

## **NEXT PHASE OF THE FIREBIRD GROWTH STRATEGY**

**Firebird Metals Limited (ASX: FRB, "Firebird" or "the Company")** is pleased to announce an updated corporate strategy that is aiming to position the Company to supply directly into the growing battery market.

Since listing in 2021, Firebird has delivered significant and rapid progress at its flagship Oakover Project ("**Oakover**") to mine and sell manganese and is now set to transition to the next stage of strategic growth.

The specific strategy has been established to develop Firebird into a near-term producer of battery-grade MnSO<sub>4</sub> (high-purity manganese sulphate), which is a key cathode material in LMFP (Lithium, Manganese, Iron and Phosphate) batteries for electric vehicles.

Importantly, 2023 is seen by many industry participants as the beginning of the new era of batteries by commercialising LMFP.

Firebird has completed extensive research in China on the high-purity manganese sulphate market and through multiple trips has developed relationships with several Chinese manganese sulphate experts. Following this period of due-diligence, the Company is well-advanced on an in-house scoping study on assessing processing and location requirements for a plant in China.

Execution of the LMFP growth strategy will place Firebird at the forefront of manganese sulphate production to meet further downstream aspirations of becoming an cathode producer and in a strong position to benefit from growing demand for LMFP.

Commenting on the Company's next major growth push, Firebird Managing Director Peter Allen said, *"We are very pleased to reveal our plans for the Company's next phase of major growth. We have delivered strong progress on the ground at Oakover, which included the production of battery grade manganese sulphate through metallurgical test work programs.*

*"We have been assessing the forecasted growth trajectory of LMFP batteries for several months now and have developed the LMFP growth strategy, to ensure Firebird is positioned to benefit from the growing demand of this new-generation battery. We have a vision of becoming a global leader in the manganese industry by seamlessly combining mining and downstream processing, with a profound dedication to the advancement of the battery sector. Execution of this strategy is the next step in this pursuit.*

*"We have spent a lot of time doing our due diligence on the LMFP strategy, which has included several trips to China to assess plant locations and meeting with potential team members. We look forward to completing a Chinese sulphate scoping study and sharing our findings with our shareholders in the coming months.*

*"LMFP demand is expected to explode over the next decade and delivery of this strategy will see Firebird become a key producer, while we continue to develop our flagship Oakover Project into*

*Western Australia's next major manganese operation to further expand into the manganese sulphate production."*

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**About Firebird Metals Limited**

Firebird Metals is a manganese developer focused on its advanced, 100% owned project portfolio, located in the renowned East Pilbara manganese province of Western Australia. The portfolio boasts a total Resource of 234Mt, with exciting exploration and development growth upside.

The Company's flagship Oakover Project holds a Mineral Resource Estimate of 176.7Mt at 10% Mn, with 105.8Mt in an Indicated category. A Scoping Study completed by Firebird at Oakover highlighted the outstanding long-term potential of the Project as a manganese operation. This potential was further strengthened through production of >99.8% purity manganese sulphate monohydrate crystal, which confirmed Oakover manganese ore can be processed into battery grade HPMSM.

The Company's other key Projects are Hill 616 and Wandanya which provide Firebird with compelling growth opportunities.

Hill 616 contains an Inferred Mineral Resource of 57.5Mt @ 12.2% Mn and shares similar geological traits to Oakover. Wandanya is a high-grade exploration opportunity, with Direct Shipping Ore potential.

Importance of manganese within EV's, due to its cost reduction abilities without reducing energy density and range, along with growing demand for battery grade manganese sulphate, highlights the critical need for projects like Oakover to become operational mines. With a limited number of advanced ASX manganese developers, Firebird is in a strong position to develop Oakover and supply a high-quality product into a growing and supply-constrained market.

The Company is committed to generating sustainable long-term value and growth for stakeholders, through the implementation of best practice exploration methods while prioritising the well-being, health and environmental protection of its employees and communities it operates in.

*Note:*

*For full details of the Oakover Mineral Resources estimate, please refer to Firebird's ASX release dated 10th March 2022 and 23 March 2023 and For full details of the Hill 616 MRE refer ASX announcement dated 1/12/2021*

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# CORPORATE PRESENTATION STRATEGY TO GROW INTO A GLOBAL CATHODE PRODUCER

September 2023

ASX:FRB

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Firebird is not aware of any new information or data that materially affects the information included in its announcement dated 30 August 2023, and all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

## **JORC Compliance Statement**

This announcement contains references to Exploration Results and Mineral Resource Estimates, which have been extracted from previous ASX announcements as referenced. For full details of Exploration Results and Mineral Resource Estimates in this release that have been previously announced, refer to those announcements.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the said announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

# EMERGING MANGANESE DEVELOPER FOR ANB ELECTRIFIED WORLD

**Well-defined vision and strategic framework**

**Poised to capitalise on the exponential surge in Li-ion and Na-ion battery demand**

**Flagship Oakover Project**

**177Mt Resource, with 106Mt in an Indicated Category**

**Updated Oakover DMS Manganese Concentrate Scoping Study**

**~ 1.2Mtpa 30-32% Mn Conc**

**18-year Life-of-Mine**

**NPV: A\$741.3 M**

**IRR: 73.1%**

**Oakover ore suitable to produce battery-grade MnSO<sub>4</sub>**

**Primary objective to grow Firebird into a globally operational, ESG-compliant and fully integrated producer of manganese-based cathode materials**

