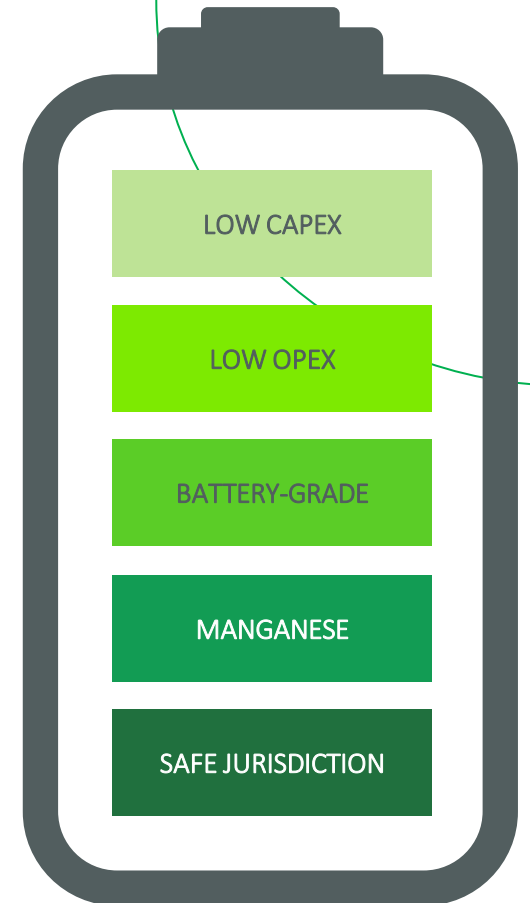


# GIYANI METALS CORP.

## BATTERY-GRADE MANGANESE DEVELOPMENT OPPORTUNITY

June 2020

TSX.V:EMM



# CAUTIONARY NOTE

## Forward Looking Statements

This presentation contains forward-looking statements and factual information that are current as of the date the presentation was originally delivered. When used in this presentation, words such as “may”, “would”, “could”, “will”, “expect”, “anticipate”, “estimate”, “believe”, “contemplate”, “intend”, “budget” “plan” and other similar expressions are intended to identify forward-looking statements. Forward-looking statements include, but are not limited to, statements with respect to the timing and amount of estimated future exploration, success of exploration activities, expenditures, permitting, and requirements for additional capital and access to data. Forward-looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance or achievements of Giyani Metals Corp. (the “Company”) to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors include, among others, risks related to actual results of current exploration activities; changes in project parameters as plans continue to be refined; the ability to enter into joint ventures or to acquire or dispose of properties; future prices of commodities; fluctuations in currency markets; operating or technical difficulties in relation to the speculative nature of exploration and development; accidents, employee relations (including labour disputes) and other risks of the gold industry; ability to obtain financing; changes in costs and estimates associated with the Company’s projects; legislative, political or economic developments in the jurisdictions in which the Company carries on business; requirements for additional capital; and regulatory restrictions including delays in obtaining governmental approvals. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or expected. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise except as required by applicable law.

# COMPLIANCE STATEMENT

## Qualified Persons

The scientific, technical, and economic information contained in this presentation relating to the K.Hill Manganese Project are based upon a technical report prepared by Mr. Michael John Beare BEng, CEng, MIOM3, Ms. Lucy Roberts BSc (Hons), MSc, PhD, MAusIMM(CP), both of SRK Consulting, and Mr. Ian Flint Ph.D., P. Eng. of Lab 4 Inc., and entitled “Kgwakgwe Hill Manganese Project Independent Technical Report” having an effective date of February 20, 2020 (release date April 28, 2020) (the “NI-43-101 Technical Report”). The NI-43-101 Technical Report was filed on SEDAR at [www.sedar.com](http://www.sedar.com) on April 30, 2020. Mr. Beare, Ms. Roberts, and Mr. Flint are "Qualified Persons" under NI 43-101, and have each consented to the inclusion in this presentation of such scientific, technical, and economic information. Mr. Beare, Ms. Roberts, and Mr. Flint are "independent" within the meaning of NI 43-101.

Giyani’s disclosure of mineral resource information is governed by NI 43-101 under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as may be amended from time to time by the CIM ("CIM Standards"). There can be no assurance that those portions of mineral resources that are not mineral reserves will ultimately be converted into mineral reserves.

# INVESTMENT SUMMARY

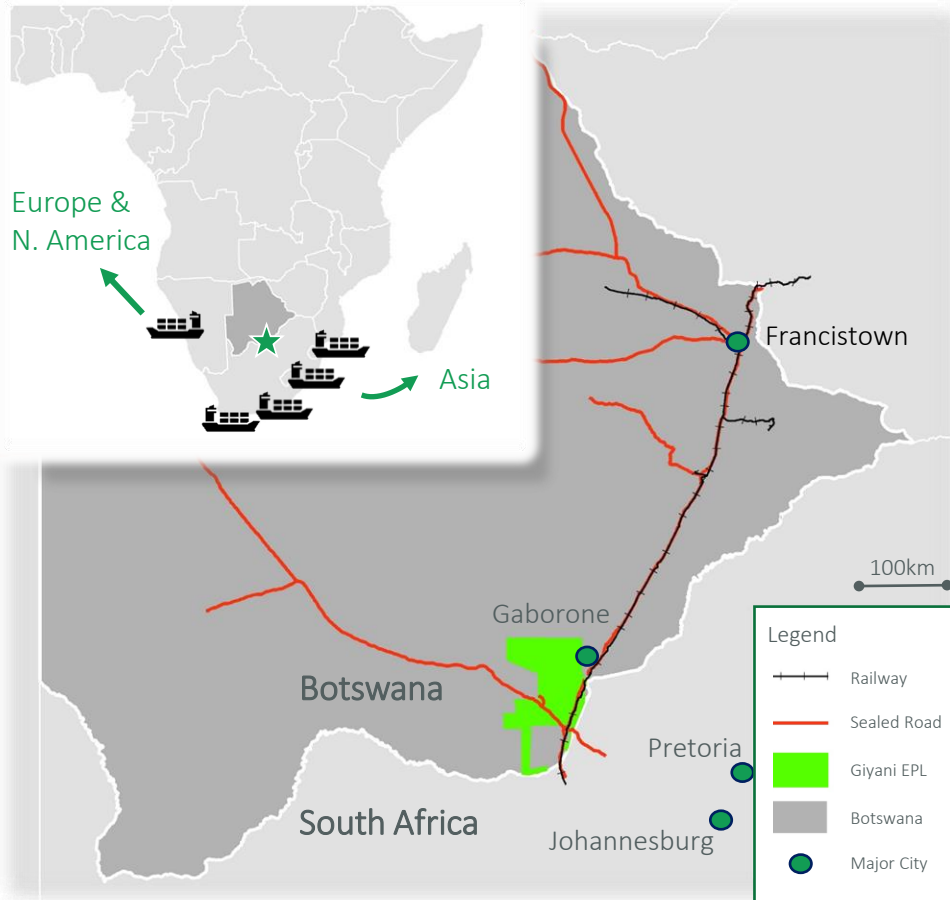
## Highlights

- Manganese Oxide deposit in a supportive mining investment jurisdiction
- Robust project economics: 82% IRR and C\$389M NPV
- Low project capex of C\$155M
- Definitive Feasibility Study due Q1 2021
- Experienced management and board with a track record of successful project delivery
- Well positioned to leverage the growth in the battery electric vehicle market



