

Andromeda The Great White Mineral Company

A new high-quality kaolin source for ceramics

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ASX:ADN

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Authorised for release by the CEO and Managing Director of Andromeda Metals Ltd









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Currency

Unless otherwise stated, all cashflows in this presentation are in Australian dollars, are undiscounted and are in real terms (not subject to inflation/escalation factors).

Assumptions and Notes for Financial Information on 2023 DFS this presentation:

Further details on the 2023 DFS and the assumptions and notes for the 2023 DFS can be found in the Company's ASX Announcement '2023 Definitive Feasibility Study Results' released on 24 August 2023, with no material changes to the assumptions underpinning the financial information.

Third party data from consultants and government agencies

Andromeda has relied on information provided by specialist consultants and government agencies in preparing this presentation. Andromeda has reviewed all information to the best of its ability but does not take responsibility for its accuracy or completeness, or reliability of such information.

Competent Person's Statements

The data in this presentation that relates to Mineral Resource estimates for The Great White Deposit and the Chairlift Deposit is based on information evaluated by Mr Eric Whittaker who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Whittaker is the Chief Geologist of Andromeda Metals Limited 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 in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Whittaker has over 30 years of experience in the mining industry. Mr Whittaker consents to the information in the form and context in which it appears. Mr Whittaker is entitled to participate in Andromeda's employee incentive plan.

The data in this presentation that relates to Mineral Reserve estimates for The Great White Deposit is based on information evaluated by Mr John Millbank who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Millbank is the Director of Proactive Mining Solutions Pty Ltd, an independent mining consultancy, 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 in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Millbank consents to the information contained in this presentation being used in the form and context in which it appears. Mr Millbank, or any of the entities he directly controls, has no financial interests in Andromeda Metals Ltd or any of its subsidiaries.

Photographs, images, diagrams, charts and maps

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Unless otherwise stated, all data contained in the charts, graphs and tables is based on information available at the date of this presentation.