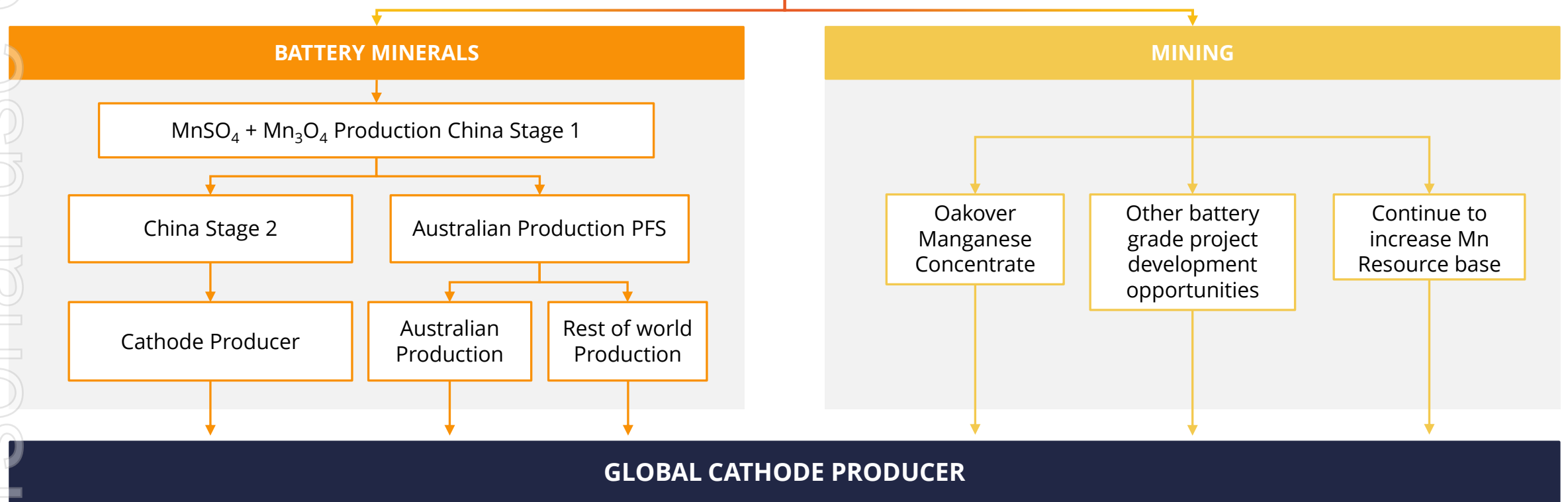
**Firebird team possesses extensive manganese experience, along with access to leading process and production specialists, providing the necessary platform to execute Company's vision**

# THE FIREBIRD VISION

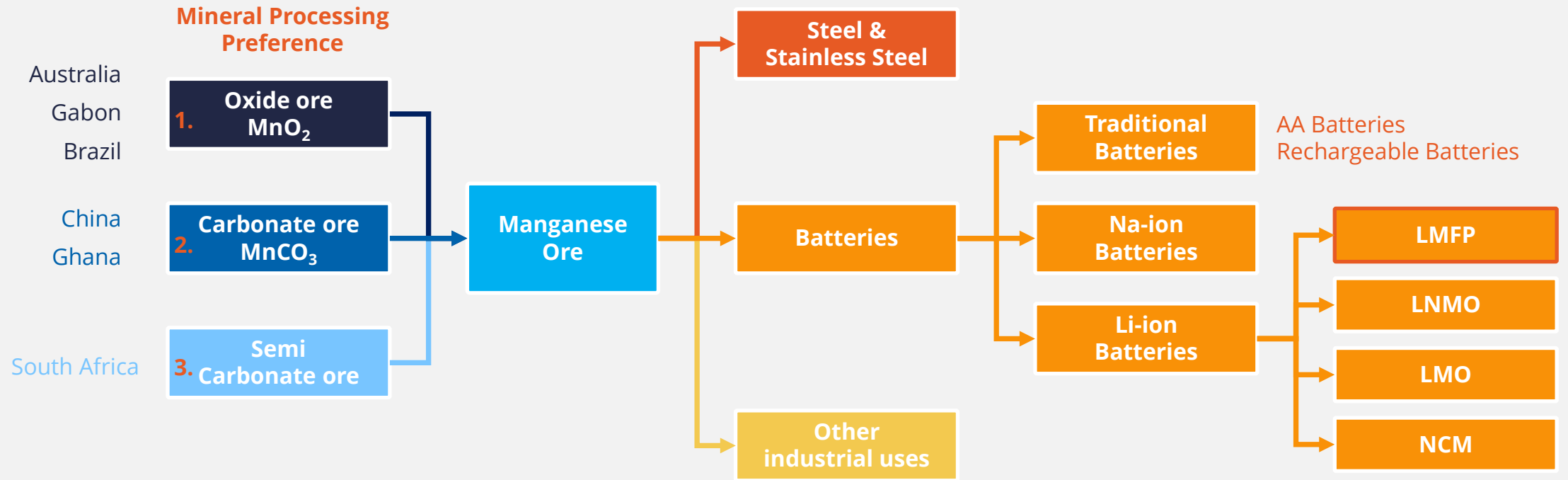
## FRB VISION

**Become a global leader in the manganese industry by seamlessly combining mining and downstream processing, with a profound dedication to the advancement of Li-ion & Na-ion battery sectors.**

**By harnessing the power of innovation and sustainability, Firebird aims to play a pivotal role in shaping the future of energy storage solutions and significantly contributing to a more sustainable and electrified world.**



# MANGANESE (MN) AND ITS USES – RAPID GROWTH IN BATTERIES



## Some facts about Mn

- Seaborne priced in CIF (delivered port of discharge)
- Priced in USD per DMTU (Dry Metric Tonne Unit) or 1%
- High grade >40%, medium grade >30%
- Roughly 60MT seaborne ore traded and China buys 30MT

## Battery terms

**EMD**  
**EMM**  
**HPMSM**

Electrolytic Manganese Dioxide  
Electrolytic Manganese Metal  
Battery Grade Mn Sulphate & High Purity MnSO<sub>4</sub> & HPMSM means the same

**Li-ion**

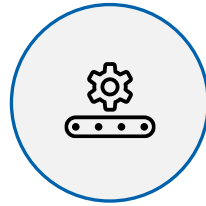
LMFP - Li Mn Fe PO<sub>4</sub>  
NCM - Ni Co Mn  
LMO - Li Mn O  
LNMO - Li Ni Mn O