# PROJECT PORTFOLIO

## Large Land Package in a Favourable Jurisdiction



### OWNERSHIP

88% interest (with option to own 100%) in an extensive land package covering 8,135km<sup>2</sup> in south-eastern Botswana

### PROJECT PIPELINE

3 battery-amenable manganese Prospects (K.Hill, Otse & Lobatse), as well as several additional targets, provides optionality for increasing the overall resource size and extending the project life

### INFRASTRUCTURE

The K.Hill Project is located near the 45,000-inhabitant town of Kanye, which hosts good rail and road connections, sufficient water supply, a 167-bed hospital and reliable power connectivity

### ROUTE TO MARKET

5 seaports accessible by rail and road with cost effective shipping to Asia, Europe and North America

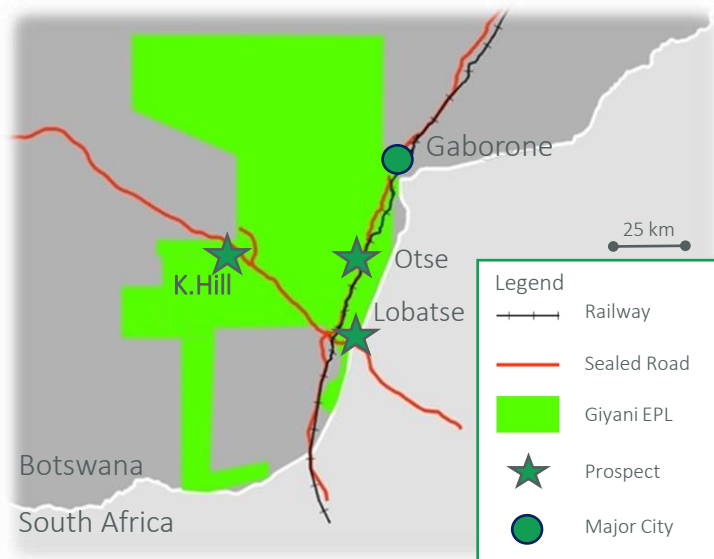
### JURISDICTION

Botswana is consistently rated as one of the most attractive African countries for supporting investment in mining<sup>1</sup>, due to favourable tax regulations and efficient government processes

1. Fraser Institute, Survey of Mining Companies 2019

# PROJECT PORTFOLIO

## K.Hill, Otse & Lobatse: Battery-Grade Manganese Oxide Deposits



### K.HILL

- Adjacent to the town of Kanye – 45,000 inhabitants
- 5km from Trans Kalahari highway connecting South Africa and Namibia
- Historical open pit DSO operation 1950 – 1970
- Remnants of processing facilities and discarded material still available
- ~166kt of high grade Mn-Ore sold

### OTSE

- 2km from A1 tarmac sealed road and the North-South railway
- Historically mined for high grade, low iron content manganese ore
- Mineralization hosted in a chert breccia unit

### LOBATSE

- Also adjacent to the A1 highway and 1km from the RSA border
- Mineralization hosted a siliceous shale/sandstone



Rail connection to South Africa



167-bed Kanye Hospital 4km from K.Hill



A1 highway connecting Otse and Lobatse to Gaborone

# MILESTONES ACHIEVED

## Highlights

**Sep. 2017:** Completion of reconnaissance surface mapping & sampling program

**Feb. 2018:** Successful fund raising of \$1.2M for 2018 exploration

**Sep. 2018:** Completion of mineral resource estimate at K.Hill, 1.1M tonnes at 31.2% MnO

**Dec. 2019:** Commencement of Feasibility Study & ESIA

**May. 2020:** Successful fund raising of C\$1.2M

**Dec. 2017:** Appointment of Mr. Robin Birchall as CEO & Director

**Sep. 2018:** Completion of ground geophysics at K.Hill & Otse, resource drilling at K.Hill & exploration drilling at Otse & Lobatse

**Aug. 2019:** Completion of PEA for K.Hill with NPV of C\$379M & IRR of 90%

**April. 2020:** Increase in K.Hill resource & updated NPV of C\$389M & IRR of 82%

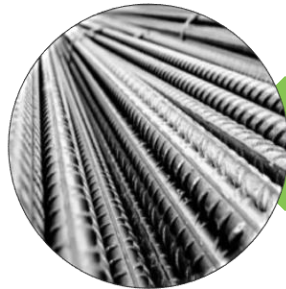
# MANGANESE

## Used in Steel, Specialty Alloys, Fertilizers, Chemicals and Batteries

### MANGANESE ORE AND MANGANESE METAL

- **Manganese ore** is used in the production of steel and metal alloys. Approximately 86% of globally mined manganese ore is used in steel making<sup>1</sup>
- The total global manganese ore consumption in 2018 was 20 million mt<sup>1</sup>
- Pure manganese metal, or Electrolytic Manganese Metal (**EMM**) is used in making a variety of speciality alloys. In 2018 approximately 8% of mined manganese ore (1.6 million mt) was processed into **EMM**. China accounts for approximately 97% of global **EMM** production. In 2018, High Purity Electrolytic Manganese Metal (**HPEMM**) at 99.9% purity represented only 35,000 mt (approximately 2.2% of total **EMM** output)

