



26 May 2021

ASX Announcement

**INVESTOR PRESENTATION**

**AVZ Minerals Limited** (ASX:AVZ, “the Company” or “AVZ”) is pleased to provide a copy of our updated Investor Presentation.

Yours sincerely,

**Ben Cohen**  
Joint Company Secretary

This release was authorised by Nigel Ferguson, Managing Director of AVZ Minerals Limited.





AVZ Minerals Limited

# Investor Presentation

May 2021





# Important Notice and Disclaimer

This presentation should be considered in its entirety. If you do not understand the material contained in this presentation, you should consult your professional advisers. The sole purpose of this presentation is to provide shareholders with an update on current activities of the Company and the current state of exploration at the Manono Lithium and Tin Project in the Democratic Republic of Congo. Any statements which may be considered forward looking statements relate only to the date of this presentation document. Such forward looking statements involve known and unknown risks, uncertainties and other important factors beyond the Company's control that could cause actual results, performance or achievements of the Company to be materially different from future results, performance, or achievements expressed or implied by such forward looking statements. As a result of these factors, the events described in the forward-looking statements in this document may not occur. Notwithstanding the material in this presentation, shareholders should consider that any investment in the Company is highly speculative and should consult their professional advisers - whether scientific, business, financial or legal - before deciding whether to make any investment in the Company. The Company may at its absolute discretion, but without being under any obligation to do so, update, amend or supplement this presentation or any other information to the recipient. No person has been authorised to give any information or make any representation other than contained in this document and if given or made, such information or representation must not be relied on as having been so authorised.

## Competent Person Statement

The information that relates to Ore Reserves is based on information compiled by Mr Daniel Grosso and reviewed by Mr Karl van Olden, both employees of CSA Global Pty Ltd. Mr van Olden takes overall responsibility for the Report as Competent Person. Mr van Olden is a Fellow of The Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as Competent Person in terms of the JORC (2012 Edition). The Competent Person, Karl van Olden has reviewed the Ore Reserve statement and given permission for the publication of this information in the form and context within which it appears. The estimated ore reserves underpinning the production target have been prepared by Competent Person, Karl van Olden from CSA Global, in accordance with the requirements in Appendix 5A of the (JORC Code) 2012. Mr van Olden consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Mineral Resource estimate has been completed by Mrs. Ipelo Gasela (BSc Hons, MSc (Eng)) who is a geologist with 14 years' experience in mining geology, Mineral Resource evaluation and reporting. She is a Senior Mineral Resource Consultant for The MSA Group (an independent consulting company), is registered with the South African Council for Natural Scientific Professions (SACNASP) and is a Member of the Geological Society of South Africa (GSSA). Mrs. Gasela has the appropriate relevant qualifications and experience to be considered a Competent Person for the activity being undertaken as defined in the 2012 edition of the JORC Code. Mrs. Gasela consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this report that relates to metallurgical test work and Exploration Targets results is based on, and fairly represents information compiled and reviewed by Mr Nigel Ferguson, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy and Member of the Australian Institute of Geoscientists. Mr Ferguson is a Director of AVZ Minerals Limited. Mr Ferguson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr Ferguson consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

## Cautionary Statement: Definitive Feasibility Study Parameters

The DFS referred to in this document is based upon Proved and Probable Ore Reserves, derived from Measured and Indicated Mineral Resources. No Inferred Mineral Resource is included in the estimation of Ore Reserves. The Company advises that the Proved and Probable Reserve provides 100% of the total tonnage and 100% of the total lithium and tin underpinning the forecast production target and financial projections. No Inferred Mineral Resource is included in the Life of Mine plan. The DFS is based on the material assumptions outlined in this document. These include assumptions about the availability of funding. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the DFS will be achieved.

To achieve the range of outcomes indicated in the DFS, funding in the order of US\$545 M will likely be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares. It is also possible that the Company could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce the Company's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the DFS.

Project approval and development remains subject to market conditions, project financing, and Board and regulatory approvals. There is no certainty that the DFS or the Ore Reserve from which it was derived will result in commercial production or the assumptions used in the DFS and resulting economic outcomes that are included in this document will be realised. Unless otherwise stated, all cash flows are in US dollars and are not subject to inflation/escalation factors and all years are calendar years. The estimate accuracy has been developed to comply with AACE International Recommended Practice No. 47R-11, Class 3, nominally  $\pm 15\%$ .

This document has been prepared in accordance with the JORC Code (2012) and the current ASX Listing Rules. The Company has concluded that it has a reasonable basis for providing forward-looking statements included in this document. The detailed reasons for this conclusion are outlined throughout this document. Your attention is drawn to the preceding Disclaimer and the Forward-looking Statements.



# Important Notice and Disclaimer

## No New Information or Data

Refer ASX Announcement dated 21 April 2020 "AVZ delivers highly positive Definitive Feasibility Study for Manono Lithium and Tin Project".

AVZ Minerals Limited ("AVZ" or "the Company") confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.

## Cautionary Notes: Exploration Targets

The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

## Cautionary Notes: Forward Looking Statements

Certain statements contained in this document, including information as to the future financial or operating performance of AVZ and its projects may also include statements which are 'forward-looking statements' that may include, amongst other things, statements regarding targets, estimates and assumptions in respect of mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by AVZ, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.

Forward-looking statements can generally be identified by the use of forward looking words such as "likely", "believe", "future", "project", "should", "could", "target", "propose", "to be", "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", and other similar words and expressions, which may include, without limitation, statements regarding plans, strategies and objectives of management, expected exploration costs for the Company and indications of, and guidance on future earnings or financial position or performance. Any such forward-looking statement also inherently involves known and unknown risks (including risks generally associated with the mining industry), uncertainties and other factors that may cause actual results, performance and achievements to be materially greater or less than estimated.

Any forward-looking statements are also based on assumptions and contingencies which are subject to change without notice and which may ultimately prove to be materially incorrect. Investors should consider the forward-looking statements contained in this document, in light of those disclosures and not place undue reliance on such statements.

The forward-looking statements in this document are not guarantees or predictions of future performance and may involve significant elements of subjective judgment, assumptions as to future events that may not be correct, known and unknown risks, uncertainties and other factors, many of which are outside the control of the Company. The forward-looking statements are based on information available to the Company as at the date of this document. Except as required by law or regulation, the Company undertakes no obligation to provide any additional or updated information or update any forward-looking statements, whether as a result of new information, future events or results or otherwise. To the maximum extent permitted by law, each member of the Company and its respective directors, officers, employees, advisers, agents and intermediaries disclaim any obligation or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions. No member of the Company makes any representation or warranty (express or implied) as to the fairness, accuracy, reliability, currency or completeness of any forward-looking statements contained in this document.

## Authorisation of release

Release of this market announcement is authorised by Nigel Ferguson, AVZ Minerals Limited's Managing Director.



## Corporate Snapshot

The team consists of an excellent mix of technical, corporate and legal professionals with over 150 years of combined African experience and with major mining operations both in Africa and globally



## Capital Structure

ASX Code	AVZ
Share Price (24 May 2021)	\$0.16
Shares outstanding	2.89bn
Market Cap (A\$)	\$465m
Cash (March 2021)	\$4.5m
Debt	Nil
Directors and Management Shareholding	3%







## Project Background

### Ownership

- 60% owned by AVZ Minerals Limited (15% under Option from Dathomir Mining Resources)
- 25% owned by DRC Government

### Status

- 5 Mt/a Scoping Study completed in May 2019
- 4.5 Mt/a DFS completed in April 2020
- Main ESIA (being conducted by EmiAfrica) expected in Q1 2021
- Permits and environmental approvals expected in Q1/2 2021

### Mine Type

- Open pit, hard rock lithium, tin and tantalum
- Alluvial tin and tantalum

### Estimated Life of Mine

- Modelled to 20 years with potential to significantly extend this

### Steady State Throughput

- 4.5 Mt/a (with a ramp-up period of 3 months)

### Process Flow Sheet

- 2 stage crush, HPGR, DMS and Calcination plant for lithium Sulphate
- Wilfley tables and magnetic separation for tin and tantalum recovery