# MANGANESE PROCESS FOR BATTERIES

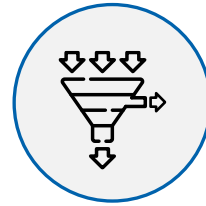
## Mn Concentrate Process



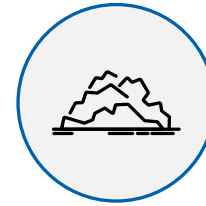
Mining



Crushing, Screening,  
Scrubbing

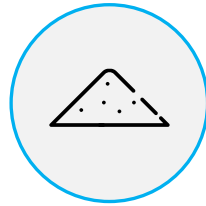


DMS



Concentrate

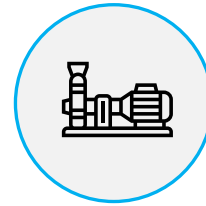
## Value add: MnSO<sub>4</sub>



Battery Grade  
MnSO<sub>4</sub> powder



Crystallisation



Purification

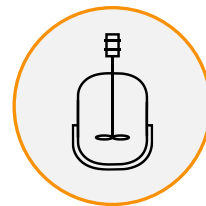


Leaching

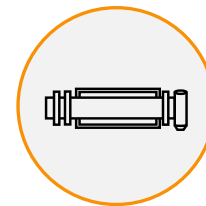
## Value add : Cathode material



Battery Grade  
MnSO<sub>4</sub>  
dissolution



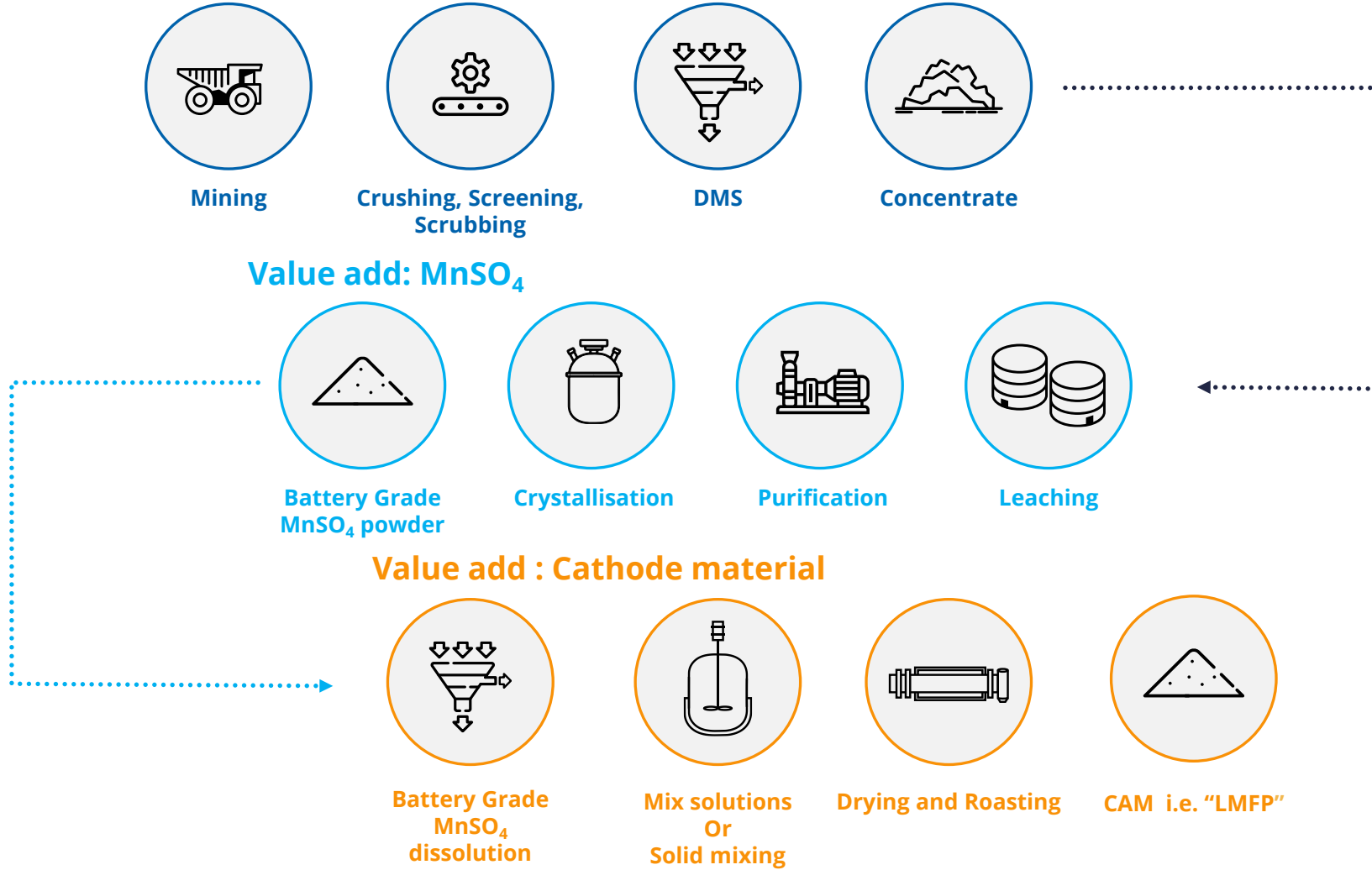
Mix solutions  
Or  
Solid mixing



Drying and Roasting



CAM i.e. "LMFP"



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# GROWING IMPORTANCE OF MANGANESE IN BATTERIES

# MANGANESE USES IN BATTERIES

## Traditional Uses

- Manganese (Mn) has a long history of being a cathode material for batteries in the form of Electrolytic Manganese Dioxide (EMD) and in its natural form
- Current production market sizes are 482kt in China and 107kt for rest of the world

## Manganese Lithium-ion Batteries

- Mn is used Li-ion batteries, for example NCM, LMO and LMFP
- Even though Mn content is not the highest in LMFP, the size and growth of market is potentially the largest in medium to long term

## Na-ion Batteries

- Na-ion batteries inherently have lower density
- Sodium batteries contains around 30% Mn

Research and advocates for manganese rich batteries is on the rise, due to Manganese being abundant and relatively inexpensive compared with nickel and cobalt. For example, Tesla plans to have 2/3 of their batteries as manganese based.