METALLURGICAL



Steel Making



Alloys



Battery Cathodes



Chemicals & Speciality Products

NON-METALLURGICAL

1. IMnI Report February 2018



# MANGANESE IN LI-ION BATTERIES

## Where is the Source of Supply?

### MANGANESE IMBALANCE WORSE THAN COBALT<sup>1</sup>

- China dominates the refined manganese market (EMM, HPEMM)
- China accounted for 93% of the chemically refined manganese in 2019, but only responsible for 6% of the mined supply
- Only 3 non-Chinese producers of refined manganese
- Not all **EMM** can be used in lithium-ion battery cathodes. This is due to the existence of toxic impurities such as selenium in traditionally made **EMM**
- Non-Chinese suppliers of **HPEMM** are critical to reducing the cathode supply chain risk
- Buyers of Non-Chinese sourced **HPEMM** are less price-sensitive

		Lithium	Nickel	Manganese	Cobalt
Current global supply	<i>tonnes</i>	77,000	2,700,000	19,000	140,000
Total land reserves	<i>tonnes</i>	17,000,000	89,000,000	810,000	7,000,000
Required for <b>30%</b> of Automotive production (NMC 811)	<i>tonnes</i>	154,845	1,046,250	122,760	131,130
Proportion of current supply	%	201%	39%	646%	94%
Time to deplete current reserves	<i>Years</i>	110	85	7	53
Required for <b>100%</b> of Automotive production (NMC 811)	<i>tonnes</i>	516,098	3,487,151	409,159	437,056
Time to deplete current reserves	<i>tonnes</i>	33	26	2	16

**SIGNIFICANT INCREASE IN SUPPLY IS REQUIRED JUST TO ACHIEVE 30 PERCENT ELECTRIFICATION, LET ALONE 100%<sup>2</sup>**

1. Benchmark Mineral Intelligence, new lithium-ion battery supply chain data exposes manganese weaknesses. March 2020  
 2. How critical metal shortage might impact the energy transition, by Dr Jody Muelaner. April 2020

# CATHODE CHEMISTRIES

## Li-ion Batteries have different types of cathode chemistries

### NMC – THE DOMINANT CATHODE FOR AT LEAST THE NEXT 8 YEARS

- NMC cathodes are expected to be used in at least 50% of all batteries (not just EVs) by 2028 (currently 35%)<sup>1</sup>
- Solid state technologies will be slow to develop and likely to only be commercialised, if at all, in the 2030s.
- NMC cathodes come in many different chemistries, such as 1:1:1, 8:1:1, 5:3:2.

The makeup of the cathode materials must address the following key challenges<sup>2</sup>:

- Specific Energy
- Specific Power
- **Safety / Thermal stability**
- Life Span
- **Cost**
- **Performance / Power Output**

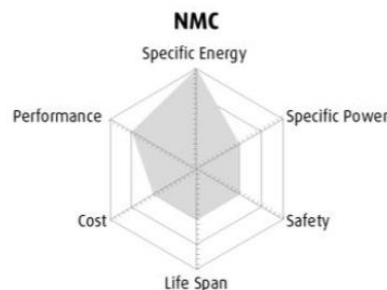
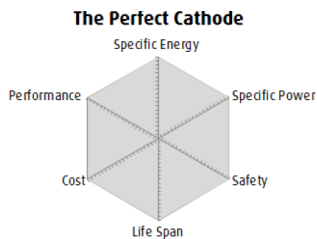
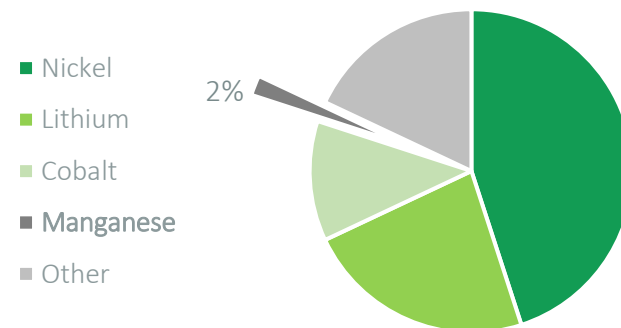
### MANGANESE A SMALL COMPONENT, BUT HERE TO STAY

Battery composition	Critical metals required (kg/kWh) <sup>1</sup>			
	Lithium	Nickel	Manganese	Cobalt
NMC 111	0.14	0.4	<b>0.4</b>	0.4
NMC 622	0.13	0.6	<b>0.2</b>	0.2
NMC 811	0.11	0.8	<b>0.1</b>	0.1

### Properties of Manganese in Cathodes

- **Safe / high thermal stability** (low risk of thermal runaway)
- Supply chain not complicated by *conflict* sources
- **Cheapest** raw material component in the cathode (**2%**)
- **High Performance / Power Output**

Cathode Cost of an NMC 811 per Raw Material<sup>2</sup>



1. IMNI Report, May 2019  
 2. Liu et al. (2017)

# K.HILL RESOURCE ESTIMATE (2020)

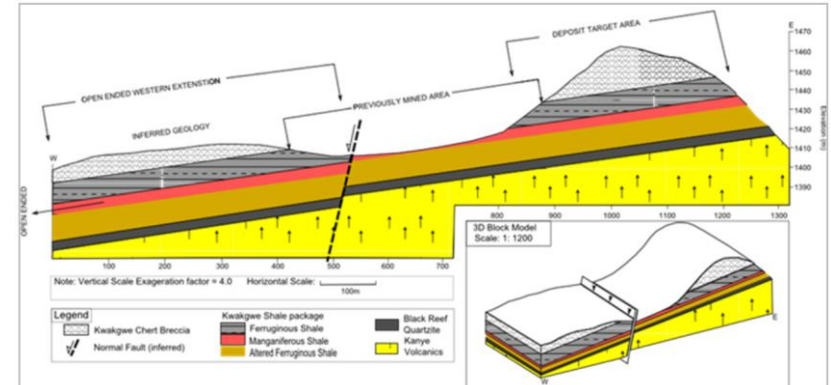
1.24Mt at 27.3% Manganese Oxide – with Significant Upside Potential

K.Hill Mineral Resource Estimation by Domain							
Domain	Category	Tonnes	MnO	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	LOI
		millions	%	%	%	%	%
High-Grade Upper Mn Shale	Inferred	1.00	31.2	8.9	26.3	16.9	8.8
Low-Grade Upper Mn Shale	Inferred	0.24	11.2	9.9	58.5	9.8	4.8
<b>Total</b>	<b>Inferred</b>	<b>1.24</b>	<b>27.3</b>	<b>9.1</b>	<b>32.5</b>	<b>15.5</b>	<b>8.1</b>

Example of K.Hill core from 10m to 30m



Upper Chert Breccia in **blue**, low grade manganese in **orange**, high grade manganese in **red**, and footwall iron shale in **yellow**