### Products

- Initial production of 700 kt/a SC6 and 46 kt/a Primary Lithium Sulphate Additional credits for Tin, Tantalum and Niobium likely

### Capital Requirement

- US\$ 545M (including contingency of US\$ 49M)

### Reserve and Resources

- 400 Mt @ 1.65% Li<sub>2</sub>O (spodumene)
- 93 Mt @ 1.58% Li<sub>2</sub>O Proved and Probable Reserves

### Power

- MOU signed in Jan 2020 to refurbish the Mpiana Mwanga hydro-electric power station, approx. 87 km from the site

### Water

- Readily available from the local man-made Lake Lukushi

### Transport

- Roads and rail to Dar es Salaam port in Tanzania and Lobito port in Angola via Kabondo Dianda Intermodal Staging Station





# Project Timeline

Milestone	Date
Early works commencement (office based works)	May 2020
Offtake agreements concluded for 80% SC6	Dec 20 – Apr 21
First tin offtake	March 21
PE & ESIA submitted for government approval	May 2021
Updated Resource/Reserves calculations	May 2021
FEED study completed	June 2021
Optimised DFS	June 2021
Mining Licence Award	July 2021
MOU on Funding with syndicated DFI group	Q3 2021
Final Investment Decision	Q3 2021
Process Plant and HEPP EPC award <sup>1</sup>	Q3 2021
Commence construction	Q3 2021
First HEPP Power to MLTO	Q4 2022
Commence Production <sup>2</sup>	Q1 2023

<sup>1</sup> Pending Financial Investment Decision by the Board

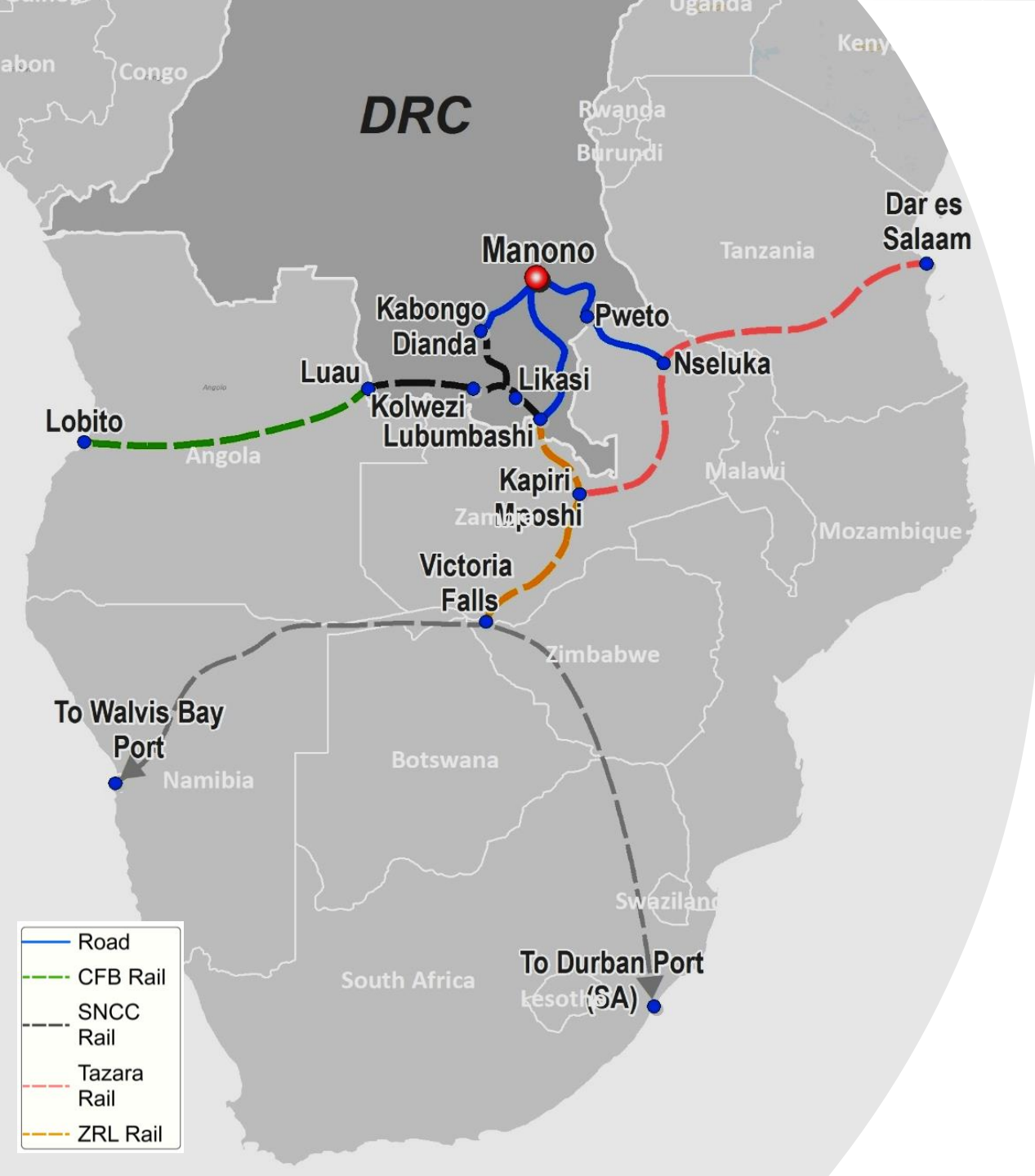
<sup>2</sup> First SC6 on train followed by first PLS on train 6 months after

The above timetable is indicative only and is subject to change. The Company reserves the right to amend any or all of these events

### To be confirmed

- Additional Offtake(s)
- SEZ Collaboration Agreement





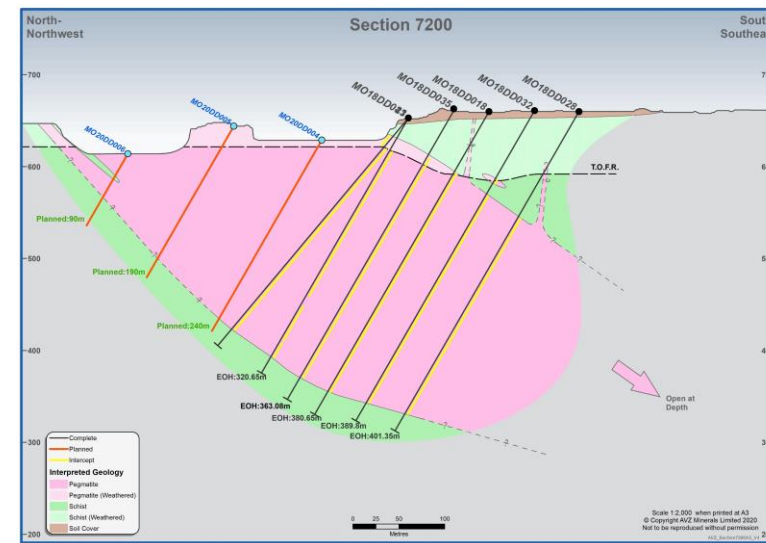
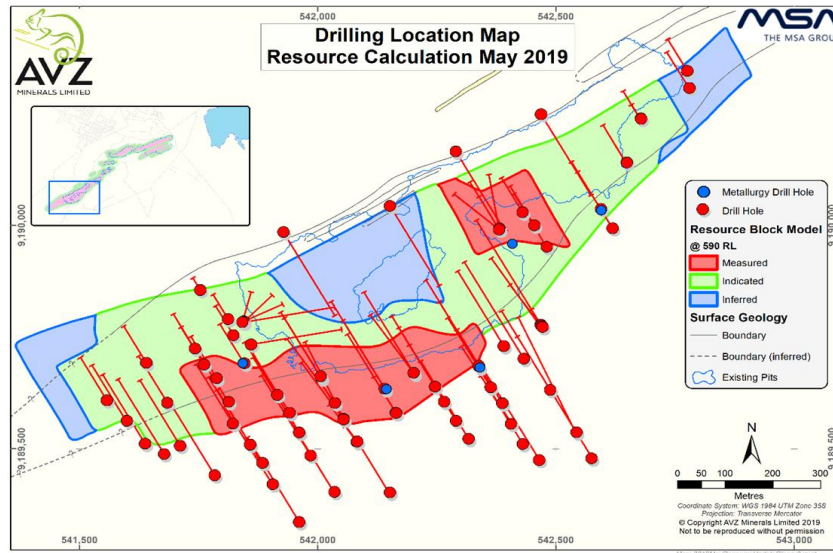
## Product Export Routes Defined