**Ford F150**  
65-95 kg/Mn



**VW ID.4**  
40-60 kg/Mn



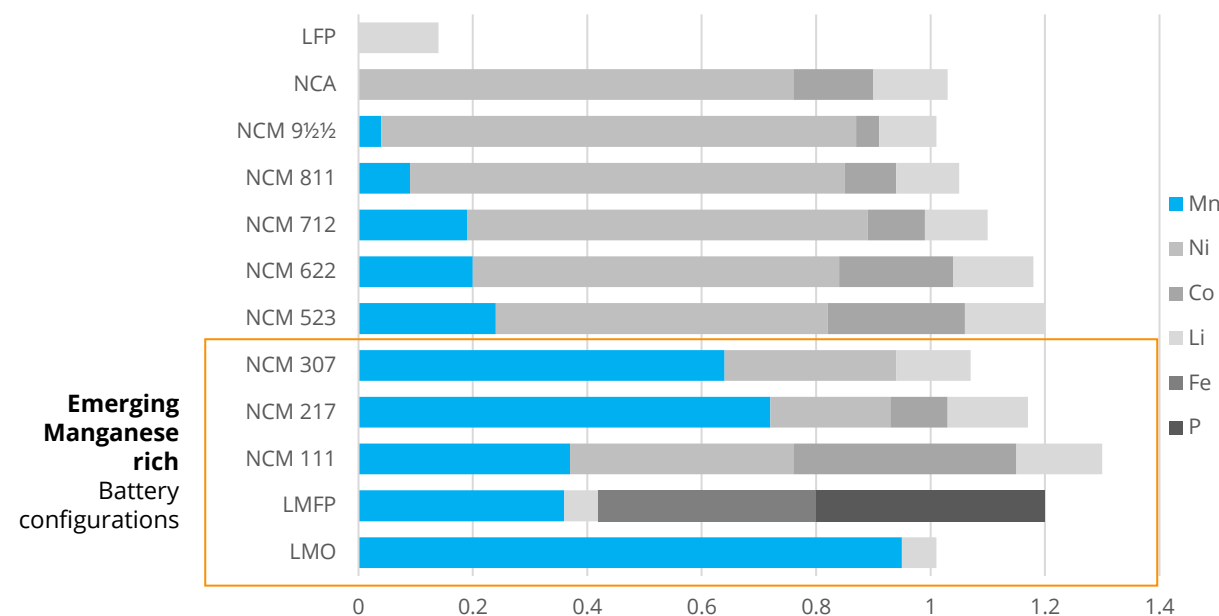
**Chevrolet Bolt**  
30-40 kg/Mn



Manganese content (kg) in per battery in each vehicle above

Source: Benchmark Mineral Intelligence

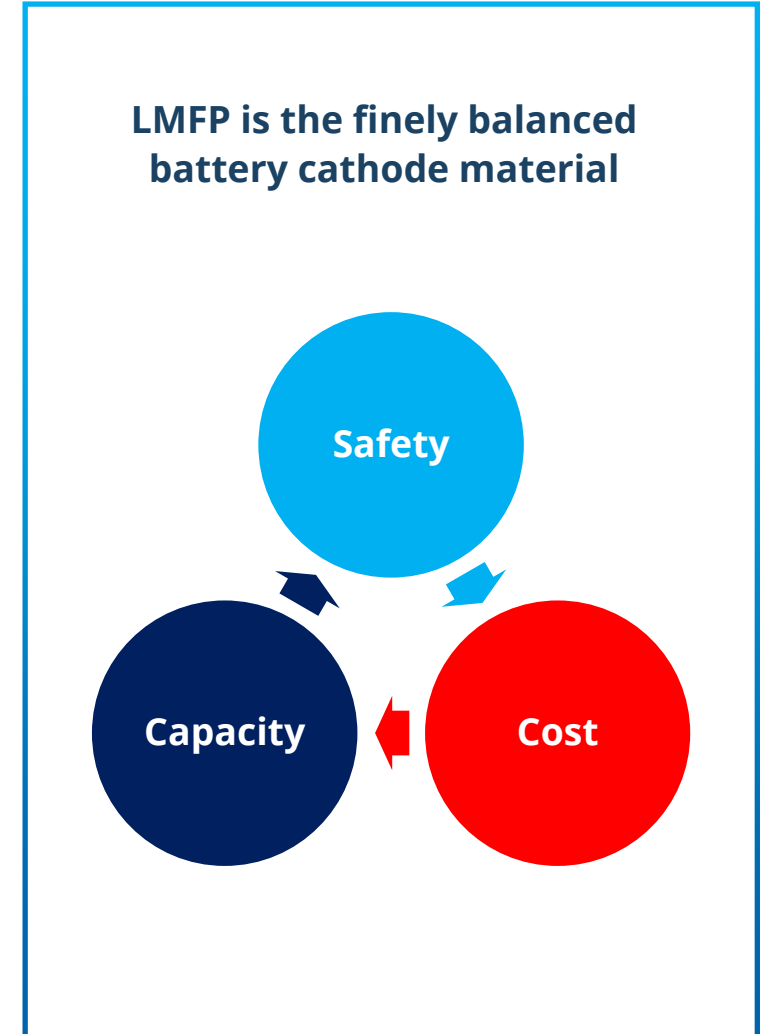
Indicative Metals Intensity By Battery Type



Source: Benchmark Mineral Intelligence and company research

# LI-ION BATTERY – LITHIUM MANGANESE IRON PHOSPHATE (LMFP)

- There is no perfect Li-ion battery cathode mix: the three key considerations for battery manufactures are **Safety, Cost and Capacity**
- Phosphate (LFP) based batteries are safer and cheaper to manufacture, whereas Ternary batteries have more capacity, they are more expensive and not as safe as Phosphate based batteries
- LMFP is an upgrade from LFP by introducing manganese to replace iron
  - Manganese enhances the voltage platform, increasing energy density
  - Adding Mn increase capacity by 15-20%, nearing mid-range Ternary batteries
  - Flexible, used on its own or mixed with Ternary batteries
- The rise of LMFP is imminent
  - LFP battery capacity is reaching its theoretical energy density capacity
  - Battery manufacturing technology limits the amount of cathode material to be placed in cells
  - LMFP fits strategies of end users: cheaper, safer & provides strong range
- **2023 is seen by many industry participants as the beginning of the new era of Li-ion batteries by commercialising LMFP**



# INCREASING USE OF LMFP BY CAR MANUFACTURERS



LUXEED S7 (3<sup>rd</sup> quarter 2023 release) uses CATL M3P+TERNARY



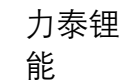
New TESLA Model 3 uses CATL M3P

*Tesla has stated plans to have two thirds of their batteries as manganese based*

## Battery Manufacturers



## Cathode Material Manufacturers



# COMMERCIALISING OF LMFP SETS A NEW ERA FOR LI-ON BATTERIES

## LMFP ADVANTAGES

VS

## LMFP CHALLENGES & ADVANCEMENTS

### LFP

- Similar production process
- Increase in energy density by 15-20%
- Better performance in low temperature environment

### TERNARY

- Policy makers in China encourage more safer batteries
- Olivine structure = safer & more stable
- Cheaper cost by a large margin