- Two manganese shale horizons, predominantly Mn-oxide
- Horizon average thickness of 5 m (ranges from 2m to 12m)
- Shallow dip ( 5-10°) towards the NW
- Mn-shale represents a primary manganese deposition in a shallow marine basin, upgraded by supergene enrichment
- Friable deposit amenable to free digging
- K.Hill prospect open to the south

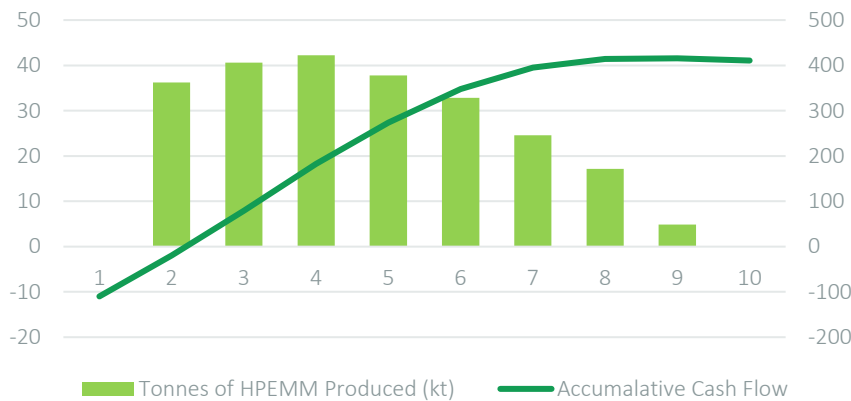
Resource Estimate Notes: The Inferred Mineral Resource Estimate is reported above a cut-off grade of 8.9% MnO. A 10% reduction has been applied to the resource tonnage to account for moisture content. Tonnages can therefore be considered dry. The Mineral Resource Estimate is constrained within grade based solids and within a Lerchs-Grossman optimised pit shell based on an HPEMM price of US\$4,700 /t and the following parameters: a. Mining Cost – US\$3.46 /t rock b. Processing Cost – US\$276.5 /t ore c. Selling cost – 3% d. G&A – US\$20 /t ore e. Discount Rate – 10% f. Processing Recovery – 87.5% g. Mining Recovery – 95% h. Mining Dilution – 5% i. Geotechnical Slope Angle - 45° All figures are rounded to reflect the relative accuracy of the estimate. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. It is uncertain if further exploration will convert Inferred Mineral Resources to higher confidence categories.

The Qualified Person (as that term is defined by NI 43-101) responsible for preparing the Mineral Resource statement, PEA and Amended Technical Report for the K.Hill is Michael John Beare, BEng, CEng, MIOM of SRK Consulting (UK) Ltd. Mr. Beare has reviewed and approved the scientific and technical content contained in this press release and verified the underlying technical data. Mr. Beare is independent of the Company.

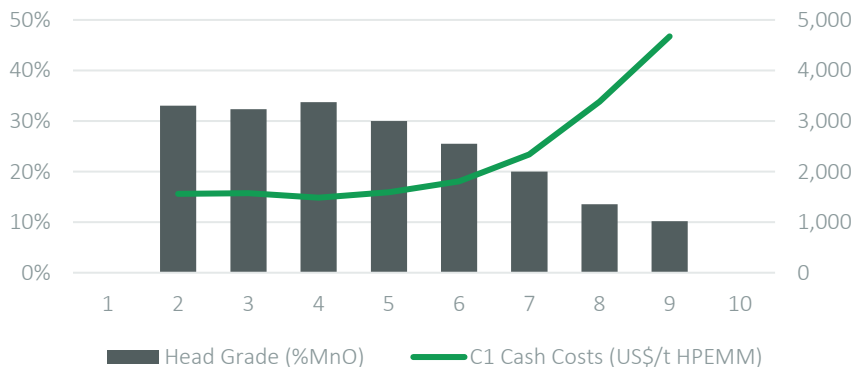
# KANYE PROJECT PEA

## Robust Economics Over a 10 Year Project Life

Annual Production (LHS) vs  
Accumulative Cash Flow (RHS)



Head Grade (LHS) vs C1 Cash Costs (RHS)



### HIGHLIGHTS

- Pre tax NPV<sup>10</sup> of C\$505M (US\$357M)<sup>2</sup>
- After tax NPV<sup>10</sup> of C\$389M (US\$275M)<sup>2</sup>
- After tax IRR of **82.1%**
- C\$155M (US\$110M)<sup>2</sup> Capex
- C\$7M (US\$5M)<sup>2</sup> closure cost
- Payback within year 3
- 10 year operating life
- 30 - 40kt per annum of HPEMM (or equivalent amount in high purity Manganese Sulphate Monohydrate)
- Open pit, free-digging mining (no blasting required)

### IMPROVEMENT POTENTIAL TO ECONOMICS

- Resource upside at K.Hill
- Inclusion of Otse and Lobatse in mine plan
- Inclusion of lower power costs