- Two main routes have been selected:
  - Manono to Kabondo Dianda Intermodal Staging Station by road, then onto SNCC to Tenke and TAZARA railway to Port of Dar es Salaam
  - Manono to Kabondo Dianda railhead by road, then onto SNCC to Tenke and to Angolan Rail (CFB) to Port of Lobito
  - Possible future option of exporting south-west is also available to Walvis Bay via the Walvis Bay Corridor
- Nyuki Logistics Company SASU has already been set up to manage road transportation from Manono to Kabondo Dianda as well as for the ferry operations
- Angolan railway (CFB) has been recently updated and is currently transporting copper to Lobito port.
- Full technical due diligence studies of railways to Lobito and Dar es Salaam have been conducted and both are considered as suitable for the product export.
- Both Dar es Salaam and Lobito Ports have undergone upgrades in the last 3 years.
- Negotiations are underway with:
  - Ports of Lobito and Port of Dar es Salaam
  - SNCC
  - TAZARA
  - CFB





# Resources, Reserves & Upgrades "The Wedge"



## Roche Dure JORC Resource

JORC Category	Tonnes (Millions)	Li <sub>2</sub> O %	Sn ppm	Ta ppm	Fe <sub>2</sub> O <sub>3</sub>
Measured	100	1.67	870	35	0.93
Indicated	174	1.65	807	35	0.97
Inferred	128	1.65	585	31	1.01
<b>Total</b>	<b>401</b>	<b>1.65</b>	<b>752</b>	<b>34</b>	<b>0.97</b>

## Roche Dure JORC Reserves

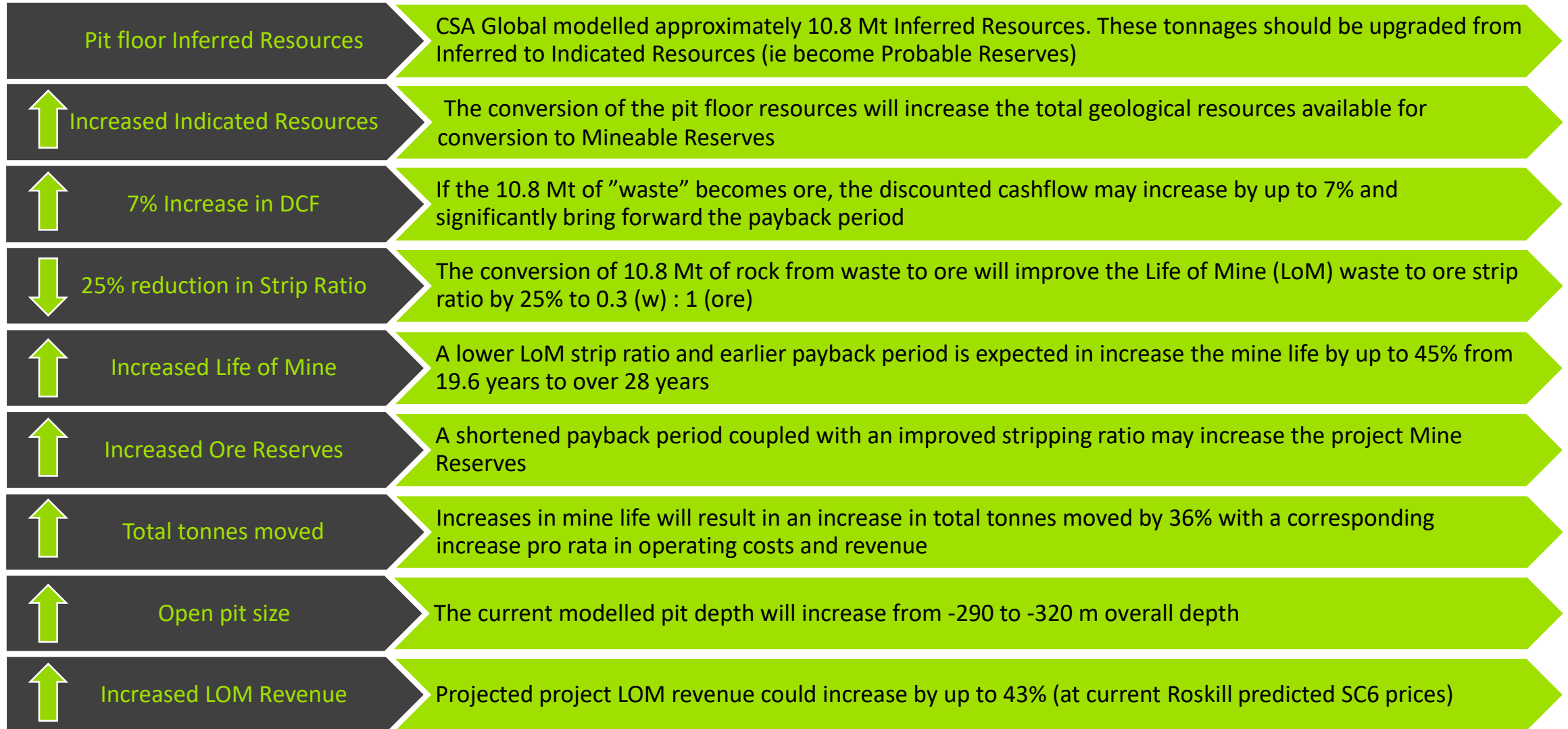
Reserve category	Tonnes (Mt)	Grade Li <sub>2</sub> O (%)	Contained Li <sub>2</sub> O (Mt)	Grade Sn (g/t)	Contained Sn (kt)
Proved	44.6	1.62	0.72	958	42.7
Probable	48.5	1.54	0.75	1016	49.3
<b>Total</b>	<b>93.0</b>	<b>1.58</b>	<b>1.47</b>	<b>988</b>	<b>92.0</b>

## Dimensions of the main Manono pegmatites

Pegmatite	Length (m)	Thickness (m)	General dip, SE
Roche Dure	2700	220	40°
Kyoni	400	20	26°
Mpete	1000	60	26°
Tempete	1700	60	26°
Carriere de l'Est	5400	230	20-40°
Malata	1300	20	10-15°



## Potential Improvements from the Wedge Drilling\*



\*Published in the DFS announcement on 21 April 2020 – "AVZ Delivers Highly Positive DFS for Manono Project"