### Dual Voltage System

- ✓ Right level of Mn/Fe mix
- ✓ Better mixing methods

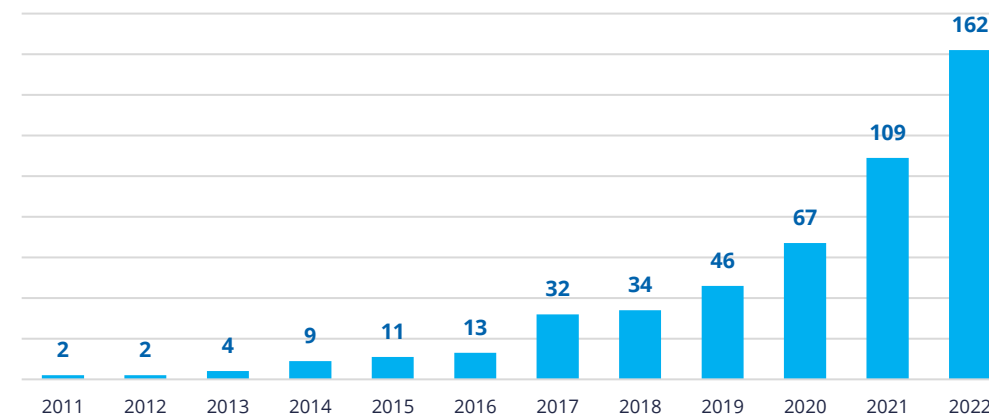
### Poor Conductivity

- ✓ Nanometerisation
- ✓ Carbon coating
- ✓ Metal doping

### Effort in R&D

- ✓ Significant increase in patents yoy

No. of LMFP patents registered per year



## Cathode Comparison

	LMFP	LFP	NCM
<b>Structure</b>	<b>Olivine</b>	Olivine	Layered
<b>Capacity (mAh/g)</b>	<b>135-145</b>	142-145	150-215
<b>Voltage</b>	<b>3.2-3.9</b>	3.2	3.7
<b>Charging Cycling</b>	<b>2,000-2,500</b>	4,000-10,000	1,000-3,000
<b>Energy Density (Wh/kg)</b>	<b>160-240</b>	150-210	200-320
<b>Compacted Density (g/cm<sup>3</sup>)</b>	<b>2.3-2.4</b>	2.2-2.6	3.4-3.7
<b>Low Temperature Performance</b>	<b>Good</b>	Poor	Better
<b>High Temperature Performance</b>	<b>Better</b>	Better	Average
<b>Safety</b>	<b>Good</b>	Good	Poor
<b>Cost</b>	<b>Low</b>	Low	High

# COMMERCIALISING OF LMFP SETS A NEW ERA FOR LI-ON BATTERIES

## Potential Market size?

- IMI estimates >3.1Mt MnSO<sub>4</sub> by 2040, a massive increase considering in 2012, demand was 32kt
- Existing capacity is 600kt for both battery grade and fertiliser manganese sulphate
- 10-15Mt of LFP planned and in production, if converted to LMFP, it is material to MnSO<sub>4</sub>

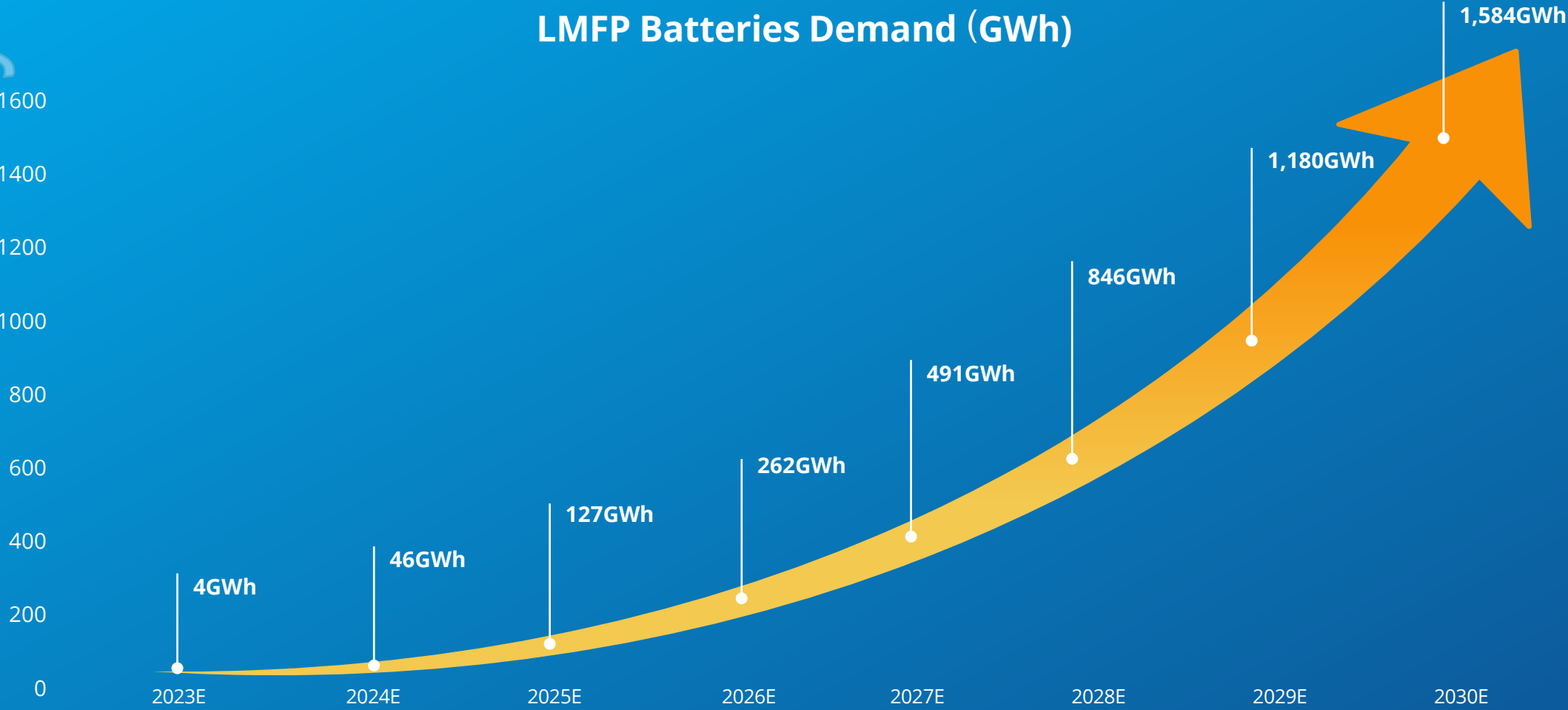
## LMFP Demand Forecast (excluding current manganese use in batteries)

