# **Corporate Presentation**

Multicom Resources Limited ABN 51 605 352 690

#### Delivering critical minerals for a sustainable future

September 2021







## **Important Notices and Disclaimers**

This presentation is not a prospectus or any other offering document under Australian or other law (and will not be lodged with the Australian Securities and Investments Commission). The presentation is for information purposes only and is not an offer of securities for subscription, purchase or sale in any jurisdiction.

This presentation contains forward-looking information. Forward looking information contained in this presentation includes, but is not limited to, statements with respect to: (i) the estimation of mineral resources and reserves; (ii) the success of exploration activities; (iii) statements about future production, future operating and capital expenditure and production timelines.

These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "could", "estimates", "expects", "may", "shall", "will", or "would". Forward-looking information contained in this presentation is based on certain factors and assumptions regarding, among other things, the estimation of mineral resources, the realization of resource estimates, vanadium prices, the timing and amount of future exploration and development expenditures, the estimation of initial and sustaining capital requirements, the estimation of labour and operating costs, the availability of necessary financing and materials to continue to explore and develop the Saint Elmo and Yappar Projects in the short and long-term, the progress of exploration and development activities, the receipt of necessary regulatory approvals, and assumptions with respect to currency fluctuations, environmental risks, title disputes or claims, and other similar matters. While the Company considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect. The information in this presentation is of a general background nature and does not purport to be complete or contain all information securityholders would require to evaluate their investment in securities of Multicom nor does it contain all information that would be required in a prospectus.

Forward looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include risks inherent in the exploration and development of mineral deposits, including risks relating to changes in project parameters as plans continue to be redefined including the possibility that mining operations and not commence at the Saint Elmo or Yappar Projects, risks relating to variations in mineral resources and or reserves, grade or recovery rates resulting from current exploration and development activities, risks relating to changes in vanadium prices and the worldwide demand for and supply of vanadium, risks related to increased competition in the mining industry generally, risks related to current global financial conditions, uncertainties inherent in the estimation of mineral resources, access and supply risks, reliance on key personnel, operational risks inherent in the conduct of mining activities, including the risk of accidents, labour disputes, increases in capital and operating costs and the risk of delays or increased costs that might be encountered during the development process, regulatory risks, including risks relating to the acquisition of the necessary licenses and permits, financing, capitalization and liquidity risks, including the risk that the financing necessary to fund the exploration and development activities at the Saint Elmo and Yappar Projects may not be available on satisfactory terms, or at all, risks related to disputes concerning property titles and interest, and environmental risks. This list is not exhaustive of the factors that may affect any of the Company's forward-looking information. The Company does not undertake to update any forward-looking information that may be made from time to time by the Company or on its behalf, except in accorda

All persons should seek appropriate professional advice in reviewing or considering this presentation and all other information with respect to Multicom and evaluating the business, financial performance and operations of Multicom. Neither the provision of this presentation nor any information contained in this presentation or subsequently communicated to any person in connection with this presentation is, or should be taken as, constituting the giving of investment or financial product advice to any person. No part of this presentation may be shown or distributed to third parties or reproduced, stored or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of Multicom. The distribution of this presentation in jurisdictions outside Australia may be restricted by law and you should observe any such restrictions.

The information in this presentation that refers to a compliant resource estimate under The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code'), is based on information prepared by Gordon Saul of Resolve Geo Pty Ltd. Gordon Saul is a member of the Australian Institute of Geoscientists and is bound by and complies strictly with the Institute's codes and recommended practices. Gordon Saul has sufficient experience with the style of mineralisation and type of deposit under consideration, and with the activities undertaken, to qualify as a competent person as defined in the JORC Code. Gordon Saul consents to the inclusion in this presentation of the contained technical information in the form and context as it appears.