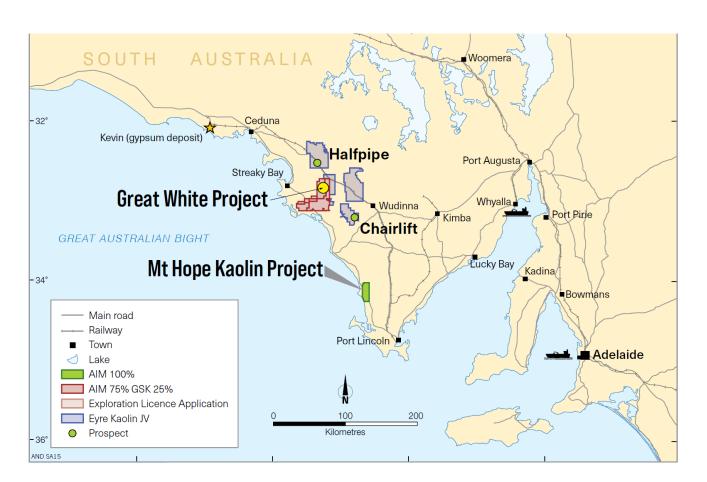
Great White Deposit

A new, large development-ready source of high-quality kaolin

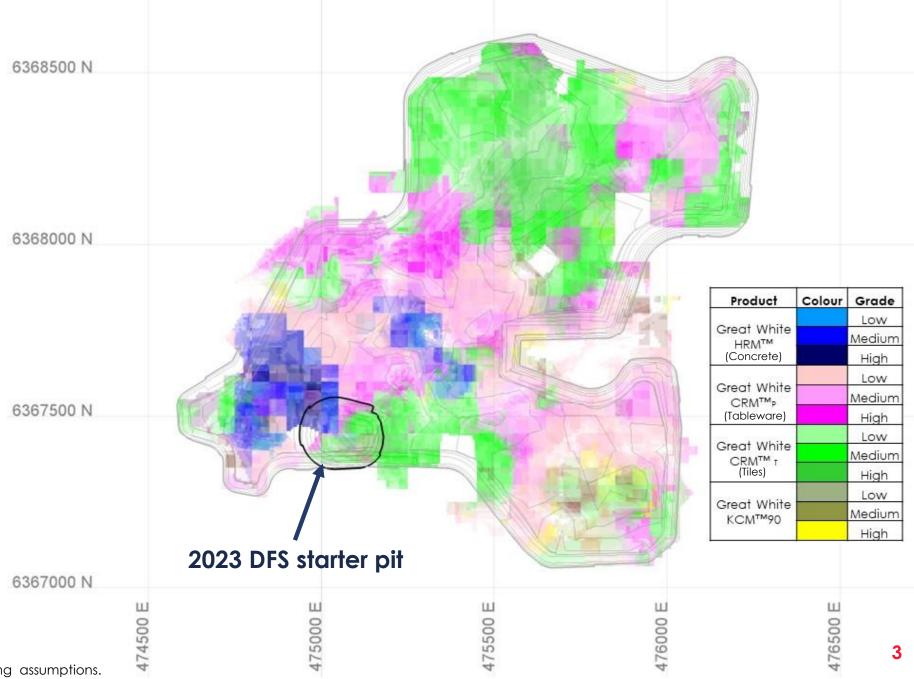
GREAT WHITE DEPOSIT KAOLIN ORE RESERVE

15.1Mt of JORC Reserves¹

Reserve Category	Mt	Yield	Halloysite	Brightness (%)	Fe2O3
Proved	5.2	45	14	84	0.5
Probable	10	46	10	83	0.5
Total	15.1 ²	46	11	84	0.5



The Great White Deposit's 15.1 Mt JORC reserve¹ delineated by core and complementary products aligned to market demand



¹ Refer ADN ASX dated 6 April 2022 titled Great White Kaolin Project - Definitive Feasibility Study, with no material changes to the underlying assumptions. 2 Table subject to rounding errors.

Andromeda Kaolin Products

Developed for premium ceramic market segments

Concentrate Product Great White KCM™90



A semi-refined high-quality kaolin for direct use, further refinement or upgrade of resources

- Highly consistent premium grade
- Halloysite optimised
- Suitable as feed for HPA

Ceramic Product Great White CRM^{TM}_T



A fully refined product for the high-end ceramic tile and porcelain slab market

- World class grade high alumina and low iron, very high Al/Fe ratio
- High whiteness and translucency
- Good green and fired strength

Ceramic Product Great White CRM™_P



A fully refined product for the high-end porcelain tableware market

- World class grade low TiO₂
- High whiteness and translucency
- Good green and fired strength

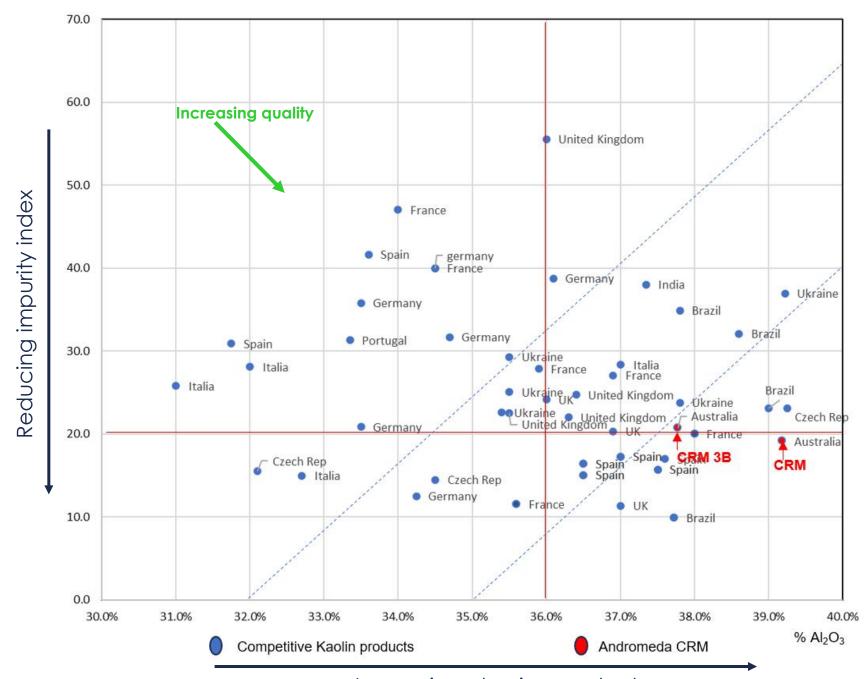


International benchmarking by Spain's Institute of Ceramic Technology (ITC)

 Work commissioned at ITC¹ has confirmed Great White CRMTM is a world-class product grade – benchmarked against a suite of globally traded kaolins.