	Unit	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Global Demand in EV	GWh	879	1,183	1,626	2,152	2,739	3,385	4,106	4,853
LFP penetration rate	%	42%	45%	46%	46%	47%	47%	49%	50%
LFP Demand	GWh	373	531	750	998	1,279	1,607	1,993	2,419
Ternary Batteries penetration rate	%	58%	55%	54%	54%	53%	53%	51%	50%
Ternary Batteries Demand	GWh	506	652	876	1,155	1,460	1,778	2,113	2,434
<b>Forecast LMFP to replace LFP</b>	<b>%</b>	<b>0.5%</b>	<b>6.5%</b>	<b>13.0%</b>	<b>20.0%</b>	<b>30.0%</b>	<b>40.0%</b>	<b>45.0%</b>	<b>50.0%</b>
<b>Forecast LMFP to mix with Ternary</b>	<b>%</b>	<b>0.2%</b>	<b>1.5%</b>	<b>3.0%</b>	<b>5.0%</b>	<b>7.0%</b>	<b>11.0%</b>	<b>13.0%</b>	<b>15.0%</b>
Total LMFP Demand	%	0.4%	3.7%	7.5%	11.8%	17.5%	24.5%	28.2%	32.1%
<b>LMFP Batteries Demand</b>	<b>GWh</b>	<b>4</b>	<b>46</b>	<b>127</b>	<b>262</b>	<b>491</b>	<b>846</b>	<b>1,180</b>	<b>1,584</b>
Growth rate yoy	%	/	1157.8%	177.8%	106.5%	87.6%	72.1%	39.6%	34.2%
Equivalent MnSO <sub>4</sub> required	kt	3	62	156	343	624	1,092	1,716	2,278

Source: Soochow Securities 16-8-23

# COMMERCIALISING OF LMFP SETS A NEW ERA FOR LI-ON BATTERIES

## LMFP Batteries Demand (GWh)



Source: Soochow Securities 16-8-23

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# THE FIREBIRD LMFP PRODUCTION STRATEGY



# THE FRB LMFP GROWTH STRATEGY

## EXPERIENCED TECHNICAL TEAM & KEY DIFFERENTIAL QUALITIES

- Oakover ore suitable to produce battery-grade MnSO<sub>4</sub>
- Extensive research of Chinese MnSO<sub>4</sub> market
- Access to Chinese manganese sulphate experts with >25 years MnSO<sub>4</sub> experience
- In-house Scoping Study underway on Chinese process and location
- Timeline, potential tonnages and equipment requirements included in Chinese Scoping Study
- We understand the Chinese market
- Environmentally friendly process in China - All tailings become input materials to other industrial plants
- Use of Chinese technology to drive efficiencies



Oakover battery grade MnSO<sub>4</sub>

**Execution of this strategy will place FRB in a strong position to benefit from the growing demand for LMFP**

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# FIREBIRD PROJECT PORTFOLIO

# MANGANESE RESOURCES SNAPSHOT

Significance of the Company's flagship Oakover Project cannot be underestimated from the perspective of world supply, with continued decline of worldwide Mn production grades and limited number of ASX manganese developers

## GHANA (~6% of Seaborne Trade)

- **Full carbonate ore**
- Overall grade decreasing
- 27% Mn
- Production grown under Chinese ownership

## GABON (~20% of Seaborne Trade)

- **Oxide Ore**
- Only country to significantly increase high grade (>40% Mn) ore production

## SOUTH AFRICA (~50% of Seaborne Trade)

- Semi Carbonate
- Overall grade decreasing
- **Production mainly 35-37% Mn (semi-Carbonate ore)**
- Grown from 18% in 2011 to 39% in 2022 of World (IMnI)
- However, plagued with logistics issues
- **Semi Carbonate most suited to steel production**

## CHINA

- **Mainly carbonate ore**
- Combination of depleting resources and environmental policies making mines unprofitable
- Overall grade decreasing
- Production decreasing
- Largest market for Mn ore
- Imports grow each year (currently ~30Mtpa)

## AUSTRALIA (~16% of Seaborne Trade)

- **Oxide ore**
- Overall grade and production decreasing
- Several existing producers
- Some of existing mines approaching end of mine life and processing tailings

# PROJECT PORTFOLIO

## OAKOVER (FLAGSHIP)

- Large resource with strong growth upside
- Near-surface, gently dipping geology and multiple processing options
- Metallurgical test work demonstrated saleable 30 - 32% Mn Concentrate product achievable
- Hydrometallurgy test work demonstrates Battery Grade MnSO4 achievable
- Concentrate DMS Scoping Study – 18-year mine life, 1.2Mtpa with low strip ratio and mining costs
- Concentrate DMS Scoping Study - Low CAPEX optionality

Mineral Resource Classification	Tonnes (Mt)	Mn (%)	Fe (%)	SiO2 (%)	Al2O3 (%)	P (%)
Indicated	105.78	10.1	8.9	39.2	9.8	0.10
Inferred	70.87	9.6	8.0	36.5	9.5	0.09
<b>Total</b>	<b>176.65</b>	<b>9.9</b>	<b>8.6</b>	<b>38.1</b>	<b>9.7</b>	<b>0.10</b>



## HILL 616

- 35km south of Oakover
- 57.5 Mt @12.2% Mn Inferred Mineral Resource
- Similar geology to Oakover

## WANDANYA

- Exploration focused, high-grade, Direct Shipping Ore potential
- 50km southwest of world class Woodie Woodie Manganese Mine
- Rock chip results up to 64.9% Mn and 55.2% Mn