# An EV Boom and the Lithium Market

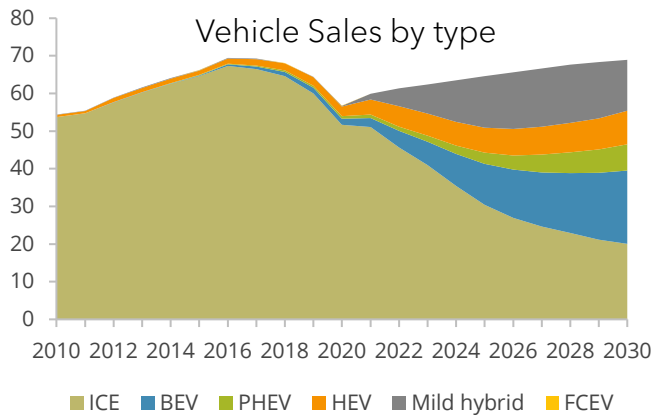


**EV SALES**  
 In 2025, >50% of total passenger vehicles sales are EVs including hybrids  
 ≈30 Million EVs

**DEMAND PER EV**  
 Average in Lithium Carbonate equivalent consumption per EV  
 ≈50Kg LCE\*\*

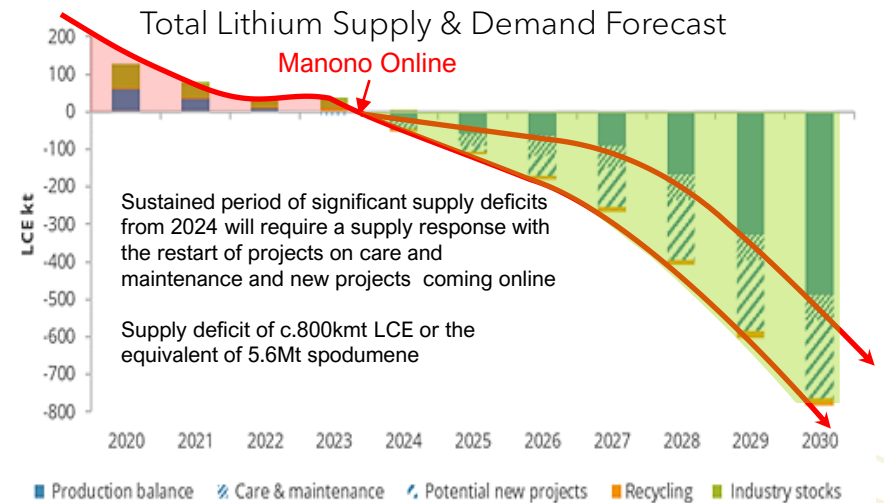
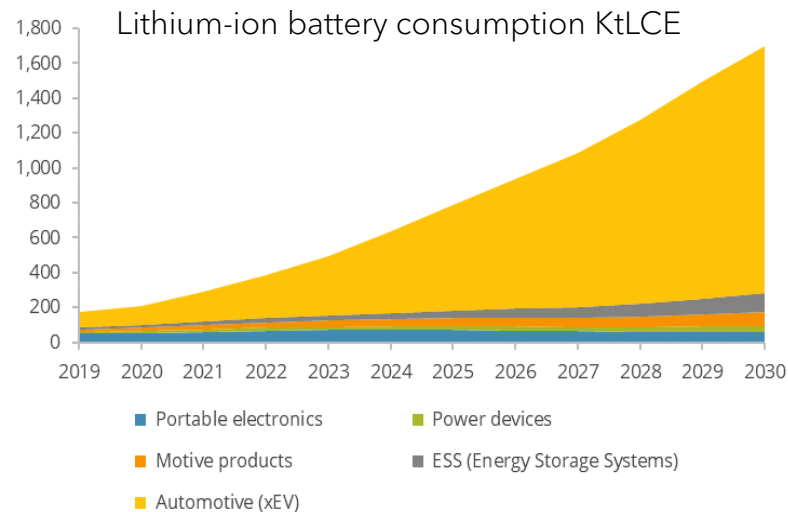
**EV DEMAND**  
 In 2025 >70% of lithium demand forecast to come from EVs

**SUPPLY DEFICIT**  
 Permanent supply deficit beginning from 2024



\* Internal Combustion Engine  
 \*\* Lithium Carbonate Equivalent

Source: Roskill, Benchmark

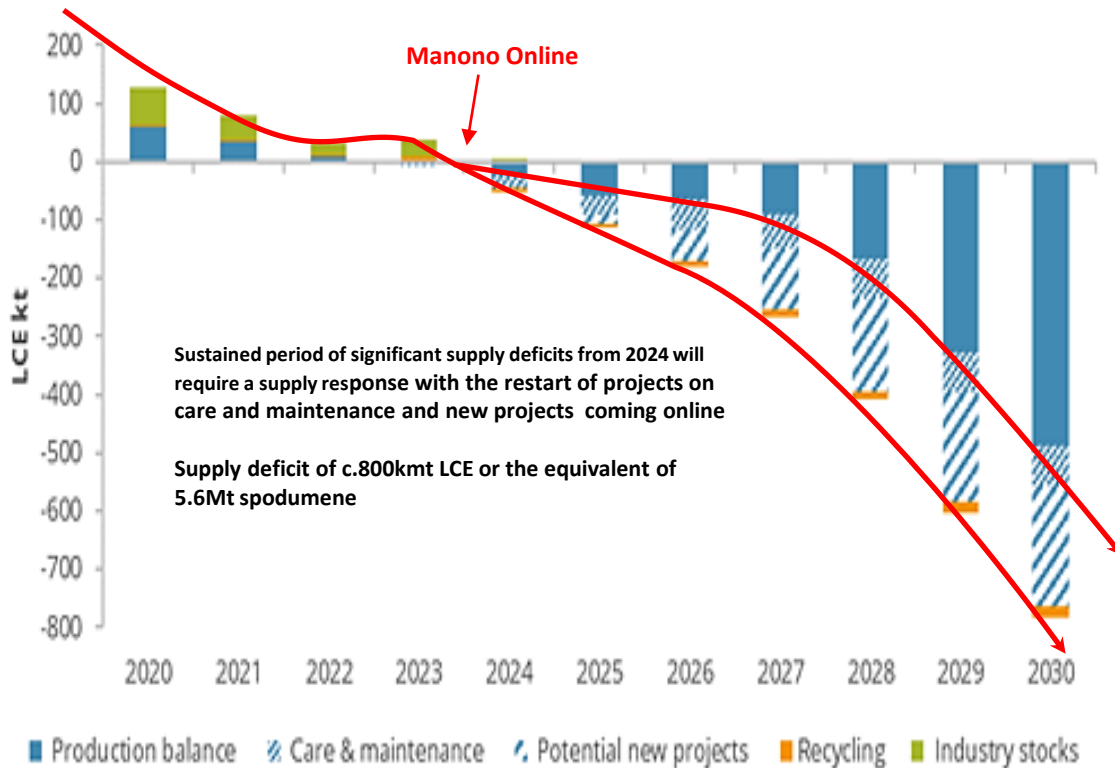




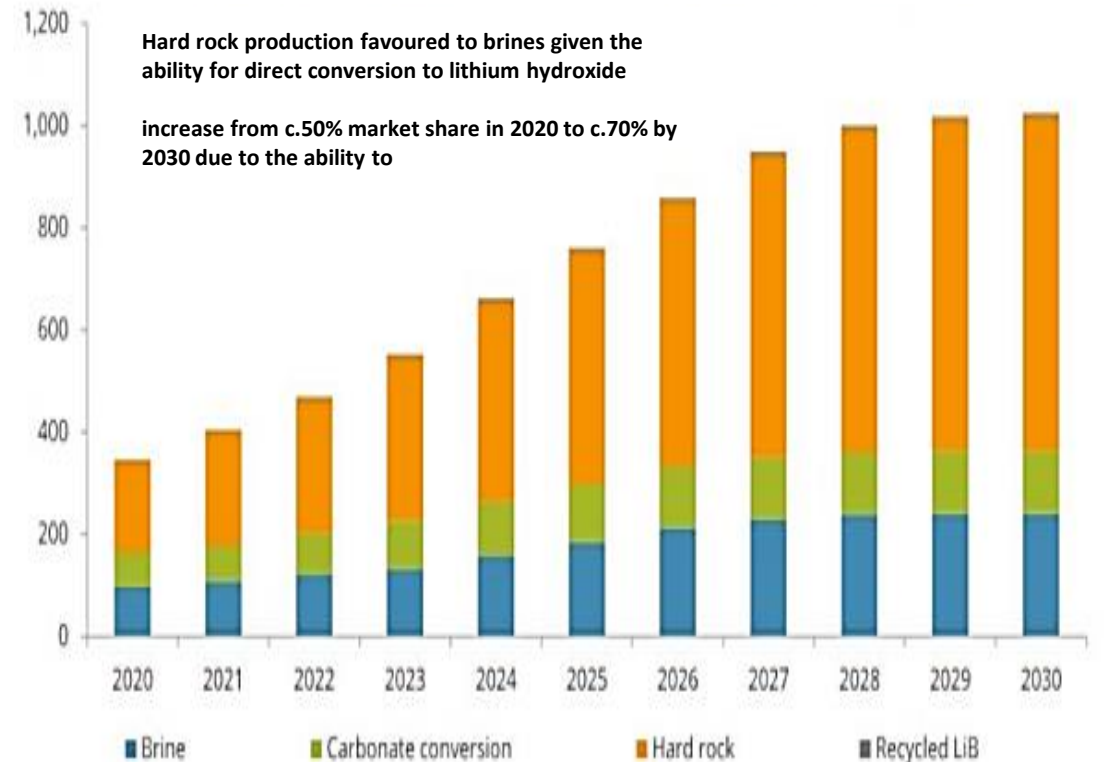
# Lithium Sector Key Themes

- Lithium market supply expected to enter a deficit within the next few years
- ASX lithium shorts are the lowest they have been since 2017, demonstrating the turn in the market
- The backend of 2020 and into 2021 has seen a strong lithium equities rally

