

ASX:RDM

LEAD THE FORGOTTEN BATTERY MINERAL

MARONAN

MAY 2018

**LEAD-SILVER
COPPER-GOLD**

- ## Caution Regarding Forward-Looking Statements

- Statements regarding the Company's plans with respect to exploring its projects are forward-looking. There can be no assurance that any mineralisation identified will be proven to be economic, that future evaluation work will confirm the viability of deposits identified or that future required regulatory and / or development approvals will be obtained.
- Such risks and uncertainties are described in periodic filings made by Red Metal Limited with the ASX. The Company disclaims any obligation to update information contained in any forward-looking statement.

- ## Competent Persons Statement

- The information in this report that relates to Exploration Results and estimates of Mineral Resources for the Maronan Project was previously reported by the Company in compliance with JORC 2012 in various market releases with the last one being dated 8 March 2016. The Company confirms that it is not aware of any new information or data that materially affects the information included in those earlier market announcements and, in the case of the estimate of Mineral Resources all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.
- All mineralised intervals have been length weighted. No top-cuts have been applied. A nominal 1% lead and 0.5% copper lower cut-off grade is applied.
- The lead equivalent values for Maronan was determined by AMDAD for the Preliminary Mine Scoping Study as released to the market on 8 March 2016.
- The copper equivalent values used here were calculated using on the current metal prices being Pb \$2335/t, Cu \$6833/t, Au \$1308/oz, Ag \$16.43/oz, Ni and 0.75USD = \$1AUD. The Maronan project is at an early stage of exploration, and as a result limited metallurgical test work has been undertaken on the lead and no metallurgical test work has been undertaken on the copper. A metallurgical recovery of 95% for lead, 93% for silver, 90% for copper and 75% for gold was assumed for the purpose of the copper equivalent calculation. The copper equivalent percentage value is calculated by summing the US dollar value of contained metal for each deposit then dividing this value by the copper price x 100. The Company's opinion is that all of the elements included in the lead and copper equivalent calculation have a reasonable potential to be recovered.
- The lead and copper equivalent values are not precise and are used here to map the broad variations in the in situ metal content to assist exploration targeting and make broad grade comparisons between deposits. It is highly likely these values will vary when metallurgical factors are applied.

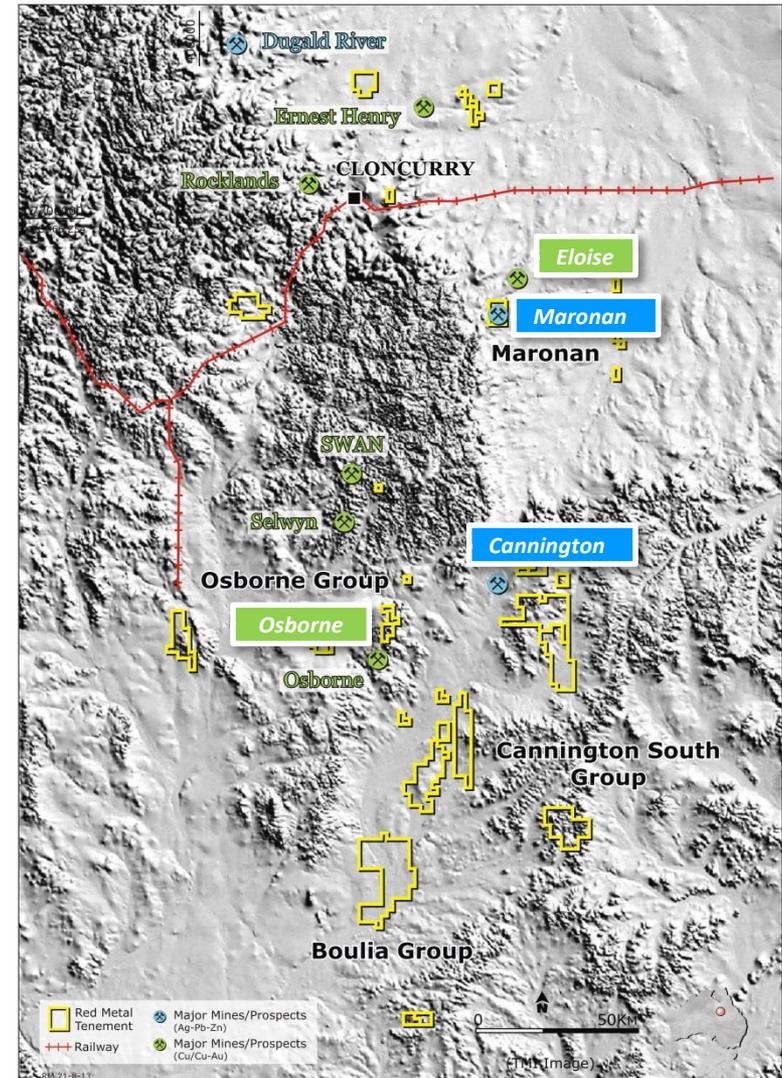
Maronan Proven Terrain

- Located in Proven Carpentaria Zinc Province
 - Multiple “Tier 1” zinc-lead-silver deposits
 - World’s most productive zinc-lead-silver terrain
 - 1.7Bn tonnes of lead-zinc-silver ore
 - >120Mt of zinc, 84Mt lead and 5.36Boz of silver
 - “Carpentaria is for zinc what the Andes is for copper”
- Large/Giant Silver-Lead-Zinc deposits
 - HYC
 - Teena (~600m cover)
 - Century
 - Lady Loretta
 - Mount Isa
 - George Fisher
 - Dugald River
 - **Maronan (~50m cover)**
 - Cannington (~50m cover)
 - Broken Hill
- Significant Copper Deposits
 - Mount Isa
 - Ernest Henry (~50m cover)
 - Osborne (~20m cover)