# CONCENTRATE SCOPING STUDY UPDATE – KEY RESULTS

- **Results confirm Oakover as long-life, high-quality operation, supported by an 18-year LoM, A\$741.3 M NPV and IRR of 73.1%**
- Updated Study followed 80% uplift in Indicated Resource at Oakover to 105.8Mt
- Study assessed two production scenarios, both utilising simple processing, crush, screen, scrub and Dense Media Separation (DMS) beneficiation:
  - **Scenario one: Full production from start-up**
    - ~4Mtpa processing
    - ~1.2Mtpa of 30% - 32% Manganese (Mn) concentrate
  - **Scenario two: 2-Stage development with a low-cost capital start-up**
    - ~1.5Mtpa processing for first 3 years, then ramp up to ~4Mtpa processing for the following 17 years
    - Producing ~500ktpa for the first 3 years then ramping up to ~1.2Mtpa of 30 - 32% Mn concentrate
- FRB to pursue scenario one, due to highly attractive economics and Oakover commencing full-scale production from year-one
- Mining & production profile
  - Low mine strip ratio of 0.45:1
  - Indicated material accounts for 99.2% of the material processed





# CONCENTRATE SCOPING STUDY UPDATE – KEY RESULTS

	Production	CAPEX	NPV (Pre tax with 8% disc rate)	IRR (Pre tax)	Average EBITDA (Pre tax)	Mine Life	Production 30% Mn Conc dry tonnes
<b>Scenario One</b>	1.2Mtpa	\$123 M	\$741.3 M	74.80%	\$85.60	18 years	22.26Mt
<b>Scenario Two</b>	0.5Mtpa Increasing to 1.2Mtpa	Stage 1 \$74.3M Stage 2 \$61.20M	\$598.90 M	50%	\$76.3	20 years	22.26Mt

## Indicative Time-Line

Activity	23	CY 2024				CY 2025			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Met Test Work	Full Quarter	Full Quarter	Full Quarter						
Environmental Baseline Surveys		Full Quarter	Full Quarter						
Feasibility Study	Full Quarter	Full Quarter	Full Quarter						
Environmental Approvals	Full Quarter	Full Quarter	Full Quarter	Part Quarter	Full Quarter				
Secondary approvals (Mining, Water, Heritage, Works Approval)				Part Quarter	Full Quarter	Full Quarter			
Detailed Engineering & Procurement			Full Quarter	Full Quarter	Full Quarter				
Construction						Full Quarter	Full Quarter	Full Quarter	Full Quarter
Commissioning									Full Quarter

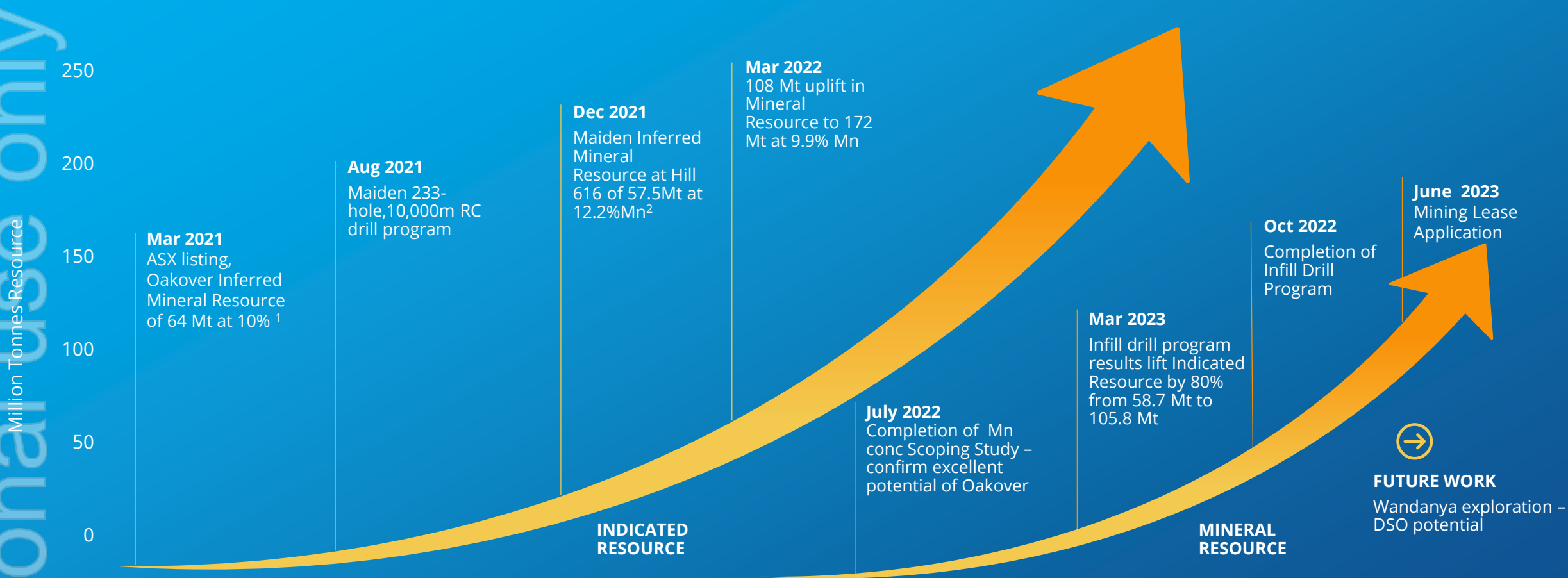
 Full Quarter  
 Part Quarter

## Environmental survey

- Base Line – Phase 1 Flora and Vegetation surveys complete
- Phase 2 will include second season flora and vegetation terrestrial fauna surveys planned for coming months
- Phase 1,2 and 3 sub terranean fauna surveys complete
- Onsite surface and ground water investigations planned for late 2023 / early 2024

# RAPID AND SUCCESSFUL MINERAL RESOURCE DEVELOPMENT

Since listing in early 2021, FRB has rapidly grown and developed its project portfolio, with a key focus on Oakover



Notes  
 1. For Full Details refer ASX announcement "Prospectus" dated 16/3/2021  
 2. For Full details refer ASX announcement "Hill 616 Maiden inferred Resources increases Mn 90%" dated 1/12/2021  
 3. For full details refer ASX announcement "Game Changing Resource Upgrade at Oakover" dated 10/3/2022  
 4. For Full details refer ASX announcement "Firebird grows Oakover Indicated Resource by 80% to 105.8 Million Tonnes" dated 23/3/2023

**Firebird’s ESG methodology plays a crucial role in our planning and business operations, including:**

**CORPORATE GOVERNANCE SYSTEM**

Establishing a sound corporate governance structure to ensure transparency, accountability, and compliance. This includes effective board operations, reasonable executive compensation, information disclosure, and risk management.

**HUMAN RESOURCES MANAGEMENT SYSTEM**

Focusing on employee welfare, training, development, and diversity and inclusion. Establishing fair employment policies, measures to protect labour rights, ensuring employee health and safety, and providing career development and equal opportunities.