1. Kgwakgwe Hill Manganese Project Independent Technical Report. SRK, February 2020  
2. C\$:US\$1.4139 as of 02/05/2020

# MAKING HIGH PURITY MANGANESE

## Acid Dissolution, Solvent Extraction And Electrowinning

### LOW COST PROCESS OF THE K.HILL MANGANESE ORE

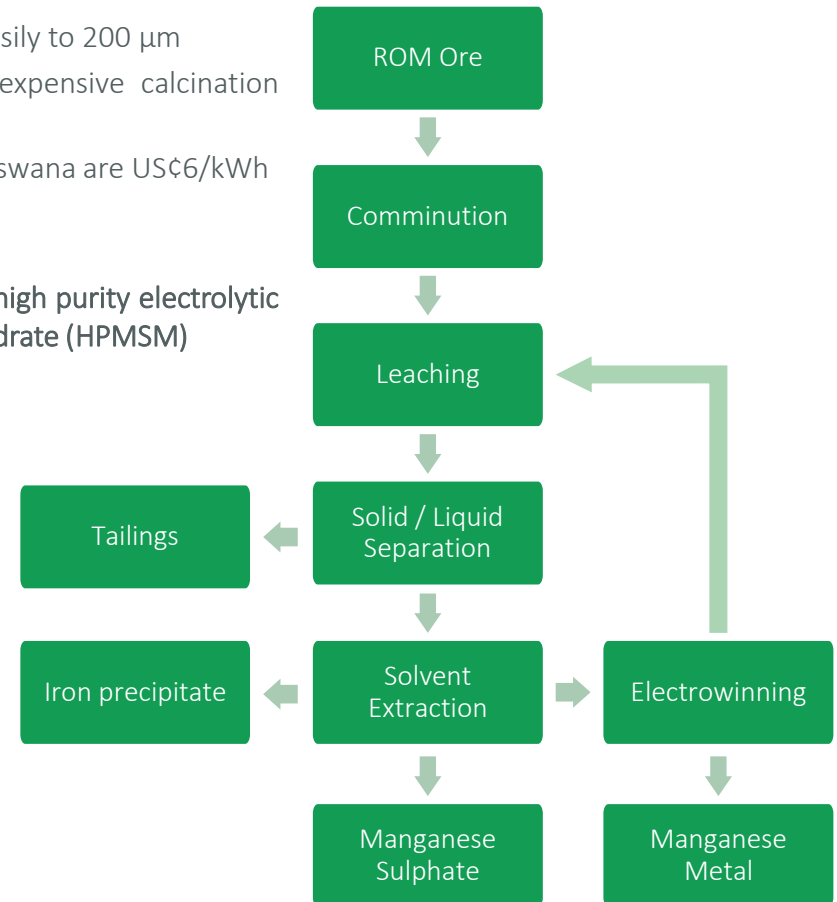
- **Low cost of grinding** → friable ore means free dig mining and grinds easily to 200 µm
- **Low cost of leaching** → oxide ore leaches in sulphuric acid (no expensive calcination required)
- **Low cost of electrowinning** → standard commercial power costs in Botswana are US\$6/kWh

### 2 HIGH PURITY PRODUCTS

In order to offer customers a choice, the Giyani plant will produce both **high purity electrolytic manganese metal (HPEMM)** and **high purity manganese sulphate monohydrate (HPMSM)**

### PROCESS OVERVIEW

- Manganese is extracted using acid leach, solvent extraction and electrowinning (SX/EW) process - similar to the processing method of copper and other base metals
- Mn ore is milled before being dissolved in an acid solution
- The ore goes through a series of precipitation and solution purification processes before the manganese pregnant solution is fed into electrolytic cells where the pure Mn gets plated on the cathodes
- The HPMSM product is deposited out prior to the electrowinning circuit
- The plated manganese is stripped from the cathodes, washed, dried and degassed



# K.Hill PROJECT TIMELINE

## Workstream News flow & Timeline

### 2020 WORKSTREAM NEWS FLOW

#### Feasibility Study

- Appoint drilling contractor and mobilisation
- Commence in-fill & hydrometallurgical drilling
- Conduct geotechnical and hydrogeology field work
- Complete market analysis, price forecasting and route to market studies
- Complete local infrastructure & site services optimisation
- Update resource block model & generate
- Generate mineral reserve estimate, mine plan and operational schedule for life of mine
- Detailed engineering plant design and process flowsheet
- Update capital & operating cost estimate
- Commence mine permitting

Q2 20

Q3 20

Q4 20

#### Environmental And Social Impact Assessment (ESIA)

- Public meeting with local communities
- Submit of Scope & Terms of Reference to the Department of Environmental Affairs (DEA)
- Receive approval for Scope & Terms or Reference by DEA
- Complete workstream assessments within the ESIA scope (*air quality, hydrology, noise, health and social impact, biodiversity, groundwater & geochemical, socio-economic impact, waste management, closure costing, landscape etc*)
- Submit completed ESIA to the DEA
- DEA review of ESIA and receive endorsement
- Government gazetting
- Public review of ESIA

### 2021/2022 TIMELINE TO PRODUCTION



# 2020 DSO PROGRAM

## Environmental clean up at K.Hill and rehabilitation of Otse

### 5 MONTH PROGRAM

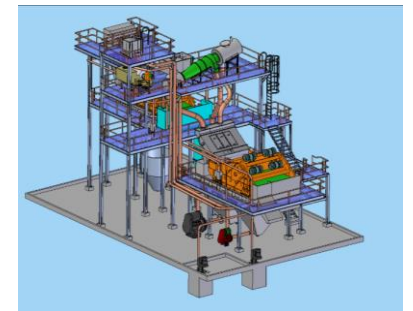
- Rehabilitation of the Otse pits and consolidation of old stockpiles at K.Hill
- Processing material through a DMS<sup>1</sup> plant
- Approximately 50,000t of product expected
- Capitalize on the recent rise in manganese ore prices
- Cash generated from program to be used for funding ongoing project development activities



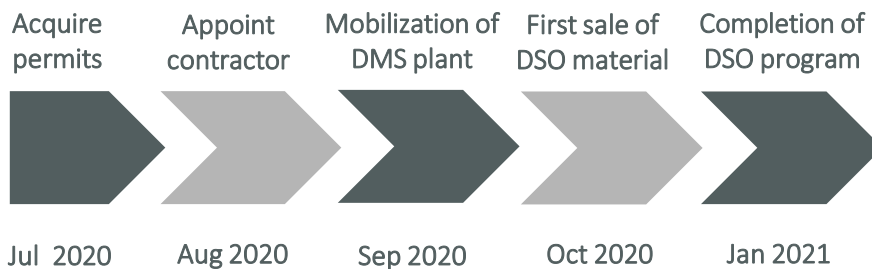
Source of DSO material - rehabilitation work on Otse pits and old stockpiles from K.Hill



Sample of DSO ore feed



DMS Plant Design<sup>2</sup>



1. Dense Media Separation  
 2. Engineering design study completed by Worley RSA in August 2019

# BOARD AND MANAGEMENT



## Proven Record in Mining Company Management & Project Delivery

### BOARD

**JONATHAN HENRY B.A.(Hons)**  
Non Executive Chairman

**25 years of experience in the mining company leadership and management**

- Executive Chairman of Ormonde Mining
- President and CEO Gabriel Resources
- CEO of Avocet Mining

**EUGENE LEE BCom**  
Non Executive Director

**Over 20 years of experience in mine finance capital markets, financial reporting, risk management, internal controls and corporate governance**

- Director, Marketing at Hudbay Minerals
- Non-Executive Director Nevada Zinc Corp
- CFO at Premier Royalty Inc.