Maronan Significant Resources

- 100% Red Metal
- Two Separate Mineral Systems
 - Bedded Cannington or Broken Hill-type lead-silver mineralisation
 - Partially overprinted by iron sulphide copper-gold type (ISCG)
 - Sulphide mineralisation within 90 metres from surface
- Significant JORC (2012) Inferred Resources
 - 30Mt @ 6.5% lead, 106g/t silver (3% lead COG)
3% copper (equivalent)
 - 11Mt @ 1.5% Cu, 0.8g/t Au (1% copper COG)
2.1% copper equivalent
 - Scope to expand at lower cut-off grades



Maronan

Exceptional Ore Quality

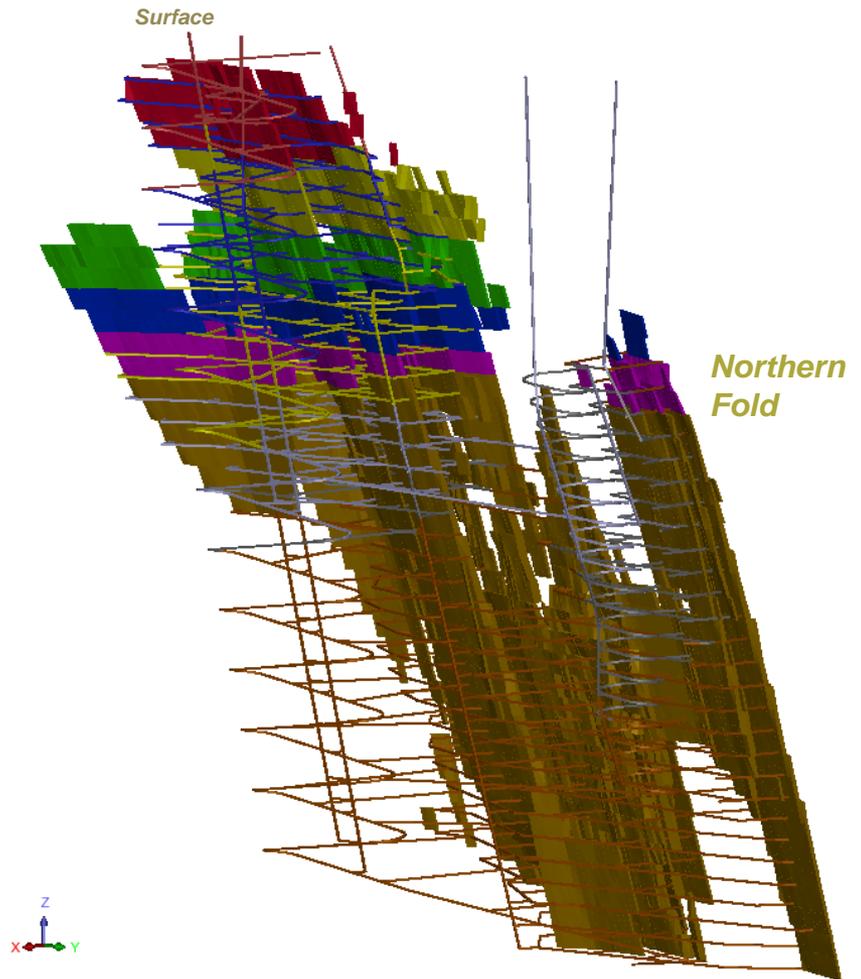
- Simple Processing
 - Coarse-grained and soft lead-silver ore
 - Outstanding recoveries
 - Low grinding index
 - Low-cost processing
 - Lowers economic cut-off grade to ~3.0% Pbeq
 - Allows mining of thicker and shallower ore lenses
- Excellent Project Infrastructure
 - 130 kilometres by bitumen due north of Cannington Mine
 - 50 kilometres by bitumen south of rail infrastructure
 - Good water and power (gas) options



Maronan

Scope to be Mined

- Favorable Mining Parameters
 - Good geometry – steep dips
 - Multiple ore horizons
 - Good mining widths (average 9m for the lead)
 - Excellent ground conditions, competent footwall and hangingwall rocks
 - Sulphide ore within 90 metres of surface