# **Saint Elmo Project Introduction**

**Delivering Critical Minerals for a Sustainable Future** 

- > A first mover critical minerals developer in Queensland
- Targeting clean energy technologies and underpinned by established markets
- > Vanadium and High Purity Alumina products
- > Environmental authority and EPBC Act approval are granted
- > Mining Lease grant imminent
- > Scalable project with staged development approach
- > Compelling economics (targeting low capex, low opex and strong financial returns)
- Low carbon footprint, integrated approach to ESG

# **Process Flow Sheet:**

### **Commercially Proven Technologies Combined**

- > Pre-existing methodologies, proven chemistry
- > Simplified process design
- > Scalable for expansion

- > Targeting low capex and opex
- > Expertly developed and independently reviewed
- > Ethically sourced, low carbon-footprint



# Vanadium

**Delivering Critical Minerals for a Sustainable Future** 

#### Serving the old...

- > A critical metal in high strength steel production
- > Global trend towards higher tensile strength steels
- Facilitates greener steel, lower carbon construction
- Specialty alloy applications in aerospace, automotive industries
- > Chemical catalyst

#### And the new...

- Electrolyte as the critical component in Vanadium Redox Flow Batteries
- Perfectly suited to utility-scale energy storage
- > Emerging application in residential storage
- Next generation EV battery chemistry



## **Vanadium Market:**

### Steady and rapidly emerging growth opportunities

- Vanadium Pentoxide (V<sub>2</sub>O<sub>5</sub>) market demand is forecast to be ~200,000tpa in 2021 and 287,000tpa in 2030, at which point there is an anticipated supply gap of 67,000tpa
- Primarily used in steel alloys with demand from highly developed and intense steel making centres -Europe, Japan and North America
- > High strength low alloy (HSLA) steels make up 2/3 of steel demand for Vanadium (includes Chinese rebar) with High alloy steel the other 1/3 (eg. stainless



Vanadium demand by region/major country 2010-2020, t V

steels and cast irons)

- Vanadium Redox Flow Battery (VRFB) demand is projected to be 36ktpa in 2030, equating to ~23% of the vanadium market
- Global energy storage projection is 250GWh of installed capacity by 2030 with VRFB forecast by CRU Group to account for 8.5%
- > Vanadium electrolyte is 100% recyclable and remains viable throughout battery lifecycle, which facilitates flexible commercial models eg. leasing

#### Vanadium demand by end use 2019 & 2020, %



# HPA Market:

### **Rapidly Increasing Demand**

- > HPA is a premium non-metallurgical alumina product characterized by its very high purity level. Its properties include corrosion and scratch resistance, high brightness and its ability to withstand extreme temperatures
- > 4N+ HPA (99.99%+) forecast growth from 22k to 90k tpa from 2020-28, CAGR 19.1%
- > 2021-28 average 4N+ HPA price is expected to be US\$23,900/t



- > LEDs/ sapphire crystal and Ceramic Cathodic Seperators (CCS) in EV batteries represents the dominant market segments
- > HPA demand dynamics moving from a 3N (99.9%+) product to "as pure as possible"



### High Purity Alumina (HPA) Rapidly Increasing Demand

#### LED and sapphire crystal market

- > HPAs largest market segment, requiring highestquality input
- > LED is low substitution segment with very high growth profile, CAGR 21.1% 2020-28
- > Larger sapphire crystal wafers driving segment growth and larger boule cores/purity and consistency demand (4N-5N+)
- China, then Japan and South Korea produce most sapphire crystal and LED substrate wafer product globally, followed by Germany and USA





# LIB and EV market – ceramic coated separators (CCS)

- CCS for LIB has highest growth rate, CAGR 21.3% 2020-28, driven by EV adoption, higher energy & greater safety
- Delineation observable between performance driven (4N+ HPA) and cost conscious (3N alumina or boehmite) consumers (CRU assumes 45% / 55% respective share)
- > China, then Japan and South Korea has the most alumina coating capability



**Corporate Presentation** | Month Aug-21

SOURCE: Strategies Unlimited, CRU. N.B. Data has not been broken down regional

# High Purity Alumina (HPA)

**Rapidly Increasing Demand** 

#### Supply

- Historical major suppliers of 4N+ HPA have been Sumitomo Chemical and Nippon Light Metal in Japan, Baikowski in France/USA and Sasol in Germany/USA
- These companies each produce between 1,000-6,000 Tpa
- Recently, Chinese production has increased, with the largest three companies producing similar volumes, but most product quality is deemed to fall into 3N, cost-conscious market
- Greenfield project supply CRU project full capacity if 100% supply comes online (unconstrained) at stated volumes increases meaningfully from 2023-25 through to 51,700 by 2028 and constrained supply (probability adjusted) as 26,220