**JOHN PETERSON J.D, B.S**  
Non Executive Director

**40 years of experience in law, sustainability and energy storage and is a global thought leader on energy and sustainability issues**

- Director & VP at ePower Engine Systems Inc
- Chairman at Axion Power International Inc
- Partner at Fefer Peterson & Co

**MICHEAL JONES C.Eng.**  
Non Executive Director

**30 years of experience in mine management, corporate finance and corporate development**

- Regional Director for Investment & Business Planning at Hatch
- Corporate Development African Minerals
- Global Co-head mining Corporate Finance at Canaccord
- Various mining engineering roles at Gencor, DE Beers and Debswana

### MANAGEMENT

**ROBIN BIRCHALL MBA, M.Sc.**  
Chief Executive Officer

**18 years of experience in the investment banking, management and development of resource companies**

- Executive Chairman of Silver Bear Resources
- Co-Head of Forbes & Manhattan London
- V.P. Investment and Corporate Banking at BMO Capital Markets
- V.P. Corporate Finance at Canaccord

**WAJD BOUBOU MBA, B.Eng.**  
President

**29 years of experience in natural resources & telecommunications**

- Services Delivery Lead at Cisco Systems
- Service Delivery Manager at Schlumberger
- Business Development Manager at Atos Origin

**AAMER SIDDIQUI CPA, CA**  
Chief Financial Officer

**10 years of experience in financial and management advisory**

- Manager at Marelli Support Services
- Manager at Welch LLP

**THOMAS HORTON M.Eng, MBA**  
Vice President, Business Development

**13 years of sector experience in finance, business development and engineering**

- VP Corporate Development at Pembridge Resources
- Investment Executive at Duke Street Capital
- Project Engineer at AMEC Americas & Fluor Corp



# SHARE STRUCTURE

## Capital Structure and Major Shareholders



### MAJOR SHAREHOLDERS

RAB Capital	11%
Tribeca	2%
US Global	1%
Directors and Management	4%

TICKER	MARKET CAP	SHARE PRICE	52 WEEK RANGE	SHARES ISSUED
TSXV : EMM	C\$14.3 M	C\$0.14*	C\$0.35 – 0.04	102,253,234

	TOTAL	EXERCISE PRICE	EXPIRY
Options	7,637,500	C\$0.10 - C\$0.34	24/06/2021 – 10/03/2025
Warrants	8,856,000	C\$0.10 - C\$0.275	24/10/2021 – 15/05/2023


\* As of May 29, 2020

# CONTACT US



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 @GiyaniMetals

 #GiyaniMetals

# APPENDIX - BOTSWANA AS A MINING JURISDICTION

## Economic & Geopolitical Stability + Mature and Supportive Mining Sector

### STABLE ECONOMY TO INVEST IN

- Domestic pension fund assets account for 41 per cent of GDP (US\$7Bn) with 30% of which mandated to invest domestically<sup>1</sup>
- **Well established mining industry with investor friendly laws and processes for exploration, development and operations**
- Local currency is the Botswanan Pula. The currency is freely convertible and pegged against a basket of currencies including the South African rand
- **Longest serving democracy in Africa (independence in 1966)**
- Steady economic growth of 3.7% in the 12 months to September 2019 (5% previous 12 months)
- **Investment grade rating - A2 Stable<sup>2</sup>** (unchanged since 2001)
- Central Bank of Botswana benchmark interest rate 4.25% & headline inflation rate of 2.2%<sup>3</sup>
- Economy highly reliant on mining (20% of GDP & 88% of exports)<sup>4</sup> – which has been in decline in recent years
- One of only three African countries to offer a flat universal pension program<sup>5</sup>

1. OCED public data, 2019
2. Moody's April 2020
3. TradingEconomics.com April 2020
4. African Development Bank Group 2018
5. OECD Working Papers on Insurance and Private Pensions, 2009
6. Fraser Institute, Survey of Mining Companies 2019

### FISCAL ADVANTAGES FOR THE K.HILL PROJECT

- **One of the most attractive mining jurisdictions in Africa with political stability and transparency<sup>6</sup>**
- Government royalty is 3% for manganese
- No import taxes on mining equipment and spares
- **Potential to classify Giyani processing plant as *manufacturing*, which has a low corporate tax rate of 22%**
- Deduction of 100% of the mining capital expenditure incurred during the tax year with an unlimited carry forward of losses
- There is no mandatory national or governmental joint venture (JV) / free carry / Black Economic Empowerment (BEE) regulation. Debswana is the only JV, set up in 1969, with a 50/50 share between the government of Botswana and De Beers

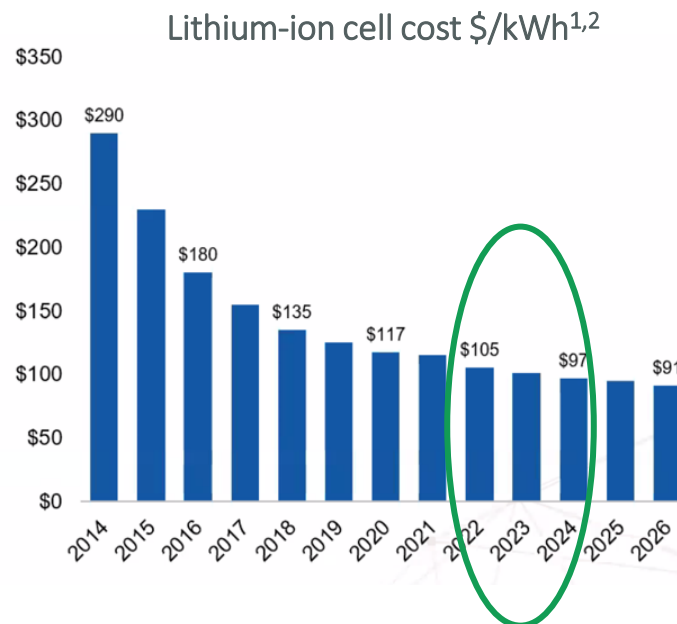
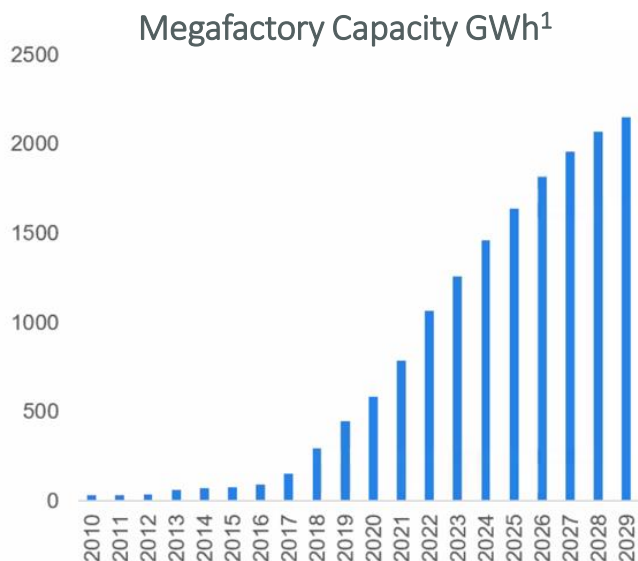