3D View Facing South West

Maronan

Preliminary Economic Studies

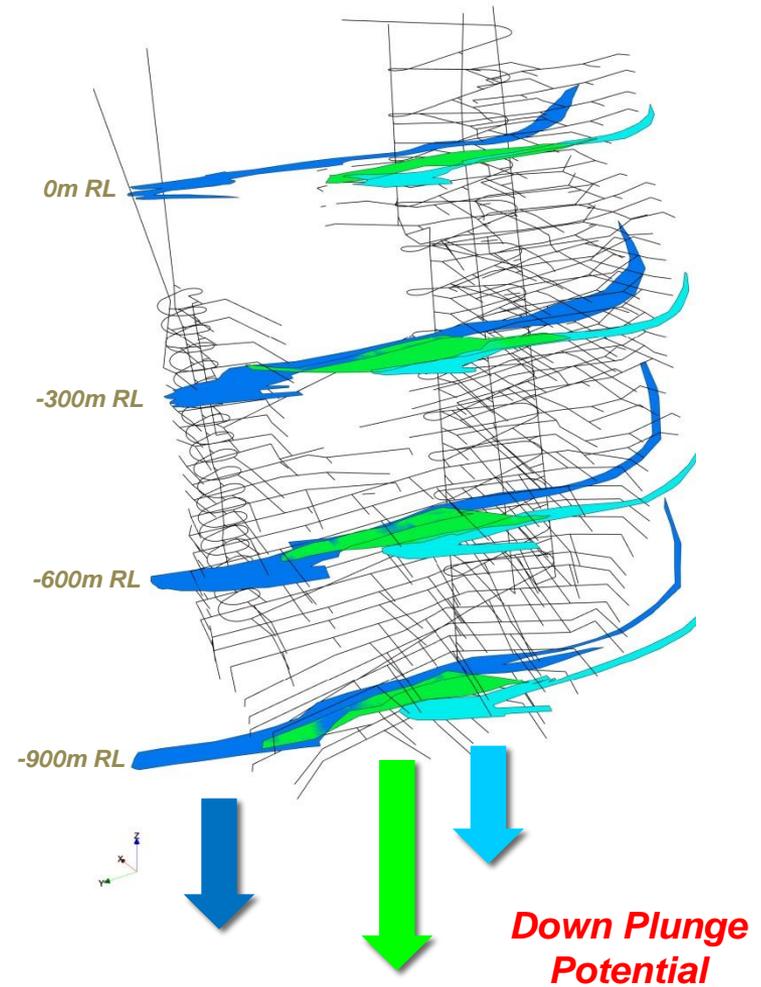
- Reveal Strong Positive Cashflows
 - For standalone operation
 - Forecast using \$US2200/t lead price – currently \$2335
- Enhanced Using Nearby Infrastructure
 - Eloise Mine CuAu 14km
 - Cannington PbZnAg 130 km
 - **Jericho CuAu discovery 11km**



Maronan

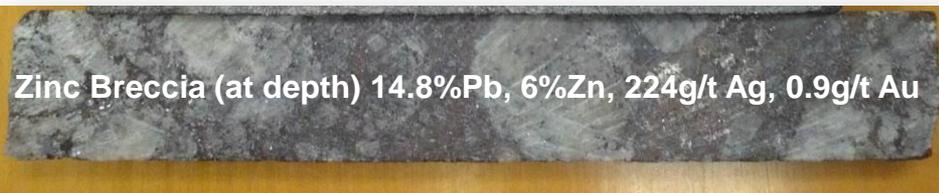
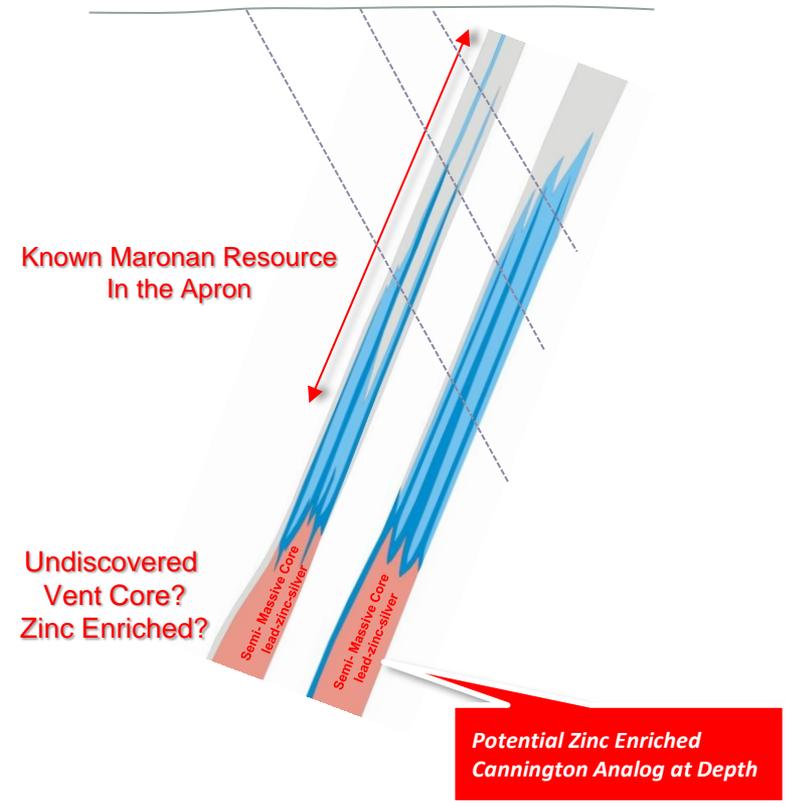
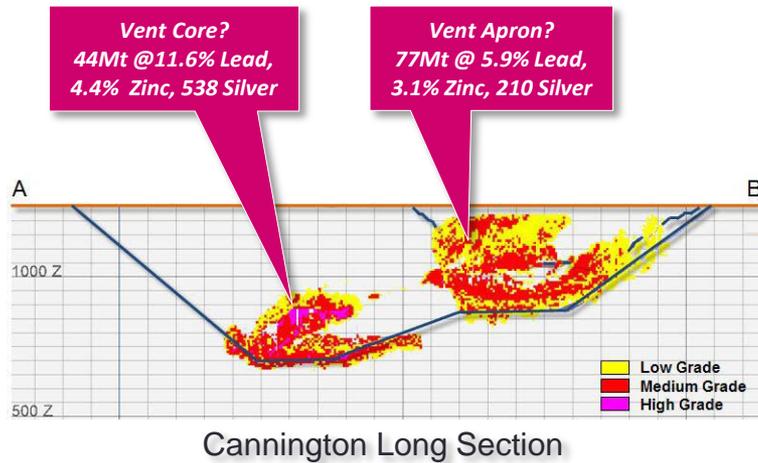
Upside

