

## **SUBSTANTIAL LOW-COST FINANCIAL SUPPORT FOR BATTERY GRADE MANGANESE SULPHATE PLANT**

### **HIGHLIGHTS**

- Strong progress and ongoing support received from the Jinshi Government, China Construction Bank (Jinshi division) and leading chemical engineering contractor, China National Chemistry Southern Construction and Investment Co Ltd (“China Chemical”), for the development and construction of the Company’s Battery-Grade Manganese Sulphate Plant (“Plant”), to be located in the Jinshi High-Tech Industrial Park, Hunan Province
- **Combined indicative and non-binding agreements (all at advanced stages) up to US\$56M account for approximately 60% of the estimated financing requirements for Firebird to construct and commission its Plant:**
  - Non-binding indicative offer from China Construction Bank (Jinshi Division) to provide to a maximum of 50% of estimated plant CAPEX requirements of US\$83.5 million (subject to conditions precedents), at very attractive terms, plus 70% of required estimated working capital of US\$10.6 million;
  - Non-binding agreement with China Chemical to provide up to 20% of construction and installation costs (approximately US\$35 million) on a deferred payment basis, interest-free and repayable 12 months after the commencement of commercial production; and
  - Binding Agreement with Jinshi local Government to receive a 62.5% rebate (totalling ~US\$4.2 million) on the ~US\$6.8 million land purchase. Rebate has been accounted within total CAPEX requirements
- Feasibility Study<sup>1</sup> outlined a **very low CAPEX of US\$83.5 million and highly competitive OPEX of approximately US\$609/metric tonne (mt)** for battery grade manganese sulphate, underpinned by major competitive advantage of strategic location within the Chinese industrial ecosystem, which provides major cost-saving and operational synergies
- Firebird on track to make a Final Investment Decision in H2 2024, with a 12–15 month construction timeline, ahead of first production
- **Once in production, Firebird is well placed to become one of the lowest cost manganese sulphate producers, at a time when the Lithium Manganese Iron Phosphate (“LMFP”) battery market is forecast to experience significant growth in coming years**
- True underlying value and importance of Flagship Oakover Project (Western Australia), as a key future operation is clearly demonstrated by recent significant manganese supply disruptions. Oakover continues to be an integral part of Firebird’s long-term manganese battery materials strategy

<sup>1</sup> Refer ASX announcement dated 7/5/24

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### **Cautionary Statement**

The Feasibility Study referred to in this announcement is a Technical Feasibility of the establishment of the Battery Grade Manganese Sulphate Project Stage 1 Processing Plant in China (the **Plant**). Please refer to ASX announcement dated 7/5/24 for full Feasibility Study details.

The Feasibility Study is based on the material assumptions contained in the Feasibility Study document which accompanied the announcement. This announcement and the Feasibility Study include assumptions about the availability of funding. While the Company considers all 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 will be achieved.

Notwithstanding the developments set out in this announcement, investors should note that there is no certainty that the Company will be able to raise the amount of funding to develop the Plant 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 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 Plant. If it does, this could materially reduce the Company's proportionate ownership of the Plant. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Feasibility Study.

**Firebird Managing Director Mr Peter Allen commented:** *"We are extremely proud to announce these critical financing and construction agreements with the Jinshi Government, China Construction Bank (Jinshi division) and leading chemical engineering contractor China Chemical. Since announcing our plans to establish operations in China to produce high-purity manganese sulphate, we have been overwhelmed by the ongoing support and engagement from key stakeholders in China, led by the Jinshi Government, to ensure the Company has the resources required to deliver on our LMFP battery strategy. This strong in-country support has been a key contributor to the rapid growth we have delivered on the ground in China.*