**SUPPORT FOR LOCAL COMMUNITIES**

Actively engaging with local communities and taking measures to protect the local environment, promote social welfare and economic development. This includes communication and collaboration with local residents and stakeholders, involvement in community projects, and corporate social responsibility activities.

**OPERATIONAL MANAGEMENT**

Paying attention to environmental protection, resource efficiency and carbon emissions reduction. By adopting sustainable operational practices, such as energy management, waste management and environmental monitoring, Firebird aims to reduce the consumption of natural resources and minimise environmental impact.

**By integrating the ESG methodology into planning and business practices, Firebird strives to ensure sustainable and responsible outcomes in terms of environment, society and corporate governance, while actively addressing future challenges and opportunities.**

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# CORPORATE SNAPSHOT



## **EVAN CRANSTON** Chairperson

Mr Cranston is an experienced mining executive, with a background in corporate and mining law



## **PETER ALLEN** Managing Director

Mr Allen is a mining executive, with more than 20 years' experience in marketing of manganese, lithium and a range of other commodities



## **WEI LI** Finance Director

Mr Li is a Chartered Accountant with extensive experience in the resource industry. Mr Li managed a private base metal exploration company in the Northern Territory and assisted in commissioning a A\$150 million Electrolytic Manganese Dioxide (EMD) plant in Hunan China



## **ASHLEY PATTISON** Non-executive Director

Mr Pattison has over 20 years' experience in the resources sector from both a corporate finance and operational perspective. Qualified as a chartered accountant, he has extensive experience in operations, finance, strategy and corporate finance



## **BRETT GROSVENOR** Non-executive Director

Mr Grosvenor is an experienced mining executive, with over 25 years' experience in the Mining and Power industry. Holding a dual tertiary qualification in Engineering and a Master in Business

<b>Firebird Metals Limited</b>	<b>ASX:FRB</b>
Share price as of 30/8/2023	\$0.135
Shares on issue	73.07 M
<b>Market capitalisation</b>	<b>\$10 M</b>
Options @ \$0.30	8 M
Options @ \$1	10 M
Performance rights	3.3 M
<b>Cash on Hand (30th June 2023)</b>	<b>\$1.3 M</b>

## **Major Shareholders**

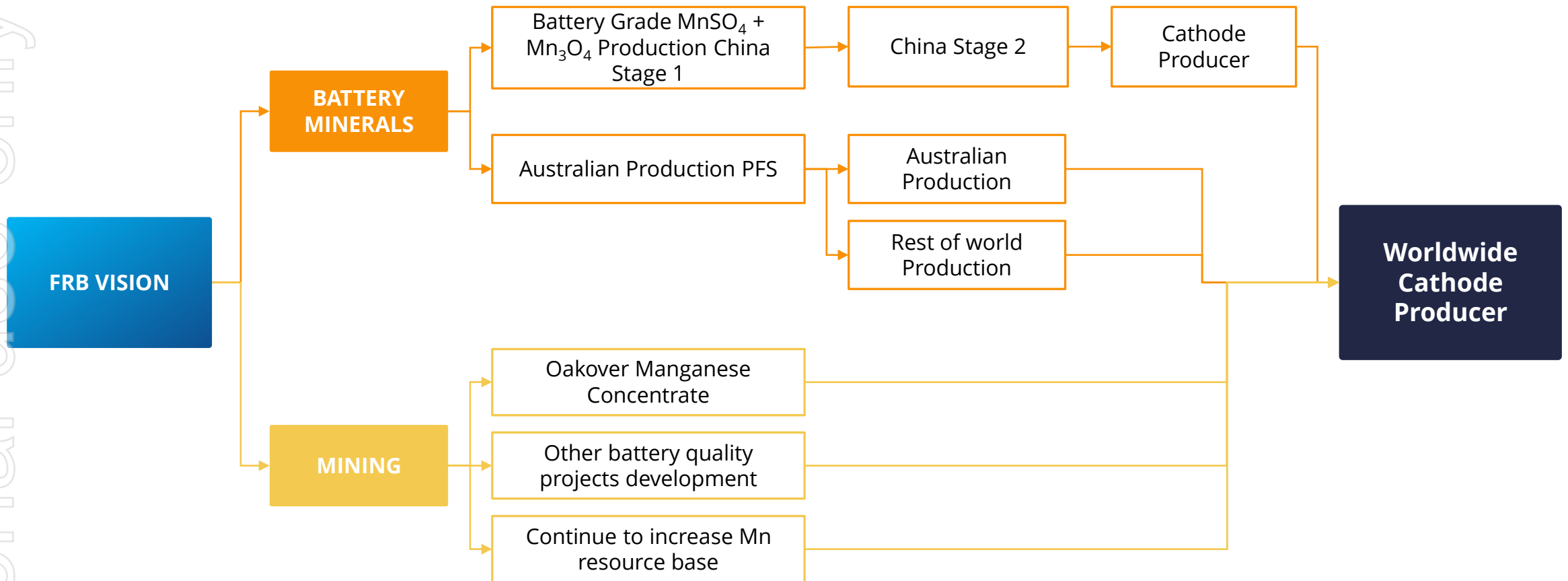
Tolga Kumova	8.4%
Mining Equities	4.9%
Board (incl related parties) & management	7.6%
Top 20 shareholders	52%

# PLATFORM SET TO BECOME A GLOBAL CATHODE PRODUCER

- ➔ **Dedicated to execution of the LMFP growth strategy which will place Firebird as a key cathode producer and in a strong position to benefit from the growing demand for LMFP**
- ➔ **Advanced in planning for potential site for processing plant in China and assembling a highly-experienced in-country team of Manganese sulphate experts**
- ➔ **Updated manganese concentrate Scoping Study results reinforce Oakover as long-life, high-quality operation underpinned by an 18-year Life-of-Mine, A\$741.3 M NPV and IRR of 74.8%**
- ➔ **Growing use and demand for Manganese in batteries continue to rise. Due to the low number of ASX-manganese developers and increasing use of LMFP by car manufacturers, Firebird is in a strong position to benefit from this growing market**
- ➔ **Led by an experienced and proven management and Board who have built companies that generate significant shareholder returns**

# SUMMARY – FIREBIRD VISION

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**THANK YOU**

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[www.firebirdmetals.com.au](http://www.firebirdmetals.com.au)