- Significant Exploration Upside
 - Down plunge



Maronan Upside

- Significant Exploration Upside
 - Down plunge
 - Increasing zinc and silver at depth, zoning to “Cannington”

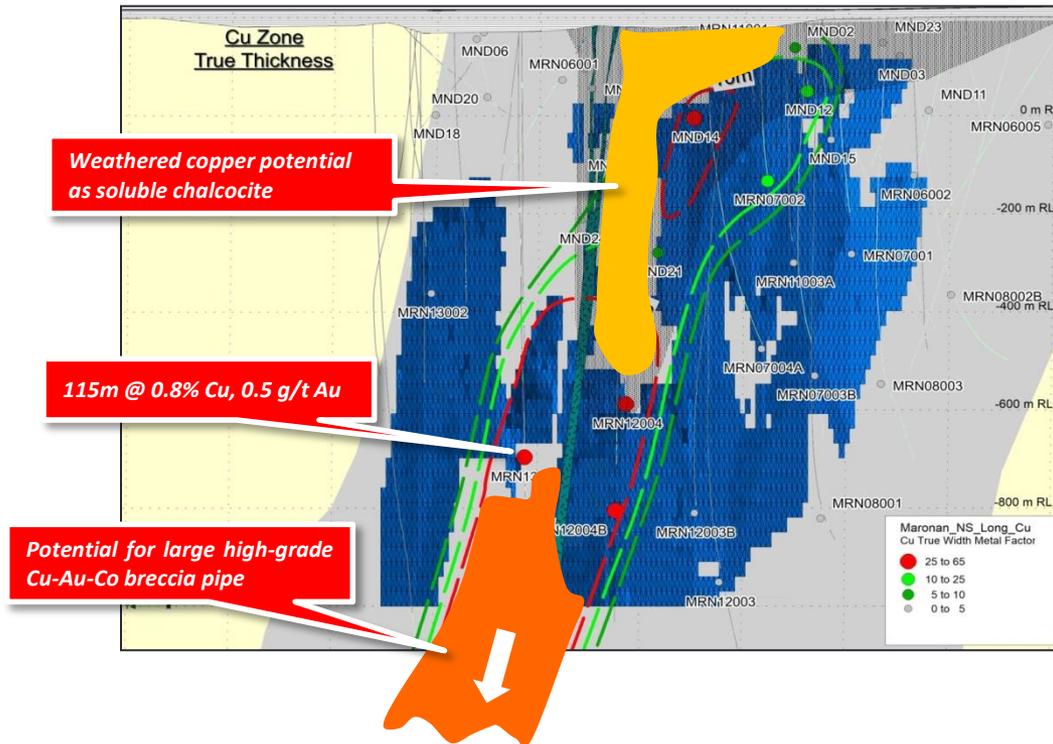


Maronan Upside

- Significant Exploration Upside
 - Increasing zinc and silver at depth, zoning to “Cannington”
 - Scope for thicker zones of high-grade copper, gold and cobalt at depth
 - Shallow soluble copper-gold (as chalcocite)



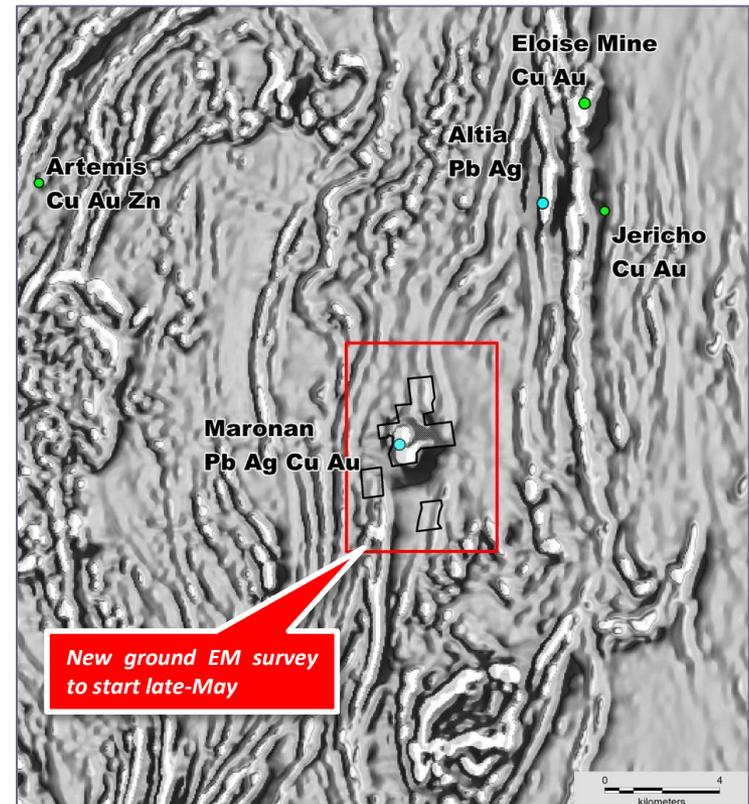
High Grades where Chalcopyrite >> Pyrrhotite
3.2% Copper, 5.1 g/t Gold