Forecast refined lithium battery-grade balance, 2020-2030 (LCE t)



Annual refined lithium production by type, 2020-2030 (000t LCE)





# Lithium Sector Key Themes

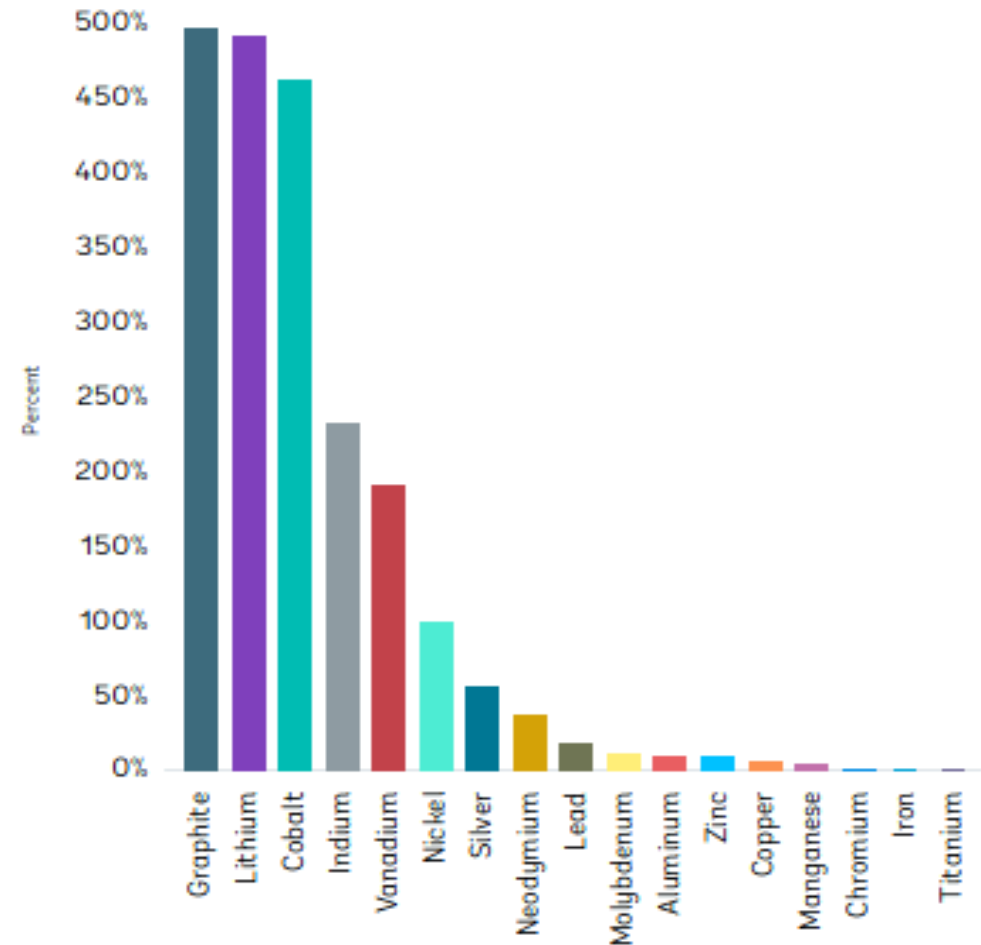
## Positioning for the future

- Significant investor-driven rally on renewed positive lithium sentiment
- Given rising Sino tensions, battery/cathode manufactures and OEMs are increasingly looking for additional ex-China supply
- ESG to become an increasing focus with clear, transparent supply chains to benefit Western upstream producers
- Rise of intermediate products (e.g. primary lithium sulphate) as a halfway house between spodumene and hydroxide/chemicals - downstream tolling also has potential

## Key “winners” from energy technologies

- Market is experiencing a rebound with moderated spodumene production starting to filter through to price, most recently with Altura’s lithium project being placed on care and maintenance after entering into receivership and lithium prices finding their floor shortly thereafter
- Lithium one of Macquarie Research’s “5-year winners”
- Upside represented by evolving battery chemistry, particularly for a lithium metal anode.
- Certain battery critical metals are required to scale as much as 500% from 2018 total production levels to meet the demand from energy technologies.
- Expect increasing pressure to adopt higher cell loadings of “clean” metals as ESG importance grows - other factors, including supply chain transparency (e.g. cobalt), to also play a role

2050 annual demand from energy technologies as percentage of 2018 production





## Other Opportunities

Other opportunities being investigated:

- Improved tin and tantalum recovery
- Lower rail rates from railway companies
- Use of 900kt/a Middlings in a potential flotation circuit
- Producing sulphuric acid on site
- Renewable energy on site such as solar arrays
- Upgraded resources and associated economic benefits
- Tax incentives from the SEZ
- European Lithium Hydroxide Plant
- Alternative methods to treat SC6 for battery products
- Train two for PLS
- Significant expansion of operations is realistic





## Carbon Footprint

- Independent assessment shows Manono Project could have one of the lowest carbon footprints of any global hard rock lithium miner
- Greenhouse gas assessment captured all proposed mining, power, haulage and downstream processing operations
- AVZ is striving to be as close to a 'zero emissions' operation as possible





# A Sustainable Power Source

The refurbishment of Mpiana Mwanga would comprise the installation of up to a 30.9 MW<sup>1</sup> via 3 new turbine generators in the Mpiana Mwanga number 2 turbine hall

Total capacity for 6 generators for total potential production of ~ 44 MW<sup>2</sup>

AVZ has executed an MoU with the DRC Government to secure the rights to Mpiana Mwanga for rehabilitation and generation of power for our operations at Manono. A full assessment will be undertaken.

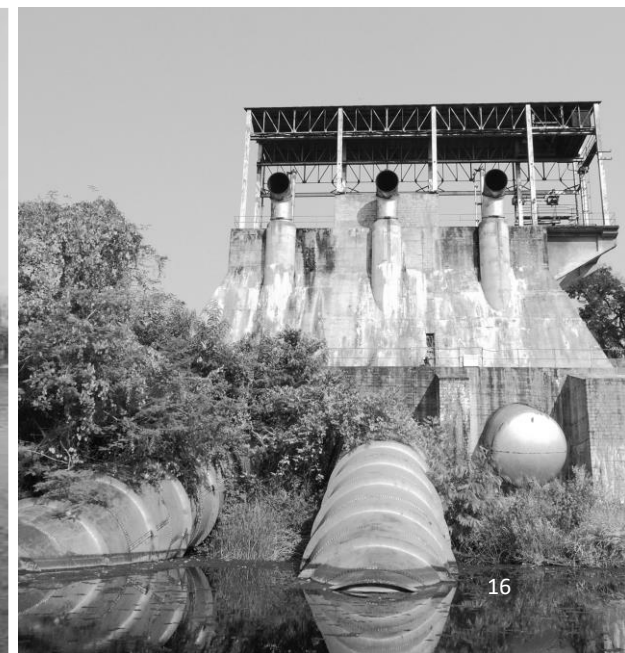
- Stage 1 - is to refurbish turbine hall 2 with the indicative installed power requirements of the base case process plant = 28 MW<sup>3</sup>. 2 duty and 1 standby unit
- Stage 2 - is to refurbish turbine hall 1 with the additional indicative installed power requirements of process plant Stage 2<sup>4</sup> = 12.3 MW<sup>3</sup>. 2 duty and 1 standby unit.
- Stage 1 and 2 combined will provide 40.3 MW guaranteed power output
- New HV power line and pylons to site
- 3 x ESAs Approved
- RFTs for refurbishment in the market
- Studying to convert electrical excess renewable power to other uses, e.g., hydrogen for Fuel Cell Electric Vehicles (FCEV) use
- Studying for Solar Power arrays and battery storage for stage 2 of the Process Plant if required
- Power for power harvest from sulphuric acid plant steam through a steam turbine

