Company") is pleased to report that a commissioned review of the Company's zinc projects, resource estimates, classification and reporting against the JORC Code 2012 and the CIM Standards 2014, in preparation for completion of a NI 43-101 Technical Report for potential TSX-V listing, has confirmed that the classification and reporting under the CIM Standards (CIM, 2014) would result in an identical tabulation and classification of the JORC 2012 Mineral Resource Estimate (MRE) published on 4/7/2016.

# **Metalicity Managing Director Matthew Gauci commented:**

"We are pleased to have a highly credentialed consultancy with experience reporting against the JORC Code 2012 and the CIM Standards 2014, deliver a positive review which supports the Company's JORC 2012 Inferred MRE published on 4/7/2016 of 170Mt at 7.5% ZnEq. The review is in preparation for a NI 43-101 Technical Report for a potential TSX-V listing and this, together with recent Institutional Placement to predominantly North American Investors, bodes well for a potential TSX-V listing."

### **Resource Estimation**

At the request of Metalicity, RMRC adopted a polygonal or nearest-neighbour approach to the estimation of resource grades within the mineralised zones. The drillhole grade (zinc, lead, silver and barium) and density data was flagged within each mineralised zone and then composited across the zone intersection to form a single, variable-length composite within each zone. A rotated block model was constructed (Y axis 120° azimuth rotation) and each mineralised zone was filled with 50 m by 50 m by variable height blocks using a minimum sub-block size of 5 m by 5 m by 1 m. Both the composite grade data and model blocks were assigned a code to discriminate their position relative to the antiform crest. Positions could be on either limb or at the crest. This position information, in combination with the mineralisation zone identifier, was used to constrain the estimation of uncapped zinc, lead, silver and barium grades from the composite data into the model blocks using nearest neighbour estimation.

Density factors were calculated for the mineralised zones by averaging the available bulk density collected by Kagara from core samples. 172 density measurements were located within the mineralised zones. Density factor values varied from 2.7 t/m³ to 3.9 t/m³.

The block model grades were visually validated to ensure that data had been correctly assigned to the mineralised zones and correctly assigned throughout each zone.

#### **Resource Classification**

The Admiral Bay Mineral Resource estimate was originally classified in accordance with the guidelines provided by the 2012 JORC Code (JORC, 2012). The classification process considered the quality of supporting geological and sample data combined with the understanding of the deposit geological and grade continuity. The QP considers that the data spacing and distribution supporting the resource modelling is considered to have established geological and grade continuity to a degree that is sufficient to assign an Inferred classification to the Mineral Resource, although the degree of extrapolation is considerable in some zones. The QP has also examined the classification and reporting of the resource with respect to the NI 43-101 guidelines (which incorporate the CIM Standards (2014)), and considers that it is appropriate to be reported within the CIM framework without modification.

### **Metal Equivalence**

A zinc equivalence value was adopted at the request of Metalicity for reporting of the Mineral Resource.

A zinc equivalence calculation was undertaken using average LME prices for lead, zinc and silver as applicable in May 2016, and metallurgical recoveries were derived from metallurgical testwork completed by previous owners CRAE and Kagara . The zinc equivalent calculations are presented in Table 1. These parameters were reduced to the following formula:

$$ZnEq = Zn+0.97*Pb+0.03*Ag$$

Table 1 Zinc equivalence parameters for 2016 resource declaration

Metal	Price (USD)	Price in assay units (USD)	Concentrate recovery (%)	Recovered unit pricing (USD)	ZnEq factor	
Zinc	0.85/lb	18.75 per %	0.90	16.88	1.00	
Lead	0.78/lb	17.15 per %	0.95	16.29	0.97	
Silver	17/oz	0.55 per ppm	0.95	0.52	0.03	



It should be noted that only preliminary metallurgical recoveries are available and that the metal prices applied for the equivalence calculation do not reflect the prices that a smelter would pay for concentrate. Moreover, no smelter penalties or charges have been included in the calculation.

## **Resource Reporting**

Due to the polygonal method employed to estimate block grades, it is only considered appropriate to report the Mineral Resource on a global mineralised zone basis. In accordance with the method used to interpret the mineralised zones, this global reporting notionally applies a 3% zinc + lead reporting cut-off. Reporting above any other cut-off grade is considered invalid as the modelling processes applied do not adequately address individually block grade variability. Alternative cut-off grade reporting could only be completed using polygonal methods by reinterpreting the mineralised at the changed cut-off grade criteria.

The Inferred Mineral Resource at Admiral Bay is reported by mineralised zone in Table 2.

Table 2 Admiral Bay total Mineral Resource by mineralised zone

	Admiral Bay Inferred 2016 Mineral Resource								
Zone	Description		es (	Density	Zn	Pb	۸۵	Ва	7.a.F.a.*
(MZ)	Style	Host stratigraphy	Tonnes (Mt)	(t/m³)	(%)	(%)	Ag (g/t)	(%)	ZnEq* (%)
11	High Zn, Low Pb	NFM at contact w/CFM	95	3.0	5.7	1.6	29	9	8.1
12	Mod Zn, Low Pb	CFM at contact w/NFM	23	2.7	3.6	0.6	17	2	4.7
20	Low Zn, High Pb	NFM below MZ11	40	3.4	1.7	5.1	19	15	7.2
30	Mod Zn, Low Pb	CFM above MZ12	2	2.7	4.4	0.8	28	1	6.0
40	Low Zn, High Pb	NFM/GFM contact	10	3.9	0.2	9.5	20	17	10.0
50	Mod Zn, Low Pb	CFM above MZ30	0.5	2.7	4.1	1.1	22	1	5.9
Total	Total Combined zones		170	3.1	4.1	2.7	25	10	7.5