Chemical composition (wt%) of Andromeda's products, compared to the industry standard interval for kaolins

Kaolin	ксм	CRM (1097)	CRM3B (1098)	Interval (ITC-AICE)
SiO ₂	48.4	47.0	48.0	47-49
Al ₂ O ₃	36.8	37.9	36.9	36.0-37.6
Fe ₂ O ₃	0.46	0.46	0.49	0.7-1.0
CaO	0.05	0.04	0.10	0.05-0.9
MgO	0.05	0.05	0.09	0.1-0.5
Na₂O	0.05	0.05	0.05	0.06-0.15
K₂O	0.50	0.28	0.35	0.8-2.6
TiO₂	0.40	0.35	0.36	0.05-0.3
MnO	<0.01	<0.01	<0.01	-
P ₂ O ₅	0.05	0.06	0.05	-
ВаО	0.02	0.02	0.02	-
Loss on ignition at 1000°C	13.3	13.85	13.5	11.7-12.6



Independent Technical Validation

Excellent firing performance of Andromeda's products

Pressing and firing behaviour of Andromeda's products, compared to the industry standard interval for kaolins¹

Kaolin	KCM	CRM (1097)	CRM3B (1098)	Interval (ITC-AICE)
Reject at 40 µm (wt%)	1.0	0.4	0.4	0-2
Dry bulk density (g/cm³)	1.38	1.32	1.40	1.55-1.67
Linear shrinkage at 1180°C (%)	6.4	6.5	6.9	3.0-6.6
Linear shrinkage at 1280°C (%)	12.8	12.5	12.1	6.0-12.4
Water absorption at 1180°C (wt%)	28.7	28.7	27.1	19.3-25.4
Water absorption at 1280°C (wt%)	14.4	15.7	16.0	6.4-20.3
L* at 1280°C	96.5	96.8	97.0	91.5-97.4
a* at 1280°C	0.1	0.0	0.1	-0.2 – 0.6
b* at 1280°C	3.3	3.2	2.9	2.2-7.3







Strong performance when included in glaze formulations

 Results of testing of Andromeda's products¹, compared to the industry standard kaolin reference values

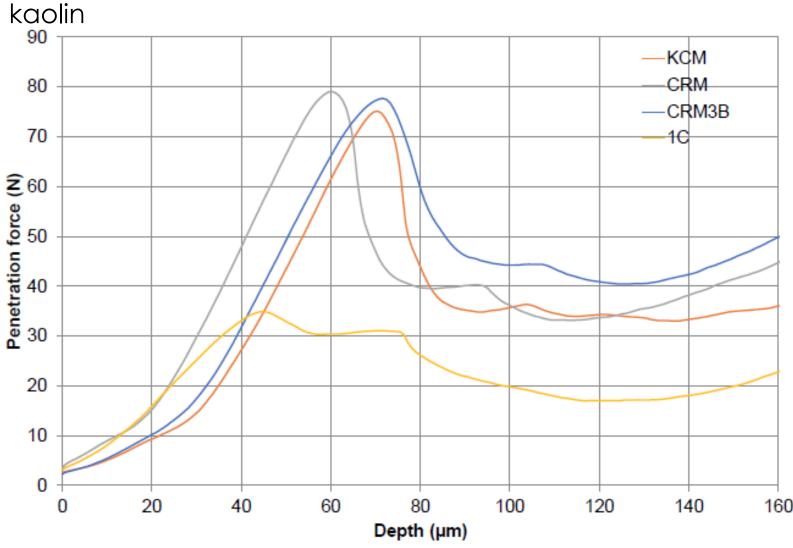
Viscosity values

Composition	E-KCM	E-CRM	E-CRM3B	E-REF
Viscosity 1´ (cP)	250	268	290	283
Thixotropy 6´ (cP)	260	283	300	295
Viscosity Ford Cup (s)	43	43	49	49