Maronan

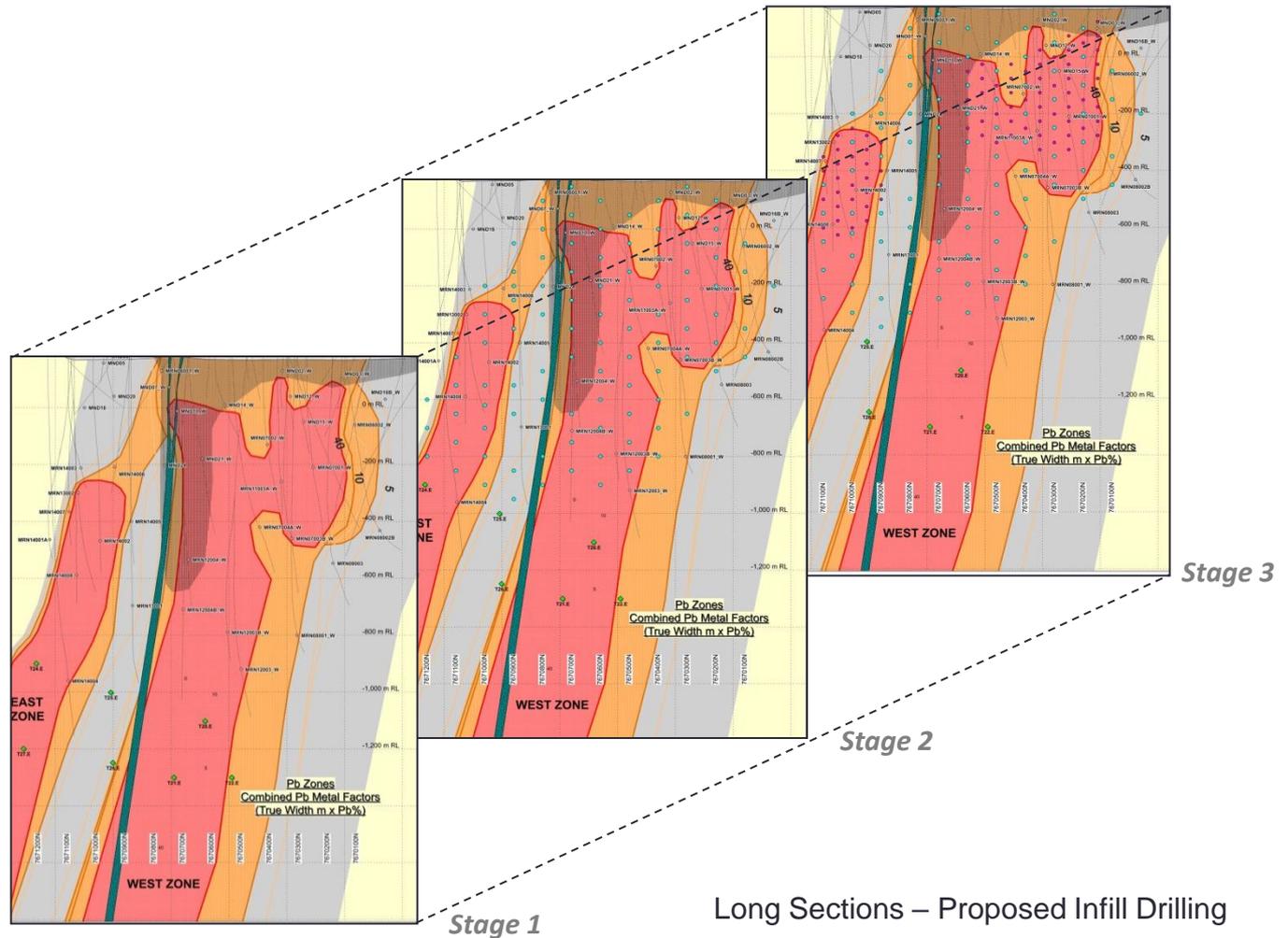
Upside

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 - Shallow soluble copper-gold (as chalcocite)
 - **New copper-gold structures surrounding Maronan (EM surveying late-May)**