#### Trade and market balance

Figure 35 Market balance (2015-2024) and supply gap (2025-2028), tonnes

From 2015-2020, US was the largest HPA exporter by far, with EU as the majorly dominant destination. The major producers there are Sasol and Baikowski. Japan is the second greatest exporter and has the 'gold-standard' brand in HPA. China's export market is virtually nil

#### > CRU notes a growing market 'supply gap' from 2025:



### Saint Elmo Project: Long Life Asset

- Deposit geology is ideal free digging, shallow, low-strip, homogenous
- > Extensive drilling, optimised mine study
- > 100% owned project, fully permitted in 2021
- > JORC Resource supports significant mine life and capacity for rapid expansion
- Strong local community engagement and support with long-term, regionally focused economic enhancement and diversification
- > Established infrastructure direct access to established rail, road and port facilities
- > Within North-West Minerals Province world's richest mineral endowment



# **Definitive Feasibility Study:**

### **Innovative Operational Efficiencies being**

- > Simple, cost-effective mining
- Proven, reliable beneficiation concentrating mineral content of ore up to 7x
- Sustainable water supply initiative utilising reliable seasonal river flows
- > Hybrid power generation onsite and efficient use of processing heat, maximizing renewable power, and heat recycling.
- > Initial Project size supports a 'truck only' logistics solution at commencement, with adjacent rail network to support rapid expansion plans.





### **SIMPLE GEOLOGY:** Large, Flat, Homogenous and Shallow

#### **Global Mineral Resource** (maiden Reserve Statement is expected with

DFS in late 2021) JORC classification	Coquina only	V205 %	Мо %	Al2O3 %	Contained V2O5	Contained Mo	Contained Al2O3
	Total Tonnes (t)	Weighted Av Grade	Weighted Av Grade	Weighted Av Grade	Total Tonnes (t)	Total Tonnes (t)	Total Tonnes (t)
INFERRED	145	0.25	0.014	1.82	369,500	19,600	2,633,500
INDICATED	144	0.26	0.020	1.68	374,400	28,080	2,420,800
Totals/Weighted Averages	289	0.25	0.016	1.75	743,900	47,680	5,054,300
Note: Grades quoted are weighted average grades							



## **DOWNSTREAM OPPORTUNTIES:**

VRFB Manufacture, Sales and Distribution integrated business



## **DOWNSTREAM OPPORTUNTIES:**

### **VRFB Rapidly Advancing Business Case**



# STRONG FOCUS ON MARKET ENGAGEMENT:

### **Product Marketing & Securing Offtake**

- > Strong focus in emerging growth markets
- Structured approach targeting off-take and potential financing
- > MOU's in place with Global Traders and end users, aiming for binding Offtake Agreements in H1-CY22



Multicom's initial products being distributed globally to potential customers for ongoing product assessment and offtake negotiation.

## **Environmental, Social, and Governance**

- Low carbon footprint Small scale mining fleet, optimised process equipment and onsite energy production will result in relatively, very low, greenhouse gas emissions
- Ecological enhancements Low impact operation; regional ecology improvement potential including the restoration of Julia Creek Dunnart habitat and the targeted eradication of Prickly Acacia
- > Sustainable water management Focused effort on a water strategy that eliminates the need to utilise Great Artesian Basin (GAB) water for operations and processing; preference for seasonal river flows and storage
- Social/Community integration McKinley Shire Council MOU to integrate Project's workforce into the local community. Active involvement in regional & community events such as the Julia Creek Dirt'nDust festival and the Julia Creek Camp Draft
- Local supply chain Established relationships with regional councils and local businesses along the Mt Isa to Townsville corridor, supported by MITEZ (Mt Isa to Townsville Economic Zone) and the QLD Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP)
- > Meaningful environmental advantages over traditional supply No drill and blast, no crushing, grinding as required in magnetite and Alkoxide bauxite processing, low toxic waste, extensive recycling
- Contribution to renewable and clean industries Reduce fossil fuel dependency and carbon gas emissions. Supply sustainable and environmentally conscious industries (VRFB, EVs, LEDs and green steel)







# Saint Elmo Project:





Low carbon footprint

Fully integrated ESG

Strong government support



Advanced project development

Outstanding economics

Staged development, scalable project

Technology and innovation focus



# **Contact Us**

#### Shaun McCarthy

CEO Mobile: + 61 428 506 180 Email: shaun@mcres.com.au

#### **Christian Shaw**

CFO Mobile: + 61 403 121 240 Email: christian@mcres.com.au