*"I believe that Firebird is in a unique and extremely competitive position, as highlighted by our Feasibility Study, which showed a very low-capex pathway to establish operations in China in the next 18 months. Importantly, the study highlighted the significant cost, development and operational advantages of building a plant in China and the exciting opportunity to transition Firebird into producer status. The Company is well positioned to deliver on its strategy to become one of the lowest cost high-purity manganese sulphate producers when compared to existing Chinese producers and western peers.*

*"With approximately 60% of our financing requirements now at an advanced stage, we are steadily gaining strong momentum towards securing the necessary funds to build our plant. The value proposition and expedited market entry potential we anticipate in China are truly remarkable. Our progress underscores our commitment to swift and effective execution of our unique growth strategy.*

*"We are now planning a second investor site visit for mid-to-late June, following the success and feedback from the first visit in April. We are looking forward to demonstrating our key in-country advantages, Chinese Government support, speed to market opportunity and Chinese industrial ecosystem within the Jinshi High-Tech Industrial Park.*

"We will continue to deliver on a busy pipeline of news at a time when the supply and demand fundamentals for manganese have never been stronger, particularly following the suspension of

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operations at Groote Eylandt. Timing is always critical, and we will be turning our Plant on at a time when the LMFP battery market is forecast to experience substantial and rapid growth, with the potential to become a >US\$20 billion market by 2030.”

**Firebird Metals Limited (ASX: FRB, “Firebird” or “the Company”)** is pleased to announce an update on the financing of its Stage 1 Battery Grade Manganese Sulphate Plant in China, which will utilise third party manganese ore to produce high-purity manganese sulphate.

The Company’s long-term strategy is to become a key producer within the manganese industry and provide security of supply across both traditional and new material outputs with a focus on the fast-growing new energy industries.

A summary of the non-binding and binding financial facilities is included below:

Funding Provider	Background
China Construction Bank	<p>Following completion of the Company’s Feasibility Study (<i>refer to ASX announcement on 7/5/24</i>) the Company can advise that it has received a non-binding indicative financing letter from CCB, Jinshi, offering half (50%) of the required plant construction capital.</p> <p><b>The key terms and conditions are:</b></p> <ul style="list-style-type: none"> <li>• Commercial loan of 5 years</li> <li>• Interest rate is set annually (current interest rate is 4-4.5%)</li> <li>• Firebird purchases land</li> <li>• Firebird receives all regulatory (permit) approvals</li> <li>• Firebird successfully engages a government backed guarantor (engagement commenced)</li> </ul> <p>The Company’s battery grade manganese sulphate strategy to build a plant and establish operations in China is aligned with CCB’s stated objective to provide financial support to LMFP battery material related projects. CCB has further indicated a willingness to provide a standard short-term facility for up to 70% of working capital requirements.</p>
China National Chemistry Southern Construction and Investment Co Ltd (China Chemical)	<p>On 13 March 2024, Firebird announced the signing of a non-binding strategic cooperation agreement with leading engineering group China Chemical, a large Chinese conglomerate and a subsidiary of China National Chemical Engineering Group Corporation (“CNCEC”), for the development and construction of the Plant.</p> <p>Firebird has now entered into a non-binding agreement, whereby China Chemical will provide 20% of construction and installation cost on an interest-free, deferred basis. These costs are repayable 12 months after the commencement of commercial production, allowing for payments to be made from first-year revenues.</p>

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Jinshi Local  
Government

Binding agreement with Jinshi local Government to receive a 62.5% rebate (totalling ~US\$4.2 million) on the ~US\$6.8 million land purchase. Rebate has been accounted within total CAPEX requirements.

Firebird looks forward to providing further updates on financing arrangements as it works towards a Final Investment Decision on the Plant in H2 2024. Importantly, the Company will be well-positioned to supply into a rapidly growing LMFP battery market, which is forecast to become a >US\$20 billion market by 2030.

**This announcement has been approved for release by the Board.**

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## About Firebird Metals Limited

Firebird Metals is an advanced manganese developer focused on combining mining and downstream processing with a dedication to the advancement of the EV battery sector.