#### Notes:

- Nearest neighbour block model estimates into 50 mX by 50 mY parent block dimensions based on composite drill intersection grades over entire mineralised zone intervals.
- CFM = Carribuddy (or Bongabinni) Formation, NFM = Nita Formation, GFM = Goldwyer Formation.
- The resource has been subdivided by modelled mineralisation domains based on a notional 3% Zn+Pb cut-off grade.
- No cut-off grade applied to block model estimates for resource reporting.
- ZnEq\* is a formula as reported above.
- Resource tonnages and grades have been rounded to two significant figures.

Metalicity reported a smaller, higher grade Mineral Resource in 2015 that was derived from the 2008 Mineral Resource compiled by Coffey (Kirchner, 2008). This Mineral Resource comprised a block model with grades estimated into 25 m by 25 m by 5 m blocks from two metre drillhole composites using an inverse distance squared grade estimation algorithm. Mineralised domains were defined as regions where either zinc or lead grades exceeded 1.5% to 2.0%.

This reporting is derived from work by CSA Global (Allen et al, 2015) which analysed the high-grade characteristics of the Coffey model, which is largely constrained to tenement M04/249, and noted that it contained continuous higher-grade zones above a zinc equivalent grade of 7.7% zinc equivalent. This reporting was based on an earlier version of the zinc equivalence formula which employed the same concentrate recovery factors as reported in Table but higher metal prices of USD1.00/lb for zinc and lead and USD19.0/oz for silver. These prices slightly modify the zinc equivalence formula stated above by increasing the emphasis on the lead component (to ZnEq = Zn+1.06\*Pb+0.03\*Ag).

The higher-grade Inferred Mineral Resource reported above a cut-off of 7.7% zinc equivalent is detailed in Table 3.



Table 3 Admiral Bay high-grade Inferred Resource estimate (February 2015)

Category	Tonnes	Density	Zinc (%)	Lead (%)	Silver (g/t)	Barium	Zinc equivalent
	(Mt)	(t/m³)				(%)	(%)
Inferred	20	3.24	3.2	5.8	25	12.7	10.1

This higher-grade component is considered to reflect a subset of the total Mineral Resource reported in Table 2 and is located as shown in Figure 1 and Figure 2.

Figure 1 Plan extent of the reported high-grade Mineral Resource (light blue) with annotated drillhole locations (red) and position of M04/249 tenement (grey)

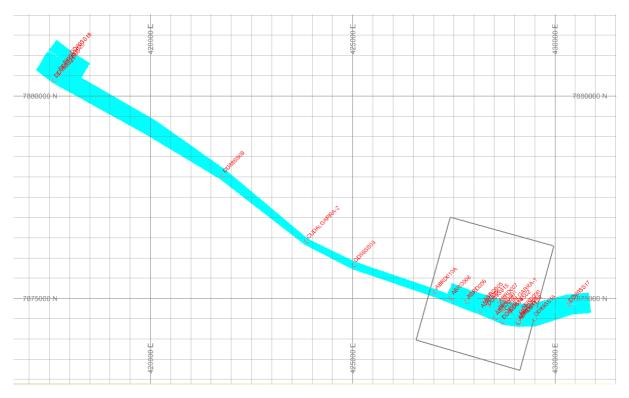
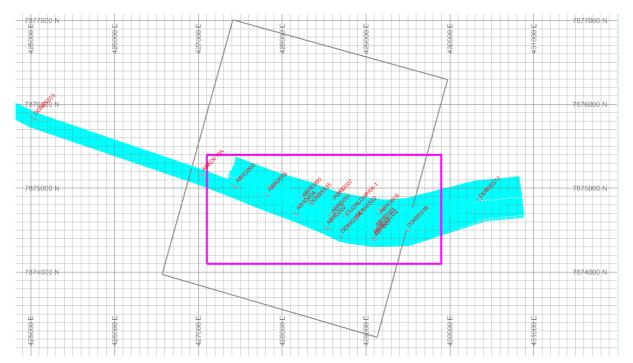




Figure 2 Plan extent of 2008 Coffey Mineral Resource (magenta box) with annotated drillhole locations (red), the position of M04/249 tenement (grey) and the local footprint of the 2016 Mineral Resource (light blue)





### **ENQUIRIES**

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## **About Metalicity Limited**

Metalicity Limited is an Australian exploration company with a primary focus on the base metals sector and the development of a pipeline of zinc projects including the high-grade Napier Range Zinc Project and the large-scale Admiral Bay Zinc Project, both located in the north west of Australia. The Company's secondary focus is the lithium and cobalt sector with early stage exploration projects located in existing world class and/or emerging districts for lithium and cobalt. The Company is supported by a management team with significant collective experience in the resources sector as well as private equity, institutional and retail funds.

# **Competent Person Statement / Qualified Person Statement**

Information in this report that relates to Mineral Resources and Exploration Target Range (ETR) has been reviewed by Mr Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy Mr. Glacken is a consultant to Metallicity Ltd, and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Glacken consents to the inclusion of the data in the form and context in which it appears.

For more information on the 4/7/16 Mineral Resource Estimate and Exploration Target Range see ASX:MCT, 4/7/16.