Chromatic coordinates and gloss of glazed pieces fired at 1100°C

Glaze	E-KCM	E-CRM	E-CRM3B	E-REF
Gloss (60°)	70	71	71	64
L*	92.6	92.4	92.4	92.5
a*	-0.60	-0.60	-0.59	-0.67
b*	-1.27	-1.33	-1.28	-1.02

Cohesion and adherence of glaze layer showing significantly higher mechanical strength compared to industry reference



Independent Technical Validation

International benchmarking by Spain's Institute of Ceramic Technology (ITC)¹

"The three samples have common characteristics for their use in glazes. This is from their low proportion of chromophorous oxides, adequate suspending capacity and for the performance of the glazes prepared with these kaolins, including high adhesion and cohesion before firing and high gloss after firing. Specifically, the thigh adhesion and cohesion may imply an increase in percentage of first quality tiles due to the decrease in the effects associated with the lack of mechanical strength of the glaze layer before firing.

"The samples are adequate for **porcelain tableware bodies** because of their **low proportion of chromophorous oxides** and **high alumina content** and therefore **high whiteness**.

"In **porcelain tile bodies**, the performance of the samples support their application in bodies with high whiteness (unglazed porcelain tiles and slabs), due to their **low proportion of chromophorous oxides** and **high alumina** content and therefore **high whiteness**. Their use could support a reduction in the percentage of required opacifiers (aspect to be confirmed)."

Institute of Ceramic Technology

Great White CRMTM use in super and ultra white slabs

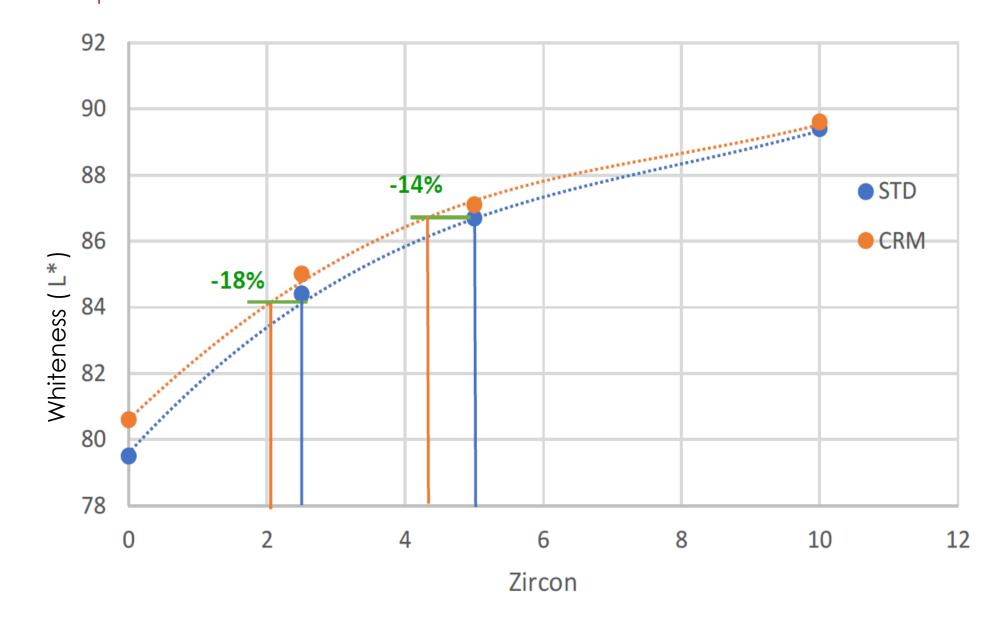


High-brightness supports reductions in use of high-priced zircon as opacifier

ZIRCON-REPLACEMENT POTENTIAL

- Premium slabs and porcelain tiles in super and ultra-white use micronized zircon for whitening
- Zircon priced at over US\$2,000/t
- Testwork¹ supports a 10-18% reduction in zircon by using Great White CRMTM