Maronan Pre-Feasibility Ready

- Infill and Step-out Drilling
 - Both economically and geologically valid



Maronan

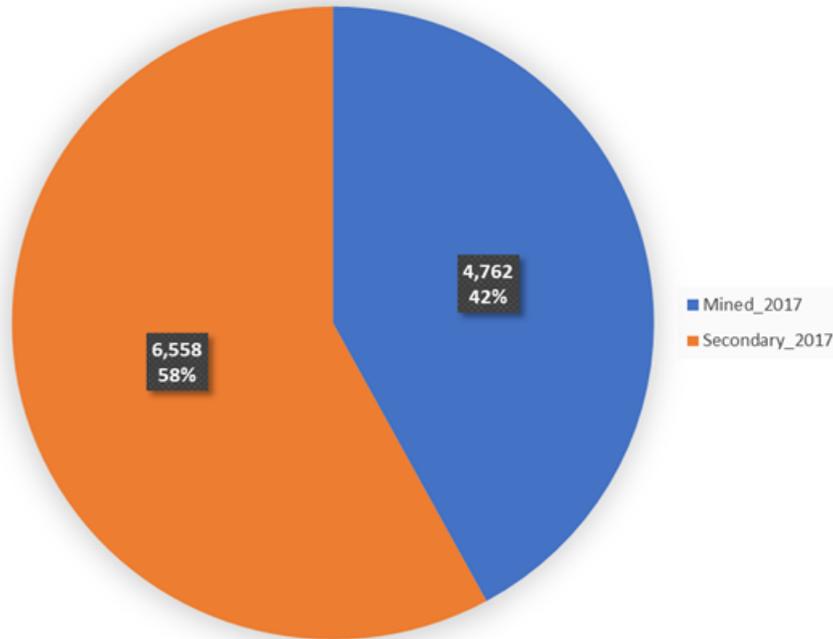
Lead

- Very much part of the “Renewable-EV-5G” industrial revolution
- EV-ification
 - Maybe a little slower than hyped and
 - Indirectly provide new markets for lead battery energy storage
- Strong future battery energy storage needs mean plenty of room for growth in lead and lithium

Maronan

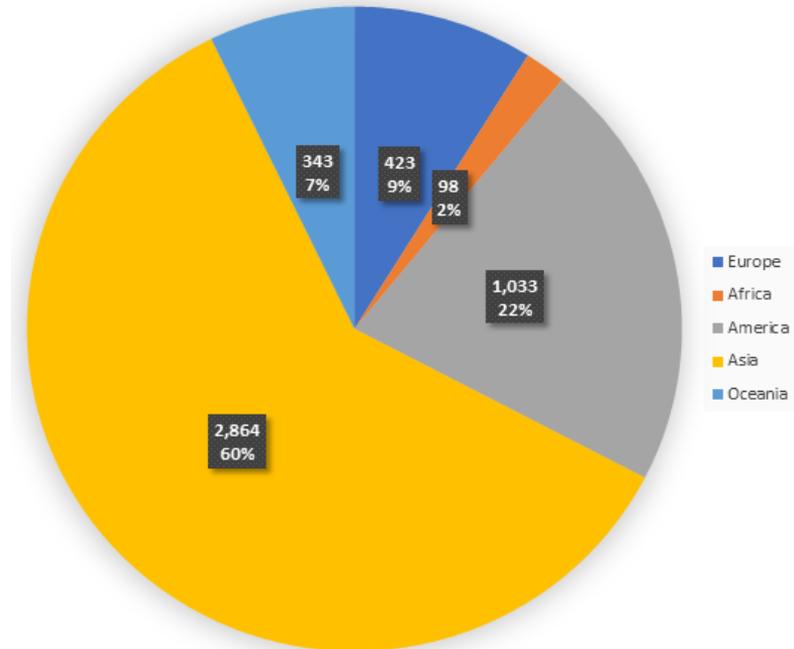
Lead Production Snapshot

Total Lead Production 2017
(Thousand Tonnes)



Total Produced 11,320kt
Total Used 11,487kt

Lead Mined 2017
(Thousand Tonnes)



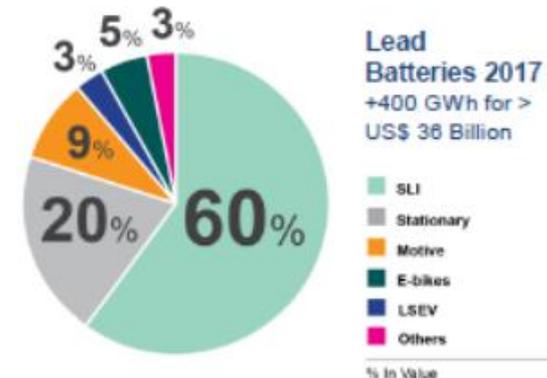
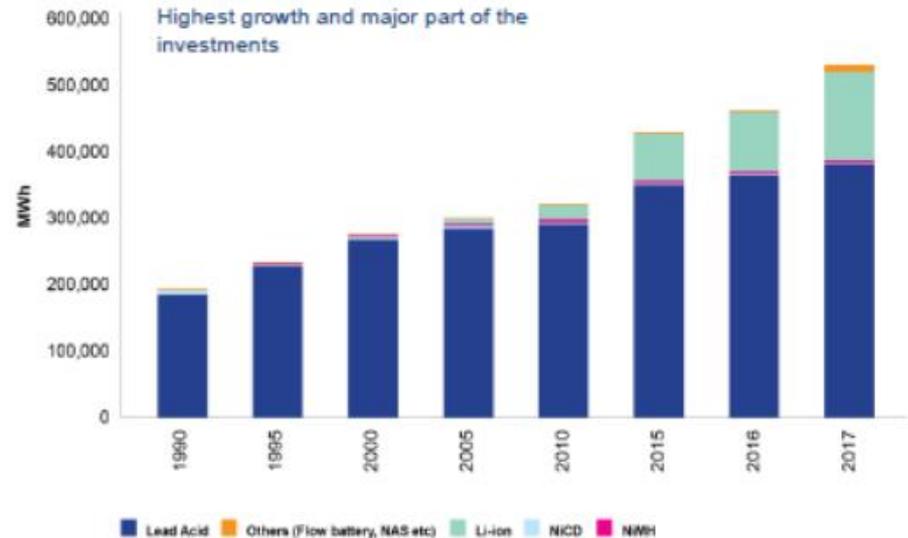
Total Produced 4,762kt
~ \$US11 Bn