# APPENDIX - MASS ADOPTION OF EVS IMMINENT

## As BEVs Become Price Competitive with ICEVs Adoption will Accelerate

Over the next decade **130** individual lithium-ion Battery Megafactories are planned, which will produce a capacity of **2,397.5 GWh<sup>1</sup>**

Economies of scale drive down the cost of a lithium-ion battery below the **\$100/kWh - the point where the cost of a BEV ≈ ICEV**



BEVs Battery Electric Vehicles  
 ICEVs Internal Combustion Engine Vehicles  
 GWh Gigawatt hour  
 \$/kWh US\$ per Kilowatt hour

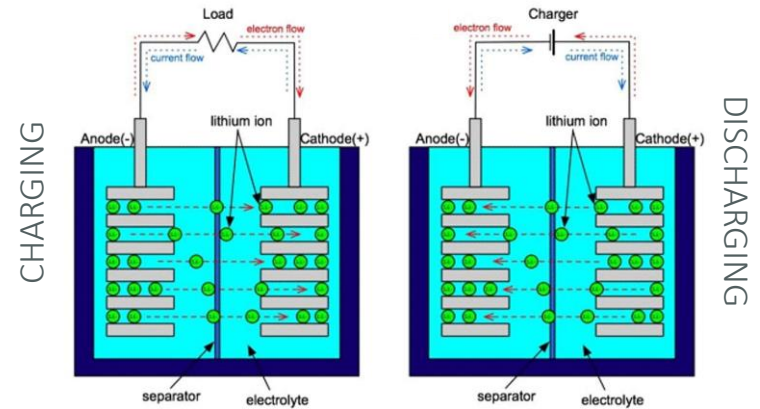
1. Benchmark Mineral Intelligence, March 2020  
 2. Assuming flat future raw material costs, excludes margin, module and pack costs, figure accounts for top 80% of producers by scale only

# APPENDIX – BATTERY CHEMISTRIES

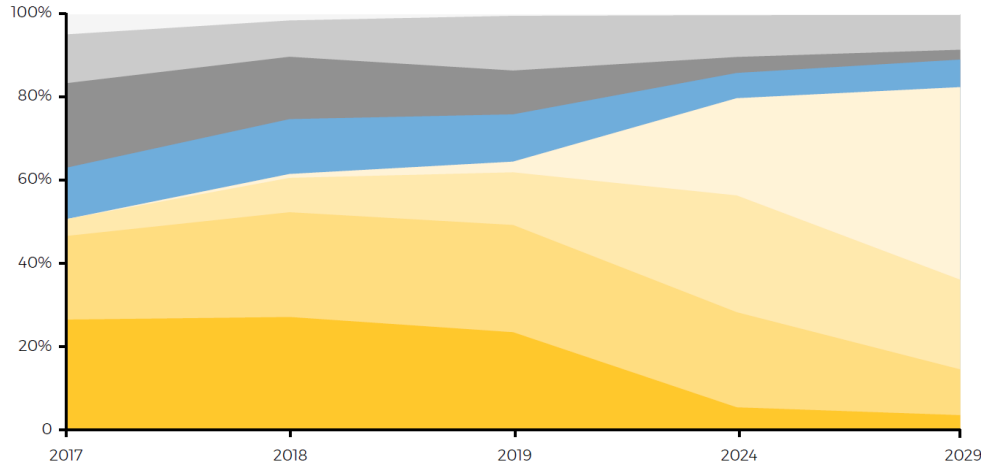
## Different Types Cathodes of Li-ion Batteries

### COMPARISON BETWEEN CURRENT CATHODE CHEMISTRIES

- The *lithium-ion* battery is an umbrella term used to describe a number of different cathode chemistries (NMC, NCA, LCO, LFP, LMO)
- The different elements contained in each chemistry have varying abilities to facilitate the shuttling of active lithium ions from the cathode and the anode or enhance cell capacity
- Each combination has its share of advantages and disadvantages
- NMC cathodes are the most widely used with 60% of global EV sales having NMC battery packs in 2019 - expected to be ~80% by 2029



### PRODUCTION CAPACITY BY CATHODE TYPE<sup>1</sup>



### TECHNICAL COMPARISON OF CATHODE TYPES<sup>2</sup>

Cathode Chemistry <sup>3</sup>	Specific Energy	Specific Power	Life Span	Safety	Cost
LMO	High	High	Fair	Good	Low
LFP	Low	High	High	V.Good	Fair
LCO	High	Fair	Fair	Fair	V.High
NCA	High	High	Fair	Fair	High
NMC 811	Higher			Fair	
NMC 622	↑	Fair	Low	↓	Low
NMC 523					
NMC 111	High			Good	