The Company is currently progressing its unique China-focused Lithium Manganese Iron Phosphate (“LMFP”) battery strategy, which will develop Firebird into a near-term producer of high-purity, battery-grade manganese sulphate, a key cathode material in LMFP batteries for electric vehicles.

Execution of this strategy will place Firebird at the forefront of manganese sulphate production, at a time when the use and demand for manganese in batteries continues to rapidly grow. 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 and deliver significant value to its shareholder base.

The Company also owns 100% of its project portfolio, located in the renowned East Pilbara manganese province of Western Australia, which boasts a total Resource of 234Mt, with exciting exploration and development growth upside. The portfolio is led by the flagship Oakover Project, which holds a Mineral Resource Estimate<sup>2</sup> of 176.7 Mt at 10% Mn, with 105.8 Mt @ in an Indicated category.

The company completed an updated Dense Media Separation (DMS) Manganese Concentrate Scoping Study (for full details refer to ASX announcement dated 30/8/2023 and disclosure on following page) for Oakover with key results included:

- 18-year Life of Mine
- Approximate A\$741.3M NPV at a discount rate of 8%
- Impressive IRR of 73.1%, with pay back in 16 months
- ~4Mt annual processing, ~1.2Mt of 30-32% Mn concentrate annually
- Capex estimate of A\$123M
- Low mine strip ratio of 0.45:1

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<sup>2</sup> 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.

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.

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<sup>2</sup>For full details refer ASX announcements dated 10/3/2022 and 23/3/2023

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## **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.

## **CAUTIONARY STATEMENT- OAKOVER DMS CONCENTRATE SCOPING STUDY**

The Updated DMS Concentrate Scoping Study referred to in the "About Firebird" section of this announcement has been undertaken for the purpose of initial evaluation of a potential development of the Oakover Manganese Project. The Scoping Study is a preliminary technical and economic study of the potential viability of the Oakover Manganese Project as a manganese producer. The Scoping Study outcomes, production target and forecast financial information referred to in this release are based on low accuracy level technical and economic assessments that are insufficient to support estimation of Ore resources.

The Scoping Study has been completed to a level of accuracy of +/- 35% in line with a scoping level study accuracy. While each of the JORC modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation work and appropriate studies are required before the Company will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case. Accordingly, given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. Given that the results of the Scoping Study are subject to the qualifications above (including assumptions as to accuracy), any results reported in this release should be considered as approximates and subject to variances having regard for the assumptions referred to in this release. The Company has reasonable grounds for disclosing a Production Target, given that approximately 99% of the Life-of-Mine (LOM) Production Target is in the Indicated Mineral Resource category, and 1% is in the Inferred Mineral Resource category. The production target stated in this announcement is based on Firebird's current expectations of future results or events and should not be relied upon by investors when making investment decisions. Further evaluation work and studies are required to establish sufficient confidence that the production target will be met. Firebird confirms that the financial viability of the Oakover Manganese Project is not dependent on the inclusion of Inferred Resources in the Scoping Study.

The Company considers all the material assumptions in this Study to be based on reasonable grounds. These include assumptions about the availability of funding. While Firebird 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 Scoping Study will be achieved. To achieve the range of potential outcomes indicated in the Scoping Study, funding of in the order of \$123 million (excluding working capital and finance costs) will likely be required. Investors should note that there is no certainty that Firebird will be able to raise that amount of funding when needed. However, the Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes that it has a "reasonable basis" to expect it will be able to fund the development of the Project. It is also

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possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Firebird's existing shares. It is also possible that Firebird 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 Firebird's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012).. For full details of the Mineral Resources estimate, please refer to Firebird's ASX release dated 10th March 2022 and 23 March 2023. Firebird has confirmed that it is not aware of any new information or data that materially affects the information included in that release. All material assumptions and technical parameters underpinning the estimates in that ASX release continue to apply and have not materially changed.

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