Maronan Lead Battery

- Global Lead Battery Market
 - **US\$ 36 Bn** in 2017
 - Vehicle starter batteries ~60%
 - Industrial batteries ~30%
- Short Term Forecasts
 - Very strong for next 10 years
 - **US\$ 80 Bn** by 2026 (*Transparency Market Research*)
 - **US\$ 94.8 Bn** by 2027 (*Future Market Insights, 2017*)
- Longer Term Forecasts
 - EV uptake rate is the big unknown making longer term demand forecasts uncertain
 - Demand in vehicle starter batteries will be challenged by lithium batteries
 - But future battery energy storage demand (industrial battery applications) is set to benefit both the lead and lithium sectors

Lead Batteries:
By far the most important market
(75% market share)

Lithium Ion Batteries:
Highest growth and major part of the
investments

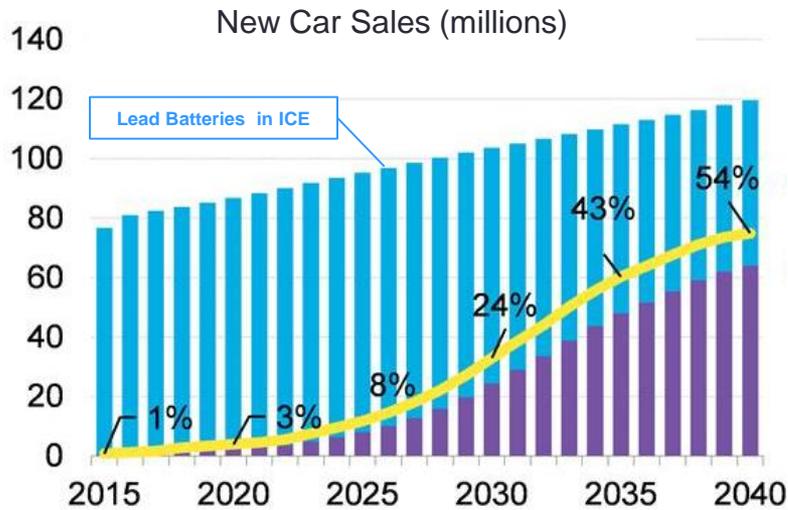


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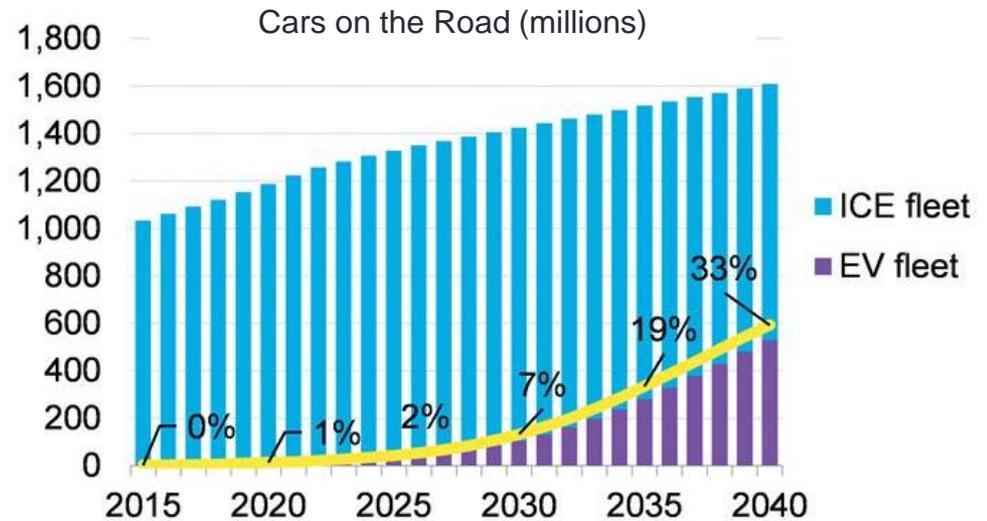
Lead Vehicle Starter Battery

- Car Forecast Data

- Global vehicle projections and EV uptake data still predict a large number of internal combustion engines (ICE) on the road at **2040** (*Bloomberg New Energy Finance, 2017*)
- Lack of investment in additional power generation capacity and charging infrastructure may slow global EV uptake