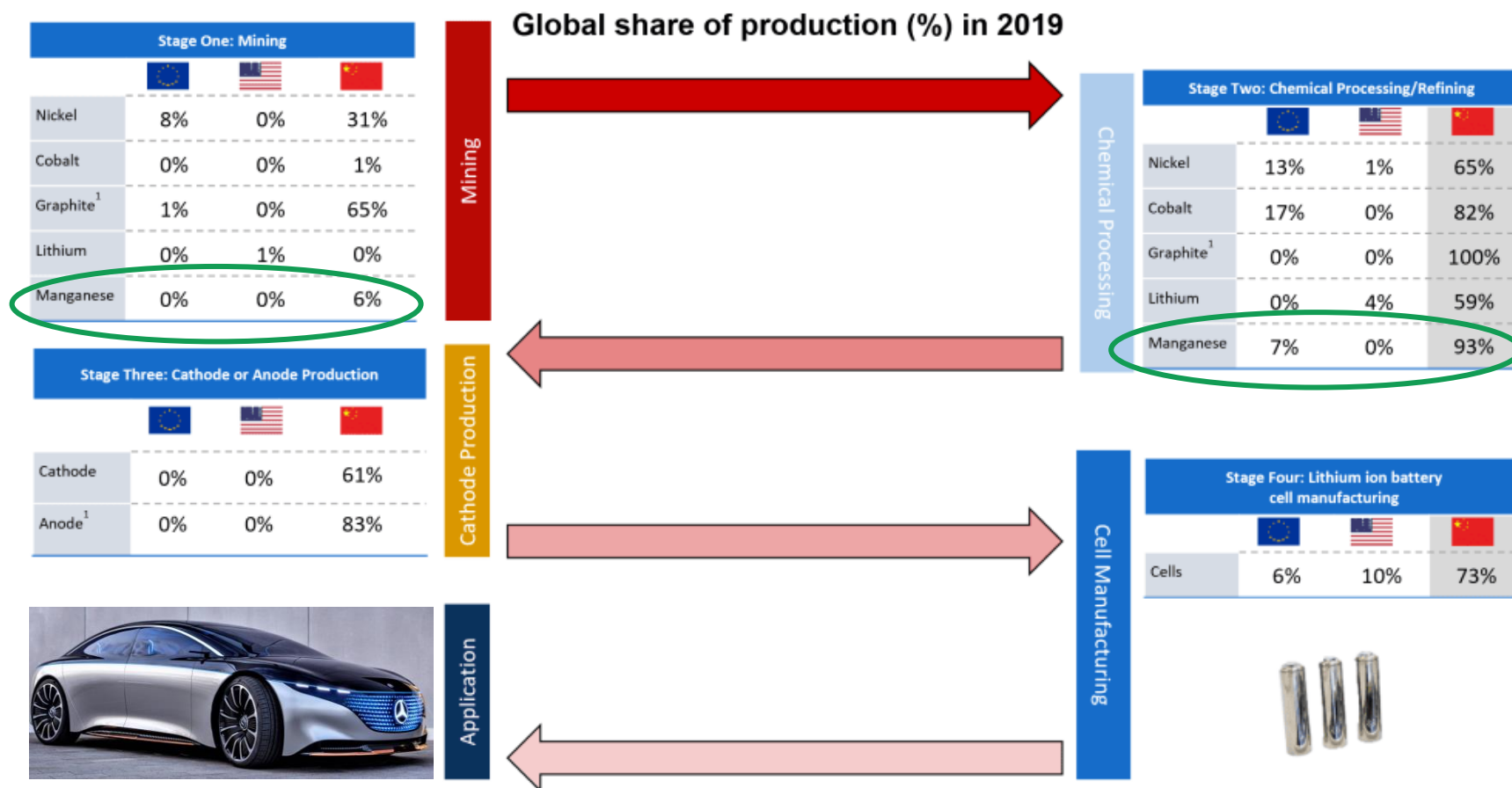
1. Benchmark Mineral Intelligence, Mega-factory Assessment April 2020

2. TIAX – PHEV Battery Cost Assessment, BMO Capital Markets, Publicly available industry research, Giyani Metals

Definitions: NMC - Lithium Nickel Manganese Cobalt Oxide, NCA – Lithium Nickel Cobalt Aluminium Oxide, LCO – Lithium Cobalt Oxide, LFP – Lithium Iron Phosphate, LMO – Lithium Manganese Oxide

# APPENDIX - FROM MINE TO MERCEDES

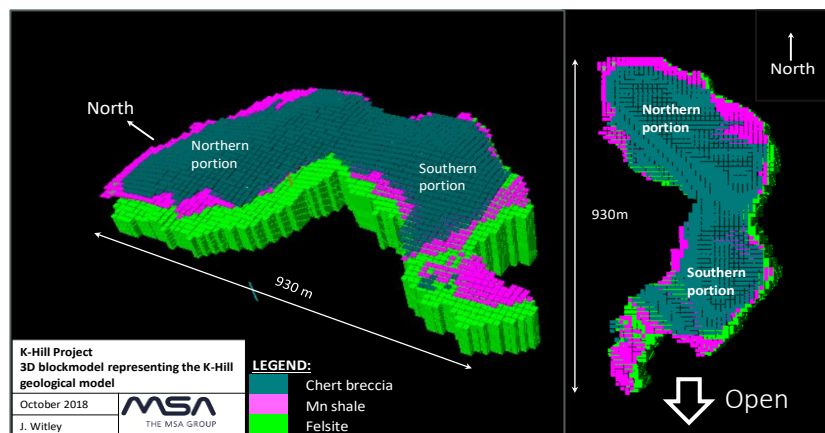
## The Lithium-Ion Battery Supply Chain<sup>1</sup>



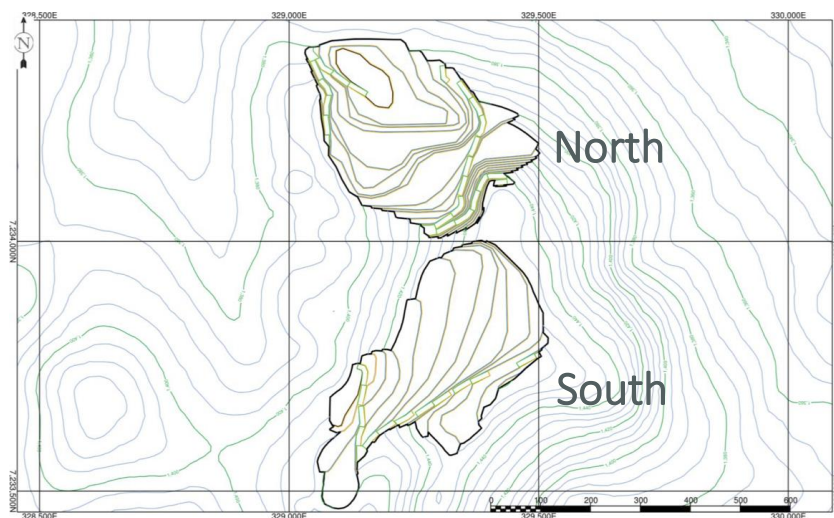
1. Benchmark Mineral Intelligence, new lithium-ion battery supply chain data exposes manganese weaknesses. March 2020

# APPENDIX – K.HILL DEPOSIT

## Mining, Processing and Upside



Block Model of K.Hill Resource



April 2020 PEA Pit Design

### MINING & PROCESSING CHARACTERISTICS

- Low tonnage mining – 175,000tpa operation
- Life of Mine stripping ratio of 7.3:1
- 3 months for pre-stripping in year 1
- Small mining fleet:
  - X4 30t dump trucks
  - X2 excavators
- US\$3.56/t rock mined & US\$276.45 ore processed
- 87.5% total process recovery
- Total Cash Cost of US\$1,855 per tonne (HPEMM)

### THE UPSIDE

- Following reserve drilling program, resource & reserves will be remodelled with the aim that the two pits will join into one large pit – increase tonnage and improving economics
- Additional exploration to the south expected to delineate additional mineralisation
- K.Hill PEA does not include inclusion of Otse & Lobatse