Feasibility of use | Porcelain tile compositions







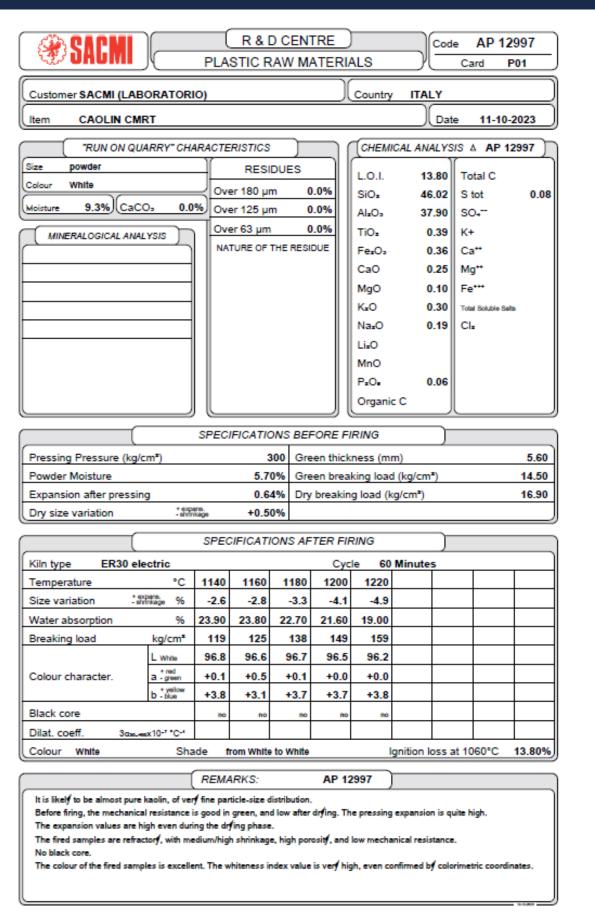


Great White CRMTM use in super and ultra white slabs

Initial characterisation at SACMI - Italy

Feedback from SACMI R&D Centre - Imola

"It is a material of **excellent quality** and **great purity**, suitable for the production of first category products such as slabs, kitchen countertops, in particular **hyperwhite products with a very high L* degree**, and also for glazes and engobes compositions. "





Positioned to be the industrial mineral of choice in the global ceramics market

Great White CRM™ properties and applications¹



Top 3 Iron/Alumina ratio (Fe₂O₃/Al₂O₃) of global kaolin samples

High whiteness is retained in high temperatures, with very good colour evolution, which is valued in high quality porcelainware and ceramic tiles



Zircon-replacement potential in super and ultra-white premium slabs and porcelain tiles

Strongly positioned to offer exceptional value in use in:

Porcelain tableware; large format porcelain ceramic tiles and glazes; and super and ultra-white premium porcelain tiles and slabs

IberoClays Agreement Provides Market Validation



High Quality & Price Point Validated for use in Ceramics

Market Validation IberoClays



- IberoClays is a leading European formulator and distributor of raw materials for ceramics, trading over 800Ktpa.
- On the basis of the ITC work and their own benchmarking, they have entered into a **5-year binding offtake agreement** for up to 20Ktpa (at Andromeda's option) of Great White CRMTM. ¹
- Exclusive Distributor in Italy, Spain and Portugal with logistics infrastructure.



"The emergence of The Great White Project as a new source of supply comes at a **crucial time in global kaolin markets**. Ongoing **geopolitical supply disruptions**, in addition to the **depletion of traditional high-quality** sources of supply, is seeing elevated pricing for high-quality kaolin that can be used in ceramics.