<sup>1</sup>30.9 MW is the installed power which equates to 28 MW of guaranteed output before transmission line losses of 3-5%

<sup>2</sup>44 MW is the installed power which equates to approximately 40.3 MW of guaranteed output before transmission line losses of 3-5%

<sup>3</sup>12.3 MW guaranteed output from turbine hall 2

<sup>4</sup>Stage 2 of the power plant is for the potential second PLS train





# Our Sustainable Development Goals

AVZ is committed to achieving sustainable outcomes in the communities we operate in. This is reflected in our Corporate Social Responsibility Policy and our Sustainable Development Plan.

## Social Contribution

### Community Wellbeing



### Community Development



### Sustainable Livelihoods



## Environmental Contribution

### Energy Use and Resilience



### Sustainable Operations





## Take Away Facts

- **World Class Project**

The largest and highest grade undeveloped hard rock lithium project globally - JORC Resource of 400.4 Mt @ 1.65% lithium (spodumene) including intercepts of >200 m with grades of up to 1.75% lithium. Expandability Carriere de L'Este - doubles tonnage. Exploration target stated "up to 1.5Bn tonnes @ up to 1.5%".

- **Robust Project Economics**

DFS delivered an NPV<sub>10</sub> (100% project interest) of US\$2.348Bn (US\$1.028Bn after tax). IRR 53% (33.2% after tax) based on a CAPEX of US\$545M inclusive of a US\$49M contingency (100% interest).

- **Secure Offtake Agreements**

80% of SC6 under binding offtake agreement with major lithium converters and first tin offtake in place.

- **Project Funding**

Advanced discussions with a potential syndicated facility comprising principally of Pan African Development Finance Institutions (DFIs) with favourable terms and conditions. The equity component of the required funding has attracted a number of interested industry participants and private equity investors with discussions ongoing.

- **Highly Leveraged to EV Thematic**

AVZ offers significant leverage to the price of lithium and tin offering considerable relative value compared to its ASX listed peers.

- **Excellent Government Relationships**

Ongoing discussion with DRC Government to secure significant favourable SEZ terms.

- Application for mining license lodged awaiting award.



# Thank you

## Company Contacts

**Nigel Ferguson** - CEO

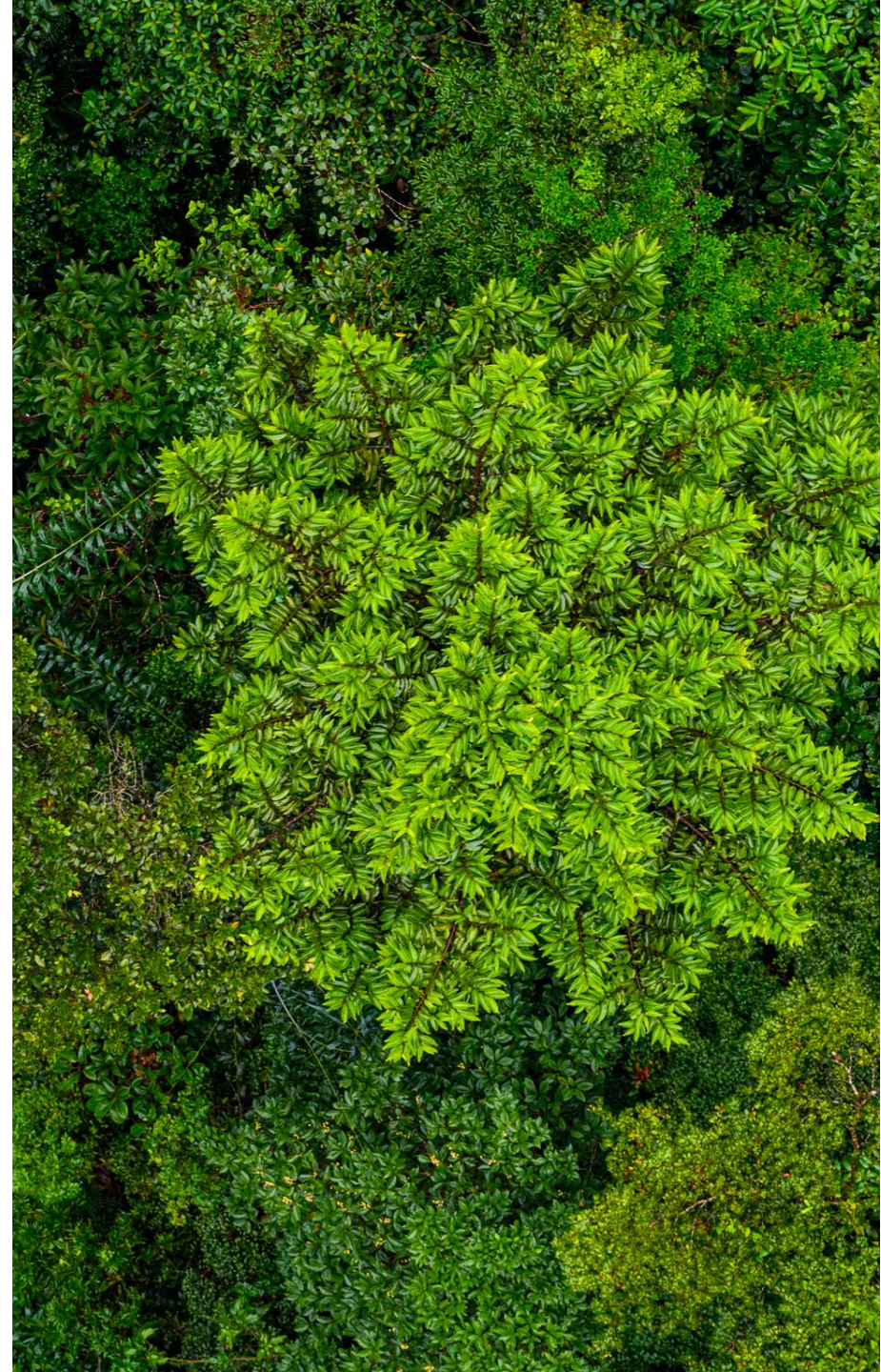
**Jan de Jager and Ben Cohen** - Joint Company Secretary