Source: Bloomberg New Energy Finance July 2017



Maronan

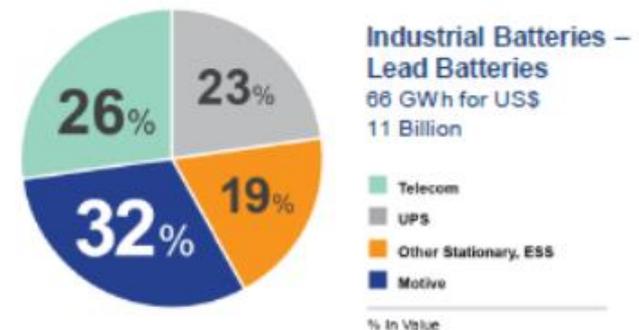
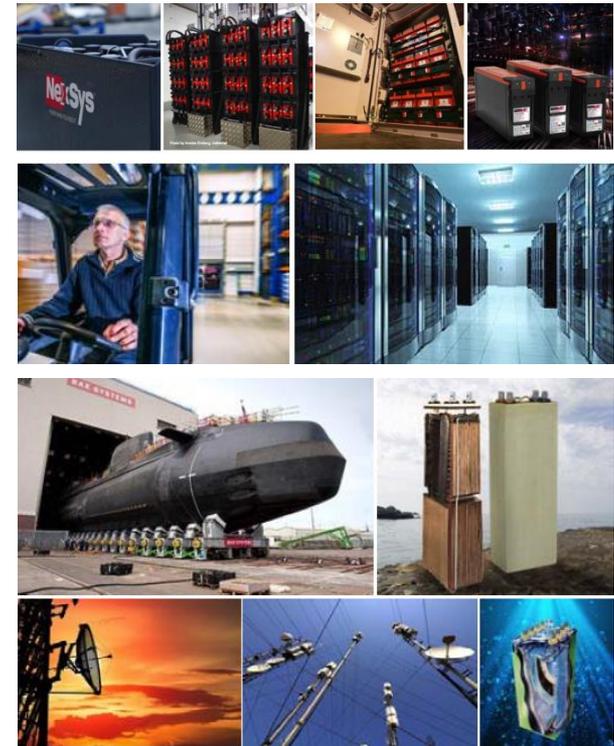
Leads Indirect EV Benefit

- Every EV Purchase Comes With The “**Desire**” To Use Renewable Energy
 - Potentially increasing demand for stationary (industrial) renewable energy storage batteries (attached to every wind farm or bank of solar cells)



Maronan Industrial Lead Battery Growth

- Global Lead Battery Market
 - **US\$ 36 Bn** in 2017
- Industrial Lead Battery Market
 - **US\$ 11 Bn** in 2017 (~30%)
- **“Renewable-EV-5G” Industrial Revolution**
 - Just the beginning
 - Forecast battery energy storage demand can only be met if lead and lithium sectors grow together – room for both
- Growth Sectors
 - Telecom towers supporting 5G
 - Grid power back-up and stabilising renewables
 - Backup power for data storage centers
 - Off-grid residential energy storage (for your EV)
 - Motive industrial (fork lifts etc.)



Maronan Lead Battery

Industry

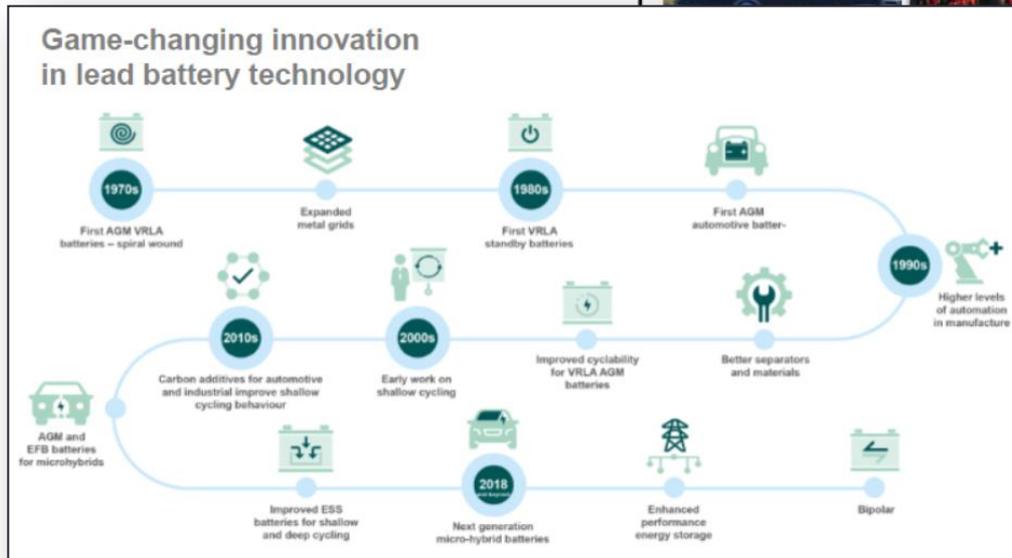
- Highly Competitive
 - Continues to innovate, customize and develop advanced lead battery technologies
 - “Not falling asleep at the wheel”

EnerSys
Powerful Solutions

Industrial battery market outlook

Advanced Lead Acid Battery

Clear Power SBS Telecom DataSafe XE Datacentre



Maronan

Recent M&A Activity in the Lead Resource Space

- S32
 - Hermosa Pb-Zn Project
 - Taylor deposit over 100.9Mt @4.3%Pb, 4.1%Zn, 2.1g/t Ag
 - Significant exploration upside
 - \$110M private placement in Arizona Mining for 15% stake in the company
- The Doe Run Company
 - Browns Pb + CuCo
 - Sulphide 45.1 Mt @ 3.74% Pb, 0.73% Zn, 0.35% Cu, 0.09% Co, 0.07% Ni
 - Option to purchase
 - Recently completed drilling for metallurgical samples and geotechnical data to assist detailed underground mine scoping study

Maronan for Comparison

- 30Mt @ 6.5% Pb, 106g/t Ag (3% Pb COG) and 11Mt @1.5% Cu, 0.8g/t Au (1%Cu COG)
- Simple metallurgy, soft ore, favorable geometry
- Significant exploration upside
- PFS Ready