The Great White Project's products not only complete our portfolio of advanced formulations for high-quality porcelain tiles, slabs and ceramic glazes, but opens up the potential for a new market for kaolin as a high-performance additive to decarbonise concrete"

Alberto Piquer González, owner and CEO of IberoClays

TGWP is development-ready

Favourable market environment

- Demand growth for kaolin is linked to GDP and urbanisation
- Increasing use of high-quality kaolin in new applications
- Emerging supply deficit with global depletion of high-quality deposits
- No new >36% alumina deposits being developed, globally

Project without peer

- Tier 1 mining jurisdiction of South Australia
- The Great White Deposit with 15.1Mt of JORC Reserves¹
- Growing regional footprint of large high-quality deposits
- Defined, very high value in use in key target segments
- Simple and low-risk mining and processing flowsheet

Development-ready with all permits in place

- Mining Lease, PEPR and EPA Works approval obtained
- Land acquisition agreement in place, with subdivision underway
- All Stage 1A long lead items on order and being fabricated

Experienced team in place

- · Highly experienced and Board and Management
- Industrial minerals and kaolin expertise

J	Stage First Shipment	Stage 1A Q1 2025	Stage 1B Dec 2025	Stage 2 Dec 2027	Stage 3 Dec 2029
Kaol	lin Production	50,000 tpa	150,000 tpa	2 50,000 tpa	300,000 tpa
Nomi	inal Capacity	100,000 tpa	300,000 tpa	500,000 tpa	600,000 tpa
3	Capital Cost	\$62.4 million	\$57.6 million	\$57.2 million	\$10.9 million

Transport and logistics routes

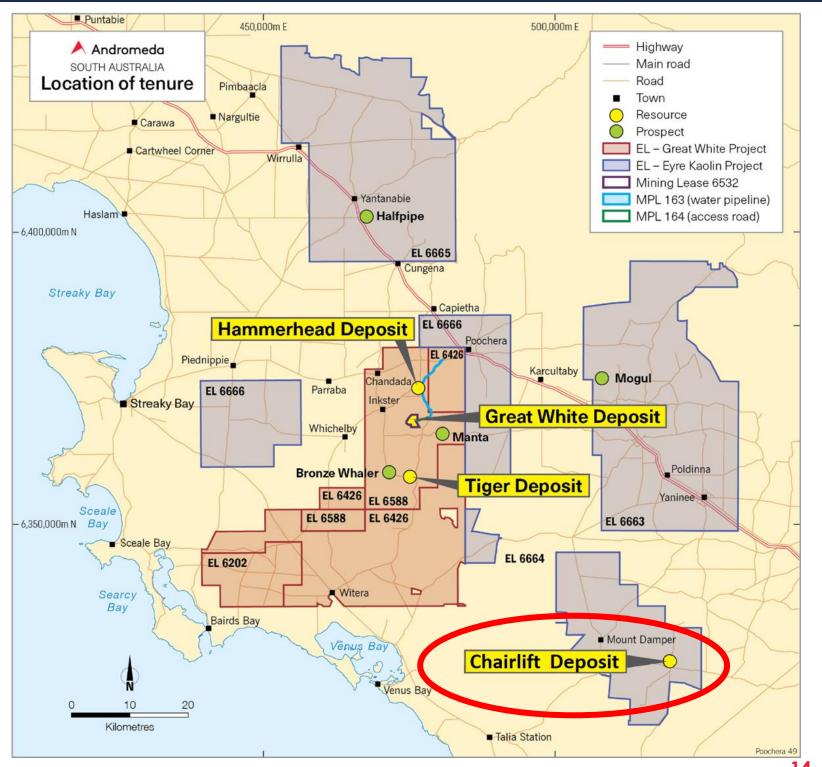


Chairlift - Mineral Resource Estimate



CHAIRLIFT¹

- Combined Inferred Resource of 53.5 million tonnes (Mt):
 - 27.0 Mt of Bright White, low titanium kaolinised granite (Chairlift CRM)
 - 26.5 Mt of rheology modifier kaolin (Chairlift HRM)
- Low titanium content of Chairlift CRM, with average TiO₂ of 0.18%
 - Chemistry could be ideal for advanced performance coatings and medical applications, supporting entry into new high value segments
- Chairlift HRM has the same rheological properties as Great White HRM™, expanding the market opportunity for the HRM product range
- Exploration upside potential, with mineralisation open in multiple directions





Andromeda The Great White Mineral Company

For more information about the Company, please visit our website, <u>www.andromet.com.au</u> or contact:

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