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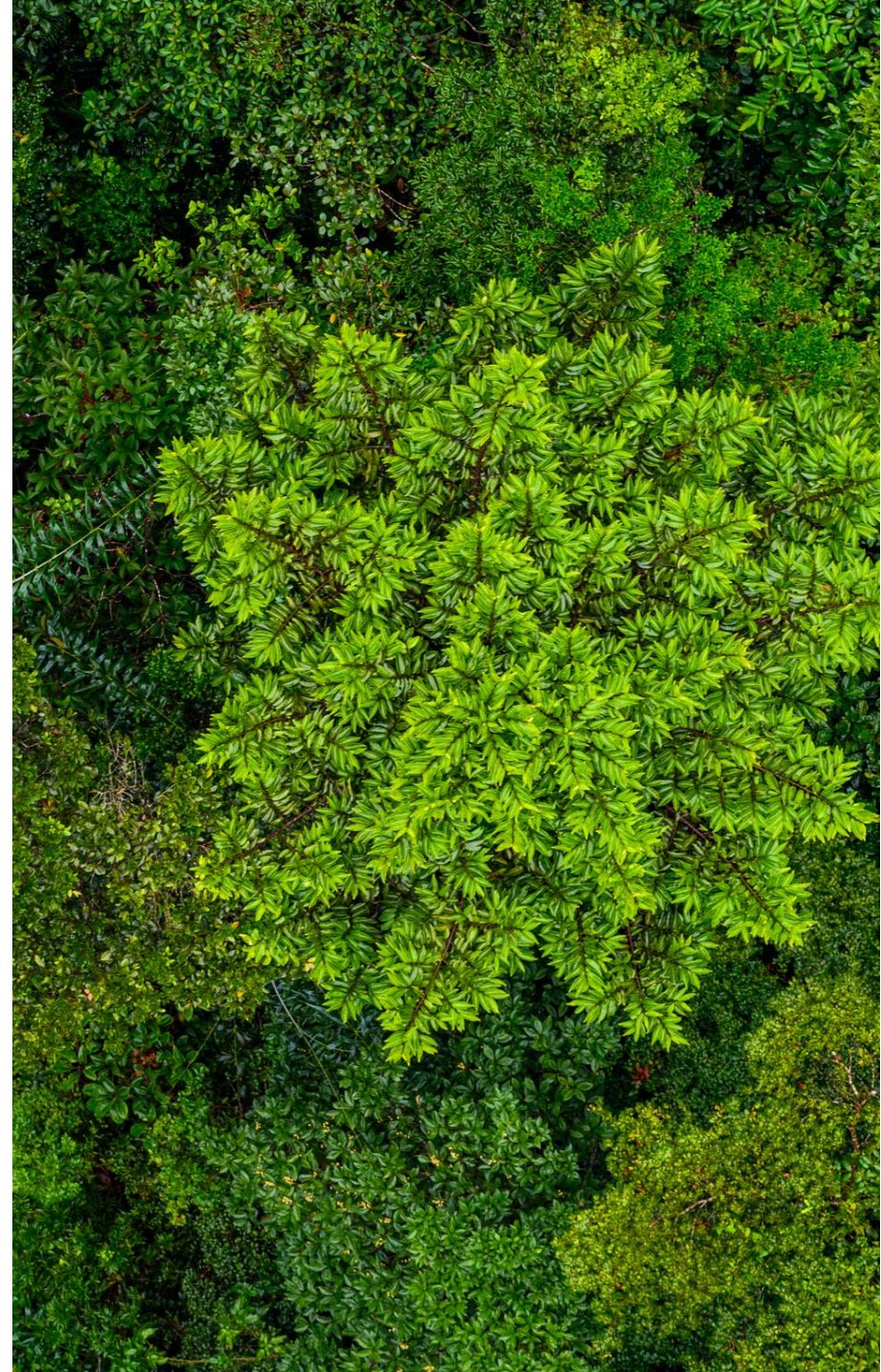
## Registered Office

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# Appendices



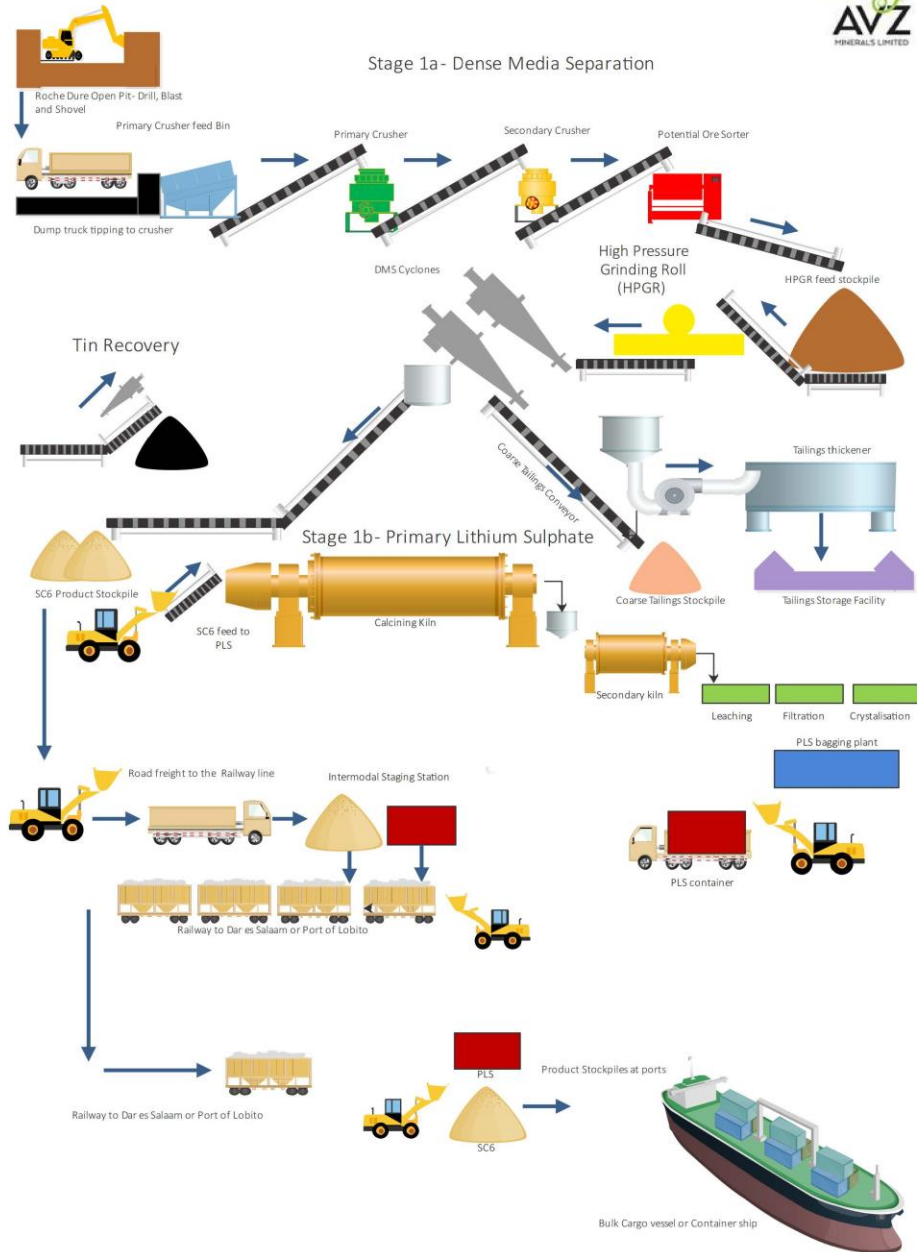


# Appendix 1 - Peer Comparison Information – Mineral Resource Estimates

Company	Project	Stage	Measured Mt	Indicated Mt	Inferred Mt	Global MRE Mt	MRE Li <sup>2</sup> O Grade %	Information Source
AVZ Minerals Limited	Manono Lithium & Tin Project	Development	107.0	162.0	131.0	400.0	1.65	ASX Release 8 May 2019
Albermarle (49%)/Tainqi (26%)/IGO (25%)	Greenbushes (excl tailings)	Operating	0.2	169.4	8.9	178.5	2.00	IGO acquisition presentation and ASX Release 9 Dec 2020
Albermarle (60%)/MinRes Ltd (40%)	Wodgina (excl tailings)	Operating (C&M)	0.0	177.0	59.9	236.9	1.19	ASX Release 23 October 2018
Alita Resources (Administration)	Bald Hill	Operating (C&M)	0.0	14.4	12.1	26.5	1.00	Presentation 20 March 2019 (Alliance Minerals Assets)
Core Lithium	Finnis	Development	3.2	4.4	7.1	14.7	1.32	2020 Annual Report, Presentation 23 June 2020
Firefinch Limited	Goulamina	Exploration	8.4	56.2	43.9	108.5	1.45	ASX Release 9 Feb 2021, Presentation 10 Feb 2021
Galaxy Resources	Mt Cattlin	Operating	1	9.2	4.4	14.6	1.29	Presentation 25 Nov 2020
	James Bay	Exploration	0	0	0	40.3	1.40	Presentation 25 Nov 2020
Ganfeng (50%)/MinRes Ltd (50%)	Mt Marion	Operating	0.0	22.7	48.7	71.3	1.37	ASX Release 31 October 2018 (MinRes)
Liontown Resources	Kathleen Valley	Development	20.0	105.0	32.0	156.0	1.35	Presentation 4 Feb 2021, Annual Report 2020
Pilbara Minerals	Pilgangoora	Operating	18.3	113.8	90.4	222.5	1.26	2020 Annual Report
	Pilgangoora (Altura)	Operating	7.4	34.2	4.1	45.7	1.06	Presentation March 2020, 2019 Annual Report, ASX Release 9 October 2019 (Altura Mining)
Prospect Resources	Arcadia (70%)	Exploration	15.9	45.4	11.4	72.7	1.11	Presentation 1 Feb 2021, Annual Report 2020
Piedmont Lithium	Piedmont	Exploration	0	13.9	14	27.9	1.10	Presentation 24 Nov 2020
SQM (50%)/Westfarmers (50%)	Mt Holland	Development	66.0	106.0	17.0	189.0	1.50	WES Presentation 2 May 2019, Mt Kidman Scheme Booklet 1 August 2019

Table represents tonnes of ore from disclosed Resource estimates and recent company presentations as published by respective project owners. These estimates may have been prepared under different estimation and reporting regimes and may not be directly comparable. AVZ accepts no responsibility for the accuracy of resource estimates other than its own.

# Manono Lithium and Tin Process Depiction



# Manono Project Strategy - SC6 and Primary Lithium Sulphate

## Staged Approach to Manono Lithium and Tin Development

### Stage 1a<sup>1</sup> – SC6 production via Dense Media Separation

- Simple technology, low power consumption producing up to 6.1% Li<sub>2</sub>O without the need for flotation
- Start up with CAPEX of ~US\$320 M for a 4.5 Mt/a capacity plant producing up to 700,000 t/a of SC6

### Stage 1b<sup>1</sup> – Primary Lithium Sulphate Production (PLS)

- Simple technology, significant value add step
- Start up with CAPEX of ~US\$179 M for plant producing up to a 45.6 kt/a Primary Lithium Sulphate

### Stage 1c<sup>1</sup> – Tin and Tantalum production

- Modular cassiterite cleaning plant

### Stage 2<sup>2</sup> – Add additional 20kt/a LCE Primary Lithium Sulphate trains

- Chose a new site and raise funds to develop this additional PLS capacity

### Stage 3<sup>3</sup> –Lithium Hydroxide Monohydrate Plant

- Commenced Conceptual Design Study with Tier 1 Canadian engineering company

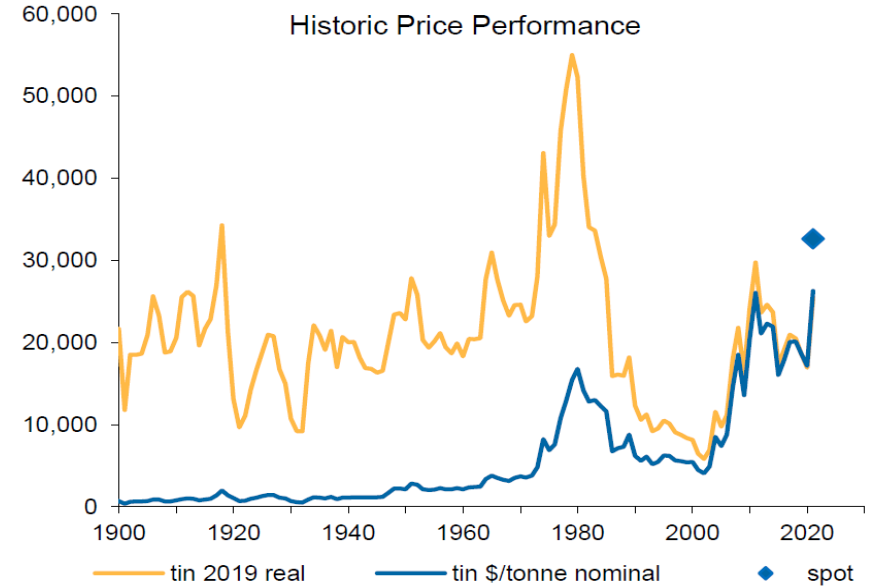
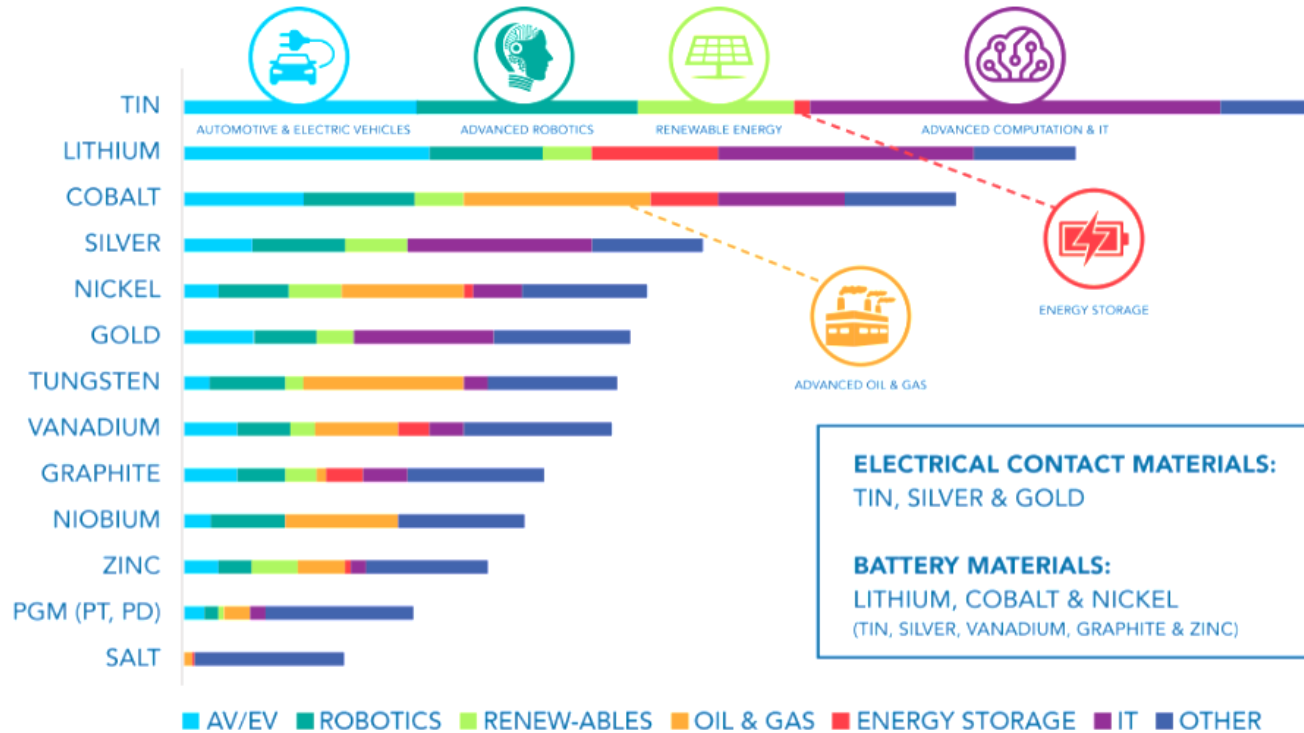
<sup>1</sup> Stages 1a and 1b and 1c will be executed at the same time

<sup>2</sup> Stage 2 will be executed after Stages 1a and 1b are completed, unless demand and finance underpin starting this development sooner and offtake agreements are in place

<sup>3</sup> Stage 3 will be executed as a standalone project, separately studied and financed with LiOH offtake agreements



# Tin Information



Source: Bloomberg, Financial Exchanges, USGS, Macquarie Strategy, May 2021

Tin is used as tinfoil for packaging and as a lead-free solder used in electronics, IT, energy storage, renewables, automotive & EV industries.

Researchers from the Massachusetts Institute of Technology (MIT) in the United States have estimated that tin is the metal most likely to be positively affected by future technology.

Tin is currently at nominal high of c.\$30k/t or approx. 50% of the historic peak price on a real 2019 basis